

**Report to Congress**  
**on**  
**Pilot Program on Intellectual Property Evaluation**  
**for Acquisition Programs Report for Fiscal Year 2023**  
**Pursuant to Section 801 of the National Defense**  
**Authorization Act for Fiscal Year 2020**  
**(Public Law 116-92)**

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**Office of the Under Secretary of Defense**  
**for Acquisition and Sustainment**

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# 1. Introduction

This report is the fourth and final annual report to the congressional defense committees pursuant to Section 801 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2020 (Public Law 116-92) (Enclosure 1). Section 801(a) authorizes the Secretaries of Defense and Military Departments (MILDEPs) to jointly carry out a pilot program to assess intellectual property (IP) evaluation techniques, including commercial valuation methods, in Department of Defense (DoD) acquisition programs to better understand the benefits of these mechanisms on the—

1. Development of cost-effective IP strategies;
2. Assessment and management of IP value and acquisition costs during acquisition and sustainment activities (including source selection evaluation factors) throughout the life cycle; and
3. Use of commercial and non-developmental technologies as an alternative to new development for DoD requirements.

Section 801(b) authorizes several specific pilot program activities, including: establishment of a team of DoD and private sector IP experts (including the DoD IP Cadre) to advise the selected programs; assessment of commercial valuation methods, agency-level oversight, contracting mechanisms, and acquisition planning for IP delivery and rights needed over the entire life cycle; and engagement with industry to develop and assess IP requirements and strategies, and develop innovative IP evaluation, valuation, and prioritization techniques.

Section 801(c) requires the Secretary of Defense and the Secretaries of the MILDEPs to submit to the congressional defense committees joint annual reports on the Pilot Program that include: a description of the acquisition programs selected to participate in the Pilot Program; a description of the Pilot Program activities that were performed under each program; an assessment of the effectiveness of the activities; an assessment of improvements to acquisition or sustainment activities related to the Pilot Program; and an assessment of the results related to the Pilot Program, including any cost savings and improvement to mission success during the operations and support phase of the selected acquisition program.

Section 801(c) requires a report on pilot program activities to be submitted by November 1, 2020, and annually thereafter through 2023. The initial FY 2020 annual report was provided on April 19, 2021 and served as an overarching implementation plan for upcoming pilot program activities. The Department provided an interim response on October 15, 2021, indicating that the second annual report would be delayed due to delays in significant data collection and analysis activities required for the report. The second annual report was submitted in March 2022, and the third annual report was submitted in November 2022. This fourth annual report summarizes the Department's pilot program activities during FY 2023, and it is organized in four sections:

Section 1, Introduction, briefly summarizes the background of the Section 801 report, as well as recent and relevant legal, regulatory, policy, and federal advisory committee activities related to these pilot activities. In addition, Section 1 provides an overview of key takeaways and lessons learned for the Pilot Program, as well as Department recommendations based on these conclusions.

Section 2, Public Engagement, discusses the Department’s various engagement activities with the public (including industry, academia, and other interested parties) and addresses the Department’s implementation plan for recommendations previously submitted by the public. In the previous annual report periods, the Department released a request for information (RFI) to the public on IP evaluation and valuation methods and techniques and organized and facilitated multiple discussions with the RFI respondents. During this reporting period, the Department is organizing and planning a multiple day Government-industry conference scheduled to take place in the first quarter of FY 2024.

Section 3, Department Engagement, summarizes the Department’s activities in collecting input from DoD programs on IP valuation and evaluation activities. This section discusses information collected in Government data calls (GDCs) related to IP valuation and evaluation, and pilot program case studies. The subsection on case studies provides content responsive to each of the required annual report elements specified in Section 801(c).

Section 4, Training and Guidance for the Acquisition Workforce, outlines the Department’s continuing activities related to the development of IP evaluation and valuation training and guidance.

## **1.1 Background on the Section 801 IP Pilot Program**

The origins of the Section 801 IP Pilot Program (Pilot Program) can be traced to the recommendations of the Government-Industry Advisory Panel (Section 813 Panel), established by the Secretary of Defense pursuant to Section 813 of the NDAA for FY 2016 to review Sections 3771-3775 and 3781-3786 of Title 10, United States Code (U.S.C.), regarding rights in technical data and the validation of proprietary data restrictions, and the regulations implementing such sections, to ensure that such statutory and regulatory requirements are best structured to serve the interests of taxpayers and national defense. The Section 813 Panel Report, *Government-Industry Advisory Panel on Technical Data Rights*,<sup>1</sup> dated November 13, 2018, is comprised primarily of a collection of thirty papers, each focused on a particular topic that the panel characterized as a “tension point” between the Department and industry.

The Section 813 Panel Report indicated that “the Panel was unable to coalesce on a single method and recommend[ed] a pilot program for IP evaluation in acquisition planning and source selection.” The 813 Panel Report recommended that the Department should not adopt a “one size fits all” approach to IP evaluation in source selections. The Section 813 Panel Report also stated that industry feedback should be actively focused on evaluation factors and the Government should incorporate this feedback to ensure these factors represent the best value to DoD for a given solicitation as informed by the program’s IP Strategy. The Section 813 Panel recommended the inclusion of a new section in the NDAA for FY 2020 regarding a pilot program for IP evaluation in acquisition planning and source selection regarding certain Major Defense Acquisition Programs (MDAPs). The suggested statutory wording appears to have formed a significant basis of the authority and requirements enacted in Section 801 of the NDAA for FY 2020.

The Department’s response to the Section 813 Panel Report and the Section 875 Independent Review Report identified numerous cross-cutting principles and threads that would

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<sup>1</sup> The Section 813 Panel’s Final report, “Government-Industry Advisory Panel on Technical Data Rights,” dated November 13, 2018, is available at <https://www.dau.edu/sites/default/files/Migrated/CopDocuments/Section%20813%20Report.pdf>

form the basis of the new DoD-wide IP policy and established a preliminary IP Working Group (IP WG) that would take the lead in drafting that policy issuance and establishing the cadre of IP experts as required by Title 10 U.S.C. §§ 1707 and 3791.

On October 16, 2019, the Department published DoD Instruction (DoDI) 5010.44, “*Intellectual Property (IP) Acquisition and Licensing*.”<sup>2</sup> This DoDI created a DoD-wide policy to govern and unify the acquisition, licensing, and management of IP, including by implementing the statutory requirements of Title 10 U.S.C. § 3791. A critical element for supporting a consistent implementation of these policies and best practices, the DoDI also established the DoD IP Cadre, a DoD-wide, cross-functional team of IP experts. The DoD IP Cadre is organized using a federated structure, with a new office established within the Office of the Secretary of Defense (OSD) to coordinate with other offices and subject matter experts (SMEs) throughout the OSD, the MILDEPs, and other DoD components to advise and support DoD programs and the acquisition workforce. The DoD IP Cadre also communicates and engages with industry on IP matters.

For a more thorough discussion of the DoD IP policy, and the organization and structure of the new OSD IP Cadre office within the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) and the federated organizational model to establish the DoD-wide IP Cadre structure that will operate as a cross-functional team of experts, see the Department’s Report to Congress on IP Policy and the Cadre of IP Experts, pursuant to Section 838 of the NDAA for FY 2020 (Section 838 Report). This report is posted in the Key References section of the OUSD(A) IP Cadre web page.<sup>3</sup>

## 1.2 Overview of Key Takeaways and Accomplishments for the Pilot Program

The Department anticipates that lessons learned from the Pilot Program will:

- Drive IP strategic planning earlier in the program life cycle, with a focus on proactively preserving flexibility and competitive options to address uncertainty in the early assessments of long-term IP needs throughout the entire life cycle;
- Reinforce the critical need for a program's IP Strategy to be tailored to balance the interests of DoD and industry, including using specially negotiated licenses and Modular Open Systems Approach (MOSA);
- Demonstrate the need to identify and tailor IP Strategy models for different acquisition pathways and technologies — for example, distinguishing IP best practices for software-intensive programs versus hardware-intensive programs; and
- Drive changes in Department-wide policies on IP evaluation and valuation, as well as Department-wide practical implementation of IP evaluation and valuation in contract negotiations and source selection activities.

The Pilot Program successfully identified, developed, and refined best practices, IP-related tactics, techniques, and procedures (TTPs), and measures and metrics of expected IP

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<sup>2</sup> DoDI 5010.44 is available at

<https://www.acq.osd.mil/asda/ae/ada/docs/DoD%20Instruction%205010.44%20on%20IP%20Acquisition%20and%20Licensing.pdf>.

<sup>3</sup> The main IP Cadre web page is available at <https://www.acq.osd.mil/asda/ae/ada/ip-cadre.html>. The section 838 report is available at [https://www.acq.osd.mil/asda/ae/ada/docs/Report%20IP%20Policy%20and%20IP%20Cadre%20\(No%20Letter\).pdf](https://www.acq.osd.mil/asda/ae/ada/docs/Report%20IP%20Policy%20and%20IP%20Cadre%20(No%20Letter).pdf).

evaluation and valuation outcomes. In doing so, the following pilot program activities were essential:

- Identification of objective outcomes of IP evaluation and valuation strategies in pilot programs to drive, to the maximum extent practicable, cost avoidance/cost savings and enable competitive procurement; and
- Utilization of a broad spectrum of data collection methods, including queries of existing databases and other information repositories, internal GDCs, RFIs to the public, and round-table discussion events with the public.

The pilot program activities instilled a broader understanding of IP issues and drove positive culture change by leveraging the Section 813, 838, and 875 report findings in combination with lessons learned from the Section 801 reports, updated policy, and additional workforce IP training. The initial Section 801 annual report summarized the Department's activities during FY 2020 in developing an implementation plan for the pilot program activities and identifying an initial group of programs to participate in the Pilot Program. The initial report included an introduction that summarized the recent legal, regulatory, policy, and federal advisory committee activities leading up to these pilot activities. Section 2, Implementation Planning, summarized the Department's activities during FY 2020 and early FY 2021 in developing an implementation plan for the pilot activities, including the creation of the Pilot Program for IP Evaluation Working Group (PPIPEWG) to manage the pilot activities and reporting during the assessment and reporting cycles from FY 2021 through FY 2023. Section 3 consisted of the required annual report elements specified in Section 801(c).

The second and third annual reports summarized the Department's Pilot Program activities during FY 2021 and FY 2022. Those reports included a public engagement section that summarized the Department's activities in soliciting comments and recommendations from the public (including industry, academia, and other interested parties) on IP valuation and evaluation, as well as feedback from roundtable discussions with industry. In addition, the Department Engagement section of the second and third annual reports summarized the Department's activities in collecting input throughout the Department on IP valuation and evaluation activities. The Department Engagement section included information on FY 2021 and FY 2022 GDCs related to IP valuation and evaluation, as well as pilot program case studies. The last section of the second and third reports included a training and guidance section that summarized the Department's activities related to the development of training and guidance related to IP valuation and evaluation.

The fourth and final annual report continues and builds upon the work and analysis completed in the previous reports.

### **1.3 Detailed Discussion of Key Takeaways and Lessons Learned**

The four years of pilot program activities yielded the following key takeaways, lessons learned, and recommendations related to IP strategies, IP pricing and valuation, IP evaluation, industry engagement, and workforce development:

## *IP Strategies*

- **The Pilot Program identified objectives measures, metrics, and outcomes, which may be employed to predict or assess program health.** Data from the FY 2021, FY 2022, and FY 2023 GDCs on IP valuation and evaluation provided objective measures and metrics associated with IP strategies and TTPs. These IP-related measures and metrics can be tied to positive program health, and include the robustness of the IP strategy and IP related TTPs identified in the GDC section of this report (see Section 3.3). These measures and metrics may be incorporated in IP-related policies, guidance, and training, which will allow program managers to make data-driven and informed decisions on IP valuation and evaluation.
- **There are DoD programs that are already successfully implementing flexible or tailored IP strategies and TTPs; and improving awareness, training, and guidance will continue to improve IP strategies for all programs.** Both industry and the Department agree on the programmatic and economic advantages of negotiating special licenses and avoiding one-size-fits-all solutions in developing IP strategies. As demonstrated by the pilot program case studies (discussed in Section 3.2) and data from multiple GDCs (discussed in Section 3.3), a substantial percentage of programs are utilizing IP best practices, including robust IP strategies, negotiating special licenses, requiring technical data and software deliverables to enable competition and sustainment, and use of alternative tools for delivery of technical data and software.
- **Based on feedback on the pilot program case studies and other pilot program activities, programs desire practical examples of IP strategies and data on associated outcomes for study, adaptation, and implementation.** The GDCs included valuable insights from programs (including legacy programs) that were able to overcome IP-related barriers to competitive procurement and organic sustainment and associated cost avoidance savings. In particular, legacy programs that are experiencing vendor lock provided candid feedback and recommendations on how other programs may avoid this outcome. In addition, Title 10 U.S.C. § 3791(c) requires the Department to develop guidelines and resources on: IP strategies and other mechanisms supporting the use of MOSA; evaluation and negotiation of IP licenses in competitive and non-competitive awards; and models and best practices for specially negotiated licenses.
- **Early acquisition planning (including IP strategies) is key in facilitating cost efficiencies and mission readiness for programs.** Half of the respondents of the FY 2022 GDC observed obstacles for competitive procurement and organic sustainment that resulted from deficiencies in terms of IP and IP rights. The respondent programs indicated that early and continuous product support planning is key to resolving these issues. This emphasizes one of the postulates of the Pilot Program: early acquisition planning must consider IP and IP rights necessary to accomplish long-term mission goals including sustainment. Developing IP strategies as a part of early acquisition planning facilitates positive outcomes for competitive procurement and successful organic sustainment. Lastly, it is imperative that local acquisition teams implement a cross-functional teaming approach throughout the acquisition life cycle – in early acquisition planning, requirement building, solicitation drafting, and contract administration.
- **Industry desires flexible and tailored IP strategies that balance the interests of industry.** Industry has expressed concerns that DoD IP strategies do not equitably balance the interests

of industry and the Government, which may negatively impact interest in solicitations and the health of the defense industrial base (DIB). In addition, the acquisition workforce desires practical guidance on how to assess return on investment of both parties, and equitably balance the interests of the parties. Such practical guidance will help the acquisition workforce develop IP strategies and solicitations that foster industry interest in DoD acquisitions.

## **Recommendations**

1. The Department should update DoDI 5010.44 (and other applicable DoD policy documents) to reflect measures and metrics identified during the Pilot Program and incorporate or further emphasize lessons learned and key takeaways on IP strategies from the Pilot Program.
2. The OSD IP Cadre should consider building a library of IP strategies and concise case studies (illustrating specific IP-related TTPs) from programs (including legacy programs) that were able to overcome IP-related barriers to competitive procurement and organic sustainment and equitably balance the interests of Government and industry. Such a library may assist other programs in learning and applying best practices.

## ***IP Evaluation***

- **DoD can and should evaluate IP in its competitive source selections and include IP in its negotiation objectives in sole source awards.** Industry has expressed concerns about IP evaluation criteria and their potential impact on the DIB. In particular, some industry organizations have expressed concerns based on statutory and regulatory restrictions related to IP-related evaluation criteria, such as Title 10 U.S.C. § 3771(b)(8) and Defense Federal Acquisition Regulation Supplement (DFARS) 227.7103-1 and DFARS 227.7203-1. However, these statutory and regulatory restrictions do not prohibit all IP-related evaluation criteria. On the contrary, DFARS 227.7103-10 and DFARS 227.7203-10 (related to contractor identification and marking of technical data, computer software, or computer software documentation) indicate that “[i]nformation provided by offerors in response to the solicitation provision may be used in the source selection process to evaluate the impact on evaluation factors that may be created by restrictions on the Government's ability to use or disclose [technical data or computer software].” Accordingly, the Department is permitted to use IP-related evaluation criteria in source selections that evaluate proposals based on cost, mission, or technical goals. For example, the Government may evaluate proposals based on whether the offeror’s proposal facilitates future competitive procurement, since such evaluation criteria does not require an offeror to relinquish license rights to the Government. In addition, the Government may evaluate proposals based on license fees (e.g., the cost of commercial software licenses for a specific number of users or terminals over a specific period of time).

Accordingly, IP evaluation during source selections allow the Government to assess proposals on impacts on considerations such as mission readiness, competition, obsolescence risk, and long-term license fees. Such evaluations allow programs to have a comprehensive understanding of an offeror’s proposal, including how the Department can execute its long-term sustainment goals, facilitate competition, and manage program risks. Similar to evaluation of technical factors in source selections (and review of proposals in sole source contract awards), the Department should evaluate IP because it impacts cost, schedule, and performance.



This strategy is supported by objective data. Based on the FY 2021 and FY 2023 GDCs, the Department observed significant positive outcomes associated with IP-related evaluation criteria in source selection evaluation plans. In the FY 2023 GDC, over 60 percent of respondents reported that IP-related evaluation factors had a positive impact on mission goals. Less than half of FY 2021 and FY 2023 GDC respondents observed additional costs associated with broader license rights resulting from IP-related evaluation factors. In addition, the majority of FY 2023 GDC respondents observed reduced costs associated with narrower license rights resulting from IP-related evaluation factors.

- **IP evaluation and valuation TTPs should be refined or tailored for DoD use based on the context or use case, including the relevant technology sector and common business models.** Some IP strategies may be inappropriate for certain use cases, technologies, or business models. Therefore, to facilitate competition and foster DIB health, these TTPs must be tailored to fit the nuances of each acquisition.
- **Digital engineering and digital acquisition (DE/DA) tools will facilitate the DoD's success in developing IP strategies, IP evaluation, and IP negotiations.** Programs need visibility into existing data assets (and associated licensing and pricing) across the enterprise to efficiently and effectively develop and execute IP strategies and inform IP negotiations. Enterprise-wide DE/DA tools will be instrumental in gaining insight into existing data and software deliverables, associated license rights, associated transactional history, and associated pricing across all DoD contracts.
- **The Department should not measure the effectiveness of IP strategies and tools based on short term costs alone.** When assessing IP strategies, IP evaluation or valuation mechanisms, and IP negotiations, the Department should use a best value approach that does not only consider costs in the short term. The Department should also consider other factors for cost efficiency as an objective measure of the efficacy of an IP strategy, IP evaluation or valuation mechanisms, and IP negotiations. The Department should consider short-term and long-term costs associated with a particular IP strategy. In addition, the Department should consider objective measures of the financial health, sustainability, and growth potential of the DIB.
- **The Department must consider whether and how IP evaluations disincentivize vendors, including non-traditional contractors and small businesses.** Industry has expressed significant concerns about a one-size-fits-all approach to preferences in solicitations for “unlimited rights” or “Government purpose rights” (GPR) as a disincentive to vendors, especially to non-traditional contractors and small businesses. A tailored approach, reflecting a program’s required uses for technical data and software, may facilitate negotiation of license rights and fair and reasonable prices.
- **The Department must break down silos that obstruct information sharing within the Department and impede efficient and effective development of IP strategies.** The Department needs improved sharing of information within the defense enterprise of existing technical data and software deliverables (and the associated license rights and pricing). In addition, the Department frequently needs to share non-technical data (including management and financial information) with certain support contractors that provide programmatic and technical assistance to programs. To facilitate such information sharing, the Department needs effective standards, processes, and tools for Department-wide

information sharing of IP deliverables and associated license rights and pricing. This approach will inform acquisition strategies, negotiation, and assessment of cost and price reasonableness, while facilitating consistent strategies and outcomes throughout the Department.

### **Recommendations**

1. The Department should update DoDI 5010.44 to incorporate or further emphasize these lessons learned and key takeaways on IP evaluation from the Pilot Program.
2. The Department should update its policies, regulations, and guidance related to IP evaluation and valuation, including common definitions of IP evaluation and valuation and practical guidance on IP evaluation and valuation (such as guidance on IP evaluation techniques and strategies for common use cases and emerging or complex technology areas).
3. The Department should develop enterprise-wide DE/DA tools that inform IP evaluation, IP valuation, and development of IP strategies. Such tools should facilitate sharing of IP deliverables and associated license rights and pricing throughout the Department and enable informed negotiations and development of IP strategies.

### ***IP Pricing and Valuation***

- **There are DoD Programs that are successfully implementing cost-effective strategies for negotiating special licenses and mitigation strategies where data or data rights were deficient.** The FY 2021, FY 2022, and FY 2023 GDC data demonstrated that the majority of respondents that negotiated special licenses reported that such special licenses either: 1) had no costs or minimal costs; or 2) were more cost effective than standard licenses. FY 2022 GDC respondents were also asked about current or anticipated barriers to obtaining or gaining access to the technical data, software, or the associated license rights necessary for organic sustainment or breaking vendor lock. Of the 38.8 percent of respondents that were able to resolve such barriers, the majority of these respondents (69.5 percent) indicated that the mitigation strategies (which resolved these barriers) had no costs, minimal costs, or costs within budget. In addition, FY 2021 and FY 2023 GDC data showed that programs implemented data/software delivery tools at no cost, minimal cost, or more cost-effectively than standard delivery methods.
- **License rights may impact pricing and tailoring license rights may drive pricing down.** For specifically negotiated licenses, the Department should negotiate and tailor the scope of the Government's license rights. In addition, the Department should tailor its technical data and software requirements to address the short and long-term needs described in the applicable acquisition strategy and product support strategy. This approach should drive down IP costs for the Government. In cases where the parties agree on the scope of detailed manufacturing or process data (DMPD), the program should thoroughly consider the costs and whether there is any short or long-term necessity before ordering such technical data. This approach should motivate industry to partner with the Department and provide industry with opportunities for decreasing IP costs to the Government.
- **In source selections and negotiations, the Department and industry need greater transparency related to IP valuation methods and rationales that impact pricing of data and data rights.** As acknowledged by industry comments made in RFI responses and the IP roundtable discussions, there are disadvantages to several common IP valuation approaches.

Due to emerging threats and uncertain or unpredictable future requirements, it may be difficult to accurately pinpoint the required data for which industry is charging an IP price under its selected valuation method at earlier milestones or phases of a program. The cost method establishes the value of an IP asset by accounting for the cost of the IP asset for the contractor. However, in DoD contracts, it may be unclear how much private and Government investment for development will be needed up front. Without this information, it may be difficult to accurately apply the cost method at earlier milestones or phases of a program.

Under the income method, the IP value is based on the economic income that the contractor expected to generate from an IP asset. The contractor's ability to accurately estimate future income may be impaired by lack of information or unpredictability regarding the duration of the product life cycle. The income method is impacted by how the contractor plans to recoup its investments in development of the technology. If the total duration of the life cycle is unclear or uncertain, contractors may value the IP at a significantly increased price to account for such risks, which may run counter to price reasonableness. With respect to the market method, there are instances of DoD-specific technologies where there is insufficient cost and pricing data from other DoD contracts or market research; in such cases, it may be difficult or impracticable to apply the market method.<sup>4</sup>

Based on public comments and recommendations from the RFI responses and the IP roundtable discussions, there are advantages and disadvantages to each of the common IP valuation methods. The specifics of each acquisition will inform the Government and offerors in determining which approach is appropriate. To determine the best approach, transparency in an offeror's methods to IP valuation is essential. As industry experts recommended during the IP roundtable discussions, the Government should request, and industry should provide, more information about offerors' IP valuation methods to ensure consistency, accountability, and cost-efficiency in the Government's cost and pricing assessments.

Because affordability was reported as one of the most common obstacles to obtaining technical data, software, and license rights in the FY 2022 GDC, the Department needs insight into industry methods and rationale for IP-related pricing, and the Department must place greater emphasis on assessment of the reasonableness of IP-related costs and pricing proposals. Nearly half of FY 2022 GDC respondents noted that proposed costs for acquiring technical data, software, or the associated license rights were not deemed fair and reasonable. In addition, the majority of FY 2022 GDC respondents did not have transparency into the contractors' IP valuation methods. In addition, only 43.8 percent of FY 2023 GDC respondents knew that the valuation method used in the license fee assessment during negotiations was the market method, income method, cost method, or combinations thereof. This data strongly suggests that IP valuation methods and transparency into contractors' IP valuation methods are important areas for improvement for DoD and industry. Due to the lack of available information on the contractor's IP pricing and IP valuation methods, it is difficult for cost and price analysts to assess the reasonableness of IP pricing in proposals submitted in response to Requests for Proposals (RFPs). If vendors provided information that informed their pricing methodology, this would allow Government price analysts to

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<sup>4</sup> Under the market method, the value of the IP asset is based on comparable IP transactions for comparable technologies.

better assess these aspects of the proposals. Based on feedback provided during industry engagement activities during the Pilot Program, the Government and industry assessments of value and pricing of IP in a particular proposal may differ. Accordingly, information sharing is critical to confirm consensus and identify differences in such assessments of pricing and may better inform more consistent assessments of pricing by Government and industry. Transparency and accuracy with respect to Government cost and pricing data also informs better budgeting for the Government.

### **Recommendations**

1. The Department should update its training and policy documents to reflect lessons learned from the Pilot Program and associated studies on IP valuation; and such training and policy updates should be developed in coordination with cross-functional teams within the Defense Acquisition University (DAU), the MILDEPs, and other DoD components.
2. The OSD IP Cadre should consider building a library of concise case studies on applied IP valuation methods, which programs may study, apply, and adapt.
3. As the Department develops enterprise-wide DE/DA tools, the Department should update its acquisition regulations to directly address the need to share non-technical data (including management and financial information) with certain support contractors that provide programmatic and technical assistance to programs.

### ***Industry Engagement***

- **Industry desires increased opportunities and greater transparency between Government and industry in the solicitation process.** There are various industry engagement opportunities that may foster such transparency, including draft solicitations, industry days, and pre-contract award discussions and negotiations, and regular and ad hoc post-contract award meetings, to better understand IP requirements and IP-related evaluation factors. However, industry expressed concerns that criticizing or protesting IP-related solicitation requirements may negatively impact their chances of being awarded a contract. Conversely, programs may have concerns about inappropriate pre-contract award communications that would create unfair advantages for offerors. These concerns may impede communication. The acquisition workforce should be educated on how to leverage appropriate communications with offerors to better inform offerors on the Government's needs and goals, increase industry interest in solicitations, and increase competition.
- **Industry has requested increased and recurring opportunities to engage with the DoD IP Cadre in identifying and resolving IP-related issues in DoD acquisitions.** Throughout the Pilot Program, the DoD IP Cadre has engaged with industry through issuances of RFIs and industry roundtable discussions, which will culminate in collaborative dialogue at the upcoming IP Forum. During each engagement, industry participants indicated these engagements helped them to better understand the issues and identify potential solutions. In addition, industry has frequently requested additional opportunities to engage with the DoD IP Cadre on continuing and evolving IP issues in DoD acquisitions.

## **Recommendations**

1. Using a cross-functional team approach, DAU should offer additional training on appropriate communications with industry to foster better communications and transparency on solicitations.
2. The Department should have a recurring DoD IP Forum to foster industry engagement and Department engagement on IP issues in DoD acquisitions.

### ***Workforce Development***

- **The DoD acquisition workforce needs more field-level resources on IP valuation.** The field of IP valuation is very complex and nuanced, and cost and price analysts and other contracting personnel may not have regular opportunities to develop this skillset. Accordingly, field-level contracting personnel have a need for DAU training and other training resources that focus on practical issues related to IP valuation in DoD acquisitions, as well as guidance and case studies on IP valuation. As the Department develops training resources and IP valuation expertise within field-level contracting centers or activities, the federated model of the DoD IP Cadre will allow field-level contracting personnel to leverage local IP valuation experts within the MILDEPs.
- **The Department should collaborate with industry on the development of training on IP valuation and evaluation techniques.** Industry recommended that the Department should leverage and tailor commercially available training on IP valuation and evaluation, where practicable. In addition, the Department and industry agreed that it would be beneficial to collaborate on the development of IP valuation and evaluation case studies that highlight challenges that are specific to DoD acquisitions.
- **Cross-functional teaming is key to the development of effective IP-related policies, strategies, and training.** IP issues impact a wide range of subject matter areas ranging from contracting, program management, and sustainment. Therefore, as discussed above, local acquisition teams should consider implementing a cross-functional teaming approach throughout the acquisition life cycle. For the same reasons, the OSD IP Cadre has adopted a cross-functional team approach in facilitating coordination between MILDEPs on various IP issues, including IP training, IP-related legislative proposals, and IP-related litigation and disputes. Accordingly, in establishing working groups on the aforementioned topics, the IP Cadre leveraged experts throughout the Department with various areas of technical expertise. Similarly, throughout the Pilot Program, the PPIPEWG sought recommendations of DoD and industry experts from various subject matter areas in addressing IP evaluation and valuation issues.

## **Recommendations**

1. Applying lessons learned from DoD acquisitions, the Department should continue to develop its IP valuation curriculum to train SMEs within field-level contracting centers or activities. This IP valuation curriculum should also cover industry approaches to IP valuation, and should be tailored to address DoD-specific statutes, regulations, and policies.
2. In collaboration with DAU and the MILDEPs, the IP Cadre should establish a series of roadshows or workshops with field-level contracting centers or activities to assess the needs

of the acquisition workforce and promulgate available IP tools and resources. Some of these outreach/training events may be provided online for greater participation.

3. Leveraging the collaborative groundwork accomplished by the PPIPEWG, the OSD IP Cadre should continue to facilitate cross-functional teamwork in the development and assessment of effective IP related policies, strategies, and training.

In addition to the above overall key takeaways and lessons learned for the Pilot Program, additional discussion of key takeaways and lessons learned for individual pilot program case studies and GDCs are covered in later sections of this report.

## **1.4 Pilot Program for IP Evaluation Working Group Management and Coordination of Pilot Program Activities**

As authorized by Section 801(b)(1), in order to successfully execute the Pilot Program activities outlined above, the Department created a team of DoD and private sector SMEs, including the DoD IP Cadre to:

- (A) Recommend acquisition programs to be selected for the Pilot Program;
- (B) Recommend criteria for the consideration of types of commercial products, commercial services, or non-developmental items that can be used as an alternative to a product or service to be specifically developed for a selected acquisition program; or
- (C) Identify, to the maximum extent practicable, at each milestone established for each selected acquisition program, IP evaluation techniques to obtain quantitative and qualitative analysis of IP during acquisition including procurement, production and deployment, and operations and support phases for each selected acquisition program.

The Charter for the PPIPEWG established a team to manage and conduct pilot program activities, including annual reporting requirements, on behalf of the Secretary of Defense and Secretaries of the MILDEPs. The overarching model for this team of SMEs is to leverage, to the maximum extent practicable, the DoD IP Cadre that was established through DoDI 5010.44.

The PPIPEWG performed data-driven analyses to identify best practices, increase acquisition innovation, and support the Department's Adaptive Acquisition Framework (AAF) Pathways. Accordingly, the PPIPEWG employed data collection techniques including (but not be limited to) data calls and RFIs.

Using the mechanisms outlined in this section, the PPIPEWG managed the overall strategic planning and conduct of specific activities in support of the Pilot Program. PPIPEWG members engaged with the DoD programs participating in the Pilot Program in various pathways, including case studies and GDCs. For example, the PPIPEWG identified appropriate approaches to conduct the FY 2023 GDC (Enclosure 2). The PPIPEWG continued to define and refine the detailed implementation plan for specific pilot activities conducted during the FY 2023 reporting cycle. These activities included, but were not limited to, the following as authorized by Section 801(b):

- Assessment, including applicability, of commercial valuation techniques for IP for use by the DoD;

- Assessment of the feasibility of agency-level oversight to standardize IP evaluation practices and procedures;
- Assessment of contracting mechanisms to speed delivery of IP or reduce sustainment costs;
- Assessment of agency acquisition planning to ensure procurement of appropriate IP deliverables and associated license rights necessary for Government-planned sustainment activities;
- Engagement with the private sector to—
  - Support the development of strategies and program requirements to aid in acquisition planning for intellectual property;
  - Support the development and improvement of intellectual property strategies as part of life-cycle sustainment plans; and
  - Propose and implement alternative and innovative methods of IP valuation, prioritization, and evaluation techniques; and
- Making recommendations to the program manager of an acquisition program participating in the Pilot Program, including evaluation techniques and contracting mechanisms for acquisition and sustainment activities.

While the PPIPEWG Charter will end at the conclusion of the Pilot Program, there is value in continuing working groups of this kind to collaborate on the foundational challenges identified during Section 801 Pilot Program activities. In coordination with the MILDEPs, the OSD IP Cadre should continue to foster collaboration on updates to applicable DoD policy, guidance, and training on IP evaluation and valuation.

## **2. Public Engagement**

### **2.1 Robust Engagement with the Public**

Robust and open communications and engagement with industry on IP matters is one of the core principles in the DoD IP Policy (DoDI 5010.44) and a recommendation of the Section 813 Panel. Accordingly, engagement with the public is a guiding principle of the Pilot Program. The Pilot Program utilized numerous mechanisms to engage with industry, academia, and the general public. For example, Section 801(b)(1) authorizes the establishment of a team of DoD and private sector SMEs, which will occur through the PPIPEWG. The pilot program activities are not solely centered around the practices of DoD programs. The Pilot Program also requested industry input to gain a better understanding of commercial products, services, and IP valuation techniques.

As detailed in the previous annual reports, the Department released a FY 2021 Section 801 RFI on IP evaluation and valuation methods and techniques, soliciting input on commercial IP evaluation and valuation methods and techniques from the public, including the private sector, academia, and other interested parties. The RFI requested comments and recommendations from the public on the following areas: 1) assessment mechanisms for program IP evaluation; 2) development of cost-effective IP strategies; 3) assessment and management of IP value and costs; 4) establishment of a cross-functional team of SMEs; 5) Engagement with the private sector; and 6) identification of future activities. Also, as stated in a previous annual report, the Acquisition Innovation Research Center (AIRC) provided recommendations on ways that the Department could improve its IP acquisition processes, in support of the objectives and activities

implementing Section 801 of the NDAA for FY 2020 as well as Title 10 U.S.C. §§ 1707 and 3791 and DoDI 5010.44. The Department also held a series of IP roundtable discussions in FY 2022 with industry and academic organizations, to gain a better understanding and insight into the comments and recommendations conveyed through the RFI responses and provide an opportunity to collaborate with industry and academia to jointly develop proposed solutions to DoD and industry IP evaluation and valuation challenges. The DoD considered the public comments and recommendations provided in response to the RFI and the IP roundtable discussions, in addition to comments and recommendations from the AIRC.

## **2.2 DoD IP Forum**

As a capstone to public engagement activities under the Pilot Program, the DoD IP Cadre will host a multiple day conference in the first quarter of FY 2024 with Government, industry, and academic organizations with support from the AIRC. The DoD IP Forum will be an industry-Government collaborative event that is open to the public, including the DIB, nontraditional contractors, and academia. One of the main purposes of the forum is to invite the acquisition workforce and their direct industry partners to participate in this conversation and share real-world challenges and solutions.

More specifically, this event focuses on engagement between the DoD acquisition workforce and industry partners to address key IP challenges, including early IP planning and strategies for DoD life-cycle needs, negotiation of tailored licenses, and IP dispute resolution. The planned agenda includes keynote speeches from senior leaders from OUSD(A&S), and Office of the Director, Operational Test and Evaluation (DOT&E), and Under Secretary of Defense for Research and Engineering (OUSD(R&E)), retrospective briefs on pilot program activities, solutions-oriented panels, workshops, and briefs with industry and Government stakeholders on issues identified during the Pilot Program. The IP Forum will also include Government-only sessions tailored for the acquisition workforce. In addition to the major topics covered in the annual reports, the tentative agenda includes topics on IP regulatory reform, DE/DA tools, IP issues in sustainment, IP issues for small businesses, and MOSA. The DoD IP Forum agenda and summary of conference proceedings will be posted on the DoD IP Forum website.

Throughout the Pilot Program, industry continued to support opportunities for engagement with the DoD IP Cadre on the major topics covered in the Pilot Program annual reports, as well other critical IP issues that will be discussed during the IP Forum. The Department will consider the valuable input from the IP Forum discussions, as it continues to develop and refine policy, guidance, training, and tools related to IP valuation and evaluation. Lastly, the Department will consider making the DoD IP Forum a recurring event for engagement between Government and industry, to continue an open dialogue with industry, seek solutions to critical IP issues in DoD acquisitions, and educate the DoD acquisition workforce.

Along with the continuation of an IP working group, the Department plans on utilizing the IP Forum as a bridge between the pilot program activities and future sustained efforts related to IP issues in DoD acquisitions. Recent revisions to Title 10 U.S.C. § 3791(c) require the Department to develop guidelines and resources on the acquisition or licensing of IP, and to regularly consult with appropriate Government and industry organizations in developing these guidelines and resources. These statutory requirements provide additional momentum for sustained industry engagement on the IP issues addressed in the Pilot Program. Many of the



pilot program activities, such as the IP Forum, and the federated IP Cadre's current and planned activities, continue to align with the direction provided in Title 10 U.S.C. § 3791.

## **2.3 Department Implementation Plan for Public Recommendations**

As previously discussed, the Department received numerous recommendations from the FY 2021 RFI respondents. The RFI covered the following topics: 1) assessment mechanisms for program IP evaluation; 2) development of cost-effective IP strategies; 3) assessment and management of IP value and costs; 4) establishment of cross-functional teams of SMEs; and 5) engagement with the private sector. Department viewpoints on each recommendation are discussed in detail below. The PPIPEWG established focused teams that reviewed, considered, and assessed whether the recommendations were actionable for the Department at this time. As discussed in the FY 2022 annual report, many recommendations had already been implemented in various capacities throughout the Department, such as Government-industry exchange programs.

The PPIPEWG determined other recommendations warranted further study, consideration, or coordination, which were discussed in detail in the FY 2022 annual report. To best address these recommendations and other initiatives, the OSD IP Cadre has established a strategic objective to facilitate and encourage tailored and cost-effective IP licenses, rights, and agreements with a specific focus on IP evaluation and valuation. This strategic objective is supported by four strategic initiatives to ensure a holistic approach: 1) Workforce training and education, 2) Policy and law, 3) Guidance, resources, and tools; and 4) Measures and metrics for data-driven decision making. The PPIPEWG developed implementation plans for the following recommendations:

### ***Simulate negotiation or contracting scenarios that involve Other Transactions Agreements (OTAs), specially negotiated license rights (SNLRs), and commercial licenses***

DAU has several training resources related to OTAs, SNLRs, and commercial licenses that will be updated and tailored to capture unique lessons learned and best practices from the Pilot Program. DAU is conducting several initiatives to introduce new training methodologies, including simulations, live-action videos and scenario-based exercises, that mimic real-life acquisitions to more effectively engage the acquisition workforce. The OSD IP Cadre and other key stakeholders will partner and support these efforts through IP Cadre's training and education strategic initiative.

### ***Collaborate with industry to develop case studies and war-game scenarios that highlight trade-off challenges facing both parties throughout the IP life cycle.***

The DAU Strategic Plan for IP and Data Rights includes this recommendation to collect real-world scenarios from DoD and industry to incorporate into various training materials and events. This is an on-going effort led by DAU and supported by OSD IP Cadre's efforts to collaborate with industry and build valuable training. The OSD IP Cadre is partnering with DAU and will continue to support these efforts through its training and education initiative, in view of the IP Cadre's strategic objective to enable tailored and cost-effective IP agreements.

### ***Identify/Grow IP valuation experts within the Department***

This recommendation grew out of the suggestion to establish a centralized center of excellence for IP valuation. Recognizing the importance of the recommendation to ensure that the DoD has expertise in IP valuation, the PPIPEWG determined that de-centralized (or local) valuation experts would be most effective and closer to the execution of programs throughout the Department. The skillsets required for IP valuation are a unique blend of in-depth knowledge of the Federal Acquisition Regulations (FAR) and the DFARS, IP, defense technologies, economics, and Government program management.

The MILDEPs will identify gaps in this knowledge area in their current workforce and coordinate with relevant personnel management offices (such as Directors of Acquisition Career Management) to identify and train personnel to fill these knowledge gaps. Additionally, as the central point for training and education resources, DAU will host a list of all IP evaluation and valuation experts across the Department. The OSD IP Cadre will coordinate on this effort through its workforce training and education strategic initiative.

***Develop DoD policies, guidance, and training for identifying and evaluating specific mission risks associated with IP that is subject to IP valuation***

The OSD IP Cadre continues to develop policy, guidance, and training as part of its strategic objective to facilitate and encourage tailored and cost-effective IP agreements. Some examples of updates to DoD guidance and training are provided in Section 4 of this report. The OSD IP Cadre will focus on the integral relationship of IP and program risk, including critical additions to the DoD Risk Management Guide highlighting the role that IP plays in managing both risk and opportunities. The OSD IP Cadre will continue to coordinate these efforts with key stakeholders such as DAU, OUSD(A&S), OUSD(R&E), Defense Pricing and Contracting (DPC), Cost Assessment and Program Evaluation (CAPE), and the MILDEPs.

***Develop DoD policies, guidance, and training on IP evaluation/valuation that depend on the IP type, which can be readily customized by project or mission type***

The OSD and federated DoD IP Cadre will develop tailored policy and guidance, as appropriate, on IP evaluation and valuation for each IP type to facilitate the adoption of these important principles. The federated DoD IP Cadre will collaborate on a common approach to identifying “IP types” in relation to IP evaluation and valuation guidance. This effort will be accomplished through the IP Cadre’s training and policy strategic initiatives and its strategic objective for facilitating tailored and cost-effective IP agreements. The OSD IP Cadre will coordinate these efforts with key subject matter stakeholders, such as DPC, CAPE, and DAU.

***Develop a DoD Inventory/Database of existing IP deliverables and associated licensing, transaction history, and litigation history***

The OSD IP Cadre has partnerships with key senior DoD stakeholders who are driving DE/DA initiatives and will continue to team with them to ensure IP deliverables and associated information are integrated in DE/DA initiatives that implement the DoD data strategy. Additionally, the MILDEPs have initiated efforts to create frameworks and ontologies for IP data necessary to feed enterprise-level tools. The OSD IP Cadre will support DE/DA efforts under its strategic initiative to facilitate and develop measures and metrics for data-driven decision making.

***Conduct an enterprise-level assessment of IP evaluation methods***

The OSD IP Cadre plans to conduct a Department-wide data call at the conclusion of this Pilot Program to assess the current methods and practice of IP evaluation and valuation to garner correlations, best practices, and unsuccessful trends. This assessment will be a continuation of the key takeaways from the three GDCs conducted during this Pilot Program. In addition, the MILDEPs and the OSD IP Cadre are continually assessing the implementation and success of IP evaluation methods across their organizations. This effort is aligned with the IP Cadre's strategic initiative to facilitate and develop measures and metrics for data-driven decision making, and the IP Cadre's strategic objective to enable tailored and cost-effective IP agreements.

## **2.4 Conclusion**

The Department is reviewing the valuable input from the FY 2021 RFI responses, FY 2022 IP roundtable discussions, and the forthcoming DoD IP Forum, as it continues to develop, refine, and implement policy, guidance, training, and tools related to IP valuation and evaluation.

## **3. Department Engagement**

### **3.1 Pathways for DoD Acquisition Program Participation**

There are several pathways by which DoD programs were able to participate in the Pilot Program: 1) case studies; and 2) Government data calls. As discussed, the Pilot Program focuses on data-driven IP valuation and evaluation strategies and data-driven recommendations. Each pathway reflects this approach.

#### ***Case Study Pathway***

The case study pathway provides an opportunity for programs with exemplary IP strategies to examine and spotlight best practices or lessons learned. The case study or spotlight programs have been nominated by the specific DoD component. As stated in the initial report, the programs which have been nominated are the following:

- Army
  - Future Long-Range Assault Aircraft (FLRAA) (Anticipated ACAT I, Middle Tier Acquisition program)
- Navy
  - Multi-Engine Trainer System (METS) (ACAT III)
  - Shipboard Air Traffic Radar (SATR) (ACAT IV)
  - Multi-Mode Radar (MMR)
- Air Force
  - Survivable Airborne Operations Center (SAOC) (ACAT ID)
  - The Air Force program took a holistic approach that focuses on tools, tactics, and procedures (TTPs) for the acquisition workforce to improve their techniques and contracting mechanisms for their acquisition of IP. These TTPs were developed from best practices and lessons learned from various Air Force programs.
- Additional Programs
  - Chief Digital and Artificial Intelligence Officer (CDAO) Tradewinds Acquisition Ecosystem

#### ***Government Data Call Pathway***

Similar to the FY 2021 GDC, the FY 2023 GDC on IP evaluation and valuation provides a robust data set to learn about a broader spectrum of programs and glean a holistic analysis of trends in strategies and outcomes. The FY 2023 GDC follows up and builds upon the prior FY 2021 GDC and aims to determine what progress the Department has made in terms of acquisition planning, program health, and associated outcomes. The FY 2023 GDC also includes many of the same questions as the FY 2021 GDC to permit comparison and trend analysis of the two data sets. In addition, the FY 2023 GDC includes additional questions to probe areas where the data analysis was inconclusive or areas that warrant further study. The FY 2023 GDC was deployed to MILDEP and OSD programs in the second quarter of FY 2023. The success of the FY 2023 GDC was a result of substantial support from MILDEP programs that volunteered to participate in this effort. The FY 2023 GDC questionnaire was distributed to Army, Navy, Air Force, and select OSD programs. In response, product and program managers provided 201 completed FY 2023 GDC questionnaires.

## **3.2 Case Study Pathway**

### **3.2.1 Army**

#### ***Future Long-Range Assault Aircraft (FLRAA)–Anticipated ACAT I Level, Middle Tier Acquisition Program***

##### ***Description of the Acquisition Programs Selected***

The Future Vertical Lift (FVL) FLRAA Capability Set 3 is a pre-Major Defense Acquisition Program (anticipated ACAT IC) commissioned to develop and field the next generation of affordable vertical lift tactical assault/utility aircraft for the Army and the U.S. Special Operations Command. This medium lift tactical assault, aerial command and control, and medical evacuation aircraft, will augment the Army's H-60 Black Hawk utility helicopter fleet to provide the Joint Force with enhanced speed, range, agility, endurance, and survivability.

The program was initiated as a Middle Tier of Acquisition (MTA) rapid prototyping effort in October 2020. In the second quarter of FY 2020, the Army awarded two OTAs, to Bell Textron, Inc., and to a Sikorsky-Boeing partnership, to complete preliminary designs to the subsystem level of their aircraft. These OTAs were executed in a Competitive Demonstration and Risk Reduction (CD&RR) effort, which provided significant risk reduction by allowing requirements refinement, trade-off analysis, and preliminary conceptual design to be conducted in a digital environment using model-based systems engineering. The two preliminary designs informed the competitive award of a single contract that supports development of a virtual prototype as well as full system development and low-rate initial production in follow-on efforts. This approach maximized competition, incentivized economic efficiency, and created opportunities to negotiate for critical IP.

##### ***Activities Performed***

As described in the previous annual reports, FLRAA was selected as an Army Pathfinder program in early 2019 as part of the Army's broader IP initiative and has been supported by the Army's IP SME team since that time. As a Pathfinder program, the FLRAA Project Management Office (PMO) developed acquisition planning strategies consistent with the Army's IP Policy. With the support of the Army's IP SME team, and other Government and private sector experts, the PMO focused on obtaining key data and associated license rights required to

sustain the FLRAA weapons system. This included carefully assessing and identifying the Government's life-cycle data and associated license rights requirements. As a result, the FLRAA PMO developed a list of IP "Crown Jewels", which paired specific supportability use cases with the projected highest sustainment cost drivers. These system/use case pairs were identified as the most critical license rights requirements for the program and became the negotiating baseline for the weapon system development (WSD) contract.

Additionally, the FLRAA PMO is utilizing a robust implementation of a MOSA to rapidly insert new technology, reduce costs and enable industry competition across the life cycle. Key to the program's MOSA strategy is a Government Furnished Information (GFI) model that includes the relevant requirements, libraries, and profiles from an Enterprise-level FVL Architecture Framework (FAF), providing a Family of System-level architecture approach. The FAF is the primary enabler of the FVL MOSA, as well as the FVL Model Based Systems Engineering approach. The FAF resulted from industry and government partners, through the Architecture Collaboration Working Group, taking a hard look at mission systems definitions to define a synchronized future vertical lift architecture framework that creates standardizations across the fleet. Incorporation of those FAF assets ensures a common method for defining Air Vehicle Functions, Mission Systems Functions, Component Definition profiles, Digital Backbone Requirements and Common Weapon System Capabilities, and creating standardization for the achievement of MOSA objectives. The FLRAA PMO provided this GFI model in its CD&RR effort as well as in the RFP for the FLRAA WSD contract.

During this reporting period, the FLRAA PMO completed its CD&RR effort while separately conducting a follow-on WSD source selection in parallel. Throughout the CD&RR effort, the PMO proactively assessed support risks, issues, and opportunities (RIO) related to IP and license rights. The FLRAA PMO required vendors to assess the impact of prime and supplier assertions of use restrictions on technical data on the Army's ability to meet FLRAA life-cycle affordability, sustainment, and modification goals. The FLRAA PMO held joint vendor/Government IP working group sessions to discuss the assessments and address discovery of new assertions. These continuing working groups have proven valuable in providing a common understanding of the need for data and plausible assertions of restrictions on the Government's ability to use, release, or disclose the data. The PMO released the WSD RFP in July 2021 to Bell and Sikorsky. The RFP clearly identified the Army's need for license rights to technical data and computer software by including IP as a source selection factor. The RFP introduced a use case approach to the valuation of technical data, software and IP rights while allowing consideration of MOSA components, as directed in Title 10 U.S.C. §§ 3774 and 4401. In addition, the RFP clearly identified the associated rights to technical data and computer software to which the Government is entitled as established in Title 10 U.S.C. § 3771 and DFARS Subpart 227, including in the areas of data necessary for operation, maintenance, installation, and training purposes (OMIT data), and form, fit, and function (FFF) data.

The RFP incorporated both an assessment of IP rights and the introduction of SNLRs agreements to achieve a tailored solution. The data rights approach was based on two core components: prioritization of high-priority use cases and systems to ensure offerors' proposals meet the Army's needs and service-defined SNLRs to give offerors a "path to yes" for granting valued data with tailored license rights. The FLRAA PMO is holding the prime contractor and suppliers accountable after contract award with independent use case validations for data and license rights offerings made in proposals. The source selection approach assessed the cost and

value of offered data using a Value Adjusted Total Evaluated Pricing (VATEP) credit to incentivize favorable proposals.

### ***Assessment of the Effectiveness of the Activities***

The FLRAA PMO continues to benefit from the OSD and Army policies for the acquisition of IP in DoDI 5010.44, “*Intellectual Property (IP) Acquisition and Licensing*”, published in October 2019, and Army Directive 2018-26, “*Enabling Modernization Through the Management of Intellectual Property*,” published in December 2018. The PMO’s approach of planning early, fostering open communication, and negotiating for IP while still in competition has greatly improved the likelihood of success. The PMO identified and evaluated vendor assertions early in the program, throughout and prior to the program’s CD&RR phase. For example, the PMO contracted for the delivery of vendor impact assessments of data right assertions on the Army’s ability to meet FLRAA life cycle affordability, sustainment, and modification goals. Delivery of these vendor assessments provided crucial RIO management planning adjustments to the IP strategy within the FLRAA IP Working Group (FLRAA IP WG).

Throughout this period, the FLRAA PMO successes were the result of continued collaborations with key Army and DoD stakeholders and continuous, closely controlled communication with industry. Direct collaborative stakeholder involvement included regular engagements with the Army’s IP Pathfinder team and the OSD IP Cadre. A regular cadence of IP Pathfinder working group sessions provided comprehensive insight into policy and analysis of strategies and plans required for success.

The FLRAA IP WG elicited representatives from across the service, private sector, and academia to establish an ensemble of experts in all facets of system support, technical data, IP rights, and DoD major system acquisition. This WG was instrumental in developing objective methodologies for determining the appropriate IP required for defined supportability use cases covering operations, training, maintenance, spare parts procurement, modifications, and software sustainment. The FLRAA IP WG developed clear and objective means of valuing the IP needed to execute the FLRAA weapons system sustainment utilizing data and tools gained through IP Pathfinder efforts. Furthermore, the FLRAA IP WG was instrumental in the development of methods for evaluating rights offered as well as incentivizing industry to provide the essential IP to achieve the Army’s supportability goals.

### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

The FLRAA weapon system program is a key component of the FVL ecosystem and enabler of Multi-Domain Operations. It will advance the Army’s ability to fight and win in future conflicts. To that end, the PMO applied critical and creative thinking to fully visualize, understand, and describe the service’s sustainment solution to identify the best, most efficient approach to life-cycle supportability.

The FLRAA PMO is actively tackling IP-associated supportability barriers early in the life cycle through stakeholder communication, competition in contracting, and the system design process to achieve an optimal support outcome. Moreover, the PMO utilized the continuous feedback from the CD&RR efforts to assess the impact of industries’ system design attributes and data right assertions on the Army’s ability to meet FLRAA life-cycle affordability, sustainment, and modernization goals. The FLRAA PMO’s proactive IP approach of planning

early and communicating openly with stakeholders enabled the program's current state of success.

The Army awarded the FLRAA WSD contract to Bell Textron, Inc. on December 5, 2022. Their competitor, Sikorsky Aircraft Corporation filed a Government Accountability Office (GAO) protest on the FLRAA WSD contract award on December 28, 2022. The GAO announced its decision to uphold the Army's decision to award the contract to Bell Textron on April 6, 2023. Currently, the FLRAA PMO and Bell Textron are executing the WSD contract utilizing MTA authorities and will transition to a Major Capability Acquisition (MCA) at Milestone B. The MCA includes nine contract options for the Engineering and Manufacturing Development (EMD) through Low Rate Initial Production (LRIP).

### ***Assessment of the Results Related to the Pilot Program***

Since the FLRAA program is still in the early stages of contract implementation with Bell Textron, the Government has not yet fully evaluated the impact of the data delivered thus far. Through the innovative use of VATEP during the source selection process, however, the PM can make reasonable presumptions about the expected benefits that the IP strategy will have on both the sustainment and supportability of the FLRAA system moving forward.

### ***IP Strategy and Source Selection Implementation***

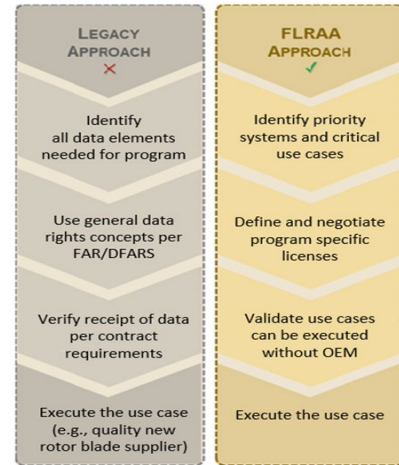
The FLRAA IP Strategy describes the PMO's plans for the access, use, and protection of all IP, data deliverables, and associated license rights associated with the program, including that for all the system's components, assemblies, and parts. FLRAA's IP strategy contains sufficient detail to allow senior acquisition leadership insight on how it will meet the technical, business, and financial goals of the program. It complies with all applicable laws and policies, while most importantly, reflects the Army's acquisition, sustainment, and modernization priorities. Like the Acquisition Strategy, the IP Strategy will evolve over time, and will continuously reflect the status and desired goals of the program.

Prior to the release of the RFP, the FLRAA PMO assessed specific scenarios where the Government would need technical data for the long-term sustainment of FLRAA. As part of the RFP, the Government prioritized the acquisition of IP rights in its source selection criteria. It specifically identified areas where IP rights were deemed most valuable to the Government and considered the long-term sustainment of FLRAA; these were illustrated as "use cases." By prioritizing IP rights for high value systems in the RFP, the Government was able to leverage competition by rewarding offerors with a more favorable evaluation, based on how effectively they were able to meet the Government's criteria for these use cases.

FLRAA's RFP used a VATEP method to incentivize the offerors to provide IP rights beyond what the Government may be entitled to, per the DFARS. The Government provided credit when offerors agreed to provide all of the rights required to execute a given use case/system pair, either organically or competitively. The Government grouped the use cases by tier and assigned each tier a value. The offerors then identified to the Government use cases for which they were willing to provide rights and labeled them: unlimited rights, GPR, or SNLRs. The concept was that the contractor would articulate the necessary IP and associated license rights, including dates that would meet the Government's need as defined in the use case, thus eliminating ambiguity on Government objectives and expectations. The Government summed up the associated value for inclusion into the VATEP calculation for a given offer. For example,

acquiring SNLRs to support integrating new survivability systems led to a predetermined credit to the offerors' VATEP.

The FLRAA IP strategy attempts to resolve points of failure that existed in the traditional IP approach by using use case pairings and SNLRs. Historical approaches to data rights have not delivered win-win outcomes for both the Government and contractor. FLRAA's methodology allows industry to identify the data and associated rights necessary to execute a specific scenario or use case and offer the Government the IP and data to execute the use case in a way that also benefits them in the evaluation. Rather than the Government attempting to define data it needs, FLRAA leveraged the contractor's expertise to provide the minimum level of IP necessary to complete each use case. With this method the contractor guarantees the sufficiency of the IP provided to fulfill those use cases. The figure illustrates the differences between the legacy approach and FLRAA approach to IP.



Historically, there also has been contention between data for the purposes of OMIT and DMPD. The overlap between these two “types” of data presented a problem in previous Government IP strategies because industry has the ability to restrict rights to DMPD for items developed exclusively or partially at private expense while the Government is entitled to unlimited rights in data necessary for OMIT (except for DMPD). To resolve this historical issue, FLRAA identified specific data deliverables they believed were OMIT, and if some of those deliverables required DMPD to execute a use case, FLRAA asked the offerors to articulate any DMPD associated with the OMIT cases and propose a level of rights for the associated DMPD to support the use case.

Additionally, to provide clarity and fairness in the evaluation of industry proposals, FLRAA included two allowable Government defined SNLRs. The first type was SNLR “A”, which gave the Government immediate full access data rights which garnered the offeror a full VATEP credit. The second type was SNLR “B”, which covered rights triggered after an event and may have an associated optional fee, which garnered the offeror partial VATEP credit. These SNLRs provided allowance for predetermined data fees and variations in delivery timing of data rights. Participation in VATEP was optional; however, the selected awardee chose to participate by offering enhanced rights to the Government (while retaining ownership to the IP), which provides a path that will help the Government meet its Operations and Support (O&S) goals. As a result, the Government will meet its goals more efficiently, and the contractor will be able to protect its investment and IP.

***Key Takeaways and Lessons Learned***

One of the primary outcomes and success of this process was the increased transparency in IP rights between the Government and industry partners prior to award and execution of the FLRAA WSD Contract. Determining win-win opportunities with the offerors while still in competition developed a stronger understanding of mutual interests and contractor limitations early in the process. This increased level of transparency enabled the Government to prepare its future support strategy with a better understanding of future manufacturing and repair facilities



options and helped industry align themselves with the Government's key interests at the initiation of the partnership.

**As a result, Bell Textron offered FLRAA access to more than 50 percent of the use cases deemed most valuable to the program without any additional cost to the Government.**

These cases were the most critical to efficient life cycle sustainment. Upon assessment, the Army was pleased to find that Bell offered access to 75-100 percent of the use cases related to a major system for five of FLRAA's major systems. Further, the Army can gain access to 50-75 percent of the associated use cases for the wing, main transmission, rotor blades, and the fuselage; all of which have considerable associated sustainment costs. Additionally, Bell offered numerous use cases on the remaining lower priority systems, giving the Army the ability to better sustain those systems as well.

With a good understanding that the Government cannot merely mandate that offerors grant the Government rights in data or software beyond certain thresholds, there was initial concern that industry would not find benefit in participating in this concept and therefore would either offer extremely limited or no additional rights to the Government. To measure the effectiveness of FLRAA's strategy, the program office took note of the percentage of use cases the contractor offered compared to the number available. The results have been encouraging. Industry granted unlimited rights, GPR or SNLRs to **nearly 40 percent** of the use cases. Specifically, for the Tier 1 and 2 cases deemed most significant to the Government, Bell offered rights to approximately 55 percent and 75 percent of the use cases respectively. It should, however, be understood that in this IP approach, the amount of data rights provided was not itself a dispositive factor in deciding the contract award. Rather, it was an incentive to the vendor to provide more data rights, as well as the other important factors like performance and price.

Additionally, the source selection methodology included MOSA use cases, which provided opportunity for the contractor to seek credit through VATEP or through the use of MOSA design. To be granted MOSA credit, Government SMEs reviewed each case to ascertain its benefits. Bell sought VATEP credit on approximately 33 percent of the available VATEP MOSA use cases, of which the Government found approximately 40 percent to be beneficial. While the number of MOSA use cases were not as notable as the data associated with increased IP rights, FLRAA viewed each use case as a continued step in the right direction towards improving the Government's ability to sustain a system over the long term. Further, the benefits of MOSA readily extend the ability to modernize the aircraft at lower cost and in less time. Due to the significant impact modernization activities have on the life cycle management of an aircraft, FLRAA recommends continued inclusion of the MOSA concepts in IP source selection methodologies.

The Army recognizes the value of maintaining rigor in every process that we execute in the program. It is important for programs to take an active role in maintaining access to and confirming proper markings for example, which can be resource intensive. For FLRAA, transparency and communication with the vendor has contributed to a better partnership from the start of the program. The FLRAA IP Strategy focuses on enabling the Government's ability to execute key use cases while providing mutual understanding of interests and benefits to the contractor. The Government's ability to obtain 50 percent increased rights to FLRAA's high priority/O&S impact systems to enable future life-cycle affordability is a positive indication of future success.

## **3.2.2 Navy**

### ***Multi-Engine Trainer System***

#### ***Description***

The Multi-Engine Training System (METS) is a follow-on replacement program for the T-44C Pegasus fleet, which will modernize multi-engine aircraft training. METS provides an intermediate and advanced training platform for accession into P-8, EP-3, KC-130, E-6, E-2, CMV-22 and MV-22 aircraft. This program will procure a commercial aircraft, a ground-based training system, spare parts, support equipment, essential training/curriculum development and support materials, and systems engineering services and contractor logistics services. The Navy selected this program for inclusion in the Pilot Program due to the early stage of this procurement and the ability to obtain and evaluate the technical data/computer software and associated data rights as part of the competition.

#### ***Activities Performed***

Throughout FY 2021, the METS Program Office conducted market research for, drafted, and refined its aircraft procurement competitive RFP. In November 2021, the Program Office held a pre-solicitation conference and released the aircraft RFP in December 2021. METS aircraft procurement proposal development, submission, evaluation, and discussion occurred throughout 2022. In January 2023, the Program Office awarded the aircraft production contract to Textron, Inc. Textron will deliver the first aircraft in January 2024.

#### ***Assessment of the Effectiveness of the Activities***

The January 2023 successful award of the production contract is a direct result of the effectiveness of the activities performed by the PMA-273 Program Office. The pre-solicitation conference allowed program leadership to discuss pertinent considerations with multiple potential offerors at once. The Program Office held a general session to potential offerors, followed by one-on-one sessions for potential Prime offerors at their request. Potential offerors asked questions and raised concerns about the draft RFP. Additionally, the Program Office asked potential offerors to submit all questions or concerns in writing so the Program Office could disseminate written answers to all potential offerors. Potential offerors were more prepared when the Program Office released the RFP for the aircraft production contract in December 2021.

The METS aircraft source selection evaluation scheme encouraged offerors (through potentially assessed strengths and risk reducers) to propose greater technical data/computer software license rights than offerors customarily provide to the public for a commercial aircraft.

#### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

Based on feedback received through in-depth market research for the RFP, the METS Program Office reviewed types of technical data/computer software, and associated rights, for procurement and sustainment activities across all lines of effort for the platform. These considerations included:

- Leveraging instructions for continued airworthiness per Federal Aviation Administration regulations;

- Drafting data deliverable requirements to require delivery of unrestricted FFF and OMIT data; and
- Encouraging offerors to use special licenses or access agreements to provide technical data/computer software rights in excess of those required by regulation.

Pursuant to DFARS 227.7103-1(c), the solicitation stipulated that offerors were not required, except as provided under DFARS clause 252.227-7015, to sell or otherwise relinquish to the Government any rights in technical data/computer software developed at private expense, as a condition of being responsive to a solicitation, or as a condition for award. Ultimately, the awardee elected to “no-bid” the greater technical data/computer software license rights contemplated in the solicitation.

Notwithstanding the above, the METS contract incorporates an enumerated list of data deliverables and annotates which data deliverables are accompanied by unrestricted rights, pursuant to DFARS 252.227-7015(b)(1). This contractually memorialized enumerated data rights lists bring clarity to the data rights of the commercial Instructions for Continued Airworthiness (ICA) data.

### ***Assessment of the Results Related to the Pilot Program***

The Program Office considered all IP aspects and included them in the aircraft specification based on lessons learned from the previous T-44 program. The T-44 program utilizes an annual data licensing agreement and an engineering services contract between the Fleet Support Team and Textron that provides limited data rights and technical reach-back. The Program Office was able to use this strategy as an example for long-term sustainment of the METS platform. Offerors were encouraged to use special licenses or access agreements to provide technical data/computer software rights in excess of those required by regulation.

### ***Key Takeaways and Lessons Learned***

The METS aircraft source selection evaluation scheme encouraged offerors to propose greater technical data/computer software license rights than offerors otherwise customarily provide to the public with a commercial aircraft. Even though the awardee elected to “no-bid” the greater technical data/computer software license rights contemplated in the solicitation, the contract still incorporates an enumerated list of data deliverables and annotates which data deliverables are accompanied by unrestricted rights pursuant to DFARS 252.227-7015(b)(1). This contractually memorialized enumerated data rights list brings clarity to the data rights of the commercial ICA data. Ensuring a common understanding of license rights, by way of the enumerated data rights license list, ensures data deliverables consisting of FFF data, and “OMIT data are provided with unrestricted license rights. These rights are sufficient to sustain the aircraft in the same manner as other commercial customers. If aircraft are damaged or the Government uses the aircraft beyond the commercial sector service life, the Government would be subject to additional expense or risk.

Increasing communication with all potential offerors through discussion of pertinent considerations via a pre-solicitation conference greatly increased efficiency and mitigated schedule risks of the RFP process. While commercial purchases save the Government costs in development and test, they can hinder the Government in the area of data, due to the fact that IP is either not for sale, or too expensive for justification. Partnering with the Original Equipment Manufacturer (OEM) through licensing or sustainment engineering may be an effective means of

bridging this gap. A challenge with the approach is the way acquisition programs are funded. Normally aircraft procurement end with the delivery of the last aircraft. Sustainment funds can be difficult to obtain past this date. A recommendation would be to earmark sustainment funds to cover the licensing of commercial data rights or sustaining engineering for the aircraft after procurement funds are expended.

### ***Shipboard Air Traffic Radar***

#### ***Description***

The U.S. National Defense Strategy calls for military forces to assure allies and friends, dissuade potential adversaries, deter aggression and counter coercion, and defeat adversaries in order to accomplish our national objectives. The Shipboard Air Traffic Radar (SATR) AN/SPN-50(V)1 supports these objectives and will be the primary air traffic control (ATC) surveillance radar onboard Nimitz Class Aircraft Carrier (CVN) and Amphibious (LHA and LHD (LH)) type ships.

The launch and recovery of aircraft, to include ATC, is a primary function of aircraft carriers and amphibious landing platforms. The surveillance function provides weather and radar data to air traffic controllers supporting aviation operations of all Navy, Marine Corps, joint and allied aviation assets within the assigned airspace. These data are utilized by air traffic controllers to provide a variety of ATC services such as radar approach and departure services, to include aircraft separation, airspace monitoring, navigational assistance, emergency vectoring, traffic calls, and vectoring and sequencing to the final approach point. Reliable and accurate ATC surveillance radar enhances overall mission and training effectiveness, and safety for aircrews and aircraft alike. The Navy signed the SPN-50 capability development document (CDD) in March 2015 and the program held Milestone B in September 2015 where the milestone decision authority (MDA) designated the SPN-50 program as an ACAT IV(T). The Navy signed the SPN-50 Capability Production Document in November 2018. The MDA conducted Milestone C in September 2020. The SATR sustainment strategy is a two-level maintenance concept: Organizational to Depot. The design is optimum for organic ship-level maintainability. The Program Office plans to use Interim Contractor Support until the projected Material Support Date in the third quarter of FY 2025.

#### ***Activities Performed***

After the FY 2020 Milestone C review and LRIP contract award in September 2020, the AN/SPN-50(V)1 Program Office conducted an LRIP post-award conference in November 2020, followed by a combined ship-integration Program Management Review (PMR) in December 2020/January 2021. In March 2021, the Program Office conducted a physical configuration audit (PCA) on engineering development model No. 3, and in April 2021, the Program Office awarded an LRIP option for three additional units. In June 2021, the Program Office provided an RFP to the prime contractor for delivery of two additional LRIP units. Additionally, in June 2021, the Program Office conducted an LRIP PCA, followed by a delta PCA in September 2021 to support inspection and acceptance of the first LRIP unit.

In May and July 2021, the AN/SPN-50(V)1 Program Office held a joint PMR with the MMR Program Office and the prime contractor to discuss efforts to address obsolescence issues and potential gaps identified in the technical data package (TDP). In July and August 2021, the Program Office conducted flight-testing and in August 2021, the Navy approved a Naval

Training System Plan. In May 2022, the Program Office issued an RFP to the OEM for five additional units. The Program Office is targeting contract award in August 2023 with a technical evaluation completed and a Business Clearance Memorandum in process.

In June 2022, the Navy successfully installed AN/SPN-50(V)1 on the U.S.S. Dwight D. Eisenhower (CVN-69) and the Navy certified the Carrier Air Traffic Control Center. The Navy signed the System Operability Verification Test and the contractor delivered technical manuals and Maintenance Requirement Cards to the Navy.

In August 2022, the Program Office awarded two additional LRIP units via contract modification. In September 2022, the Program Office awarded an Interim Contractor Support contract modification. Then, in November 2022, the Program Office conducted another joint PMR with NAVSEA's MMR Program Office and the OEM to address potential combined sustainment efforts.

In December 2022, the Navy conducted flight deck certification and IT-C2 testing. These events revealed significant software issues, delaying the Initial Operational Capability (IOC) schedule. The contractor installed software updates and subsequent flight testing verified software issue resolution.

In January 2023, a high rate of Power Amplifier Module (PAM) failures began to occur aboard CVN-69. The Navy initiated PAM root cause correction analysis (RCCA), which is ongoing. The Program Office rescheduled IOC from fourth quarter of FY 2022 to third quarter of FY 2024 due to delays to integrated testing and operational testing. The expected inventory is 25 AN/SPN-50(V)1 systems (12 LRIP and 13 full rate production units).

### ***Assessment of the Effectiveness of the Activities***

The Program Office conducted a joint system verification review and functional configuration audit (FCA) in August 2020 resulting in several FCA deficiencies and corrective actions which are still open for completion. The deficiencies are related to meeting system requirements centered on radar performance. The Program Office and its prime contractor are currently addressing deficiencies, such as unreliable target reporting for fixed and rotary winged aircraft through software upgrades, which underscore the importance of a robust technical data/computer software package. Initial assessment of the technical data/computer software package began during PCA and continued into developmental testing and first system installation. The assessment results show that while the Government has access to the data required to successfully install, operate and maintain the AN/SPN-50(V)1 in a shipboard environment, the Government is highly reliant on the OEM to address technical issues and determine the best path forward for obsolescence.

In May 2021, the SATR and MMR Program Offices met jointly with the prime contractor to discuss future efforts to address obsolescence issues and capitalize on commonalities across the prime contractor's naval programs. Discussions focused on the prime contractor's effort to implement a configuration change that mitigates obsolescence issues and increases AN/SPN-50(V)1 and MMR system commonality. The Program Offices are working together to review several courses of action for implementing this configuration change effectively. In July 2021, the SATR Program Office conducted a joint PMR with NAVSEA's MMR Program Office and the prime contractor to reiterate data sharing intentions between the two programs. The Program Offices were able to compare and contrast the amount, type, and level of drawings and

provisioning technical documentation received to date. The SATR Program Office continues to coordinate with the MMR Program Office to utilize technical data/computer software common between the MMR and AN/SPN-50(V)1 systems that the prime contractor delivered to the MMR Program Office. The Program Office learned that to compete production, the Government requires a Level 3 (or product level 58) technical data/computer software package. In order to compete sustainment of the platform, acquiring tailored data and negotiated rights to use the data is required.

The AN/SPN-50(V)1 team continues to review and request data rights asserted by the contractor, Saab, Inc. Identification and assertion of restrictions on the Government's use, release, or disclosure of technical data/computer software submitted in accordance with DFARS 252.227-7017 and incorporated into the EMD and LRIP 1 contracts include the following:

- Computer Software Configuration Item (e.g., Signal Processing, Data Processing, Radar Control, Local Maintenance Console & Remote Maintenance Console, Weather Processing, and Redundancy Management);
- Adaptive Clutter Filter Algorithm for Through-the-Sensor Weather Processing;
- Real-time Weather Radar Display; and
- Weather Extractor Computer Common Radar Data Processing Modules (e.g., Beam Processing, Post-Processing, and Volume Processing software modules).

Delivery of this data would assist the Government in organically maintaining the system once the production phase is complete.

#### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

Government engineering and logistics teams, working together across the AN/SPN-50(V)1 and MMR programs are able to evaluate the documentation provided to determine gaps in the technical data/software packages, or where there are different program requirements. One such identified gap is the lack of part number identification on applicable drawings, which diminishes material availability and future second source manufacturing and repair options. Through cooperation and lessons learned, the prime contractor is delivering drawings, specifications and reports via NAVAIR's specific web-based Contract Deliverable Requirements List (CDRL) delivery tool. The Program Office requires the prime contractor to deliver updated or up-to-date AN/SPN-50(V)1 manuals through the NAVSEA advanced technical information support web portal to ensure that the Navy's radar system is operable.

#### ***Assessment of the Results Related to the Pilot Program***

Joint PMRs (SATR and MMR) with the prime contractor give the Government opportunities for strategic advantage. Addressing multiple Service programs capitalizes on commonalities with potential for gaining efficiencies and economies of scale. This refers to both hardware and software, and then extends to processes, such as provisioning, that are common between two or more programs.

The sharing of information reduces effort of document production and non-recurring engineering outputs. The Program Office should evaluate sustainment activities, considering both competing and/or utilizing organic solutions. Collaboration with the contractor and other

programs when performing this evaluation can lead to a greater understanding of the scope and depth of requirements. Lessons learned from the Pilot Program have led to a more specific negotiation for delivery of necessary technical data/computer software, to include drawings, provisioning data, and the data rights to support these strategies.

### ***Key Takeaways and Lessons Learned***

Discovery of technical data/computer software gaps started at PCA, and the Program Office continued to find gaps throughout developmental testing and installation of the first system. Gaps include insufficient data for provisioning and materials that did not meet minimum shipboard use specifications. The OEM delivered the data in Swedish, which was a complicating factor.

The Program Office identified gaps via CDRLs in the FY 2022 procurement contract, awarded in September 2022. The Program Office learned that the data identified in the CDRLs should be sufficient for provisioning efforts; materials should meet minimum shipboard use specifications, where applicable; and English data deliverables will be specified when dealing with foreign contractors. When possible, a strategy to leverage data sharing across Government (cross-program/Service) programs is preferred.

The SPN-50 Program Office is coordinating with the MMR Program Office in order to utilize technical data/computer software common between the MMR and SATR AN/SPN-50(V)1 systems that was delivered to the MMR Program Office as part of its strategy to acquire sufficient rights and data in the TDP to support a competitive production and sustainment approach.

The ability to ensure assessment of both competing and/or utilizing organic capabilities to perform sustainment requirements is extremely valuable in determining the sustainability of a platform over time. Collaboration with the contractor and other Program Offices during the assessment period is preferred, and the Program Office should be specific with the contractor about delivery of the necessary technical data/computer software, to include drawings, provisioning data, and associated data rights to support these strategies.

### ***Multi-Mode Radar***

#### ***Description***

The MMR was competitively-procured as a non-developmental item system with custom interface development to support the United States Coast Guard (USCG) Offshore Patrol Cutter's (OPC) class, providing both air and surface surveillance. The MMR is a Navy Type/Navy-Owned sensor system for both USCG and Navy. The MMR is the USCG OPC's primary sensor used for air surveillance, surface surveillance, and gun weapon system cueing. MMR also serves as the surveillance system for the Expeditionary Sea Base (ESB) ships to support multiple missions, such as air mine counter measures, counter-piracy operations, maritime security operations, humanitarian aid and disaster-relief missions, and crisis response operations. In addition, the littoral combat ship (LCS) class will utilize MMR in support of mine countermeasures, anti-submarine, or surface warfare missions in near shore and open ocean environments. MMR shares a substantial number of system elements with NAVAIR's AN/SPN-50(V)1 program and the Navy selected the MMR program for inclusion in the Pilot Program for the same reasons as listed in the AN/SPN-50(V)1 section above.

#### ***Activities Performed***

In FY 2021, the MMR Program Office conducted IP assessments through collaboration with the AN/SPN-50(V)1 Program Office. In order to meet future procurement needs for the USCG's OPC class and the Navy's ESB class, the Program Office determined that a follow-on production contract is required. The Program Executive Officer for Integrated Warfare Systems (PEO IWS) determined that the Level 2 TDP delivered by the prime contractor was not to the level of detail necessary to competitively bid the next production contract. In December 2021, the Navy accepted a sole source follow-on contract proposal from the prime contractor. In September 2022, the Program Office executed an Unfinalized Contract Action to procure one system. The Program Office will definitize this contract to procure a second system and take advantage of bulk buy prices. The estimated contract award is fourth quarter of FY 2023.

The Program Office continues to collaborate with the NAVAIR AN/SPN-50(V)I Program Office, especially in the area of logistics. A joint program review occurred in June 2023, where the Government and industry teams discussed these current issues.

### ***Assessment of the Effectiveness of the Activities***

The MMR consists of above deck (antenna unit) and below deck equipment. Major below deck components are: the solid-state transmitter; the antenna control unit; the power distribution/conditioning unit; the high frequency unit; the signal data unit; the dry air unit-transformer; the man aloft switch; and the maintenance display. The Program Office plans traditional organic sustainment activities for both the weapon replaceable assemblies and shop replaceable assemblies. Throughout FY 2021, the MMR Program Office identified areas of the technical data/computer software package that did not fully support a competitive production and sustainment strategy and attempted to remedy these gaps with the prime contractor by the following courses of action:

- Pursuing contractual remedies against the prime contractor for incomplete technical data/computer software package deliveries.
- Seeking to acquire sufficient license rights in the technical data/computer software package to support a competitive production and sustainment approach. However, these efforts were not successful. Obsolescence issues drove the prime contractor to a technical refresh so there were few benefits in pursuing a Level 3 TDP. In FY 2023, the Program Office continued to focus on these efforts.
- Addressing obsolescence, diminishing manufacturing sources and material shortages (DMSMS), and missing provisioning data through repeated communications with the prime contractor to obtain the missing data and information.
- Addressing insufficient requirements testing. This has resulted in a majority of the requirements verification/testing being completed.
- Pooling technical data/computer software with NAVAIR's AN/SPN-50(V)1 Program Office to fill gaps in their respective technical data/computer software packages. Joint Program Office reviews have resulted in exchanging/coordinating materials/provisioning information to support logistics efforts.
- Continuing to leverage/coordinate Program Office activities with NAVAIR's AN/SPN-50(V)1 Program Office to fill requirements and logistics gaps, such as environmental



testing, provisioning data, and documentation. The Program Office has leveraged a majority of the environmental testing from the AN/SPN-50(V)1 program.

### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

MMR technical data/computer software package gaps existed because the initial production contract did not contain sufficient language or CDRL Data Item Description (DID) reference to allow PEO IWS to procure a Level 3 technical data/computer software package that could support a competitive production and sustainment period. After repeated attempts over a two-year period to obtain a rough order of magnitude estimate to fill gaps in the technical data/computer software package, the prime contractor chose not to provide an estimate. The prime contractor's eventual response via a follow-on production RFP appears to be unreasonably high. However, as noted earlier, the need for this Level 3 TDP was negated due to a pending technical refresh. Furthermore, in conducting additional assessments, as well as through collaboration with NAVAIR's SATR Program Office, the MMR Program Office was able to establish second sources for multiple parts. For example, a second source for power filters and transformers yielded savings of thousands of dollars per part, to include accelerated lead time by as much as six months in one case.

### ***Assessment of the Results Related to the Pilot Program***

Through collaboration with the SATR Program Office, the MMR Program Office requested a sole source proposal that included a Contract Line Item Number (CLIN) for enhanced data rights for the MMR system technical data/computer software package. Once the Program Office received the initial proposal response, comparison with the AN/SPN-50(V)1 system helped the Program Office identify gaps and requests for additional details and clarifications. The proposal to date shows a major increase in costs from the original production contract. The SATR Program Office helped evaluate the offeror's proposal and proposed enhanced data rights to determine if the technical data/computer software package will support a competitive sustainment strategy. The SATR Program Office provided initial reviews of the unit material costs, as well as the TDP, which helped inform future discussions on follow-on SATR contracts with the OEM. With projected contract award in fourth quarter of FY 2023, the Level 3 TDP proposed cost is excessive (greater than \$25M). Therefore, the Program Office continues to pursue acquiring sufficient data to support organic sustainment, including depot repair. The obsolescence issues identified by the OEM negated the value/necessity of obtaining the detailed drawings and TDP necessary to compete the MMR radar.

### ***Key Takeaways and Lessons Learned***

Leveraging data sharing across Government (cross-program/Service) programs is highly recommended. This strategy between the MMR and SATR Program Offices proved to be highly effective, resulting in exchange of technical data/computer software between the programs to identify the gaps. Pursuing a joint contract strategy and attempting to assess license rights to individual components is effective as well.

Holding joint PMRs with industry allows the Government opportunities for strategic advantage. Increasing clarity in contracting language to deliver unrestricted FFF and OMIT data is recommended. Seeking valuation assistance from IP SMEs if cost increases greatly from

values in original production contracts will provide the Government with opportunities for counter-proposals and negotiation techniques.

### **3.2.3 Air Force**

#### ***Survivable Airborne Operations Center–ACAT ID***

##### ***Description***

The Survivable Airborne Operations Center (SAOC) will replace the aging E-4B fleet which faces capability gaps, diminishing manufacturing sources, increased maintenance costs, and parts obsolescence as it approaches the end of its serviceable life. SAOC will provide the President of the United States, Secretary of Defense, and the Chairmen of the Joints Chiefs of Staff a worldwide, survivable, and enduring node of the National Military Command System to fulfill national security requirements throughout all stages of conflict. As a command, control and communications center directing U.S. forces, executing emergency war orders and coordinating the activities of civil authorities including national contingency plans, this capability ensures continuity of operations and continuity of Government, as required in a national emergency, or after negation/destruction of ground command and control centers. SAOC will fulfill the requirements of the Air Force (AF) Nuclear Mission by providing Nuclear Command, Control and Communications (NC3) capabilities to enable the exercise of authority and direction by the President to command-and-control U.S. military nuclear weapons operations.

##### ***Activities Performed***

The SAOC Program sought out the input of the OSD IP Cadre and the Department of the Air Force IP Cadre (AF IP Cadre) to improve their RFP and programmatic documentation. While OSD reviewed the SAOC draft RFP as part of a pre-RFP Peer Review (DFARS 201.170(a)(1)(i), and PGI 201.170-2(a)(1)) in Fall 2022, the AF IP Cadre reviewed relevant programmatic documentation before carefully analyzing all unclassified content in that RFP. After completing that review, the AF IP Cadre provided the program office a summary of its findings, including ways to improve various portions of that RFP and discussed its findings with relevant personnel assigned to the program office. Based on this guidance, the SAOC Program modified portions of its RFP to reflect these improvements.

Various portions of the SAOC final RFP reflect a holistic approach to requiring offerors to map the IP licenses they will grant to IP deliverables that describe or are Major System Components (MSCs) and Modular System Interfaces (MSIs) identified in the Government's and offerors' proposed architectures. The Statements of Work (SOWs) highlight the use of a Digital Environment to track all IP rights and deliverables. Finally, the SAOC RFP's evaluation criteria includes technical data rights and the Government's ability to use them throughout the life of the system.

##### ***Assessment of the Effectiveness of the Activities***

The SAOC RFP implements best practices described in DoDI 5010.44 and DAFPAM 63-138. Specifically, the RFP includes the Government's architecture. That architecture identifies the minimum set of MSCs and MSIs that define the shared boundaries between those MSCs. It requires offerors to identify in their proposed architecture MSIs and MSCs that correlate to the MSIs and MSCs identified in the Government's architecture. It also requires offerors to map the

IP licenses it will grant to IP deliverables that describe or are MSCs/MSIs in the Government's and offerors' proposed architectures. Lastly, it requires offerors to demonstrate that their proposed MSIs will comply with Air Force's Open Mission System standards.

### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

As the date set for receipt of initial proposals has passed and the program is currently in source selection, it is not possible to provide such an assessment at this time.

### ***Assessment of the Results Related to the Pilot Program***

As the date set for receipt of initial proposals has passed and the program is currently in source selection, it is not possible to provide such an assessment at this time.

## ***Air Force IP Cadre Tactics, Techniques, and Procedures (TTPs)***

### ***Description***

In September 2019, Deputy Assistant Secretary of the Air Force (Contracting) (SAF/AQC) and the Air Force General Counsel's Office (SAF/GC) chartered the AF IP Cadre to enable the Air Force and Space Force to execute cost-effective acquisitions by obtaining mission-essential IP and associated license rights at the proper time. The AF IP Cadre is a cross-functional team of IP and acquisition experts with expertise in IP law, contracting, program management, logistics, and multi-disciplinary science and engineering areas.

The AF IP Cadre's formal mission is to provide the Department of Air Force with tools and advice to strategically execute cost efficient acquisitions and enable appropriate flexibility in life cycle support by obtaining mission-essential IP deliverables and associated license rights. Over the past year, the AF IP Cadre has continued its development, publication, and promotion of best practices and TTPs to empower the work force and continue building a strong AF IP culture.

### ***Activities Performed***

#### ***Intellectual Property Continuity Book***

The IP Continuity Book TTPs demonstrate how to collect and retain IP content and any IP rights-related documentation, which provides programs with an enduring authoritative source of all IP-related content. This collection of all IP-related content is vital to facilitate rapid resolution of IP-related issues by program office personnel and contracting officers and their successors—throughout the life cycle of the acquisition (including research, development, production, sustainment, and disposal). The AF IP Cadre recommends that each acquisition program designate an individual (preferably a configuration manager) to collect and retain IP documentation in an electronic repository and keep it current in real-time with assistance and support from contracting officers and program office personnel. The IP Continuity Book is published on the AF IP Cadre's Teams channel. Thus, AF acquisition professionals now have easy access to this TTP resource. Additionally, the AF IP Cadre has presented these TTPs to several programs and in various forums.

With particular emphasis on IP evaluation and valuation, the IP Continuity Book TTP details the IP related documents to be collected during each phase of the acquisition life cycle including the following:

- Programmatic IP documents (e.g., capability development documents focused on Modular Open System Approaches, and specific strategy and planning documents related to IP);
- Market Research IP documents (e.g., IP industry day minutes, patent applications, and elections of title to inventions);
- RFP-related IP documents (e.g., Sections I, K, L, and M related to IP, including CLINs and CDRLs);
- Negotiated acquisition IP related documents (e.g., specially negotiated licenses, and IP-specific clarification questions);
- Sole-Source IP documentation (e.g., approved IP-related Justification and Approvals (J&As), and IP-related fact-finding questions);
- Contract Documents related to IP (e.g., deliverable tasking statements, and licensing provisions); and
- Contract Administration IP-related documents (e.g., IP deliverables and markings).

#### *Receipt of Data Deliverables TTP*

The AF IP Cadre developed and published a TTP regarding effective use of DD Form 250 (“Material Inspection and Receiving Report”) to ensure receipt of proper data deliverables. First, the TTP advises that the DD Form 1423 (“Contract Data Requirements List”) requires use of the DD Form 250 when accepting deliverables. The TTP then counsels reviewing the delivered data items to determine (a) that they meet the stated requirements and needs of the Government (e.g., format and technical requirements); and (b) that they are properly marked. It also advises that every page of the data deliverables be reviewed to ensure that all the markings in the deliverable conform to the DFARS requirements/contract requirements and that the data rights provided to the Government in each section of the deliverable match those required by the contract. Finally, it recommends contracting personnel not execute the DD Form 250 before ensuring that the data deliverables have been properly evaluated and satisfy the requirements of the contract.

#### *Justification and Approval Template Review*

An initial review of Justification & Approvals (J&A) revealed that some draft J&As did not contain information sufficient to determine whether the use of the proposed authority for seeking a sole source for contract award was justified, particularly when the approval was based on IP, specifically when the justification involved a lack of IP, IP rights, or both. As a result, J&As that were insufficiently documented caused unnecessary delays in approval.

Last year, the Deputy Assistant Secretary (Contracting), Office of the Assistant Secretary of the Air Force (Acquisition, Technology & Logistics) issued an updated J&A and an accompanying Contract Policy Memorandum created by the AF IP Cadre to ensure all statutory and regulatory requirements have been satisfied when justifying a sole source contract award. The updated template extensively addresses the acquisition of IP and associated IP rights under Air Force contracts. This increased focus on IP and associated IP license rights is due to a number of reasons, including (but not limited to):

- New statutes enacted by Congress;
- Alignment with DoD strategy which states that data should be treated as a weapon system and that it is a strategic asset (see e.g., DoD Data Strategy (2020); OSD Memorandum, Creating Data Advantage, 5 May 2021);
- OUSD(A&S)'s enactment of the Adaptive Acquisition Framework that places an increased emphasis on the acquisition of IP and associated IP license rights in DoD 5000-series documents; and
- OUSD(A&S)'s issuance of DoDI 5010.44, IP Acquisition and Licensing, 16 October 2019).

The revised J&A template addresses these issues and provides detailed instructions that focus on the acquisition of IP and associated IP rights. After senior Department of Air Force leadership became aware of this initiative, this year they fully embraced it, highlighted its existence to program executive officers, program managers and requiring activities, and stated that J&As should address these additional areas of interest.

#### *Air Force Data Rights Guidebook Update*

In 2019, the Air Force created the *Air Force Data Rights Guidebook* to equip Air Force acquisition personnel to handle common issues encountered in the realm of acquisition under the DFARS, particularly those issues surrounding the valuation and evaluation of rights in technical data and computer software. The AF IP Cadre is currently drafting significant updates to the Guidebook.

The Guidebook focuses on the need for optimizing license rights within life-cycle planning, source selections, and the procurement of commercial and non-commercial software. Other focus areas are technical data issues within integrated data/digital environments and obtaining the necessary IP deliverables and rights to support cost-effective sustainment.

The Guidebook complements, rather than replaces, other DoD guides and DAU educational tools focused on the acquisition of data rights and software licenses. Each question in the Guidebook presents recurring issues that acquisition personnel can expect to encounter and is followed by a suggested plan for dealing with those issues. Rather than being contemplative, the plans presented are intended to be actionable—not merely a recitation of the rules. The input and coordination of leaders and personnel across the program are critical to understanding the scope of the issues, how they relate to a requirement or life-cycle objective, and what steps can be taken to resolve them.

As of March 2023, the *Air Force Data Rights Guidebook* includes eight chapters:

- Chapter 1 focuses on life cycle planning for IP and discusses how to incorporate IP into the acquisition strategy and related documents, how to identify IP requirements, and other data acquisition topics.
- Chapter 2 guides the reader through IP considerations in source selections.
- Chapter 3 is about optimizing data license rights.
- Chapter 4 outlines the data rights issues with software acquisition including commercial computer software and software maintenance.
- Chapter 5 provides guidance on enforcing delivery of IP content and associated IP rights.
- Chapter 6 provides guidance on data markings.

- Chapter 7 provides guidance to other approaches for reducing the total life cycle costs of weapon systems.
- Finally, Chapter 8 is a guide for data rights issues in integrated data/digital environments.

### *IP Acquisition Strategy Plan*

The AF IP Cadre found that while programs are incorporating intellectual property into their acquisition strategy plan, some plans are not sufficiently detailed, or do not utilize the various approaches to acquiring, valuing, and evaluating IP that they need for the life cycle of the program. To address this issue, the Air Force IP Cadre is creating a guide that can be used in conjunction with the IP Continuity Book as the cornerstone of a program's efforts to acquire IP and associated IP rights for the life of the program.

This cradle-to-grave IP Acquisition Strategy Plan provides a list of approaches for evaluation, valuation, development, production, maintenance, sustainment, and disposition. It also includes considerations for encouraging competition and innovation, including win-win scenarios for the Government and our industry partners.

### *Tactics, Techniques, and Procedures (TTPs) to Build Inter-Agency Relationships and Restrict Foreign Access to Air Force IP*

It is crucial to prevent dilution of U.S. superiority, prevent improper transfer of American ingenuity overseas, and combat foreign adversaries' desire to match U.S. capabilities in an expedited manner without the requisite development time and expense. The Air Force wants to assist the U.S. Government in maintaining its technological superiority by strengthening protections of critical U.S. IP regarding its availability for disadvantageous transfer. Accordingly, the Air Force is currently working across Government agencies to develop relationships and implement TTPs to prevent improper transfer of critical U.S. technologies. The TTPs will assist the field in utilizing identified resources and relationships to limit transfer of important technology to foreign adversaries.

### *Acquisition Strategy Document Template Update*

Current Air Force Acquisition Strategy Panel slides/meeting minutes and Acquisition Strategy Document (ASD) content provide limited insight into the IP deliverables and IP rights in those deliverables that programs intend to acquire. Moreover, those documents do not necessarily address all statutory and regulatory requirements that currently apply to their content. In April 2011, the Principal Deputy, Under Secretary of Defense (Acquisition, Technology & Logistics) (PDUSD(AT&L)) issued an Acquisition Strategy Sample Outline that prescribed the content of acquisition strategies. However, that publication did not address all applicable statutory and regulatory requirements on the date of its issuance. Since then, Congress has enacted various statutes pertaining to the content of acquisition strategies (e.g., Title 10 U.S.C. §§ 4211(c)(2) and 4402(c)). Also, OUSD(A&S) released the DoD 5000-series AAF, where various issuances/pathways describe in detail what an acquisition strategy must address.

To provide one-stop-shopping for Air Force milestone decision authorities, program executive officers, program managers, and contracting officers, this ASD template will address IP deliverables, IP rights, and a MOSA. This ASD draft is still being reviewed by the document owner and revised with IP updates and to improve advance planning to ensure resulting requests for proposals will require IP and associated license rights consistent with the program's

intelligence threat inputs/supportability considerations and product support strategy. This will foster competition, increase interoperability, and facilitate technical upgrades, thereby reducing total life-cycle costs. It will also provide insight to that user community regarding the sheer number of requirements imposed upon them by Congress and OUSD(A&S) so the programs' budget will reflect a more accurate estimate of the total life-cycle costs of the program. The current ASD draft is in the review process and will publish once coordination is completed with all members assigned to update the document with the document owner.

#### *IP Management Training for Senior Leaders*

The AF IP Cadre has developed an initial set of training and training materials for its senior acquisition leaders. The training will include usable and concise information on what and how to understand IP and its impact in various acquisition situations. The goal is to arm Air Force senior acquisition leaders with the questions to ask of their workforce to ensure that they are holistically thinking about and optimally approaching IP and technical data. The training will allow for better, smarter, and timelier decision-making capabilities, which should result in mutually beneficial IP terms and incentivize innovation.

#### *Considerations for Evaluating IP in Source Selections*

The AF IP Cadre is developing a series of TTPs to help the field to think through and consider in what cases it is appropriate to consider IP in source selection and the appropriate methods to do that. This includes all the various aspects of a source selection and its documents. The considerations are multifaceted and encourage early engagement with industry on the topics to create fair and effective source selection criteria. An initial high level TTP was released to the field helping to encourage the programs to consider if IP is an appropriate evaluation criterion, if so when and how and to what level of specificity. Further, it is designed to not eliminate anyone from competition but to enhance competition.

#### *Assessment of the Effectiveness of the Activities*

##### *Intellectual Property Continuity Book*

The AF IP Cadre has received positive feedback from various programs since the IP Continuity Book TTP was published in FY 2022 and continues to engage acquisition professionals and leadership regarding this TTP. Additionally, the Cadre is constantly tracking and assessing the number of acquisition programs engaged and that have successfully instituted the processes and guidance provided by this TTP. Further, the number of programs and individuals who have accessed the Cadre's Teams channel continues to increase.

##### *Receipt of Data Deliverables TTP*

This TTP was released and is being implemented by the field. The AF IP Cadre has over 200 users (and growing) of its Teams channel, and it is expected that this TTP will generate valuable feedback and revisions resulting therefrom as it continues to be used. As noted in a previous report, the Cadre discussed the TTP developments with sustainment and logistics experts, who praised the concept as having significant value. Further, a procurement team indicated an intent to make the TTP a requirement of the program's IP plan because it thought it was critical to the plan's success. Based upon these initial comments, the TTP is expected to continue to generate additional feedback from users that will assist in evaluating its continued effectiveness and to drive refinements.

### *Justification and Approval Template Review*

As reported last year, the Deputy Assistant Secretary (Contracting) Assistant Secretary of the Air Force (Acquisition, Technology & Logistics) (SAF/AQC) approved, signed, and published the updated J&A template and Contract Policy Memorandum to the acquisition workforce on 5 July 2022. (The updated template is available at Air Force Federal Acquisition Regulation Supplement 5306.303-2(a).) The Subject of the Memorandum is “Guidelines for Intellectual Property Considerations and Enhanced Justification & Approval (J&A) Template Completion Instructions.” After the Assistant Secretary of the Air Force (Acquisition, Technology & Logistics) (SAF/AQ) became aware of this initiative, he fully embraced it. Accordingly, on 14 November 2022, SAF/AQ issued his own memorandum to all acquisition personnel stating that program executive officers, program managers, and requiring activities are key contributors to the J&A before the DAF can limit sources or pursue sole-source acquisitions. That memorandum then stated that J&As should also address the following areas of interest: demonstrate how the acquisition strategy supports the J&A conclusions, discuss additional relevant information pertaining to strengthening small business participation, and provide a thorough discussion of efforts to remove barriers to competition for subsequent actions. To spread the word, the AF IP Cadre gave three training presentations to contracting officers and program counsel providing the background on this initiative. The training also identified sources of information the acquisition workforce should consult to properly complete J&As submitted to SAF/AQ for approval. Feedback has been uniformly positive.

The AF IP Cadre, while reviewing a multitude of draft J&As for their IP justification sufficiency, routinely recommended items from their updated J&A template. Accordingly, with the issuance of the template update, the Cadre expects Air Force senior leadership will be able to determine whether the use of the proposed authority for seeking a sole source for contract award is justified faster than is currently the case. In particular, the Cadre expects that the focus on IP in these documents will effectively assist program offices and contracting personnel in performing critical thinking regarding what IP deliverables and IP rights they need to acquire under the proposed sole-source contract (including potentially separately pricing those deliverables and associated rights).

### *Air Force Data Rights Guidebook Update*

To maximize resources and efficiency, the AF IP Cadre is updating the Data Rights Guidebook one chapter at a time. In March 2023, the Cadre issued its first chapter update. That update completely rewrote Chapter 5 (Battling Vendor Lock) and split the result into three new chapters: Enforcing Delivery of IP Content and Associated IP Rights, Data Markings: What is Conforming and Justified?, Approaching IP in Sustainment. The Cadre is working with acquisition professionals and SMEs to draft updates to other chapters. The Cadre will assess the effectiveness of the Guidebook chapter updates in a general manner. Results will vary from program to program depending on their IP needs in relation to negotiation success. The Cadre expects to request feedback from acquisition teams within program executive office portfolios regarding areas in which program offices experience challenges in planning and executing IP strategies.

### *IP Acquisition Strategy Plan*

After deploying the IP Acquisition Strategy Plan in fiscal year 2023, the AF IP Cadre will assess selected acquisition programs employing it. The Cadre will coordinate with the program



and program counsel to evaluate the effectiveness of the IP Acquisition Strategy Plan in acquiring the technical data and software needed for life-cycle sustainment of the program. In particular, the Cadre will assess programs' valuation of IP and data rights, and their evaluation of IP and data rights, where necessary, under the IP Acquisition Strategy Plan. In doing so, the Cadre will review the effectiveness of the approaches of the IP Acquisition Strategy Plan such as MOSA and more robust IP valuation and evaluation practices regarding technical data rights.

#### *Acquisition Strategy Document Template Update*

The AF IP Cadre is currently in process of reviews and will publish once all members assigned to update the document with the document owner. The AF IP Cadre will coordinate with program counsel to assess any increased emphasis on IP deliverables, IP rights and MOSA approaches.

#### *IP Management Training for Senior Leaders*

The AF IP Cadre has received positive reception of its proposed leadership continuing education as a much-needed addition. The AF IP Cadre has completed several senior leader events. The efforts concentrated on providing senior leaders with situational awareness of IP issues that teams need to address throughout the life cycle and the importance of various functional contributions to such effort. The material focuses in on collaboration with industry to develop mutually agreeable and mutually beneficial solutions. The discussion focused on common issues that arise and considerations and approaches teams may take to resolve such issues to the mutual benefit of all.

#### *Considerations for Evaluating IP in Source Selections*

The TTP was widely anticipated and has received wide praise since its release with many new functional program SMEs accessing the TTPs. Senior leaders have asked for teams to review it and the IP Cadre will be briefing a group of senior leaders on the TTP in the coming weeks. The follow-on work will be to iterate this product with more details and assistance for the field.

#### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

##### *Intellectual Property Continuity Book*

Because the IP Continuity Book TTP is intended to be an updated practice and preventative measure, the AF IP Cadre continues to periodically monitor the programs that have implemented this TTP to assess what positive impacts it has had on the program's acquisition activities, such as an increased focus on IP-related contract documents. The AF IP Cadre will assess future activities related to the IP Continuity Book TTP.

##### *Receipt of Data Deliverables TTP*

The Receipt of Data Deliverables TTP focuses on overcoming obstacles to receiving contractually required data. These obstacles impede the Government's ability to create cost-effective sustainment, resulting in depot maintenance costs that erode innovation, modernization, and weapon system deterrence value. Accordingly, the AF IP Cadre is assessing how the TTP improves use of the DD Form 250 as a new or previously underutilized data rights tool. Because these forms are not used until performance has begun (and sometimes well after), it will take

time to develop meaningful data. However, initial comments from SMEs indicate that this TTP is well-received and should result in improvements to sustainability.

#### *Justification and Approval Template Review*

The AF IP Cadre expects that an improved understanding of the necessary IP deliverables and associated license rights will assist programs in reducing instances of IP acting as an unintended and unnecessary obstacle to competing follow-on acquisitions.

#### *Air Force Data Rights Guidebook Update*

The Guidebook provides preferred approaches to resolving obstacles that limit the Air Force's ability to maintain and sustain its weapon systems. By engaging with acquisition teams and encouraging their feedback, the AF IP Cadre can assess any improvements to the acquisition process resulting from the Guidebook, such as stimulating creative business solutions for the procurement of the necessary level of technical data rights and software licenses. The feedback from acquisitions teams, along with questions from field activities, will drive continuous updates to the Guidebook to increase capabilities throughout the workforce to create comprehensive IP strategies and contracts.

#### *IP Acquisition Strategy Plan*

The AF IP Cadre will note any improvements to acquiring the necessary technical data and software for mission success. The Cadre will utilize these improvements in engagements with program teams as part of the acquisition process.

#### *Acquisition Strategy Document Template Update*

The AF IP Cadre will monitor programs that utilize the ASD template update and assess the improvements to the overall acquisition strategy including compliance, and increased emphasis on IP rights and deliverables and modular open system architecture in requests for proposals and responses.

#### *IP Management Training for Senior Leaders*

The AF IP Cadre will track attendance at IP management trainings, as well as utilization of training materials. The Cadre has solicited and will incorporate feedback from the training to improve future training quality. The Cadre will also assess the overall improvement to the IP acquisition and life-cycle sustainment through an increased focus on the IP TTPs in the senior leader training. To date, the feedback has been overwhelming positive with praise from over 15 senior leaders.

#### *Considerations for Evaluating IP in Source Selections*

The AF IP Cadre is tracking utilization of the materials along with requests for training and program support. The Cadre has solicited and will incorporate feedback from training sessions and users of the materials. The Cadre is also tracking overall improvements in acquisitions and life-cycle sustainment as it relates to IP through increased focus on the TTPs. Further, the SAOC Program worked with the Cadre to implement these ideas effectively.

#### ***Assessment of the Results Related to the Pilot Program***

#### *Intellectual Property Continuity Book*

The AF IP Cadre expects that any potential results related to improvements will occur during the award or sustainment phases of the contract life-cycle during which there could be a potential dispute on data rights evaluation, the level of data rights licenses, or data rights deliverables. At that point, the IP Continuity Book TTP is intended to provide guidance and serve as a tool to quickly resolve IP issues and minimize disruptions to the contracting process. The Cadre will continue to track and assess activities related to the IP Continuity Book.

#### *Receipt of Data Deliverables TTP*

The AF IP Cadre continues to anticipate that this TTP will assist in the shift towards a development model in which new aircraft are developed every few years while awarding multiple contracts with short production batches. As noted in prior reports, receiving the proper data deliverables is critical to ensuring the cost-efficiencies and combat value of every platform while driving modernization. This TTP is expected to foster rapid and accurate redesign of weapons systems with spiraling development and fielding, making it easier to move from the current sustainment-centric approach to a design-centric approach on the tactical edge. The Air Force will assess FY 2023 activities when the TTPs generate meaningful data. However, based upon initial assessments, the TTP is being well-received and should have an impact on future data deliverables.

#### *Justification and Approval Template Review*

The J&A Template Review process has enhanced the IP strategy process throughout a program's life cycle and incorporated lessons learned into future efforts. The J&A review is directed to the ultimate results of (1) sustaining the weapon system, (2) accelerating technical upgrades, and (3) enhancing interoperability between the weapon system and other weapon systems in order to reduce the total life-cycle cost of the weapon system.

#### *Air Force Data Rights Guidebook Update*

Through its engagements with acquisition teams, the AF IP Cadre will study the results of the Guidebook's impact. The Cadre expects that the Guidebook will provide acquisition personnel with an increased capability to make informed decisions for improving acquisition outcomes to appropriately equip our fighting forces. Further, the Cadre anticipates that, over the long-term, the Guidebook will encourage a cultural shift to support the acquisition of modern and innovative weapons systems at the speed of relevancy.

#### *IP Acquisition Strategy Plan*

The AF IP Cadre anticipates that outcomes of the IP Acquisition Strategy Plan may include shortened acquisition cycles, the securing of data rights required for future procurements, and more agile specially negotiated licenses.

#### *Acquisition Strategy Document Template Update*

The AF IP Cadre will qualitatively assess the increased emphases on IP rights, IP deliverables and MOSAs as programs incorporate the strategies of the ASD template into new acquisitions.

#### *IP Management Training for Senior Leaders*

The AF IP Cadre will track the frequency of trainings and training attendance and assess any resulting increased emphasis on the Air Force IP TTPs and resources. To date, the AF IP

cadre has presented two such trainings with overwhelmingly positive feedback, which has led to engagement by the field of the AF IP Cadre's services.

### *Considerations for Evaluating IP in Source Selections*

The AF IP Cadre is tracking utilization of the materials along with requests for training and program support. Further, the IP Cadre is planning to follow up with selected programs to receive targeted feedback for further iteration and improvement. The SAOC program was one of the first to use these techniques and is being closely monitored.

### ***Key Takeaways and Lessons Learned***

The SAOC case study and TTPs demonstrate a range of comprehensive strategies developed by The AF IP Cadre for obtaining the IP deliverables and IP rights necessary for modernization and cost-efficiencies from award through sustainment. These achievements reflect valuable lessons.

SAOC highlights the importance of building upon a precise and thorough RFP. Going forward, RFP transparency will likely reduce the risk of major impasses typically found when there is initial miscommunication about data delivery and license scope.

The AF IP Cadre has observed that using precisely defined IP deliverables and IP rights within the RFP, and requiring offerors map the IP licenses they will grant to IP deliverables that describe or are components in the Government's and offerors' proposed architectures, forms a strong base for programs to manage and tailor their IP needs post-award to execute mission imperatives. In addition, the Receipt of Data Deliverables TTP teaches best practices upon delivery by linking acceptance of data to ensuring that the data meets the program's requirements and associated IP rights match the contract.

Highlighting the Air Force's advances in line with valuation under the Pilot Program, an ACAT II weapon system program implemented the AF IP Cadre's due diligence structure and customized valuation methods to overcome a significant IP price impasse over technical data from a contractor. Program officials used those tools to assess the IP price and streamlined data pricing negotiations. During the negotiations, the parties were efficiently focused on the practical needs of both the program and contractor, which had been revealed by the due diligence results. With the ability to balance both parties' data rights' needs and guided by the transparency conferred by the due diligence and IP valuation tools, program officials and the contractor expeditiously resolved the appropriate price for the contractor's IP at a substantial cost savings to the Government.

The AF IP Cadre supported another program achieving successful data outcomes with a contractor through coordination with the Army and Navy. In an ACAT I air vehicle program, officials faced a lengthy impasse in attempting to obtain delivery of multiple data items affecting sustainment costs. Program officials formulated an updated IP strategy, under the guidance of the AF IP Cadre, that set forth a practical discernment of necessary data. In developing the strategy, the Air Force program engaged with program officials at the Army and Navy that had positive experiences with balancing their own needs for similar data rights. The Air Force program gained an enhanced understanding to target necessary data rights, allowing them to create impactful solutions with the contractor for moving forward from delivery impasses.

The AF IP Cadre assisted another AF weapon system with multiple on-going major programs and leveraged the AF IP Cadre's unique skillset to develop a solution satisfying both

the Government's needs and contractor IP concerns. Prior to this solution, the contractor and the Government were unable to move multiple programs forward, thus incurring risk to schedule and capability delivery. With the support of the AF IP Cadre, the Government finalized a special license agreement ensuring sufficient data was available for the program to continue developing, testing, and life-cycle support for multiple programs. Further, Government personnel were provided key negotiating and clarification points on license deliverables, access, and management, to ensure expectations were in alignment for the duration of the system's life-cycle support requirements.

The AF IP Cadre engaged with the KC-46 program to address an IP issue involving expectations of delivery of IP content and IP licenses concerning the KC-46 program, which is based upon a commercial Boeing 767 aircraft. The contractor was concerned about the scope of the delivery requirements for certain aspects of the commercial IP content related to the program, and the Air Force was concerned about achieving its sustainment strategy for this aircraft, particularly during deployment. Of course, the Air Force also wanted to have the most current IP content, given that the data related to the commercial airframe could change over time, and even differ between individual aircraft. The AF IP Cadre worked with the program office, the contractor, and other stakeholders to draft and memorialize a specially negotiated license agreement concerning the commercial technical data and the associated rights to balance the needs of both the contractor and the Air Force. As of the drafting of this report, this issue remains in progress; however, it is nearing completion.

The AF IP Cadre took an active role in supporting the resolution of significant IP disputes throughout the enterprise. In particular, the AF IP Cadre worked with programs to implement best practices in existing programs with appropriate adjustments given the various programs' specific and unique situations. For example, the AF IP Cadre supported programs and contractors to adapt decades old contract structures to include more modern acquisition and sustainment concepts. The AF IP Cadre worked with programs to customize the "one size fits all" approach of the DFARS IP provisions. The AF IP Cadre worked with programs to address significant IP conflicts between prime contractors and subcontractors relating to their IP content and rights obligations.

Finally, the AF IP Cadre has been engaging with industry in a variety of settings to enhance mutual understanding and to develop smart strategies. This engagement with numerous industry partners has been significant and resulted in a beneficial exchange of ideas. The AF IP Cadre appreciates the time and work that industry partners have contributed into these efforts.

### **3.2.4 The Chief Digital and Artificial Intelligence Office (CDAO)**

#### ***CDAO Tradewinds Acquisition Ecosystem***

##### ***Description***

The Joint Artificial Intelligence Center (JAIC) was established in 2018 to seize upon the transformative potential of Artificial Intelligence (AI) technology for the benefit of America's national security. In FY 2019, the JAIC completed an environment scan of current DoD acquisition offerings, collecting data on the compatibility of existing IT contracts with artificial intelligence/machine learning requirements. The agency found that agile contracting strategies, which incorporated IP strategies that incentivized and maximized engagement with the AI marketplace, were needed to ensure efficient and rapid AI procurement at scale. Because

contract vehicles that were suited to implement these strategies did not exist, the JAIC established the Tradewinds Ecosystem of contract offerings.

The first iteration of the Tradewinds Ecosystem utilized both FAR/non-FAR acquisition tools to maximize acquisition agility, provided a platform to collaborate on DoD AI solutions, and applied a complete approach that delivered AI solutions from ideation to tangible solutions to be placed in the hands of the warfighter. Each vehicle was designed to address a specific AI-related challenge the DoD faces (e.g., outreach to non-traditional defense contractors, availability of third-party test and evaluation services, ability to try AI algorithms “before you buy,” and more).

In February 2022, the JAIC, Defense Digital Services, and the Chief Data Officer were merged into one organization, the CDAO. As a result, the CDAO renamed the Tradewinds Ecosystem to the ‘CDAO Acquisition Ecosystem’. There are currently six contract methodologies, some including established contract vehicles that are part of the CDAO Tradewinds Acquisition Ecosystem. Specifically, the CDAO Tradewinds acquisition strategy includes: executing prototype other transactions (OT) in a rapid and agile fashion; the Data for AI Development (DRAID) basic ordering agreement (BOA); a Test & Evaluation Blanket Purchase Agreements (T&E BPA); an AI Talent Management BOA; the TryAI Commercial Solutions Offering (CSO); and the Solutions Marketplace. Due the fact that the OSD IP Cadre was already providing support for the JAIC, the OSD IP Cadre recommended the Tradewinds OT as a case study for the Pilot Program.

The CDAO Tradewinds initiative started as an OT versus a buyer/seller market that it currently represents today. The Tradewinds OT provided an end-to-end acquisition solution that is tailored to meet the AI needs of DoD Components, as well as provide a robust communication network to maximize constructive dialog and collaboration with industry, academia, and other leading AI organizations. The Tradewinds acquisition team leveraged lessons learned from the Tradewinds OT effort to construct the current Tradewinds platform, which focuses on rapid contracting processes and methodologies, as well rapid delivery by assisting the DoD in adopting agile methodologies (e.g., design thinking, immediate delivery to end users, and continuous iterations based on warfighter feedback).

- The objective of the DRAID BOA is to create a flexible and agile contracting vehicle that facilitates all tasks needed to create, acquire, curate, prepare, manage, or secure data sets for use in DoD AI models and application development, testing, certification, and operation. Examples of such tasks include, but are not limited to, Extract Transform Load and Data Engineering Development; Database Design and Development; Data Science Development; Data Analysis; Data Collection and Curation; and Project and Outreach Program Management. For the execution of DoD Task Orders, these activities shall be performed while maintaining appropriate security and ethical considerations, which includes federal and DoD regulations governing cyber security, information security, operational security, ethical standards of conduct, conflicts of interest, and AI Ethical Principles.
- The objective of the T&E BPA is to meet the DoD’s requirements for test technology and tools for a variety of AI and autonomy applications. This contract is open for ordering to all U.S. Government agencies in support of AI T&E. Working in partnership with the prime contractors, CDAO manages the contracts, in coordination

with Army Contracting Command – Rock Island. Through the use of the T&E BPA, users have a flexible means of supporting their commercial AI T&E needs quickly, efficiently, and cost-effectively. Orders may be placed by any contracting officer, and there is no fee to place orders against the T&E BPA.

- The objective of the AI Talent Contract Support BPA is to allow Government agencies to rapidly and repeatedly on-ramp contractor talent needed to advise and assist the future AI ready DoD workforce.
- The TryAI CSO is a merit-based, competitive, bid-selection model used by federal contracting and agreements officers to acquire “demonstrations” of innovative commercial items. By using CSOs, federal organizations can more quickly acquire and test commercial AI solutions. For private industry, CSOs allow contracts for innovative technology to be struck more quickly and on commercial-friendly terms.
- The Tradewinds Solutions Marketplace is the DoD's digital environment of post-competition, readily awardable, technology solution pitch videos. The Marketplace provides a venue for DoD organizations to search, view, review, compare, contrast, contact, discuss, negotiate, and procure data, analytics, digital, and AI/Machine Learning (ML) capabilities solutions through rapid acquisition procedures. For industry, academic partners, and individuals, the Marketplace is a single location to identify, describe, and promote data, analytics, digital, and AI/ML technology solutions, products, and services to the DoD in an environment with a rapid acquisition contract pathway.

### ***Activities Performed***

The CDAO and the OSD IP Cadre continue to collaborate on numerous efforts to implement IP considerations and activities into the CDAO Tradewinds Acquisition Ecosystem, including drafting IP contract terms and conditions into the five procurement vehicles; assisting requirement owners on developing IP strategies for their AI projects; and developing the overall IP strategy for the AI and Data Accelerator initiative. Because partners from all Government agencies may place orders off these agreements, and because of the challenge presented by generating standardized IP terms in a complex emerging industry, the team elected to offer a flowchart to customers, with sample IP structures instead of prescriptive language in the ordering guides. The value added for customers is bespoke language in each order, while the Department benefits from rapid procurement afforded by standardization.

During the first three years of the Pilot Program, the OSD IP Cadre assisted the CDAO in drafting and negotiating IP and IP license terms for specific Tradewinds OT project agreements for OSD and MILDEP customers. In particular, the OSD IP Cadre assisted the CDAO with drafting announcements, IP strategies, technical data and software delivery requirements, and specially negotiated licenses (including conditional licenses) for AI projects utilizing Tradewinds. Many of the vendors which were awarded these project agreements are non-traditional defense contractors, which have privately developed software that is generally licensed under standard commercial license agreements. To ensure the success of license negotiations, it was often important to clearly communicate the Government's use case for the specific technical data and software deliverables. The CDAO Tradewinds acquisition team and the OSD IP Cadre encouraged customers to: 1) not rely upon inapplicable DFARS license

models for privately developed software; and 2) consider how the vendor's commercial license model could be modified to meet the Government's needs in the short-term and the long-term.

During the fourth and final year of the Pilot Program, the OSD IP Cadre collaborated with CDAO on developing the business platform for the CDAO Tradewinds Acquisition Ecosystem that incorporated the lessons learned during the Pilot Program. In particular, the OSD IP Cadre and CDAO collaborated on the development of AI-powered tools for DoD buyers and offerors that would simplify and expedite the process of building requirements for DoD buyers and the process of preparing proposals for offerors. In particular, the CDAO Tradewinds acquisition team and the OSD IP Cadre are developing tools that encouraged and enabled Government customers to develop and communicate their IP needs and IP strategy early in the acquisition planning process. In addition, the Tradewinds acquisition team is developing tools for its business platform that assist offerors in preparing proposals.

In particular, the CDAO is currently developing or deploying the IP-related functionality on the business platform including:

- Tools that identify terms in commercial license agreements that may conflict with federal law or user needs;
- Tools that suggest license models based on the requiring activity's desired use cases;
- Tools that provide insight on vendor's desired license models and suggests license models, based on vendor input on desired license model. This tool may allow users to easily identify and learn from vendor feedback on potential IP licensing schemes at the announcement or draft solicitation stage.
- User-friendly videos for vendors and Government customers regarding common IP questions and issues related to the CDAO Tradewinds Ecosystem.

To the extent practicable, CDAO is using AI and automated tools. The CDAO Tradewinds acquisition team and the OSD IP Cadre are working to build mechanisms within these tools that facilitate transparency and accountability for decision makers using these tools. Accordingly, these tools will only enable efficient review and processing of project agreements. These tools cannot and will not replace sound judgment and business case analyses by Tradewinds acquisition professionals and requiring activities.

Lastly, the CDAO and the OSD IP Cadre are developing AI technical standards that facilitate requirement building in DoD AI acquisitions. Based on lessons learned from the Pilot Program, the CDAO observed a need for AI-centric data item descriptions (DIDs) that will facilitate acquisition of common technical data and software deliverables in AI acquisitions. Accordingly, CDAO and the OSD IP Cadre partnered to develop DIDs related to AI training data and AI validation and verification reports for AI training data, models, and algorithms, which can be leveraged by all DoD buyers.

### ***Assessment of the Effectiveness of the Activities***



Recent research on DoD acquisition studies indicated 82.7 percent of AI vendors believe that negotiating IP rights in DoD AI acquisitions is extremely important or very important.<sup>5</sup> In a study on viewpoints of AI vendors on DoD AI acquisitions, IP was the most prevalent topic.<sup>6</sup> The primary IP concerns from AI vendors were: lack of understanding of the unique IP licensing framework in defense contracts; how the Government uses contractor data; ability to negotiate terms; and whether a DoD contract can yield a return on investment with the revenue expected from licensing their technology to the Government.<sup>7</sup> Industry and academia members of the Tradewinds Ecosystem are currently composed of 74 percent non-traditional defense contractors, which have little to no experience working with the DoD to solve critical AI needs. For non-traditional contractors, IP are frequently viewed as an obstacle in partnering with the DoD.

Using lessons learned from working with AI vendors, the CDAO Tradewinds acquisition team is trying to change industry viewpoints on partnering with the DoD on AI acquisitions. In addition, Tradewinds is going to demonstrate to DoD buyers the “art of the possible” with respect to acquisition agility in DoD acquisitions, which may be applied to other types of DoD acquisitions. By working together on tools that facilitate tailored IP language in AI project announcements, RFIs, and RFPs, helping requirement owners establish appropriate IP strategies tailored to unique AI requirements and providing requiring activities with educational IP tools and guides, the CDAO and the OSD IP Cadre help ensure that the Government meets its exact needs in terms of IP and IP license rights while not insisting on unnecessary requirements. By giving requirement owners the flexibility to signal specific program goals to vendors (rather than a specific category of license rights) via CDAO Tradewinds projects or advertisements, the Government may better evaluate and measure the capabilities of companies. As a result, the Government can respect the IP interests of industry partners, while also ensuring that the Government secures IP and IP license rights that are mapped to its mission goals (which may include, but are not limited to, maintaining a competitive environment in the future).

These efforts also ensure that the industry and academic members of the vast DoD AI ecosystem have the flexibility they need to do business with the Government. The OSD IP Cadre/CDAO collaborative approach to determining IP strategies and identifying only the most critical of IP license rights required (vice insisting on license rights equivalent to a DFARS “Government purpose rights” license) demonstrates the respect that the DoD has for the IP interests of its industry partners.

Based on feedback from the requirements owners, the CDAO Tradewinds acquisition team and the OSD IP Cadre developed forms to efficiently collect input from requirements owners on their IP-related requirements and preferences. In addition, the CDAO Tradewinds acquisition team and the OSD IP Cadre developed internal guidance regarding commercial software license agreements and templates for project announcements. Building upon the successful tactics, techniques, and procedures captured from the first three years of the Pilot Program, the CDAO Tradewinds acquisition team and OSD IP Cadre collaborated to develop AI-powered tools. For example, one of the CDAO Tradewinds platform tools identifies terms that are potentially inconsistent with Federal law or user needs. In addition, the CDAO

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<sup>5</sup> Andrew Bowne, “Attracting Commercial Artificial Intelligence Firms to Support National Security Through Collaborative Contracts” 154, Figure 18 (February 2023) (Ph.D. dissertation, Adelaide Law School), available at [https://digital.library.adelaide.edu.au/dspace/bitstream/2440/138369/1/Bowne2023\\_PhD.pdf](https://digital.library.adelaide.edu.au/dspace/bitstream/2440/138369/1/Bowne2023_PhD.pdf).

<sup>6</sup> Id. At 212-213.

<sup>7</sup> Id. At 213.

Tradewinds acquisition team is developing tools that assist requirements owners in developing IP-related requirements, based on forms and workflows that were successfully implemented by the Tradewinds acquisition team and the OSD IP Cadre. For example, if Tradewinds platform tools may provide more comprehensive market intelligence, DoD buyers may develop IP strategies that are informed by the license models prevalent in the marketplace. After the CDAO finalizes and publishes its new AI-related standards for data and software requirements, the Tradewinds platform will reference these standards. Lastly, the Tradewinds acquisition team is developing platform tools that may assist offerors with proposal preparation. Accordingly, the Tradewinds platform may lower barriers to entry for non-traditional contractors and increase competition.

### ***Assessment of Improvements to Acquisition or Sustainment Activities Related to the Pilot Program***

The partnership between the CDAO and the OSD IP Cadre has resulted in the following improvements to the CDAO Tradewinds Acquisition Ecosystem:

- Customers have successfully utilized IP strategies that facilitate competition for non-traditional defense contractors by relying upon less restrictive license models. For example, one requiring activity was initially adamant about requiring vendors to grant an “unlimited rights” license (or an equivalent license) for source code deliverables. However, the CDAO Tradewinds acquisition team was able to convince the requiring activity to avoid such licensing requirements, permitting a broader range of licensing solutions and encouraging more vendors to submit proposals.
- The CDAO Tradewinds acquisition team developed a standard rubric that asks vendors to clearly explain their license model and how this license model aligns with the Government’s technical and mission needs. In addition, this rubric clearly states that the Government does not need to own the source code or algorithms developed under the project agreements. Based on these standard rubrics, the CDAO Tradewinds acquisition team is developing AI-powered tools for requirements builders for developing and communicating IP requirements. As these tools are further refined, they may be used as an example of tools that enable acquisition agility for all DoD contracts.
- The CDAO Tradewinds acquisition team is relying upon templates and samples developed by the OSD IP Cadre. Based on these templates and models, the Tradewinds acquisition team plans to develop AI-powered or automated dynamic (or web-based) menu of specific licensing options and associated sample language. The CDAO Tradewinds acquisition team has become more proficient in reviewing and negotiating commercial software license agreements with little or no support from IP SMEs. Such tools are intended to educate and empower acquisition professionals, reduce the need for an IP SME on every project, and enable efficient review of project agreements.
- Tradewinds customers frequently leverage standard commercial license agreements (and derivatives thereof) as much as possible in project agreements, rather than requiring vendors to utilize more restrictive DFARS-based license models. This model increases competition by encouraging participation from non-traditional defense contractors that are not familiar with traditional DoD license models.

Leveraging these lessons learned, the Tradewinds portal will include workflows to assist requiring activities in identifying options for IP strategies and recommendations (based on user input and potentially vendor input). This functionality is currently in development, and the CDAO and the OSD IP Cadre have been working together on the development plan for this functionality, and will continue to develop forward-thinking, agile acquisition business processes that will inform and empower DoD users on developing, assessing, and executing IP strategies. Specifically, the CDAO and OSD IP Cadre are in the intermediate planning stages for embedding these processes, procedures, and IP terms and conditions resulting from this work into the AI acquisition life cycle, from pre-award IP strategies to final post-award IP terms and conditions. The OSD IP Cadre is working with the CDAO to develop customizable IP-related contract language and strategies to embed in the CDAO Tradewinds Ecosystem, which will be offered to users on the Tradewinds business portal based on responses to questions about the user's technical, logistical, and business needs.

### ***Assessment of the Results Related to the Pilot Program***

As the CDAO further develops and refines IP-related aspects of the Tradewinds OT, the goal is to provide a model for agile acquisitions and agile IP strategies for the Department. The CDAO has already observed various positive IP-related outcomes associated with IP strategies or approaches that balance life-cycle needs and cost efficiencies. In negotiating IP and IP rights for commercial technologies, both the CDAO Tradewinds acquisition team and the OSD IP Cadre have repeatedly stressed the importance of considering opportunities for mitigating risk of vendor lock and opportunities for cost efficiencies (e.g., negotiating narrower license rights that are tailored to suit the customer's needs and requesting license proposals that satisfied specified goals or outcomes, rather than requiring a specific standard category of license rights). As Tradewinds users consider these IP issues, the CDAO Tradewinds acquisition team has stressed the importance of encouraging diverse IP licensing approaches in solicitations and negotiations. Overall, this approach incentivizes participation from the AI commercial marketplace, thereby sustaining a robust pool of innovative offerors, increasing opportunities for competition, and driving down costs.

### ***Key Takeaways and Lessons Learned***

Based on the Pilot Program, the CDAO and the OSD IP Cadre teams reached the following conclusions:

- The DoD should avoid one-size-fits-all solutions for contract language to encourage AI vendors to partner with the DoD. Acquisition agility and flexibility in negotiating IP terms is a key factor in incentivizing and attracting industry to partner with the DoD in AI acquisitions.
- Rather than new statutes or regulations regarding AI acquisitions, the acquisition workforce needs guidance and training on best practices for identifying and communicating program needs in AI acquisitions and negotiating IP license rights that meet the program needs while incentivizing AI vendors to partner with the DoD.
- The Department should leverage AI tools in the contracting process, which will make the process more accessible and efficient for both DoD buyers and offerors.

## **3.3 Government Data Call Pathway: Comparative Analysis and Key Findings**

### **3.3.1 Requirement, Objectives, and Methodology**

#### **Overview**

Prior to the Pilot Program, there was a lack of established measures, metrics, and datasets to characterize past and present DoD activities related to IP evaluation and valuation in the Department. Consequently, information asymmetry persisted, leaving few ways to objectively gauge overall health and effectiveness regarding the Department's IP acquisition and management capabilities. Accordingly, the GDC component of the Pilot Program served as a means for gauging these Department-wide activities through three GDCs. Based on the results of these data calls, it is evident that the Department is making progress in the development and implementation of effective IP strategies.

#### **Objectives**

The Department has maintained a focus on data-driven analytics, methodologies, and approaches to its acquisition program management. Similarly, the Pilot Program was designed and executed with a commitment to data-driven analytics, methodologies, and approaches, which may be used to benefit the DoD enterprise. Accordingly, the FY 2021, FY 2022, and FY 2023 GDCs were designed to resolve historical gaps in objective IP-related measures and metrics, to inform decision-making by DoD programs and policy stakeholders.

#### **Methodology**

The methodology for this GDC relied on querying DoD program and product managers about their observations on IP-related acquisition activities and associated outcomes. Although some acquisition activities and outcomes may have a causal relationship, other correlations do not necessarily imply causation. Yet, such correlations between an increasing variety of tactics, techniques, procedures, and outcomes may be emulated, adapted, tailored, and scaled to identify, track, and study programs that are likely to generate positive program outcomes.

The GDC questionnaire executed in FY 2023 was the third data call in the Pilot Program (Enclosure 2, FY 2023 GDC on IP Evaluation & Valuation – Data Collection Form), which has improved over time, achieving greater levels of sophistication, reliability, and data validation. In particular, the findings of the FY 2021 and FY 2022 GDCs provided direction on areas warranting further investigation. This third GDC included forty-three, adaptive questions that augmented the two preceding GDCs and enhanced key instrument measures, including response rates, completion rates, and average completion time. Each question and corresponding answer options were tailored to pose important questions to assess IP valuation and evaluation activities. The scope of the FY 2023 GDC covered the following focus areas:

- IP A&S Program Demographics & Governance;
- Acquisition & IP Planning, Strategies, & Implementation Outcomes;
- IP-Related Evaluation Activities – Source Selection Plans (SSEPs);
- IP-Related Evaluation Activities – Sole Source Awards (SSAs);

- Obstacles Encountered;
- Gaps & Deficiencies; and,
- Uncertainties of Future Needs.

Most of the questions were designed as multiple-choice questions to gather both qualitative and quantitative data. For example, some multiple-choice questions allowed respondents in the FY 2021 GDC to provide free-form, anecdotal insights and feedback. Subsequently, some of the open-ended questions and qualitative trends gleaned from the FY 2021 GDC were used to frame and refine the FY 2022 and FY 2023 GDC questionnaires to provide opportunities for greater candor, depth, and context in the results.

The FY 2023 GDC questionnaire was distributed to program executive offices within the Army, Navy, and Air Force. In response, product and program managers from the Military Departments completed and submitted 201 GDC surveys, compared to 130 GDC participants in FY 2021. This annual report focuses upon comparative trends and correlations (e.g., specifically between FY 2021 and FY 2023 GDCs), based on all relevant data collected to date. A compendium of the FY 2023 GDC data visuals may be found in Enclosure 3. The aggregated, comparative results and key findings between FY 2021 and FY 2023 GDCs are summarized in each of the seven subsequent detailed data analysis sections and subsections below.

## **3.3.2 Detailed Data Analysis**

### **3.3.2.1 PROGRAM DEMOGRAPHICS**

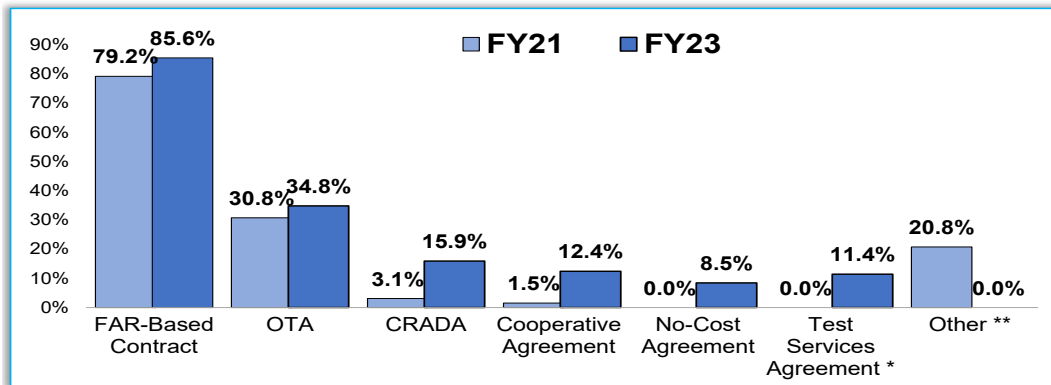
#### **Section Overview**

In the first section of the FY 2023 GDC questionnaire, respondents were asked a series of questions regarding their program demographics and governance.

#### **3.3.2.1.1 Types of Agreements Used and Effectiveness of Agreement Types**

From FY 2021 to FY 2023, FAR-based procurement contracts (used by 79 percent to 86 percent of respondents), and OTAs (used by 30 percent to 35 percent of respondents) were the types of agreements programs used most often for acquiring, managing, and licensing IP-related technical data, software, and associated license rights (e.g., “data rights”).

**Figure 1-1(a): Types of Agreements Used, FY21 and FY23 Respondent Percentages<sup>8</sup>**



In comparison to the FY 2021 GDC results, FY 2023 GDC results show that the use of CRADAs and cooperative agreements increased to 15.9 percent and 12.4 percent, while use of test services agreements and no-cost agreements also increased from no use at all in FY 2021, to 11.4 percent and 8.5 percent in the FY 2023 GDC (Enclosure 3, Figure 1-1(a)).

FY 2023 respondent programs also evaluated the effectiveness of these contracting mechanisms. Only 20 percent and 17.6 percent of the FY 2023 respondents reported that FAR-based contracts and OTAs were highly effective, respectively. In contrast, no cost and cooperative agreements were rated as being “highly effective” most often, by 28.6 percent and 50.6 percent of respondents, respectively (Enclosure 3, Figure 1-1(b)).

### 3.3.2.1.2 Technology Readiness Levels

On average, 93.5 percent of FY 2021 and FY 2023 respondents reported a technology readiness level (TRL) of 6 or higher, indicating that almost all programs have achieved a range of technological and operational milestone requirements (Enclosure 3, Figure 1-2).

### 3.3.2.1.3 Commerciality of Product Baselines

Throughout the Pilot Program, respondents have reported substantial use of commercial technology:

- 58.6 percent of FY 2021 respondents reported that their programs use primarily commercial technology;
- 50.4 percent of FY 2022 respondents reported that their programs use a hybrid of commercial and noncommercial technology; and
- 52.2 percent of FY 2022 respondents reported that their programs use a hybrid of commercial and noncommercial technology (Enclosure 3, Figure 1-3).

### 3.3.2.1.4 Total Life-Cycle Cost Estimates

The majority of FY 2022 (67.5 percent) and FY 2023 (66.6 percent) respondents valued the total life-cycle cost estimates of their programs at approximately \$100M or more; total life-cycle costs include costs from inception through the operations & support phases (Enclosure 3, Table 1-4).

<sup>8</sup> \* Indicates that this type of agreement was not a response option in FY21; \*\* indicates that this was not an FY23 option.

## Section Summary

Most FY 2021 and FY 2023 GDC respondents: 1) used FAR-based procurement contracts; 2) acquired products that were based in commercial technology (in whole or in part); 3) managed products with a TRL level of 6 or higher; and 4) valued their total life-cycle cost at \$100M or more.

### 3.3.2.2 IP PLANNING, STRATEGIES, PROCEDURES, AND OUTCOMES

#### Section Overview

In this section, FY 2023 respondents were asked various questions regarding their IP planning, strategies, and outcomes. These questions focused on the types of technical data and software deliverables that were required under contract; documentation of IP strategies within acquisition strategies, product support strategies, and other program management documentation; correlations between programs with robust IP strategies and applied tactics, techniques, and procedures; and impacts of applied TTPs on mission goals (Enclosure 3, Figures 2-1, 2-2(a)-(c), 2-3, 2-4(a)-(d), 2-5; and Table 2-6).

#### 3.3.2.2.1 Types of IP-Related Technical Data and/or Software Deliverables Programs Required under Contract.

*The majority of program respondents ordered types of technical data and software deliverables that may facilitate long-term sustainment goals.* The majority of respondent programs in the FY 2023 GDC ordered: 1) technical data necessary for installation, operation, maintenance, and training purposes (82.6 percent); 2) form, fit, and function data (78.6 percent); 3) technical necessary for production and reprourement (69.4 percent); software documentation and executables (64.7 percent); and computer source code and software tools that facilitate sustainment (51.2 percent) (Enclosure 3, Figure 2-1). Compared to FY 2021 GDC results, an increased percentage of FY 2023 respondents ordered these types of technical data and software. This data suggests that most programs are implementing acquisition planning to facilitate some level of competitive procurement for hardware or software sustainment.

#### 3.3.2.2.2 Documentation of IP Strategies within Acquisition Strategies, Product Support Strategies, and other program management documentation

*From FY 2021 to FY 2023, there has been a slight increase in respondent programs that incorporated robust IP strategies within their acquisition strategies.* Specifically, 73.1 percent of FY 2023 GDC respondents reported robust strategies (i.e., IP strategies that are embedded throughout the acquisition strategy or are included in a stand-alone section), in contrast with 67.5 percent of comparable FY 2021 GDC respondents (Enclosure 3, Figure 2-2(a)). This trend suggests that the Department is making progress in developing and implementing IP strategies, enabling better alignment with DoD-wide acquisition policy and guidance on translating IP strategies in contract language and required deliverables. In addition, the majority of respondents in the FY 2021 and FY 2023 GDCs (81 percent and 85 percent of respondents, respectively) have established implementation procedures for ensuring contracts implement or account for IP strategies that are documented within their acquisition strategies (Enclosure 3, Figure 2-3).<sup>9</sup>

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<sup>9</sup> Of the 85% of FY23 programs, 54.7% indicated having “primarily documented procedures,” and 30% indicated having “primarily informal procedures” in place.

However, there is room for improvement. From the FY 2021 and FY 2023 GDC results, there was a significant decline in the percentage of respondents that reported that IP strategies were incorporated in product support strategies (Enclosure 3, Figure 2-2(b)). In the FY 2021 GDC, 90.6 percent of respondents incorporated IP strategies in their product support strategies, compared to 60.5 percent of FY 2023 GDC respondents (Enclosure 3, Figure 2-2(b)). In addition, a substantial percentage of FY 2023 respondents (between 49.5 percent to 56.3 percent) reported that no IP strategy or minimal IP strategy information was incorporated within their systems engineering plan and test and evaluation master plan (Enclosure 3, Figure 2-2(c)).

This data suggests a current misalignment between DoD policy and implementation within program management documentation. This misalignment may result in IP contract requirements that do not adequately address systems engineering, testing, and evaluation needs.

### **3.3.2.2.3 Correlations between Programs with Robust IP Strategies and Applied Tactics, Techniques, and Procedures**

*FY 2021 and FY 2023 GDC data show that programs with robust IP strategies are more likely to implement TTPs.* Respondents with robust IP strategies (i.e., programs with a stand-alone IP strategy section within an acquisition strategy, or an IP strategy embedded throughout an acquisition strategy) were cross-referenced with respondents who utilized IP-related best practices and related TTPs. The following results were observed:

- ***Programs with robust IP Strategies are more likely to have established implementation procedures.*** Among the FY 2021 GDC respondents that had a robust IP strategy, 84.7 percent of those respondents also had established procedures for translating IP strategies in contracts (Enclosure 3, Figure 2-4(a)). In the FY 2023 GDC, a greater percentage of respondents (88.5 percent) reported having established procedures for implementing IP strategies in contracts. Of these FY 2023 GDC respondents, 65.5 percent of these programs have primarily formal procedures, while 34.5 percent of these programs have primarily informal procedures.
- ***Programs with robust IP Strategies are more likely to implement IP-related evaluation criteria in source selection evaluation plans (SSEPs).*** Among the FY 2021 GDC respondents with robust IP strategies, 48.2 percent of these respondents utilized IP-related evaluation criteria in SSEPs (Enclosure 3, Figure 2-4(b)). In the FY 2023 GDC, this percentage increased to 53.6 percent, indicating an upward trend toward programs strengthening their IP strategies by using IP-related evaluation criteria in SSEPs.
- ***Programs with robust IP Strategies are more likely to negotiate license rights in technical data and/or software.*** In the FY 2021 GDC, 57.6 percent of respondents with robust IP strategies negotiated special licenses (Enclosure 3, Figure 2-4(c)). In FY 2023, this percentage increased to 72.7 percent, indicating that programs are more frequently conducting negotiations for IP-related license rights in technical data or software. Of these programs, 81.3 percent of respondents negotiated for license rights in technical data, software, or both.
- ***Programs with robust IP Strategies are more likely to utilize alternatives to definite, standard, and formal delivery.*** In the FY 2021 GDC, 36.5 percent of respondents with robust IP strategies utilized alternative tools for ensuring delivery of contract requirements



(e.g., optional CLINs, access agreements<sup>10</sup>, and escrow agreements<sup>11</sup>). In the FY 2023 GDC, this percentage significantly increased. 70.9 percent of FY 2023 GDC respondents with robust IP strategies also utilized alternative tools for ensuring delivery of contract requirements (Enclosure 3, Figure 2-4(d)).

Overall, these results demonstrate correlations between robust IP strategies and implementation of IP TTPs. The next section demonstrates correlations between these TTPs and positive outcomes for short and long-term mission goals.

#### **3.3.2.2.4 Impacts of Applied TTPs on Mission Goals**

*GDC data suggests that there has been an increase in program use of TTPs; and, in the majority of cases (66 percent on average), these TTPs have had a positive impact on mission goals.* Enclosure 3, Figure 2-5 (below) shows: 1) the percentage of respondents that use specific TTPs; and 2) percentage of respondents that observed a positive impact<sup>12</sup> of these TTPs on mission goals.

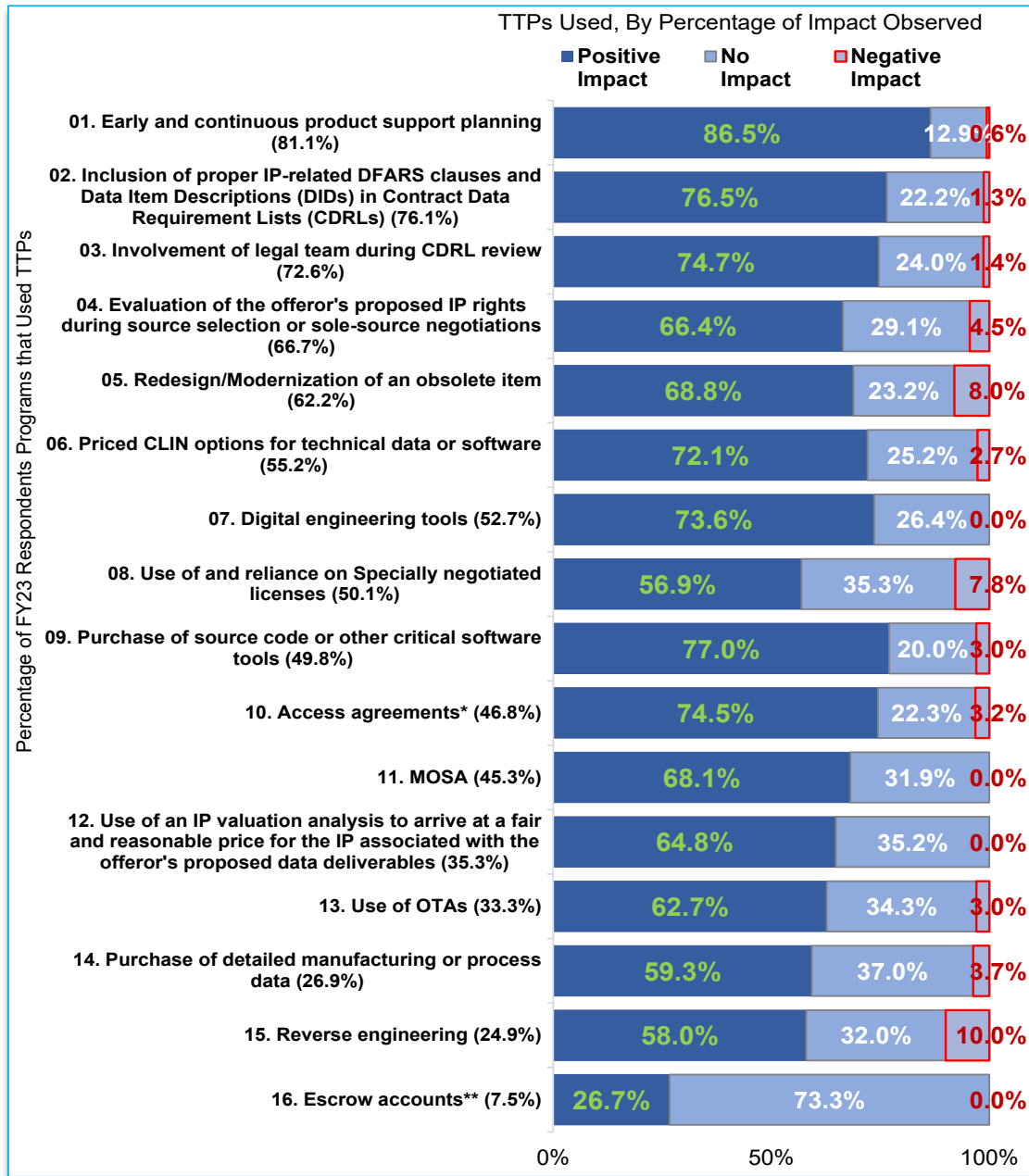
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<sup>10</sup> Access agreements permit the Government to view or access technical data or software in contractor-controlled repositories or facilities.

<sup>11</sup> Escrow agreements require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

<sup>12</sup> In Figure 2-5, the levels of impact (e.g., positive impact, no impact, or negative impact) were not specifically defined in the FY23 GDC. Accordingly, further study on types of positive and negative impacts on mission goals may be necessary.

**Figure 2-5: TTPs Used by FY23 Respondents and Corresponding Impact on Mission Goals<sup>13</sup>**



<sup>13</sup> It should be noted that the total values are greater than 100%, as FY23 respondents had the opportunity to select one or more responses to the GDC question associated with Figure 2-5. above (Enclosure 3). In addition: "\*" indicates the definition of Access agreements, which permit the Government to view or access technical data or software in contractor-controlled repositories or facilities. "\*\*" indicates the definition of Escrow Agreements, which require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

Figure 2-5 shows that most<sup>14</sup> of the TTPs used by FY 2023 respondents were characterized as having positive impacts on mission goals by respondents that used these TTPs.

Based on FY 2022 and FY 2023 GDC data, there has been a significant increase in the use of specific TTPs that were considered key to obtaining or gaining access to critical technical data, software, and associated license rights (Enclosure 3, Table 2-6). In particular, the most common key TTPs are:

- Early and continuous product support planning;
- IP Evaluations during Source Selection and Sole-Source Negotiations;
- Redesign/Modernization of an Obsolete Item;
- Priced CLIN Options for technical data or software; and
- Digital Engineering (DE) Tools.

### **Section Summary**

Based on these results in this Section, key IP-related measures and metrics for positive program health are robust IP strategies and TTPs outlined herein with associated positive impacts on mission goals.

#### **3.3.2.3 IP Evaluation Activities – Source Selection Procedures and Sole Source Awards**

##### **Section Overview**

The third and fourth sections of the FY 2023 GDC highlighted pre-award IP-related evaluation activities in source selection procedures and sole source awards.

##### **3.3.2.3.1 IP-related Evaluation Criteria in SSEPs**

*Comparing FY 2021 and FY 2023 GDC data, fewer FY 2023 GDC respondents included IP-related evaluation criteria in SSEPs.* Specifically, 49 percent of FY 2021 GDC respondents reported including IP-related evaluation criteria in SSEPs, compared to 37 percent of FY 2023 GDC respondents. This data suggests a potential area for improvement in development of SSEPs (Enclosure 3, Figure 3-1).

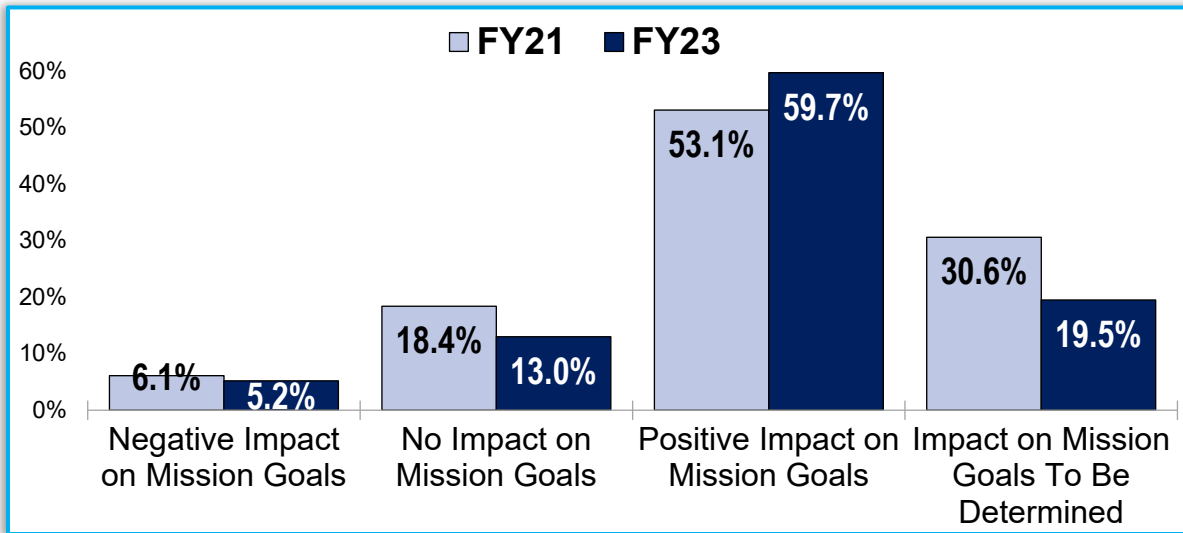
##### **3.3.2.3.2 Impact of IP-related Evaluation Criteria in SSEPs Impact of IP-related Evaluation Criteria in SSEPs on Mission Goals**

*IP-related criteria in SSEPs generally have positive impacts on mission goals.* Specifically, 53.1 percent of FY 2021 respondents reported that IP-related evaluation factors had a positive impact on mission goals. In the FY 2023 GDC, this statistic increased to 59.7 percent among the comparable group of respondents (Enclosure 3, Figure 3-2).

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<sup>14</sup> In the case of escrow accounts, the majority of FY23 respondents (73.3%) that used this TTP observed “no impact.” However, this observation may be attributed to the fact that some impacts of escrow accounts are not observed until escrow account conditions are triggered, which may be years after award of the contract. Further study on this topic may be necessary.

**Figure 3-2: IP-Related Evaluation Criteria Included in SSEPs & Associated Impact on Mission Goals, By Comparable FY 2021 & FY 2023 Respondent Percentages**



*Of programs that received broader or narrower license rights with cost impacts, a substantial percentage of these GDC respondents observed a positive impact on mission goals associated with IP-related evaluation factors.* 41.7 percent of FY 2021 respondents that received broader license rights with increased costs/fees reported a positive mission impact associated with IP-related evaluation criteria. In the FY 2023 GDC, this percentage increased to 50.0 percent, among the comparable subset of respondents (Enclosure 3, Figure 3-3(e)). Among these FY 2023 GDC respondents, 50.0 percent indicated that any impact on mission goals could not yet be determined. Moreover, of the FY 2021 GDC respondents that received license rights with increased costs/fees, no respondents identified negative mission impacts and only 8.33 percent identified no impact. Among FY 2023 respondents, no respondents observed negative impacts or no impact on mission goals.

### **3.3.2.3.3 Impact of IP-related Evaluation Criteria in SSEPs on License Rights**

*Compared with FY 2021 GDC respondents, significantly fewer FY 2023 GDC respondents received broader or narrower IP license rights than the standard license rights, in response to IP evaluation factors in solicitations.* In the FY 2021 GDC, 61.7 percent respondents reported receiving broader or narrower IP license rights than the standard rights the Government may normally require. In the FY 2023 GDC, this percentage of comparable programs decreased by roughly half, to 28.5 percent. Of these FY 2023 programs, roughly half (50.9 percent) reported that the Government received broader IP license rights than the standard license rights; the other half (49.1 percent) received narrower rights than the standard license rights (Enclosure 3, Figure 3-3(a)).

### **3.3.2.3.4 Costs associated with Broader or Narrower IP license rights resulting from IP-related Evaluation Factors in SSEPs, and Evaluation of Cost Proposals**

*Less than half of FY 2021 and FY 2023 GDC respondents observed additional costs associated with broader license rights.* Of the FY 2021 GDC respondents, 37.5 percent respondents reported that the contractor identified additional costs associated with programs which received broader IP license rights. 46.4 percent of comparable FY 2023 respondents

reported that contractors identified added costs (32.1 percent) or other consideration (14.3 percent) associated with the Government receiving broader license rights than the standard license rights (Enclosure 3, Figure 3-3(b)).

***The majority of FY 2023 GDC respondents observed reduced costs associated with narrower license rights resulting from IP-related evaluation factors.*** 21.4 percent of FY 2021 GDC respondents identified reduced costs associated with the license fees for obtaining narrower IP license rights. In contrast, 57.1 percent of FY 2023 GDC respondents indicated that contractors identified reduced costs associated with narrower than standard license rights (Enclosure 3, Figure 3-3(c)).

***The vast majority of FY 2021 and FY 2023 GDC respondents did not consider additional costs as part of cost proposal evaluations.*** Only 22.1 percent of FY 2021 respondents considered additional costs (associated with IP license rights) as a part of the evaluation of the cost proposal. Similarly, 22.4 percent of FY 2023 respondents reported implementing the same process in their programs (Enclosure 3, Figure 3-3(d)). The rationale behind additional and reduced costs associated with license rights is not clear from the data. Accordingly, this topic may require further investigation. However, if programs more frequently considered additional and reduced costs as a part of the cost proposal evaluation, this may have driven a stronger correlation between decreased costs and narrower license rights.

#### **3.3.2.3.5 Individually Priced Option CLINs for Technical Data and Software Items**

***The FY 2023 GDC results showed a decrease in the percentage of respondents that used individually priced option CLINs for technical data or software items.*** (Enclosure 3, Figure 3-4). 50.5 percent of FY 2021 respondents included individually priced option CLINs for technical data or software items in their contracts. This percentage decreased to 30.3 percent in the FY 2023 GDC. Although the data confirms that individually priced option CLINs for technical data and software are a common contracting tool in practice, this data may suggest that this is an area for improvement in training and implementation of TTPs.

#### **3.3.2.3.6 IP-related Bases or Sole Source Justifications in Sole Source Awards (SSAs)**

***From FY 2021 to FY 2023, there was an increase in the percentage of GDC respondents whose Justification and Approval documents (J&As) asserted IP and/or IP license rights as a basis in support of a sole source award*** (Enclosure 3, Figure 3-5). 23.8 percent of FY 2021 GDC respondents reported IP-related bases for J&As, compared to 53.2 percent in the FY 2023 GDC. The majority of these FY 2021 respondents (54.8 percent) reported that cost-prohibitive IP or IP rights was the most common basis for their sole source justification. In contrast, the majority of FY 2023 respondents (45.2 percent) cited insufficient license rights in technical data and software as the most common basis for their sole source justification.

#### **3.3.2.3.7 IP-related Negotiations and Sole Source Awards**

***Of the FY 2021 and FY 2023 respondents that reported SSAs based on IP-related J&As, there was an increase in the percentage that conducted negotiations for license rights in technical data, software, or both*** (Enclosure 3, Figure 3-6(a)). In the FY 2021 GDC, 70.1 percent of respondents with sole source contracts (based on IP-related issues) also reported conducting negotiations for license rights. In the FY 2023 GDC, this percentage increased to 88.9 percent among comparable respondent subgroups. Of the FY 2021 respondents, 9.1 percent of respondents negotiated rights in only technical data, 4.5 percent of respondents negotiated

rights in only software, and 86.4 percent of respondents negotiated rights in both technical data and software. Of the FY 2023 GDC respondents, 14.6 percent of these respondents negotiated rights in only technical data, 12.5 percent of these respondents negotiated rights in only software, and 72.9 percent of these respondents negotiated rights in both technical data and software. This data suggests that programs are negotiating license rights more often for IP license rights in both technical data and software, which has been shown to have a positive impact on mission goals (see Enclosure 3, Figure 2-5).

***A growing percentage of GDC respondents observed that license rights negotiations in sole source environments are frequently cost prohibitive or not cost effective.*** In the FY 2021 GDC, only 16.1 percent of respondents that conducted license rights negotiations in a sole source environment characterized the costs associated with the IP-related license rights negotiations as either cost prohibitive or not cost effective (but within budget). However, in FY 2023, the percentage of comparable respondents increased to 43.2 percent (Enclosure 3, Figure 3-6(b)).

#### **3.3.2.3.8 Mitigation Plans in J&As to Address IP-related Deficiencies in Future Procurements**

***In comparison to FY 2021 GDC results, a lower percentage of FY 2023 GDC respondents provided plans in J&As to address asserted deficiencies in IP and/or IP license rights for future procurements.*** The majority of FY 2021 GDC respondents (61.5 percent) provided a plan in the J&A to fill any deficiencies in IP and/or IP license rights for future procurements. In the FY 2023 GDC, the percentage of comparable respondents decreased to only 27.1 percent (Enclosure 3, Figure 3-7(a)). Furthermore, FY 2023 GDC respondents were less likely to consider reverse engineering products, compared to FY 2021 GDC respondents. Only 18.7 percent indicated that reverse engineering products was a consideration in J&As (Enclosure 3, Figure 3-7(b)); however, 37.8 percent of respondents in FY 2021 considered reverse engineering in J&As. Costs and impacts on program schedule associated with reverse engineering efforts may explain this trend. However, to determine the cause of this data trend, further study would be needed regarding program viewpoints and business case analyses on reverse engineering products.

#### **3.3.2.3.9 Lessons Learned about Activities which could have Prevented Vendor Lock**

***A substantial percentage (42 percent) of FY 2023 respondents cited Acquisition of TDPs Enabling Competitive Procurement of hardware and hardware sustainment services as the leading measure for preventing vendor lock.*** In the FY 2022 GDC, respondents provided lessons learned regarding preventative measures that could have prevented vendor lock in retrospect. FY 2023 respondents were polled about the preventative measures provided by FY 2022 respondents. FY 2023 respondents reported the following results on preventative measures that could help to avoid vendor lock (Enclosure 3, Table 3-8):

**Table 3-8: Commonly Applied Program Activities Reported in FY 2022, Which Could Have Prevented Vendor Lock Scenarios, As Validated By FY 2023 Respondent Percentages**

<i>Rank #</i>	<i>Preventative Measures that may help Programs Prevent Vendor Lock</i>	<i>Count</i>	<i>Percentage of Respondents</i>
1	<i>Acquisition of TDPs that Enable Competitive Procurement of Hardware, &amp; Hardware Sustainment Services</i>	45	42.1%
2	<i>Negotiating Data Rights At Earlier Stages of A Program</i>	39	36.4%
3	<i>Open System Architecture and Platform Interfaces</i>	38	35.5%
4	<i>Early IP Planning</i>	38	35.5%
5	<i>Contract Option Years To Permit Off-Ramping of Contractors</i>	35	32.7%

- In FY 2023, 42.1 percent of respondents highlighted acquiring TDPs that enable competitive procurement of hardware, and hardware sustainment services as a preventative measure against vendor lock. This was ranked as the most common preventative measure provided by FY 2023 respondents.
- Roughly one-third (32.7 percent to 36.4 percent) of FY 2023 respondents highlighted the following preventatives measures against vendor lock: negotiating data rights (36.4 percent); open system architectures and platform interfaces (35.5 percent); and early IP planning (32.7 percent).
- Lastly, 17.8 percent of programs highlighted the use of option years to permit contractor off-ramping as a preventative measure against vendor lock.

### **Section Summary**

Based on the FY 2021 and FY 2023 GDC data, IP-related evaluation criteria in SSEPs are likely to have a positive impact on mission goals. IP-related evaluation criteria do not necessary result in additional costs in proposals; in fact, they may result in reduced costs in proposals. The GDC results reveal several areas for improvement for the Department. Based on the GDC data, programs should use IP-related evaluation criteria in SSEPs. Many respondents in sole source environments provided recommendations to avoid vendor lock. These preventative measures included early IP planning (including acquisition of technical data that enables competition), early negotiation of data rights, and MOSA planning. Based on this data, IP-related measures and metrics for positive program health include: 1) IP evaluation criteria; 2) early IP and MOSA planning, including data deliverables and strategies that enable competition; and 3) early negotiation of data rights.

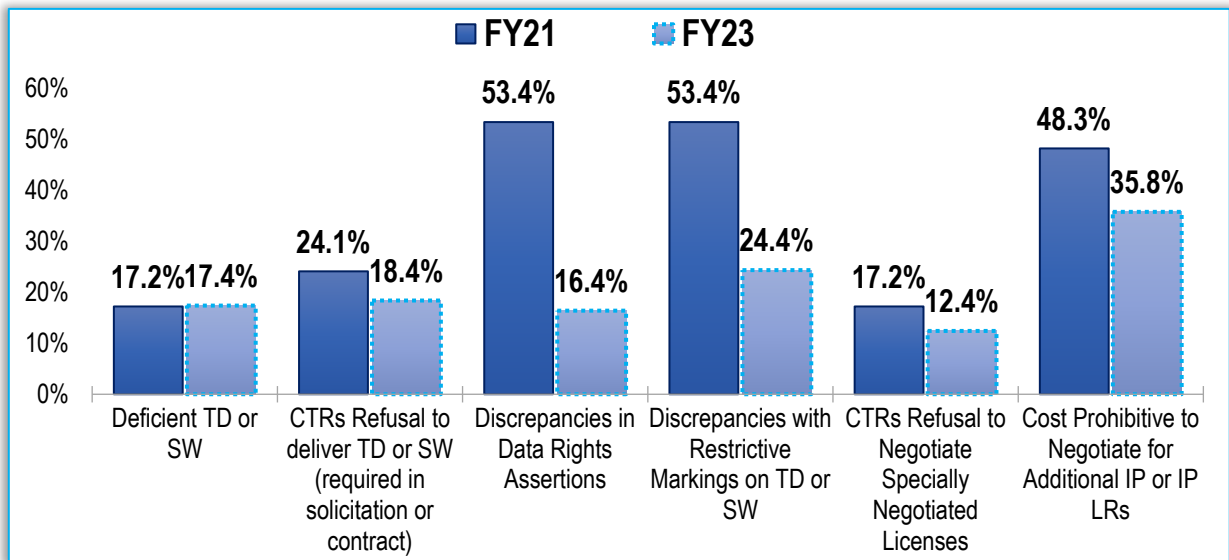
### 3.3.2.4 Obstacles Encountered related to Technical Data, Software, and IP License Rights

#### Section Overview

The fifth section of the FY 2023 GDC included questions about IP-related obstacles, discrepancies in the data right assertions, and IP-related disputes. In particular, respondents described current or anticipated barriers to obtaining or gaining access to the technical data, software, or the associated license rights necessary for organic sustainment or breaking vendor lock.

#### 3.3.2.4.1 Types of Obstacles Encountered related to Discrepancies in technical data, software, and license rights

*Comparing data from the FY 2021 and FY 2023 GDCs, there has been an overall decrease in the percentage of programs that encountered obstacles related to discrepancies in technical data, software, and associated license rights.* Figure 4-1: Obstacles Encountered related to Discrepancies in technical data, software, and license rights, By Comparable FY21 & FY23 Respondent Percentage



In particular, FY 2023 respondents reported the following recurring issues to a lesser extent overall than FY 2021 respondents, which suggests a positive trend with regard to the following recurring issues (Enclosure 3, Figure 4-1, shown above):

- **Discrepancies in data rights assertions:** 53.4 percent of FY 2021 respondents observed this issue; in FY 2023, 16.4 percent of respondents encountered similar challenges.
- **Discrepancies with restrictive markings on technical data or software:** In FY 2021, this issue affected over half (53.4 percent of respondents) of programs; by contrast, nearly 50% less faced similar issues in FY 2023 (24.4 percent of respondents).
- **Cost Prohibitive IP or IP License Rights:** In FY 2021, 48.3 percent of respondents indicated negotiation of IP or IP license rights was cost prohibitive. In FY 2023, 35.8 percent of comparable respondents faced similar obstacles.



However, about the same percentage (approximately 17 percent) of FY 2021 and FY 2023 respondents observed deficiencies in technical data or software deliverables.

#### **3.3.2.4.2 Types of Discrepancies Observed in Data Rights Assertions**

*The percentage of respondents reporting common discrepancies in data rights assertions slightly decreased or moderately increased from FY 2021 to FY 2023.* In particular, respondents reported on the following discrepancies in data rights assertions (Enclosure 3, Table 4-2):

- In FY 2021, 48.8 percent and 41.9 percent of respondents cited discrepancies relating to either FFF data or OMIT data as the top two concerns, respectively.
- In FY 2023, 63.6 percent and 51.5 percent of respondents cited discrepancies relating to either FFF data or OMIT data as the top two concerns, respectively.
- In FY 2021 and FY 2023, approximately one third of respondents (between approximately 32 percent and 39 percent) cited discrepancies related to inaccurate assertions of development funding; assertions included items that were not deliverables; or vague/ ambiguous assertions.

#### **3.3.2.4.3 Impact of Resolving Discrepancies in Data Rights Assertions**

*Comparing FY 2021 and FY 2023 GDC data on respondents that resolved discrepancies in data rights assertions (and the associated impacts), a higher percentage of programs were able to competitively procure hardware and software sustainment services.*

Among programs that resolved data rights assertions, 73.7 percent of FY 2021 respondents indicated that resolving data right assertion discrepancies enabled competitive procurement of hardware or software sustainment services. In FY 2023, 87.5 percent of programs enabled competitive procurement hardware or software sustainment services (Enclosure 3, Figure 4-3). Lastly, while there was no comparative FY 2021 data, only 21.2 percent of FY 2023 respondents observed no impact on opportunities for competitive procurement from resolving discrepancies in data rights assertions.

*Generally, resolution of discrepancies in data rights assertions had no, minimal, or undetermined impacts on program schedule.* Where discrepancies were found in data right assertions, respondents reported the following impacts on program schedule:

- In FY 2021, 87.8 percent of respondents reported that resolving such discrepancies ultimately had either no impact or minimal impact on the program's schedule (Enclosure 3, Figure 4-4).
- In FY 2023, by contrast, 75.8 percent of comparable respondents observed no, minimal, or to be determined impacts on program schedules — 15.2 percent (no impact), 21.2 percent (minimal impact), and 39.4 percent (impact to be determined).

Accordingly, this data may motivate programs to resolve data rights assertions because 1) the resolution may enable competitive procurement opportunities; and 2) the resolution process may not negatively impact program schedules.

#### **3.3.2.4.4. Bases for Formal Validation or Other Dispute Procedures related to technical data, software, and IP license rights**

*In the FY 2023 GDC, the leading bases of formal disputes were: 1) deficiencies in technical data or software; 2) deficiencies in restrictive markings; and 3) loss of access to repositories.* FY 2021 and FY 2023 respondents reported on bases for formal validation procedures and other dispute procedures (e.g., show cause letters or cure notices).

The following comparative trends in FY 2021 and FY 2023 GDC data on bases for IP-related formal disputes were observed (Enclosure 3, Table 4-5):

- In the FY 2021 GDC, 24.1 percent of respondents reported such disputes were based on deficient technical data or software; in the FY 2023 GDC, this percentage increased to 27.3 percent;
- In the FY 2021 GDC, 48.3 percent of respondents reported such disputes were based on a contractor's refusal to provide IP license rights as required under DFARS clauses; in the FY 2023 GDC, this percentage decreased to 12.1 percent;
- In the FY 2021 GDC, 41.4 percent of respondents reported such disputes related to deficient restrictive markings; in the FY 2023 GDC, this percentage decreased to 21.2 percent;
- In the FY 2021 GDC, 6.9 percent of respondents reported such disputes were based on the Government's loss of access to technical data or software in contractor-controlled repositories; in the FY 2023 GDC, this percentage was 6.1 percent.

#### **Section Summary**

Based on the FY 2023 GDC data, common IP-related obstacles include: 1) discrepancies in data rights assertions; 2) discrepancies in restrictive markings; and 3) cost prohibitive IP and IP rights. Similarly, common IP-related formal disputes were related to 1) deficient data deliverables; 2) restrictive markings; and 3) loss of access to data in contractor-controlled repositories. Based on the GDC data, resolution of discrepancies in data rights assertions are likely to enable competitive procurement of hardware and software sustainment services. Accordingly, IP-related measures and metrics associated with positive program health include resolution of discrepancies in data rights assertions. Such discrepancies are commonly related to FFF data; OMIT data; development funding; and vague or inaccurate descriptions of data deliverables.

#### **3.3.2.5 Addressing Gaps & Deficiencies related to Technical Data, Software, and IP License Rights**

##### **Section Overview**

The sixth section of the GDC focused on how programs addressed gaps and deficiencies related to technical data, software, and IP license rights.

##### **3.3.2.5.1 Negotiations for License Rights in Technical Data and/or Software**

*Based on FY 2021 and FY 2023 GDC data, there was an upward trend in the percentage of respondents that negotiated license rights in both technical data and software (amongst respondents that negotiated data rights).* In the FY 2021 GDC, 54.2 percentage of respondents negotiated license rights in both technical data and software (Enclosure 3, Figure 5-2). In the FY

2023 GDC, the percentage of comparable respondents increased to 75.0 percent. In addition, FY 2021 and FY 2023 GDC data shows that, on average, 53.2 percent of respondents that negotiated license rights in technical data, software, or both, compared to respondents that negotiated license rights in only technical data (26.8 percent on average) or only software (8.1 percent on average) (Enclosure 3, Figure 5-2).

#### **3.3.2.5.2 Negotiations for License Rights in other Types of IP (e.g., Patents and/or Trademarks)**

*The vast majority of FY 2021 and FY 2023 GDC respondents reported that other types of IP license rights were not negotiated (such as patent or trademark rights).* Among FY 2021 respondents, only 13.5 percent of respondents negotiated license rights in other types of IP (e.g., for patent or trademark license rights) (Enclosure 3, Figure 5-3). Similarly, only 9.2 percent of comparable FY 2023 respondents negotiated license rights in trademarks (1.5 percent), patents (4.6 percent), or both (4.6 percent). This data suggests that the Department may need to improve education and training resources on negotiation of patent or trademark license rights.

#### **3.3.2.5.3 Purpose and Objectives of Negotiations**

*Among FY 2021 and FY 2023 GDC respondents that conducted negotiations for license rights, these programs frequently negotiated data rights for the purpose of facilitating the following long-term product life-cycle goals:*

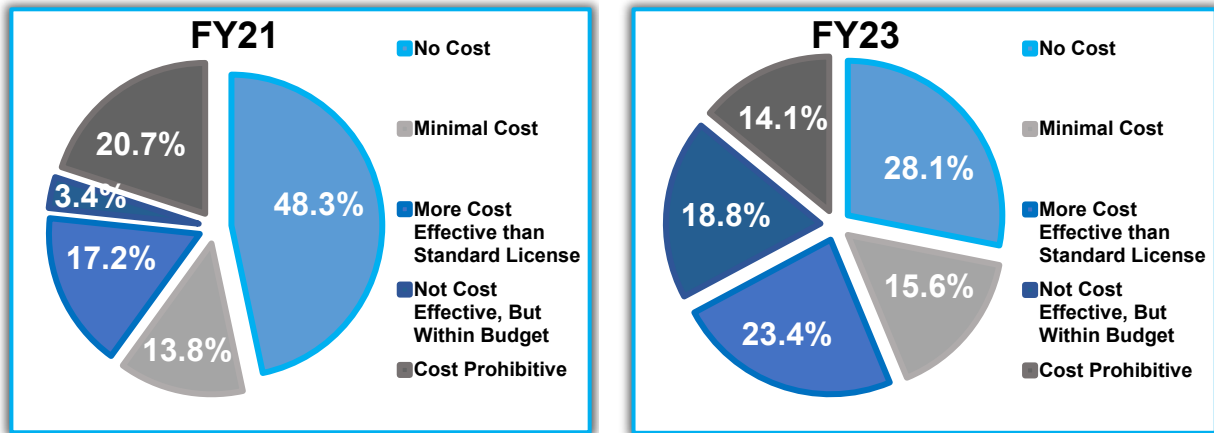
- In the FY 2021 GDC, 50.0 percent of respondents planned to facilitate *transition to sustainment*; in the FY 2023 GDC, the comparable percentage of respondents increased to 59.4 percent.
- Additionally, 43.3 percent of FY 2021 respondents planned to facilitate *modernization of a product or system*; in the FY 2023 GDC, the comparable percentage of respondents decreased slightly to 40.6 percent.
- Lastly, 53.3 percent of FY 2021 respondents planned to facilitate *competitive procurement of an end item*; in the FY 2023 GDC, this percentage decreased to 40.6% among comparable respondents (Enclosure 3, Figure 5-4).

This data demonstrates that a substantial percentage of programs are planning for long-term life-cycle needs.

#### **3.3.2.5.4 Costs Associated with Negotiated License Rights**

*More than two-thirds of FY 2023 respondents characterized negotiated licenses rights as: 1) having no or minimal cost; or 2) more cost effective than the standard license.* However, comparing the data from the FY 2021 and FY 2023 GDCs, FY 2023 respondents reported higher costs for specially negotiated license rights, as discussed below:

**Figure 5-5: Costs Associated with Conducting Negotiations for IP License Rights, By FY 2021 & FY 2023 Respondent Percentage**



- 79.3 percent of FY 2021 respondents indicated that specially negotiated license rights were cost effective (Enclosure 3, Figure 5-5). Of these FY 2021 respondents—
  - o 48.3 percent reported no costs;
  - o 13.8 percent reported minimal costs; and
  - o 17.2 percent reported that the specially negotiated licenses were more cost effective than the standard license.
- In the FY 2023 GDC, this percentage decreased to 67.2 percent. Of these FY 2023 respondents—
  - o 28.1 percent reported no costs;
  - o 15.6 percent reported minimal costs; and
  - o 23.4 percent reported that the specially negotiated licenses were more cost effective than the standard license.

### 3.3.2.5.5 Valuation Methods Used for Assessing Licensing Fees

*Based on FY 2021 and FY 2023 GDC data, the cost method and a combination of the cost, income, or market methods are the most common commercially accepted IP valuation methods used by programs in assessing fees associated with IP-related license rights.<sup>15</sup>* In Enclosure 3, Table 5-6, comparative FY 2021 and FY 2023 data were tabulated to illustrate the following findings on IP valuation methods programs used to assess IP-related licensing fees:

- In the FY 2021 GDC, 40 percent of programs used the cost method to assess fees associated with specially negotiated licenses. In the FY 2023 GDC, 32.1 percent of programs used the cost method.

<sup>15</sup> As discussed above in Section 1.3, the cost, market, and income methods are the most common commercial approaches used in assessing the value and fees associated with IP-related technical data, software, and license rights. The cost method establishes the value of an IP asset by calculating the reproduction or replacement cost of a similar (or exact) IP asset. Under the income method, the IP value is based on the economic income that the IP asset can or will generate in the future. Under the market method, the value of the IP asset is based on comparable IP transactions for comparable technologies.

- In the FY 2021 GDC, 25.0 percent of programs used a combination of valuation methods to assess fees associated with specially negotiated licenses. In the FY 2023 GDC, 53.6 percent of programs used a combination of valuation methods, indicating a trend toward programs preferring to use of a combination of valuation methods for assessments of licensing fees.

However, only 43.8 percent of FY 2023 respondents knew that the contractor used the market method, income method, cost method, or combinations thereof for calculating the IP price. Among the remaining 56.2 percent of FY 2023 respondents, 47.2 percent of this subset of respondents reported that the method was “unknown,” and 52.8 percent of this subset of respondents reported that none of the common commercially accepted valuation methods were used. As supported by other sections of this report, this GDC data demonstrates that IP valuation methods and greater transparency of the contractor’s IP valuation methods are important areas for improvement for DoD and industry.

### **3.3.2.5.6 Program Schedule Impacts Associated with Negotiated Licenses related to Technical Data and/or Software**

*Among FY 2021 and FY 2023 respondents that conducted negotiations for IP-related license rights, the majority of programs reported experiencing no impact or minimal impacts to program schedules.* 89.6 percent of FY 2021 respondents indicated that negotiations for IP license rights had no impact or minimal impacts to program schedules (Enclosure 3, Figure 5-7(a)). 68.8 percent of FY 2021 respondents reported no impact, and 20.8 percent reported a minimal impact on program schedule. In FY 2023, this percentage of respondents decreased to 71.9 percent of respondents that indicated that negotiations for IP license rights had no impact or minimal impacts to program schedules.

*In the FY21 and FY23 GDCs, programs reported that post-award negotiations do not necessarily result in adverse impacts on program schedules; however, the data clearly demonstrates that the best time to conduct negotiations for IP-related license rights is prior to contract award, based on following data impacts to program schedule:*

- 86.8 percent of FY 2021 respondents that negotiated license rights before contract award reported no impact (63.2 percent) or minimal impacts (23.7 percent) on program schedule (Enclosure 3, Figure 5-7(b)).
- In the FY 2023 GDC, 76.5 percent of respondents that negotiated license rights before or before and after contract award observed no impact or minimal impact on program schedule. 45.1 percent of FY 2023 respondents that negotiated license rights before contract award reported no impact (21.6 percent) or minimal impacts (23.5 percent) on program schedule. 31.4 percent of FY 2023 respondents reported no impact (21.6 percent) or minimal impacts (9.8 percent) on program schedule, when license rights negotiations were conducted before and after contract award (Enclosure 3, Figure 5-7(b)).
- On a similar note, 44.3 percent of FY 2023 GDC respondents also reported planning for gaps/deficiencies pre-award, post-award, or both (Enclosure 3, Figure 5-1). However, 55.7 percent also reported that there was no need to address gaps/deficiencies pre-award or post-award (Enclosure 3, Figure 5-1).

Accordingly, these findings may further motivate programs to consider pre-award negotiations for license rights in IP. The data strongly suggest that it is more advantageous for programs to negotiate IP license rights before contract award, based on the little or no impact such negotiations have on program schedules. However, the data also suggest that more guidance and training may be needed on identifying IP-related gaps or deficiencies pre-award and post-award.

### Section Summary

The majority of FY 2021 and FY 2023 respondents negotiated license rights in technical data, software, or both. The GDC data suggest that such negotiations frequently had little or no impact on program costs or schedule, especially if negotiations are conducted pre-award. This data suggests that early license negotiations are an IP-related measure and metric for positive program health. However, the data in this section also suggests that additional guidance and training resources may be needed on license negotiations and consistent and transparent application of IP valuation methods for assessment of such license fees.

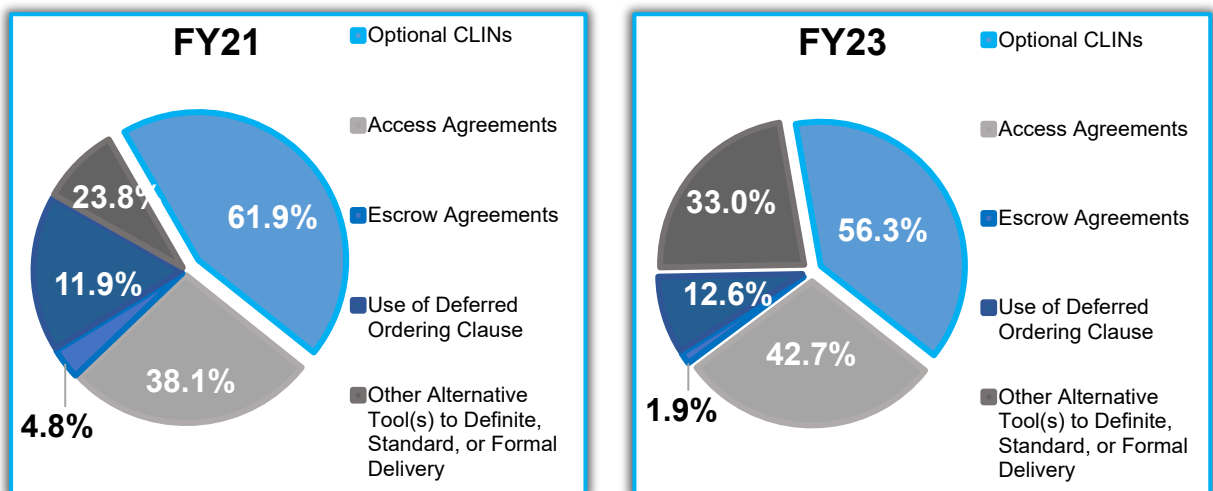
#### 3.3.2.6 Uncertainties of Future Needs related to Technical Data or Software Section Overview

The final section of the GDC included questions on effective approaches to address uncertainties of future needs related to technical data or software.

##### 3.3.2.6.1 Alternative Delivery Tools used for Ensuring Delivery of IP-related Technical Data and/or Software Requirements

*From FY 2021 to FY 2023, the two tools used most often for ensuring delivery of technical data and/or software were: Optional CLINs (59 percent on average); and Access Agreements (40 percent on average), indicating that programs addressed uncertainties of future IP-related needs using multiple mechanisms.* In particular, the following alternative tools were used to ensure delivery of technical data and/or software, shown in Figure 6-1 below:

Figure 6-1: Tools Programs Used to Ensure Delivery of TD, CS, or Both, By Comparable FY 2021 & FY 2023 Respondent Percentage



- In the FY 2021 GDC, 61.9 percent of respondents used optional CLINs, among respondents that used alternate tools to definite, standard, or formal delivery (Enclosure 3, Figure 6-1).
- This percentage decreased to 56.3 percent of FY 2023 respondents that used optional CLINs, among respondents that used alternate tools to definite, standard, or formal delivery.
- In the FY 2021 GDC, 38.1 percent of respondents used access agreements, among respondents that used alternate tools to definite, standard, or formal delivery.
- This percentage increased to 42.7 percent of FY 2023 respondents that used access agreements, among respondents that used alternate tools to definite, standard, or formal delivery.

This data demonstrates that a variety of approaches are being used by programs to ensure delivery of technical data and/or software. However, the data also suggests that programs may need more education and training resources on alternate tools to definite, standard, or formal delivery, including the deferred ordering clause and escrow agreements.

### **3.3.2.6.2 Purposes for Alternative Delivery Tools for Ensuring Delivery of Technical Data and/or Software**

*The FY23 GDC data demonstrate that the above alternative delivery tools were frequently used to ensure delivery of both technical data and software.*

#### ***Optional CLINs***

Of the 56.3 percent of FY 2023 respondents that used optional CLINs—

- Over two-thirds (62.1 percent) reported using optional CLINs as delivery alternatives for both technical and software (Enclosure 3, Figure 6-2(a)); and
- 32.8 percent used optional CLINs for only technical data, and 5.2 percent used optional CLINs for only software.

#### ***Access Agreements***

In the FY 2021 GDC, 38.1 percent of respondents used access agreements. Overall, this percentage increased in the FY 2023 GDC to 42.7 percent among comparable GDC respondents (Enclosure 3, Figure 6-1 above). Of these FY 2023 respondents—

- 70.5 percent used access agreements as delivery alternatives for both technical and software;
- 22.7 percent used access agreements for only technical data; and
- 6.8 percent used access agreements for only software (Enclosure 3, Figure 6-2(b)).

### ***Escrow Agreements***

In the FY 2021 GDC, 4.8 percent of respondents used escrow agreements. Overall, this percentage decreased in the FY 2023 GDC to 1.9 percent (Enclosure 3, Figure 6-1). Of these FY 2023 respondents—

- One respondent used escrow agreements for both technical and software;
- No respondents reported using escrow agreements for only technical data;
- One respondent used escrow agreements for only software (Enclosure 3, Figure 6-2(c)).

### ***Deferred Ordering Clauses***

In the FY 2021 GDC, 11.9 percent of respondents used the deferred ordering clause (Enclosure 3, Figure 6-1, above). Overall, this percentage decreased in the FY 2023 GDC to 12.6 percent. Of these FY 2023 respondents—

- 76.9 percent used the deferred ordering clause for both technical and software; and
- 15.4 percent used the deferred ordering clause for only technical data, and 7.7 percent used the deferred ordering clause for only software (Enclosure 3, Figure 6-2(d)).

### ***Other Alternative Tools***

In the FY 2021 GDC, 23.8 percent of respondents used other alternative tools (Enclosure 3, Figure 6-1, shown above.). Overall, this percentage increased in the FY 2023 GDC to 33.0 percent, among GDC programs that reported using alternative delivery tools. Of these FY 2023 respondents—

- 62.1 percent used other alternative tools for both technical and software;
- 32.8 percent used other alternative tools for only technical data, and 5.2 percent used other alternative tools for only software (Enclosure 3, Figure 6-2(e))

As evidenced by the significant percentage of FY 2023 respondents indicating usage of other alternative delivery tools, it may be of benefit to further investigate and identify these alternatives, including availability and scalability for wider adoption.

#### **3.3.2.6.3 Effectiveness of Alternative Delivery Tools**

***The vast majority of FY 2021 and FY 2023 programs that used alternative delivery tools reported that such tools met or exceeded the program's needs.*** The GDCs yielded following data on the effectiveness of alternate delivery tools (Enclosure 3, Figure 6-3):

- In the FY 2021 GDC, 88.9 percent of respondents reported that program needs were met or exceeded by alternatives to definite, standard, or formal delivery.
- In the FY 2023 GDC, this percentage increased to 92.0 percent among comparable respondents.
- In the FY 2021 and FY 2023 GDCs, only 11.1 percent and 8.0 percent of comparable respondents, respectively, reported that using alternative delivery tools failed to meet program needs.

This data strongly suggests that these alternative delivery tools are a measure and metric for positive program health.



### 3.3.2.6.4 Costs Associated with Alternative Delivery Tools for Ensuring Delivery of Technical Data and/or Software

*The FY 2021 and FY 2023 GDC data showed that alternative delivery tools can be implemented at no cost, minimal cost, or more cost-effectively than standard delivery methods.*

FY 2021 and FY 2023 respondents provided the following insights on costs associated with alternative delivery tools (Enclosure 3, Figures 6-5):

- In the FY 2021 GDC, 75.1 percent of respondents reported that alternate tools had no or minimal costs or were more cost effective than standard delivery methods.
- In the FY 2023 GDC, this percentage increased to 77.3 percent among comparable respondents. Of these FY 2023 respondents, 22.7 percent reported that using alternative tools had no cost; 39.3 percent reported minimal costs; and 15.3 percent reported greater cost-effectiveness than standard delivery methods.

This data demonstrates the cost effectiveness of alternative delivery tools to ensure delivery of technical data and/or software.

### Section Summary

Among programs using alternative delivery tools, a substantial percentage of programs use optional CLINs and access agreements to ensure delivery of both technical data and software. Based on GDC data, these alternative delivery tools frequently met or exceeded program needs, and such tools had no or minimal cost, or were more cost effective than standard delivery methods. This data suggests that such alternative delivery tools are an IP-related measure and metric for positive program health. However, the data in this section also suggests that additional guidance and training resources may be needed on alternate delivery tools, including the deferred ordering clause and escrow agreements.

### 3.3.3 Key Takeaways

Key takeaways from the GDC analysis include:

- **Respondent Demographics:** Most of the FY 2021 and FY 2023 respondents: 1) used FAR-based procurement contracts; 2) acquired products that were based in commercial technology (in whole or in part); 3) managed products with a TRL level of 6 or higher; and 4) valued their total life-cycle cost at \$100M or more.
- **IP Planning, Strategies, Procedures, and Outcomes:** Key IP-related measures and metrics for positive program health are robust IP strategies and TTPs outlined in this section with associated positive impacts on mission goals.
- **IP Evaluation Activities:** IP-related evaluation criteria in SSEPs are likely to have a positive impact on mission goals. IP-related evaluation criteria do not necessarily result in additional costs in proposals; in fact, they may result in reduced costs in proposals. IP-related measures and metrics for positive program health (which may help to avoid vendor lock) include: 1) IP evaluation criteria; 2) early IP and MOSA planning, including data deliverables and strategies that enable competition; and 3) early negotiation of data rights.
- **Obstacles for Obtaining Data and Data Rights:** Common IP-related obstacles include: 1) discrepancies in data rights assertions; 2) discrepancies in restrictive markings; and 3)

cost prohibitive IP and IP rights. Resolution of discrepancies in data rights assertions are likely to enable competitive procurement of hardware and software sustainment services. Accordingly, IP-related measures and metrics of positive program health include resolution of discrepancies in data rights assertions.

- ***Addressing IP Gaps and Deficiencies:*** The majority of FY 2021 and FY 2023 respondents negotiated license rights in technical data, software, or both. The GDC data suggest that such negotiations frequently had little or no impact on program costs or schedule, especially if negotiations are conducted pre-award. This data suggests that early license negotiations are an IP-related measure and metric for positive program health. In addition, GDC data suggests programs frequently have inadequate transparency into the valuation method supporting IP pricing.
- ***Addressing Uncertain Future Needs:*** Among programs using alternative delivery tools, a substantial percentage of programs use optional CLINs and access agreements to ensure delivery of both technical data and software. Based on GDC data, these alternative delivery tools frequently met or exceeded program needs, and such tools had no or minimal costs, or were more cost effective than standard delivery methods. This data suggests that such alternative delivery tools are an IP-related measure and metric for positive program health.

### **3.3.4 Conclusions**

The GDC analysis identified several objective measures and measures associated with positive program health. These measures and metrics include robust IP strategies and the TTPs outlined in this section. These TTPs include: 1) early and continuous product support planning; 2) IP evaluation criteria; 3) early IP and MOSA planning, including data deliverables and strategies that enable competition; 4) early negotiation of data rights; 5) resolution of discrepancies in data rights assertions; and 6) alternative delivery tools. These IP-related measures and metrics for positive program health may be incorporated in DoD policies, guidance, and training resources.

## **4. Training and Guidance for the Acquisition Workforce**

### **4.1 IP-Related DAU Training and Educational Initiatives**

DAU, guided by its FY 2021-2026 IP Strategic Plan, and in coordination with the OSD IP Cadre, developed comprehensive IP-related training and educational resources in FY 2023 for the Defense Acquisition Workforce. DAU provided a series of IP-related in-person and virtual webinars and workshops. They have conducted several program specific mission assistance engagements across DoD. These customer-focused initiatives reflect DAU's commitment to provide a learning platform for superior training and resources, to both DoD and non-DoD personnel, focused on experiential learning ("hands-on learning by doing") and scenario-based training. IP evaluation and valuation - foundational to IP activities across the Defense Acquisition System - are woven throughout all of DAU's IP-related training and educational resources.

In response to its Knowledge Area Initiative, the OSD IP Cadre participated in strategy sessions hosted by DAU on the governance structure for Knowledge Areas, including IP. As the Knowledge Area Initiative is implemented, the OSD IP Cadre and DAU will partner with senior

acquisition leaders to identify other acquisition personnel who would benefit from IP and Data Rights (IPDR) training, specific training requirements and whether to revise the FY 2021-2026 IP Strategic Plan to remain responsive to these new acquisition workforce priorities.

***Highlights of FY 2023 activities include:***

*Videos, Simulations, and Scenario-Based Exercises*

- DAU began developing a new series of on-demand videos addressing nuanced topics critical to the acquisition of sufficient data rights for system sustainment. It is scheduled for deployment in FY 2024, including videos on the following topics: Reducing Vendor Lock on Programs; Noncommercial Computer Software; IP and Data Driven Product Support Analyses; IPDR marking; IP Issues in Supply Chain; and IP scenario-based vignettes: IP and Supply Chain.
- DAU updated its online IPDR modules, which are the required courses for its Foundational IP Credential. Focusing on developing an IP Strategy to facilitate critical and strategic thinking by the DoD Acquisition Workforce in acquiring military technology, the comprehensive update enhances the scenario-based exercise experience and engage the learner with emphasis on live-action videos, simulations and other creative media; and lessons learned. The revised foundational IP Credential will be released in FY 2024.

*IP and Data Rights Workshops and Webinars*

- DAU's IP team participated in a series of virtual and in-person IPDR workshops and webinars for a range of stakeholders across key sectors, including acquisition professionals, logisticians, product managers, product support managers and industry. Examples include: Product Support Annual Workshop and JPEO-CBRND (DoD Chemical and Biological Defense Program) (September 2022); NDIA/AIA Technical Data Forum (October 2022); DAU's "Hacking Program Management Series: Government Property Rights, Part 2 (December 2022): DoD's Viewpoint,"; "Logistics Live" (April 2023); DAU-Air Force AFMC Data Rights Marking webinar with over 700 attendees (April 2023); the Council of Logistics Engineering Professionals webinar (May 2023); Open Source Software, DARPA (June) 2023; Defense Health Agency briefing (July 2023); IP Considerations for Product Support (August); Other Transactions Cross Talk, IP Considerations (September 2023); Software Acquisitions, Defense Business Systems (October 2023); and Detroit Arsenal Acquisition Insight Days, Data Rights (November 2023).
- DAU hosted several mission assistance workshops for various DoD programs, including NAVAIR CH 52K & E6B (Nov/Dec), DAU Podcasting Contracting Conversations (Nov), KC-Y Program Office Foundational & IP Strategy Planning (January), IP Strategy Presentation (Shield Program Office) and the Dr. Scan Tool from JTIC identifying improper markings (April) in order to assist the Military Departments in the development of program-specific IP strategies.

*IP and Data Rights and Related Topics Credentials*

- DAU deployed a Foundational Software Acquisition Management Credential in December 2022, which provides the acquisition workforce with the knowledge and skills to successfully develop and acquire better software products faster and more efficiently. DAU's videos on Software Licensing and Open Source addressing the intersection of software and IP serve as topical companion assets to this credential.
- DAU is developing a Product Support Data Requirements Credential to teach critical life-cycle data strategies, including concepts such as identifying, evaluating, selecting and applying specific IP-related DIDs and CDRLs that will ensure (MCA, MTA, Software pathways) acquisition programs have maximum flexibility in meeting statutory maintenance requirements.

#### *Other Initiatives*

- DAU collaborated with and developed partnerships with other DoD and federal agencies to develop IPDR training, including each MILDEP IP Cadre Office, DoD Components, DoD Tech Transfer (T2) Community, the U.S. Patent and Trademark Office, the Federal Laboratory Consortium (FLC) and CENDI's Copyright and Intellectual Property Federal Agency Working Group.
- A key planned activity with the DoD T2 Community is exploring revising DAU's current T2 and Science and Technology Management assets and the creation of new educational resources to address leveraging T2 for long-term and strategic acquisition planning. DAU participated in the Federal Laboratory's Consortium's National Meeting and DoD's Tech Transfer Workshop in Cleveland in March 2023. DAU is also collaborating on the development of a panel on leveraging T2 for acquisition at the DoD Technology Transfer Training Working Group (T3WG) meeting in November 2023.
- DAU's FY 2023 activities reflect the University's commitment to providing dynamic, customer-focused and accessible IPDR educational resources across the DoD acquisition workforce and collaborating with a multitude of partners. This broad level of engagement and commitment to improve IP training and education enabled DAU to continue to be a key partner of the OSD IP Cadre, the PPIPEWG, the MILDEPs and DoD Component agencies.

## **4.2 IP-Related Guidance**

In addition to coordinating with DAU on IP-related training, the OSD IP Cadre has continued work on IP-related guidance and manuals during FY 2023. In particular, the OSD IP Cadre is updating DoDM 5010.12, "Acquisition and Management of Contractor-Prepared Data," and developing a new guidebook, "Intellectual Property: A Strategic and Tactical Guidebook," (IP Guide). The updated version of DoDM 5010.12 will provide a uniform approach to acquisition and management of data required from contractors. The IP Guide will provide new DoD acquisition framework guidance to help replace the Defense Acquisition Guidebook and will also replace a DoD IP related guidebook that was published over two decades ago.

DoDM 5010.12 and the IP Guide will provide complementary guidance and procedures for identifying needs for data and associated IP rights and developing IP acquisition strategies to better ensure that DoD acquires the necessary IP with clear and enforceable rights for the entire life cycle of a DoD system. In addition, the IP Guide is intended to facilitate the Department's implementation of MOSA, as reflected in Section 804 of the NDAA for FY 2021. A new third related guidebook is now also in development. Led by OUSD(R&E), with support and input

from the OSD IP Cadre, the forthcoming MOSA Guidebook is being developed in coordination with the IP Guide to cover more of the non-IP aspects of MOSA and to ensure integration with the IP related MOSA guidance in the IP Guide. The IP Guide, planned for CY 2023 release, will be a living document with occasional updates due to recent statutory amendments and policy changes. In addition, the Department's IP guidance will evolve as lessons are learned from this Pilot Program and ongoing IP policy and practice development efforts, including best practices and techniques for the valuation and evaluation of IP assets, and as feedback is received from the DoD and industry communities and academic commentators, such as the AIRC.

## **5. Conclusion**

Throughout the various activities of the Pilot Program, the Department strove to take a data-centric approach to understanding and assessing IP evaluation and valuation issues in DoD acquisitions. The Pilot Program case study participants methodically considered the effectiveness of TTPs. Through multiple industry engagement activities, the Department also considered the broad spectrum of comments and recommendations from the public and DoD stakeholders and considered how to implement this feedback in a manner that equitably balances the interests of the Government and the public.

Through coordination with stakeholders throughout the DoD, the Department assessed what resources are necessary to implement recommendations provided by the public and determined how to incorporate recommended TTPs into IP-related training, guidance, policies, and regulations. In addition, multiple GDCs revealed objective IP-related measures and metrics and indicators for positive program health. Supported by this data, the Department will incorporate these measures and metrics into current and future IP-related training, guidance, policies, and regulations. Lastly, the Pilot Program catalyzed sustainable activities for engagement within the Department and with the public to collaborate and resolve IP-related acquisition issues. These activities, individually and collectively, demonstrate the success of the Pilot Program.

## **6. Enclosures**

- 1) Section 801 of NDAA for FY 2020.
- 2) FY23 GDC on IP Evaluation & Valuation – Data Collection Form.
- 3) FY23 GDC on IP Evaluation & Valuation – List of Figures and Tables.

“... PUBLIC LAW 116–92—DEC. 20, 2019

**SEC. 801. PILOT PROGRAM ON INTELLECTUAL PROPERTY EVALUATION FOR ACQUISITION PROGRAMS.**

10 USC 2322 note.

(a) PROGRAM.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense and the Secretaries of the military departments may jointly carry out a pilot program to assess mechanisms to evaluate intellectual property (such as technical data deliverables and associated license rights), including commercially available intellectual property valuation analysis and techniques, in acquisition programs for which each such Secretary is responsible to be the benefits associated with these mechanisms on—

Deadline.

(1) the development of cost-effective intellectual property strategies;

Assessment.

(2) the assessment and management of the value and acquisition costs of intellectual property during acquisition and sustainment activities (including source selection evaluation factors) throughout the acquisition lifecycle for any acquisition program selected by such Secretary; and

(3) the use of a commercial product (as defined in section 103 of title 41, United States Code, as in effect on January 1, 2020), commercial service (as defined in section 103a of title 41, United States Code, as in effect on January 1, 2020), or nondevelopmental item (as defined in section 110 of title 41, United States Code) as an alternative to a product or service to be specifically developed for a selected acquisition program, including evaluation of the benefits of reduced risk regarding cost, schedule, and performance associated with commercial products, commercial services, and nondevelopmental items.

Assessments.

(b) ACTIVITIES.—Activities carried out under the pilot program may include the following:

Recommendations.

(1) Establishment of a team of Department of Defense and private sector subject matter experts (which may include the cadre of intellectual property experts established under section 2322(b) of title 10, United States Code) to—

(A) recommend acquisition programs to be selected for the pilot program established under subsection (a);

(B) recommend criteria for the consideration of types of commercial products, commercial services, or nondevelopmental items that can used as an alternative to a product or service to be specifically developed for a selected acquisition program; or

(C) identify, to the maximum extent practicable at each milestone established for each selected acquisition program, intellectual property evaluation techniques to obtain quantitative and qualitative analysis of intellectual property during the procurement, production and deployment, and operations and support phases for each selected acquisition program.

(2) Assessment of commercial valuation techniques for intellectual property for use by the Department of Defense.

(3) Assessment of the feasibility of agency-level oversight to standardize intellectual property evaluation practices and procedures.

(4) Assessment of contracting mechanisms to speed delivery of intellectual property to the Armed Forces or reduce sustainment costs.

(5) Assessment of agency acquisition planning to ensure procurement of appropriate intellectual property deliverables and intellectual property rights necessary for Government- planned sustainment activities.

(6) Engagement with the private sector to—

(A) support the development of strategies and program requirements to aid in acquisition planning for intellectual property;

(B) support the development and improvement of intellectual property strategies as part of life-cycle sustainment plans; and

(C) propose and implement alternative and innovative methods of intellectual property valuation, prioritization, and evaluation techniques for intellectual property.

Recommendations.

(7) Recommendations to the relevant program manager of an acquisition program selected under subsection (a), including evaluation techniques and contracting mechanisms for acquisition and sustainment activities.

Coordination.

(c) REPORT.—Not later than November 1, 2020, and annually thereafter through November 1, 2023, the Secretary of Defense, in coordination with the Secretaries concerned, shall submit to the congressional defense committees a joint report on the pilot

Assessments.

program conducted under this section. The report shall, at a minimum, include—

(1) a description of the acquisition programs selected by the Secretary concerned;

(2) a description of the specific activities in subsection (c) that were performed under each program;

(3) an assessment of the effectiveness of the activities;

(4) an assessment of improvements to acquisition or sustainment activities related to the pilot program; and

(5) an assessment of the results related to the pilot program, including any cost savings and improvement to mission success during the operations and support phase of the selected acquisition program...”<sup>1</sup>

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<sup>1</sup> P.L. 116-92, Dec.20. 2019.

FY23 Government Data Call on IP Evaluation and Valuation

0%

**SECTION 1. PROGRAM OVERVIEW**

**Sec. 1. Tell Us About Your Program.**

**\* 1 Select a rating for the type(s) of agreements your program uses with respect to acquiring, managing, and licensing intellectual property (IP) rights in technical data (TD), software (SW), and associated license rights (i.e., "data rights")?**

*(Instructions: For EACH ROW, select ONE response):*

**Please select 6 answers**

	Highly Effective	Somewhat Effective	Not Effective	Contract Type Not Used
1. Federal Acquisition Regulations (FAR)-Based Contract	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Other Transaction Authority (OTA) Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Cooperative Research & Development Agreement (CRADA)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Test Services Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. No-Cost Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Cooperative Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## \* 2 What is your program's Technology Readiness Level<sup>(\*)</sup> (TRL)?

(Instructions: Select ONE response):

- TRL (1)
- TRL (2)
- TRL (3)
- TRL (4)
- TRL (5)
- TRL (6)
- TRL (7)
- TRL (8)
- TRL (9)
- Don't Know TRL for my program

**?** *Note: the following definitions below relate to the answer options above:*

<sup>(\*)</sup> "Technology readiness levels (TRL) – is a scale that consists of nine levels ranging from one through nine—each one requiring the technology to be demonstrated in incrementally higher levels of fidelity in terms of its form, the level of integration with other parts of the system, and its operating environment than the previous, until at the final level the technology is described in terms of actual system performance in an operational environment. The scale is ordered according to the characteristics of the demonstration or testing environment under which a given technology was tested at defined points in time." GAO Report 20-48G (January 2020)

**\* 3 What are the total lifecycle cost estimates<sup>(\*)</sup> for your program, from inception through the operations & support (O&S<sup>(\*\*)</sup>) phases?**

*(Instructions: Select ONE response):*

- Approx. > \$1B+
- Approx. = or < \$1B, but > or = \$100M
- Approx. < \$100M, but > or = \$10M
- Approx. < \$10M
- Don't know my program's current cost estimate

**?** *Note: the following definitions below relate to the answer options above:*

<sup>(\*)</sup> If your program generally calculates a similar estimate of lifecycle costs (e.g., independent cost estimates, cost estimates, or cost analyses), please provide such an estimate for the total O&S costs.

<sup>(\*\*)</sup> O&S costs mean all costs during the O&S phase, responsible for over 60% of total ownership costs for military systems, consisting of all costs incurred from the initial system deployment through the end of system operations. These include all costs of operating, maintaining, and supporting a fielded system, to include costs of personnel, equipment, supplies, software, and services associated with operating, modifying, maintaining, supplying, and otherwise supporting a system.

**\* 4 What is the commerciality of your program's product baseline?**

*(Instructions: Select ONE response):*

- Hybrid of Commercial and Noncommercial Technology
- Based Primarily on Commercial Technology
- Based Primarily on Noncommercial Technology

## FY23 Government Data Call on IP Evaluation and Valuation

14%

### SECTION. 2. ACQUISITION PLANNING & STRATEGY OUTCOMES

#### Sec. 2. Tell Us About Your Program's Acquisition Planning and Strategy Outcomes.

**\* 5 What types of technical data (TD) or software (SW) deliverables<sup>(\*)</sup> were required under the contract(s) for this program?**

*(Instructions: Select ALL that apply):*

**ⓘ Please select from 1 to 7 answers.**

- Technical Data Necessary for Operation, Installation, Maintenance, and Training
- Form, Fit, and Function Data
- Test Data, Studies, and Analyses
- Technical Data Necessary for Production
- Software Documentation
- Software Executables
- Source Code and Software Tools that facilitate sustainment
- No TD or SW was delivered under this contract (e.g., None of the above)

**?** **Note: the following definitions below relate to the answer options above:**

**(\*)** "Technical data and software deliverables" are the technical data and software items that are delivered or furnished to the Government by the contractors.

**\* 6 How is your Intellectual Property (IP) strategy structured within the following program documentation?**

*(Instructions: For EACH ROW, select ONE response):*

**Please select 5 answers**

	<b>Embedded through the Strategy</b>	<b>Stand-alone Section</b>	<b>Stand-alone Paragraph</b>	<b>No IP Strategy</b>
Acquisition Strategy (AS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Product Support Strategy (PSS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lifecycle Sustainment Plan (LCSP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Systems Engineering Plan (SEP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Test and Evaluation Master Plan (TEMP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\* 7 Does your program management (PM) have established procedures for ensuring that contracts implement or account for the IP Strategy that is addressed in the Acquisition Strategy?**

*(Instructions: Select ONE response):*

- Primarily Documented Procedures
- Primarily Informal Procedures
- No Established Procedures

**\* 8 Does your program management (PM) have established procedures for ensuring that contracts implement or account for the IP Strategy that is addressed in the Life cycle Sustainment Plan or Product Support Strategy?**

*(Instructions: Select ONE response):*

- Primarily Documented Procedures
- Primarily Informal Procedures
- No Established Procedures

**\* 9 What was the impact of the following tactics, techniques, and procedures (TTPs) on your short and long-term mission goals?**

(For EACH ROW, select ONE response):

**Please select 17 answers**

	Positive Impact	No Impact	Negative Impact	Not Used
1. Early and continuous product support planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Priced CLIN options for technical data or software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Redesign/Modernization of an obsolete item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Evaluation of the offeror's proposed IP rights during source selection or sole-source negotiations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Specially negotiated licenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Purchase of source code or other critical software tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Digital engineering tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Access agreements*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Reverse engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Purchase of detailed manufacturing or process data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\*<sup>9</sup> What was the impact of the following tactics, techniques, and procedures (TTPs) on your short and long-term mission goals?**

(For *EACH ROW*, select *ONE* response):

**Please select 17 answers**

	Positive Impact	No Impact	Negative Impact	Not Used
11. MOSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Use of an IP valuation analysis to arrive at a fair and reasonable price for the IP associated with the offeror's proposed data deliverables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Escrow accounts**	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Inclusion of proper IP-related DFARS clauses and Data Item Descriptions (DIDs) in Contract Data Requirement Lists (CDRLs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Successful reliance on SNLRs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Use of OTAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Involvement of legal team during CDRL review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**?** *Note: the following definitions below relate to the answer options above:*

\* Access agreements permit the Government to view or access technical data or software in contractor-controlled repositories or facilities.

\*\* Escrow Agreements require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

28%

## SECTION 3. IP EVALUATION ACTIVITIES FOR SOURCE SELECTION

### Sec. 3. Tell Us About Your IP Evaluation Activities in the Context of Source Selections.

#### \* 10 Were there intellectual property (IP)-related evaluation criteria in your Source Selection Evaluation Plan?

(Instructions: Select ONE response):

! Choose one of the following answers

- Yes
- No

#### \* 11 What was the impact of the IP-related evaluation criteria?

(Instructions: Select ONE response):

- Positive Impact on Mission Goals
- No Impact on Mission Goals
- Negative Impact on Mission Goals
- Impact on Mission Goals cannot be determined at this time



**\* 12 Did the Government receive broader or narrower IP license rights<sup>(\*)</sup> than the IP license rights that the Government may normally require?**

*(Instructions: Select ONE response):*

- Broader IP License Rights
- Narrower IP License Rights
- No Impact on IP License Rights

**?** **Note: the following definitions below relate to the answer options above:**

<sup>(\*)</sup>"License rights" are how the Government may use, modify, reproduce, perform, display, release, or disclose the technical data or software items furnished or delivered by contractors.

**\* 13 Did the Contractor identify impacts on costs related to broader or narrower IP license rights discussed in Question 12?**

*(Instructions: Select ONE response):*

- Reduced Cost Identified by CTR
- No Cost Identified by CTR
- Additional Cost Identified by CTR
- Other Consideration Identified by CTR

**\* 14 Were any additional costs (associated with IP license rights) considered as part of the evaluation of the cost proposal?**

*(Instructions: Select ONE response):*

- Yes
- No

**\* 15 Did technical data or software items have individually priced option CLINs?**

*(Instructions: Select ONE response):*

Yes

No

42%

## SECTION 4. IP EVALUATION ACTIVITIES FOR SOLE SOURCE AWARDS

### Sec. 4. Tell Us About Your IP Evaluation Activities in the Context of Sole Source Awards.

**\* 16 If there were sole source contracts and the justification & approval (J&A) asserted IP and/or IP license rights<sup>(\*)</sup> in support of the sole source justification, what was the justification based on?**

*(Instructions: Select ONE response):*

**!** Check all that apply

- Late Delivery of Technical Data or Software in Another Contract
- Deficient or Insufficient Technical Data or Software Possessed by the Government
- Insufficient License Rights in Technical Data or Software Possessed by the Government
- Cost Prohibitive to Negotiate for Additional IP or IP License Rights
- The J&A was not based on IP and/or IP License Rights
- No sole source contract(s)

**?** **Note: the following definitions below relate to the answer options above:**

<sup>(\*)</sup> "License rights" are how the Government may use, modify, reproduce, perform, display, release, or disclose the technical data or software items furnished or delivered by contractors.

**\* 17 Did the Government provide a plan in the J&A to fill any deficiencies in IP and/or IP license rights for future procurements?**

*(Instructions: Select ONE response):*

Yes

No

**\* 18 Did the Government consider reverse engineering the product in the J&A?**

*(Select ONE response):*

Yes

No

**19 Which of the following program activities could have prevented your program from becoming vendor locked?**

*(Instructions: Select ALL that apply):*

**ⓘ Please select from 1 to 6 answers.**

Early IP planning

Open system architecture and platform interfaces

Contract Option years to permit off-ramping of contractors

Negotiating data rights at earlier stages of a program

Acquisition of technical data packages that enable competitive procurement of hardware and hardware sustainment services

My program did not encounter vendor lock

57%

## SECTION 5. OBSTACLES ENCOUNTERED

**Sec. 5. Tell Us About Obstacles You Encountered, in Relation to TD, SW, or IP License Rights.**

**\* 20 What obstacles did you encounter related to technical data, software, or IP license rights?**

*(Instructions: Select ALL that apply):*

ⓘ Please select from 1 to 6 answers.

- Deficient Technical Data or Software
- Contractor's Refusal to deliver Technical Data or Software (required in solicitation or contract)
- Discrepancies in Data Rights Assertions
- Discrepancies with Restrictive Markings on Technical Data or Software
- Contractor's Refusal to Negotiate Specially Negotiated Licenses
- Cost Prohibitive to Negotiate for Additional IP or IP License Rights
- My program did not encounter any of the obstacles listed above (e.g., None of the above)

**\* 21 If there were discrepancies in the data right assertions, what were these discrepancies?**

*(Instructions: Select ALL that apply):*

**ⓘ Please select from 1 to 6 answers.**

- Form, Fit, and Function Data was provided with restrictions
- Operation, Maintenance, Installation, Training Data was provided with Restrictions
- Inaccurate Assertions of Development Funding
- Assertions Include Items that are Not Deliverables
- Vague/Ambiguous Assertions
- The discrepancies are yet to be determined
- No discrepancies were found

**\* 22 If discrepancies were found in the data rights assertions, what was the impact of resolving these discrepancies?**

*(Instructions: Select ONE response):*

- Enabled competitive Procurement of Hardware or Software Sustainment Services
- Enabled competitive Procurement of Hardware Procurement
- The impact of resolving the discrepancies is yet to be determined
- There was no impact in resolving the discrepancies

**\* 23 If discrepancies were found in the data rights assertions, what was the impact of the process of resolving these discrepancies?**

*(Instructions: Select ONE response):*

- No Impact on Schedule
- The impact of the process of resolving these discrepancies are yet to be determined
- Minimal Impact on Schedule
- Significant Impact on Schedule
- Critical Impact on Schedule

**\* 24 If any formal validation procedures or other dispute procedures (e.g., show cause letter or cure notice) were used to resolve discrepancies related to technical data, software, or IP license rights, what was the basis for the dispute?**

*(Instructions: Select ALL that apply):*

**ⓘ Please select from 1 to 8 answers.**

- No Formal or other dispute procedures were used
- Technical Data or Software was deficient
- The contractor refused to provide the IP license rights required under the DFARS clauses
- The restrictive markings were deficient
- Contractor's changes to Data Rights Assertions would have impacted the source selection
- Loss of access to Technical Data or Software in contractor-controlled repositories
- The basis for the dispute is yet to be determined
- Other Basis for the Dispute

## FY23 Government Data Call on IP Evaluation and Valuation

71%

## SECTION 6. ADDRESSING GAPS/DEFICIENCIES

**Sec. 6. Tell Us About How You Addressed Gaps/Deficiencies in TD, SW, or IP License Rights.****\* 25 In what context did your program address gaps/deficiencies in TD, SW, or IP License Rights?***(Instructions: Select ONE response):*

- In both the Pre-Award phase (e.g., in RFP, proposal) and the Post-Award phase (e.g., initial contract award, modification)
- Only in the Pre-Award phase (e.g., in RFP, proposal)
- Only in the Post-Award phase (e.g., initial contract award, modification)
- Did not need to address gaps/deficiencies in either context



**\* 26 Did your program conduct negotiations for license rights<sup>(\*)</sup> in...?**

*(Instructions: Select ONE response):*

- Both Technical Data (TD) and Software (SW)
- Only Technical Data (TD)
- Only Software (SW)
- Did not negotiate license rights in either TD or SW

**?** *Note: the following definitions below relate to the answer options above:*

**(\*)** "License rights" are how the Government may use, modify, reproduce, perform, display, release, or disclose the technical data or software items furnished or delivered by contractors.

**\* 27 What was the overall purpose of the negotiations?**

*(Instructions: Select ALL that apply):*

**!** Please select from 1 to 7 answers.

- Facilitating Transition to Sustainment
- Facilitating Modernization
- Facilitating Transition to a Program of Record
- Facilitating Competitive Procurement of an End Item
- Securing an Enterprise-wide License
- Removing Commercial License Terms that conflict with Federal procurement law
- Removing Commercial License Terms that conflict with User Needs

**\* 28 What was the cost of the negotiated license rights?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than the standard license
- Within budget, but not cost effective
- Cost Prohibitive

**\* 29 What valuation method was used in assessing the license fee?**

*(Instructions: Select ONE response):*

- A combination of valuation methods was used
- Market Approach
- Income Approach
- Cost Approach
- Valuation method used is unknown
- None of the valuation methods listed were used

**\* 30 What impact did the negotiations for IP license rights have on your program's schedule?**

*(Instructions: Select ONE response):*

- No impact on schedule
- The impact of the negotiations on program schedule are yet to be determined
- Minimal impact on schedule
- Significant impact on schedule
- Critical impact on schedule

**\* 31 Was this negotiated before or after contract award?**

*(Instructions: Select ONE response):*

- Before and After Contract Award
- Before Contract Award
- After Contract Award

**\* 32 In addition to rights in technical data (TD) and software (SW), did the Government negotiate for any other license rights in the following types of IP?**

*(Instructions: Select ONE response):*

- Both Trademark rights and Patent rights
- Trademark rights
- Patent rights
- No other license rights were negotiated besides TD and SW

85%

## SECTION 7. ADDRESSING UNCERTAINTY OF FUTURE NEEDS

### Sec. 7. Tell Us About How You Addressed Uncertainty of Future Needs for TD, SW, or IP License Rights.

**\* 33 Did your program use any of the following tools for ensuring delivery of either technical data, computer software, or both?**

(Instructions: For EACH ROW, select ONE response):

**Please select 5 answers**

	Both Technical Data (TD) and Computer Software (CS)	Technical Data (TD)	Computer Software (CS)	Not Used (Neither for TD nor CS)
Optional CLINs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access Agreements*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Escrow Agreements**	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of the Deferred Ordering Clause	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Alternative Tool(s) to Definite, Standard, or Formal Delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**?** *Note: the following definitions below relate to the answer options above:*

\* Access agreements permit the Government to view or access technical data or software in contractor-controlled repositories or facilities.

\*\* Escrow Agreements require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

**\* 34 How well have the Optional CLIN tools (e.g., used/selected in the first question of this section) met your program's needs?**

*(Instructions: Select ONE response):*

- Exceeded Program Needs
- Met Program Needs
- Did Not Meet Program Needs (e.g., Deficient)

**\* 35 How would you characterize the cost for the Optional CLIN tools (e.g., used/selected in the first question of this section)?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than Standard Delivery
- Not Cost Effective, But Within Budget
- Cost Prohibitive

**\* 36 How well have the Access Agreement<sup>(\*)</sup> tools (e.g., used/selected in the first question of this section) met your program's needs?**

*(Instructions: Select ONE response):*

- Exceeded Program Needs
- Met Program Needs
- Did Not Meet Program Needs (e.g., Deficient)

**?** **Note: the following definitions below relate to the answer options above:**

<sup>(\*)</sup> Access agreements permit the Government to view or access technical data or software in contractor-controlled repositories or facilities.

**\* 37 How would you characterize the cost for the Access Agreement<sup>(\*)</sup> tools (e.g., used/selected in the first question of this section)?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than Standard Delivery
- Not Cost Effective, But Within Budget
- Cost Prohibitive

**\* 38 How well have the Escrow Agreement<sup>(\*\*)</sup> tools (e.g., used/selected in the first question of this section) met your program's needs?**

*(Instructions: Select ONE response):*

- Exceeded Program Needs
- Met Program Needs
- Did Not Meet Program Needs (e.g., Deficient)

**?** *Note: the following definitions below relate to the answer options above:*

**(\*\*)** Escrow Agreements require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

**\* 39 How would you characterize the cost for the Escrow Agreement<sup>(\*\*)</sup> tools (e.g., used/selected in the first question of this section)?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than Standard Delivery
- Not Cost Effective, But Within Budget
- Cost Prohibitive



**\* 40 How well have the Deferred Ordering Clause tools (e.g., used/selected in the first question of this section) met your program's needs?**

*(Instructions: Select ONE response):*

- Exceeded Program Needs
- Met Program Needs
- Did Not Meet Program Needs (e.g., Deficient)

**\* 41 How would you characterize the cost for the Deferred Ordering Clause tools (e.g., used/selected in the first question of this section)?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than Standard Delivery
- Not Cost Effective, But Within Budget
- Cost Prohibitive

**\* 42 How well have the Other Alternative Tool(s) to Definite, Standard, or Formal Delivery (e.g., used/selected in the first question of this section) met your program's needs?**

*(Instructions: Select ONE response):*

- Exceeded Program Needs
- Met Program Needs
- Did Not Meet Program Needs (e.g., Deficient)

**\* 43 How would you characterize the cost for the Other Alternative Tool(s) to Definite, Standard, or Formal Delivery (e.g., used/selected in the first question of this section)?**

*(Instructions: Select ONE response):*

- No Cost
- Minimal Cost
- More Cost Effective than Standard Delivery
- Not Cost Effective, But Within Budget
- Cost Prohibitive

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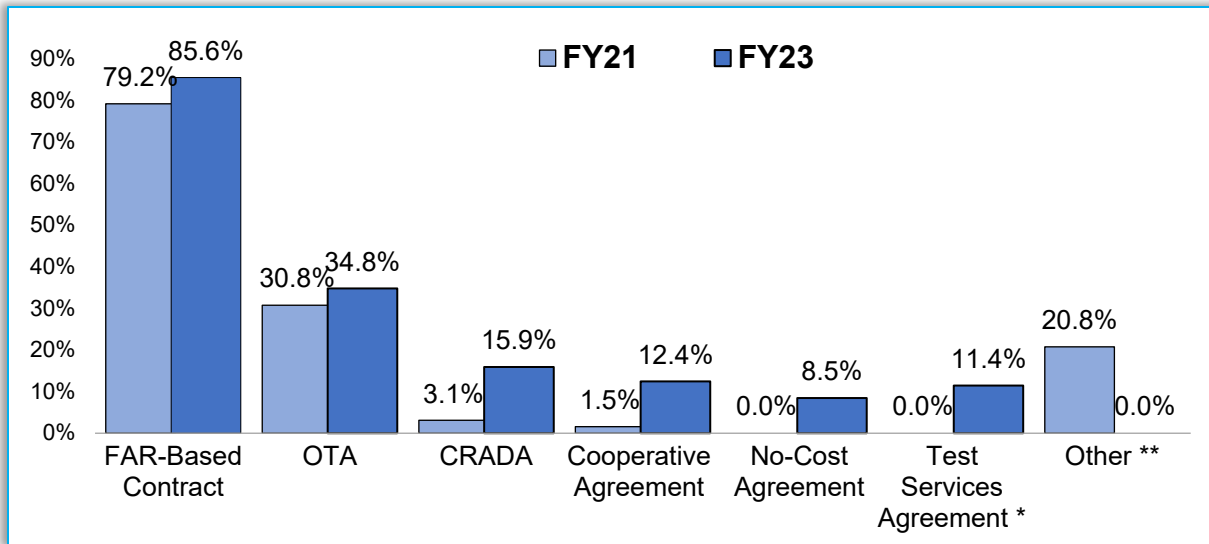
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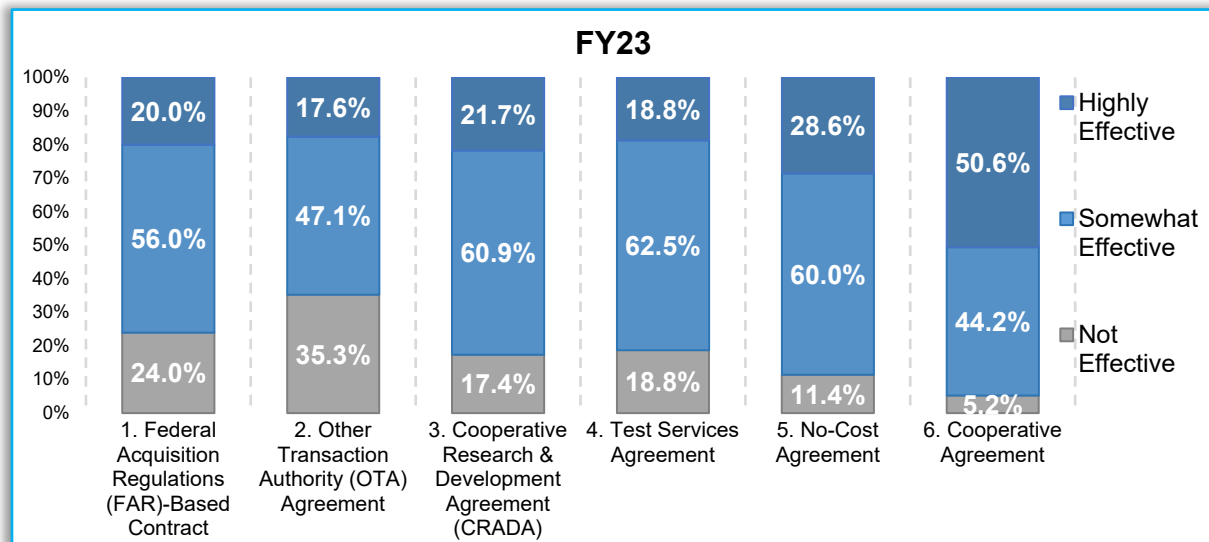
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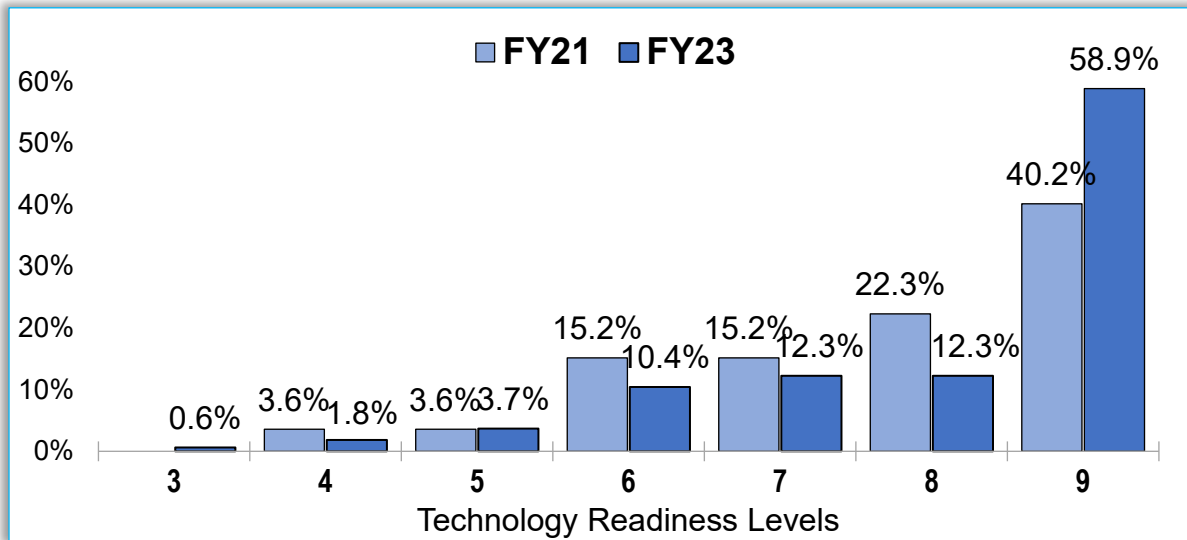


**Figure 1-1(b): Effectiveness of Agreements Used, By FY23 Respondent Percentages**

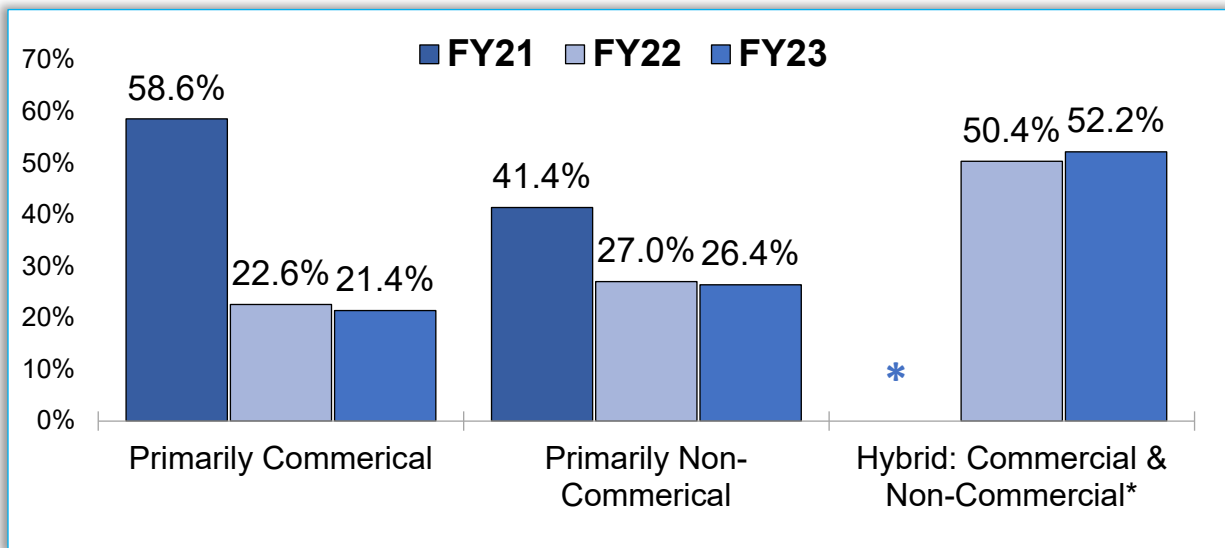


<sup>1</sup> \* Indicates that this type of agreement was not a response option in FY21; \*\* indicates that this was not an FY23 option.

**Figure 1-2: Technology Readiness Levels, By Comparable FY21 & FY23 Percentages**



**Figure 1-3: Commerciality of Product Baseline by Comparable FY21, FY22, & FY23 Percentages<sup>2</sup>**



<sup>2</sup> \* Indicates that a hybrid of commercial & noncommercial was not a response option in FY21.

**Table 1-4: Total Life-cycle Cost Estimates, by FY22 & FY23 Respondent Percentages**

<b>Total Life-cycle Cost Estimates</b>	<b>FY22</b> (“n” = 160)		<b>FY23</b> ("n" = 201)	
	<b>Count</b>	<b>%age</b>	<b>Count</b>	<b>%age</b>
\$1B+	48	30.0%	61	30.3%
\$100M to \$1B	60	37.5%	73	36.3%
\$10M to \$100M	34	21.3%	42	20.9%
\$10M and below	18	11.3%	6	3.0%
Unknown	0	0.0%	20	10.0%



Figure 2-1: TD & SW Deliverables A&S Programs Required Under Contract, by Comparable FY21 & FY23 Respondent Percentages<sup>3</sup>

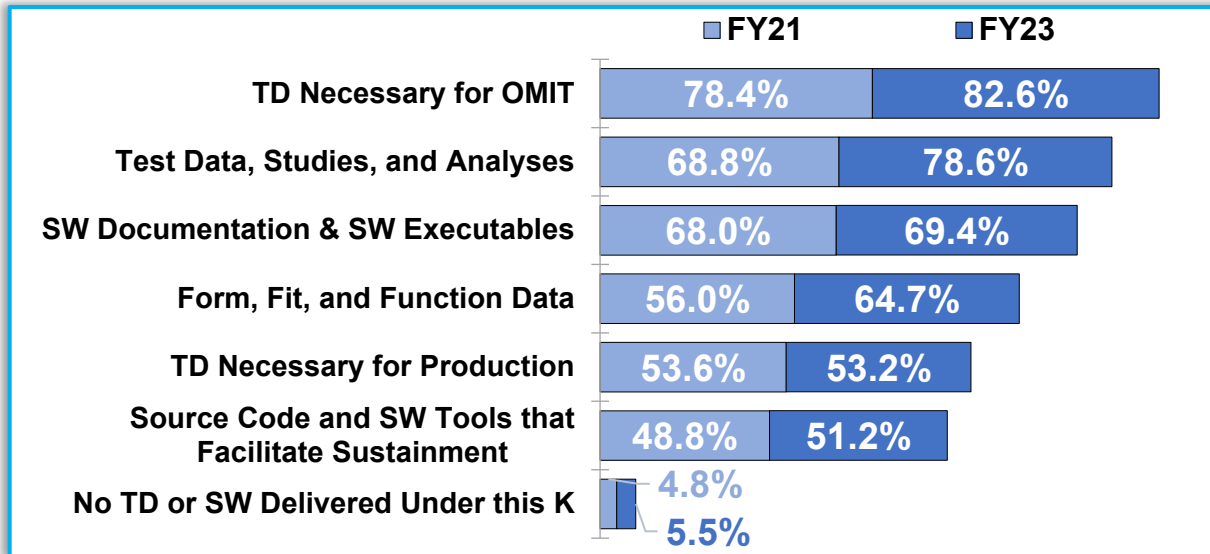
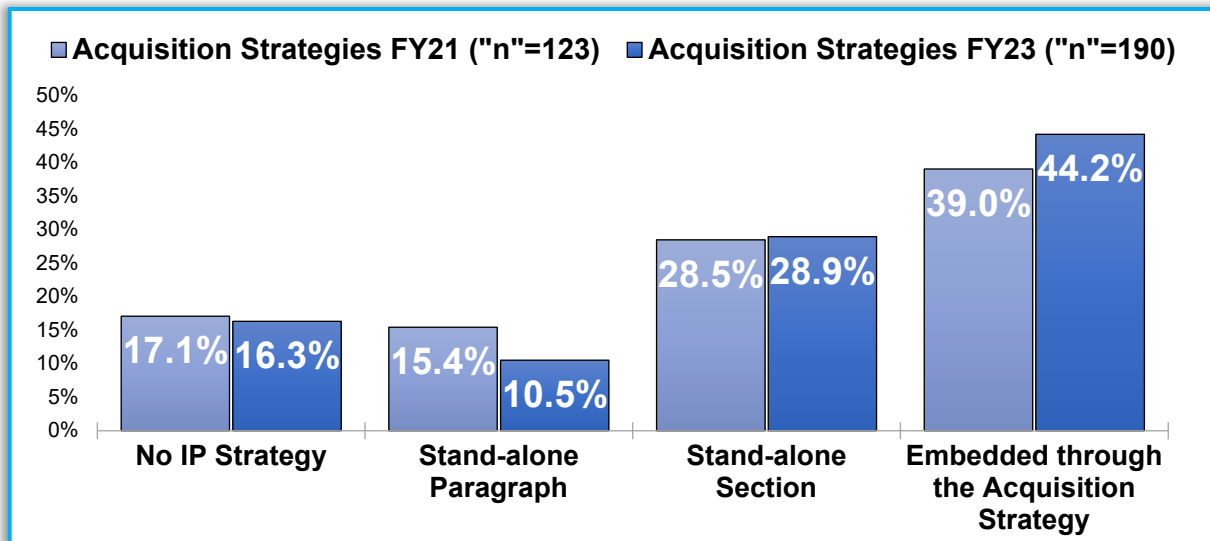
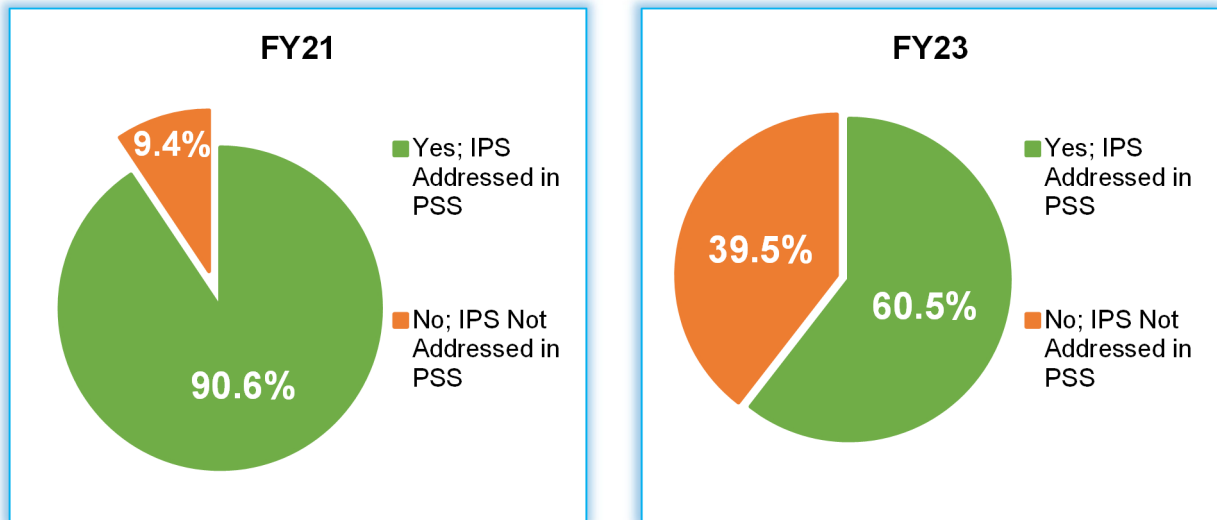


Figure 2-2(a): IP Strategies & Structures Within Acquisition Strategies, By Comparable FY21 & FY23 Respondent Percentages

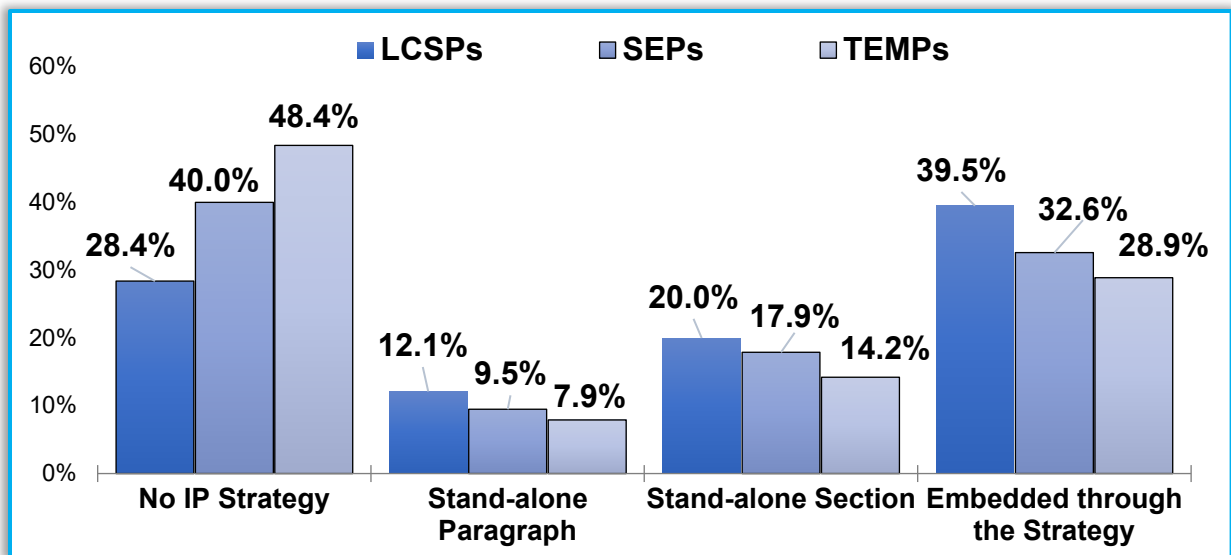


<sup>3</sup> It should be noted that respondents had the option of selecting more than one type of TD and SW deliverable across the FY21 and FY23 GDCs (Enclosure 3, Figure 2-1, shown above).

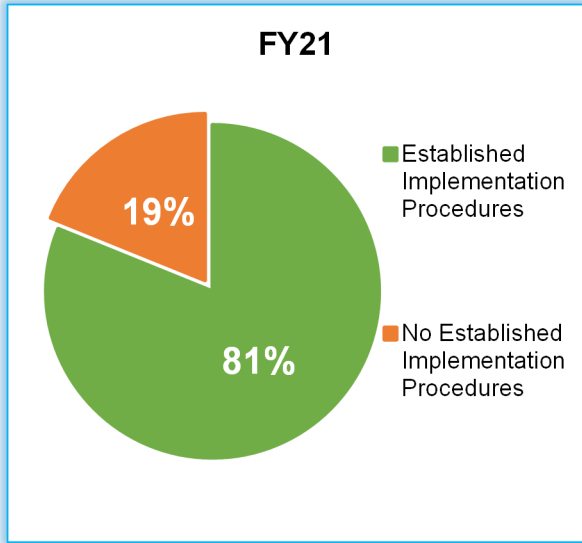
**Figure 2-2(b): Whether IP Strategies Are Addressed Within PS Strategies, By Comparable FY21 & FY23 Respondent Percentages**



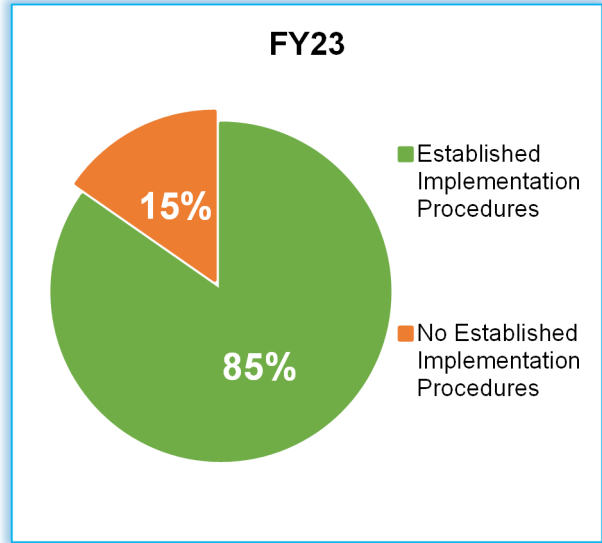
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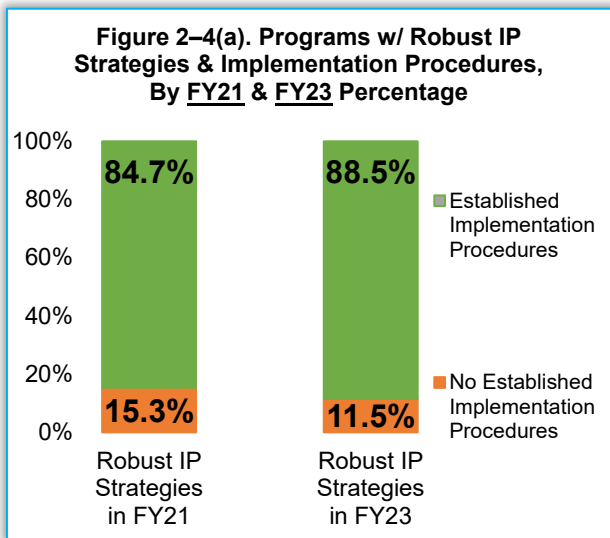
**Figure 2-3: Extent of Programs Having Established Procedures for Ensuring Contracts Implement or Account for IP Strategies Addressed Within Acquisition Strategies, By Comparable FY21 & FY23 Respondent Percentages<sup>4</sup>**



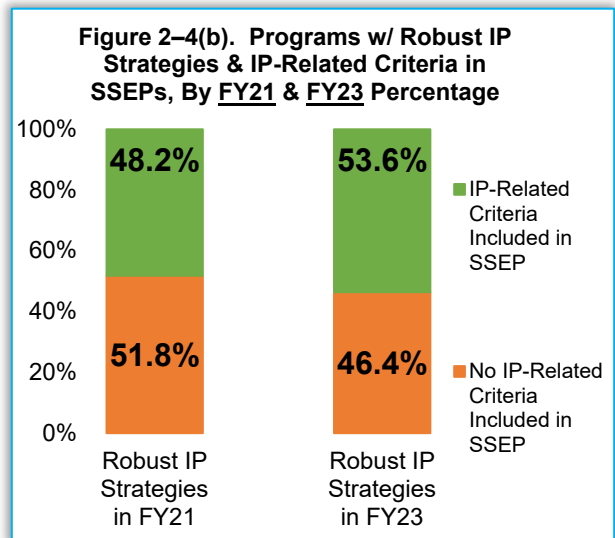
**Figure 2-4(a): Robust IPS + Established Implementation Procedures**



**Figure 2-4(b): Robust IPS + IP-Related Evaluation Criteria Used in SSEPs**



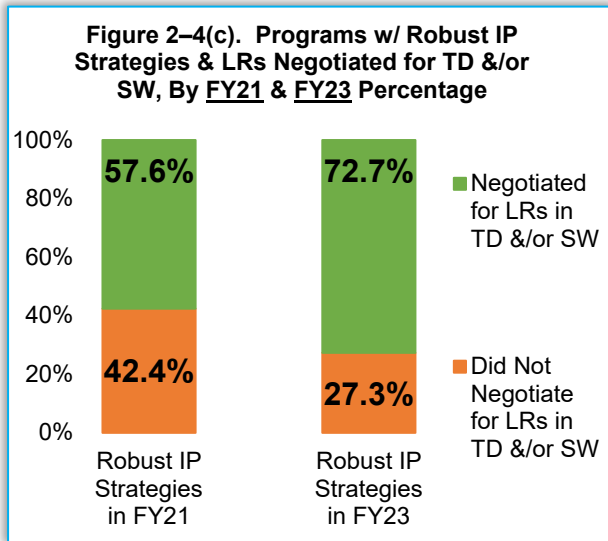
**Figure 2-4(a): Robust IPS + Established Implementation Procedures**



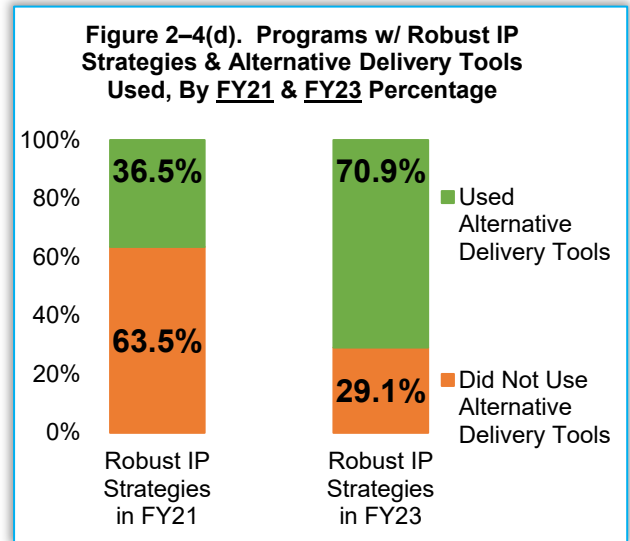
**Figure 2-4(b): Robust IPS + IP-Related Evaluation Criteria Used in SSEPs**

<sup>4</sup> Of the 85% of FY23 programs, 54.7% indicated having “primarily documented procedures,” and 30% indicated having “primarily informal procedures” in place.

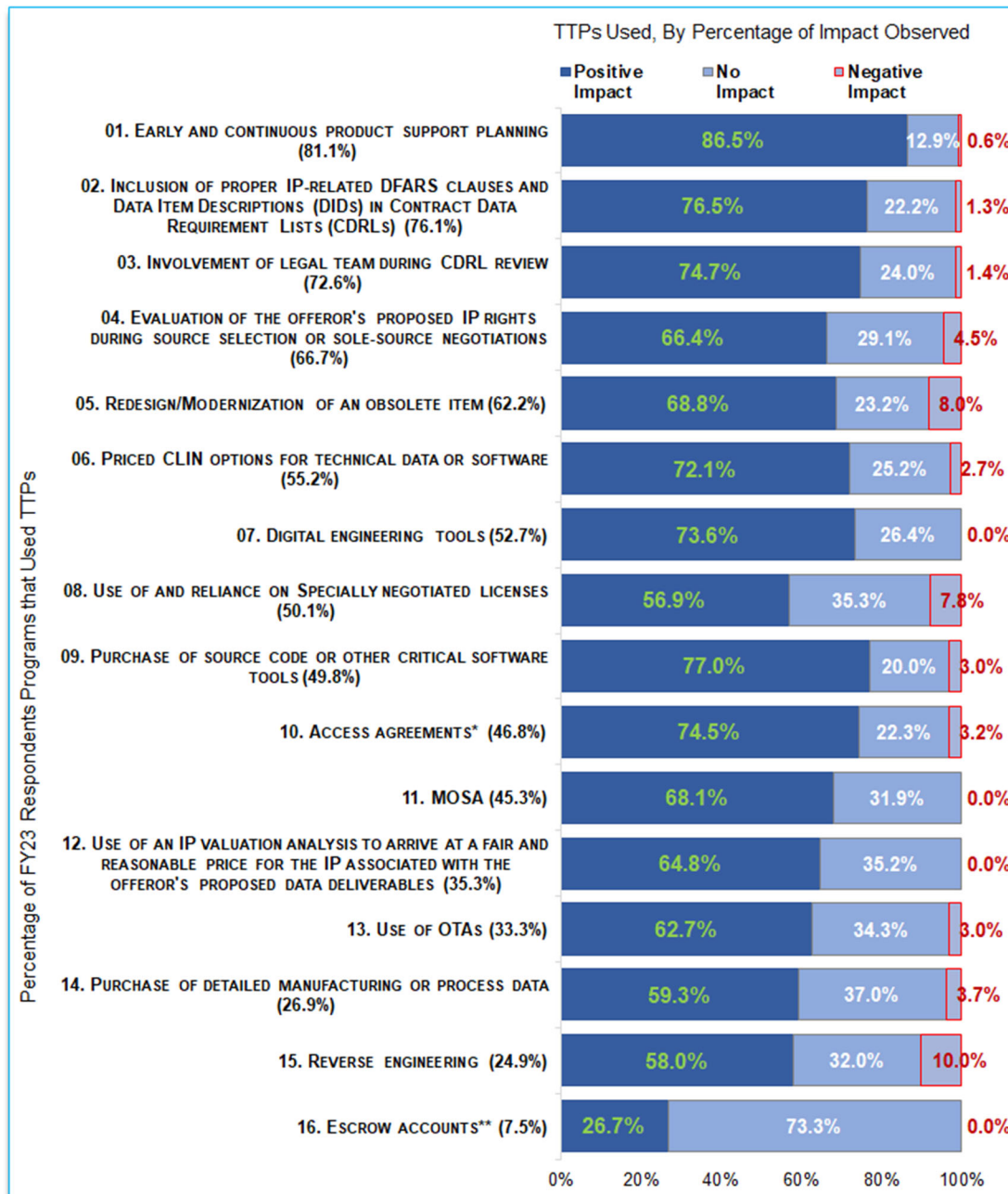
**Figure 2-4(c): Robust IPS + Negotiated LR in IP-related TD and/or SW**



**Figure 2-4(d): Robust IPS + Use of Alternative Delivery Tools (e.g., tools used as alternatives to definite, standard, & formal delivery).**





















**Figure 2-5: TTPs Used Among FY23 Programs and Their Corresponding Impact on Mission Goals, By Respondent Percentages.<sup>5</sup>**



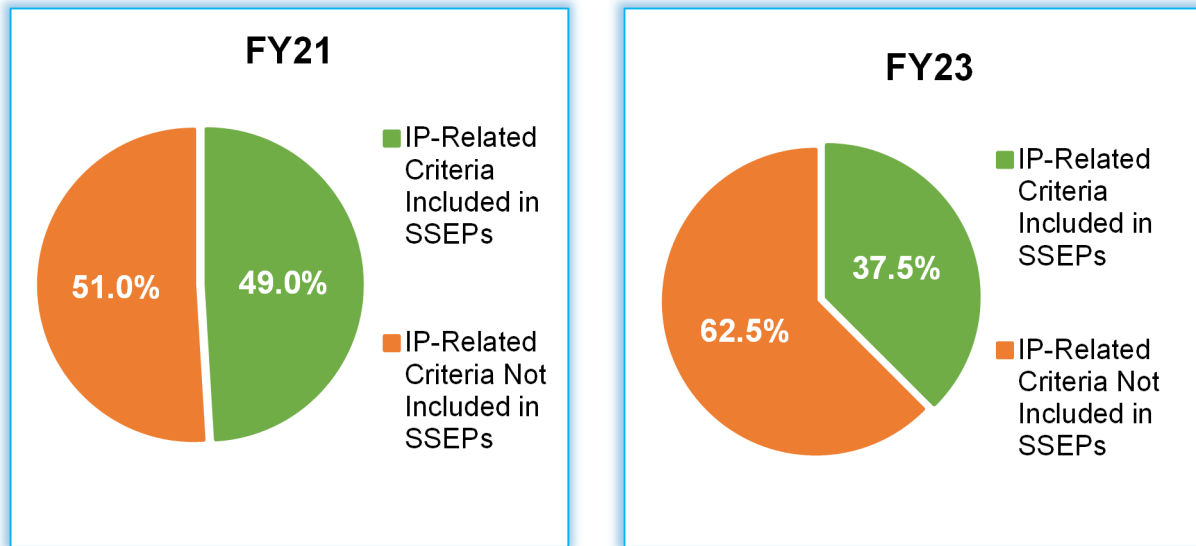
<sup>5</sup> It should be noted that the total values are greater than 100%, as FY23 respondents had the opportunity to select one or more responses to the GDC question associated with Figure 2-5. above (Enclosure 3). In addition: "\*" indicates the definition of Access agreements, which permit the Government to view or access technical data or software in contractor-controlled repositories or facilities. "\*\*" indicates the definition of Escrow Agreements, which require deferred delivery of technical data or software upon the occurrence of specific events indicated in the contract (e.g., the contractor's cease of sale or support of products or bankruptcy).

**Table 2-6: TTPs Used Among FY22 and FY23 Programs, By Respondent Percentages**

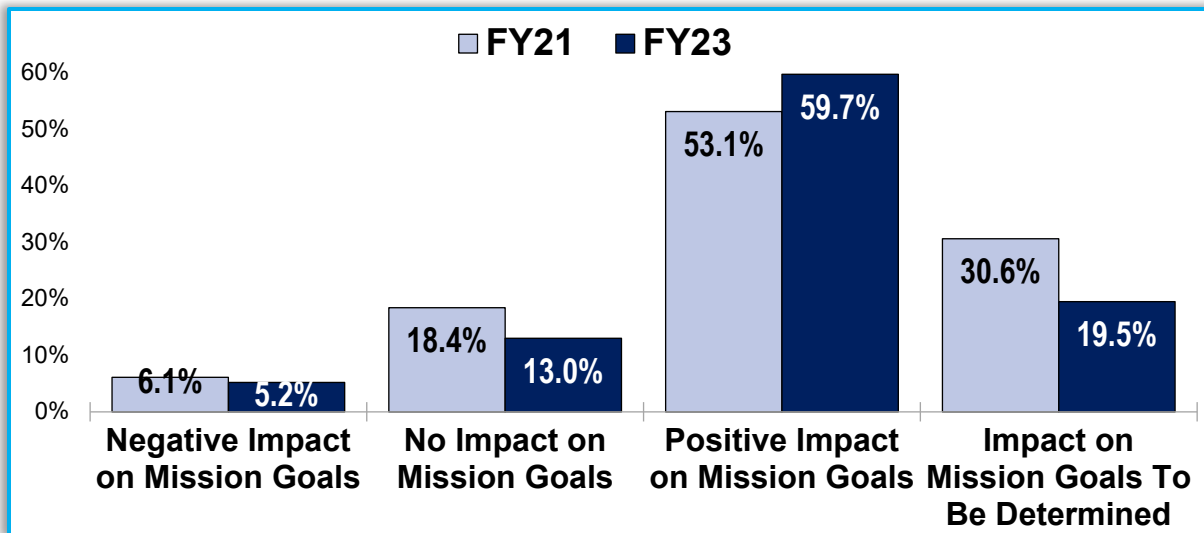
Table Legend	
Indicator	Description
	= Increase (▲ = or > 25%)
	= Moderate Increase (5% < ▲ < 25%)
	= Slight/No Increase or Decrease (0% = ▲ < 5%)
	= Moderate Decrease (-5% < ▲ < -25%)
	= Decrease (▲ = or > -25%)

TTPs Applied by Programs	FY22 ("n"=270)		FY23 ("n"=201)		% Change	+/- Trend
	Count	%age	Count	%age	▲	
Early and Continuous Product Support (PS) Planning	115	42.6%	163	81.1%	38.5%	
Evaluation of the Offeror's Proposed IP Rights During Source Selection or Sole-Source Negotiations	62	23.0%	134	66.7%	43.7%	
Redesign/ Modernization of an Obsolete Item	82	30.4%	125	62.2%	31.8%	
Priced CLIN Options for TD or SW	100	37.0%	111	55.2%	18.2%	
Digital Engineering (DE) Tools	55	20.4%	106	52.7%	32.4%	
Purchase of Source Code or Other Critical SW Tools	56	20.7%	100	49.8%	29.0%	
Specially Negotiated Licenses (SNLs)	61	22.6%	94	46.8%	24.2%	
Access Agreements	50	18.5%	94	46.8%	28.2%	
MOSA	27	10.0%	91	45.3%	35.3%	
Use of an IP Valuation Analysis to Arrive at a Fair and Reasonable Price for the IP Associated with the Offeror's Proposed Data Deliverables	23	8.5%	71	35.3%	26.8%	
Purchase of Detailed Manufacturing or Process Data (DMPD)	32	11.9%	54	26.9%	15.0%	
Reverse Engineering	40	14.8%	50	24.9%	10.1%	
Escrow Accounts	3	1.1%	15	7.5%	6.4%	

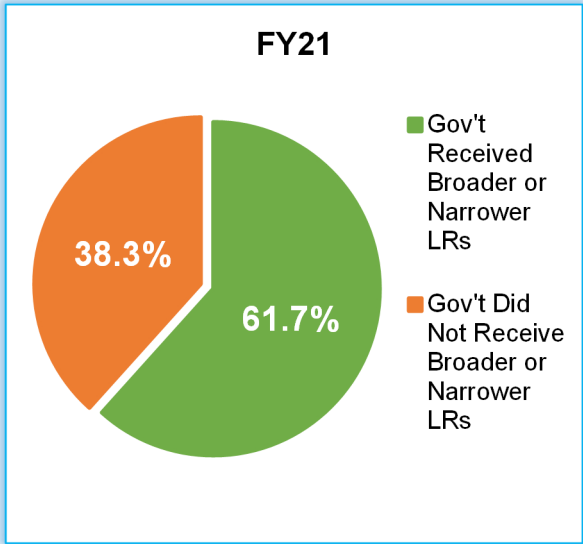
**Figure 3-1: Extent of IP-related Evaluation Criteria Being Included in SSEPs, By Comparable FY21 & FY23 Respondent Percentages**



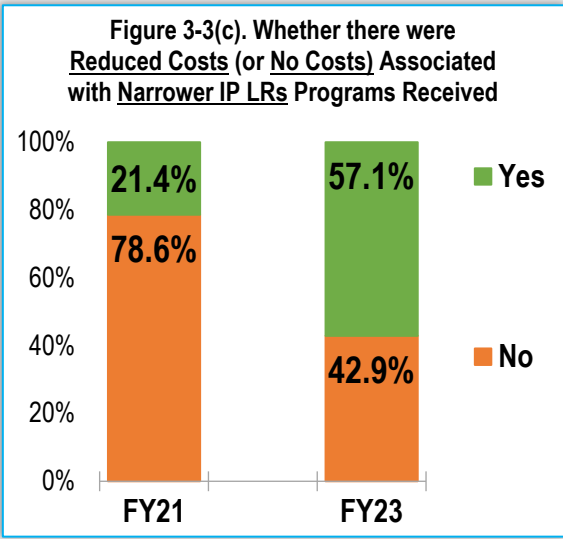
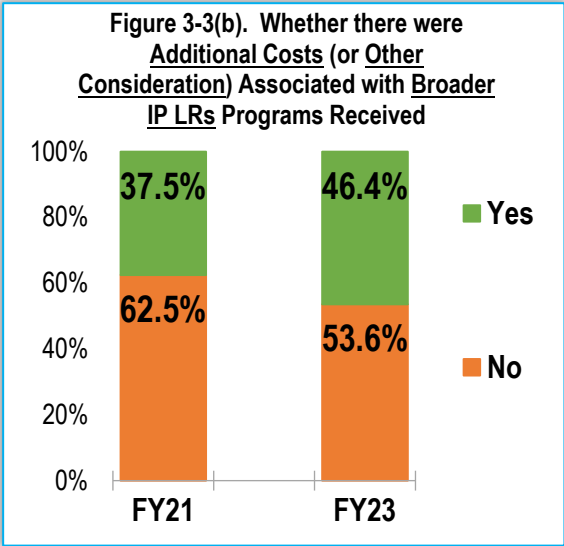
**Figure 3-2: IP-Related Evaluation Criteria Included in SSEPs & Associated Impact on Mission Goals, By Comparable FY21 & FY23 Respondent Percentages**



**Figure 3-3(a): Scope of Broader or Narrower IP LRs In Which the Government Received, By FY21 & FY23 Respondent Percentages**

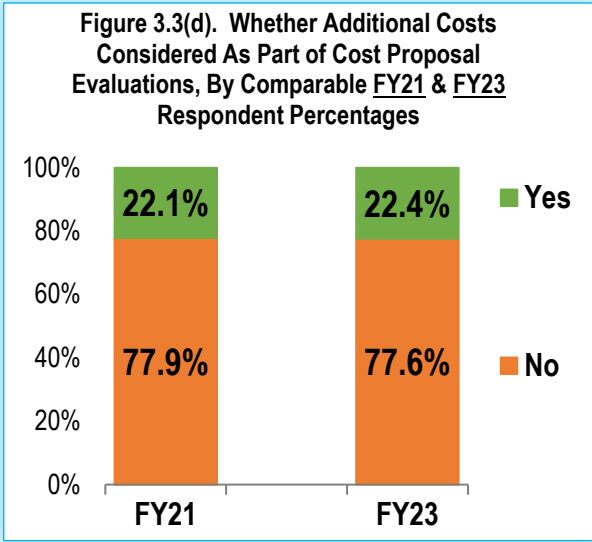


**Figures 3-3(b)-(c): Programs That Received Broader Or Narrower IP LRs, And Programs Where Additional Or Reduced Costs Were Associated With The IP LRs Received, By Comparable FY21 & FY23 Respondent Percentages**

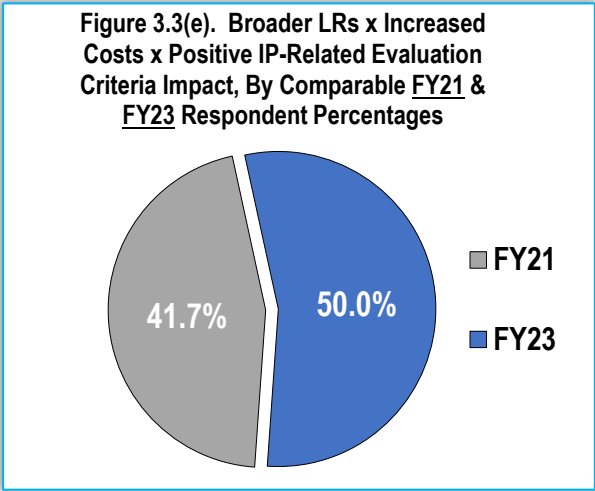




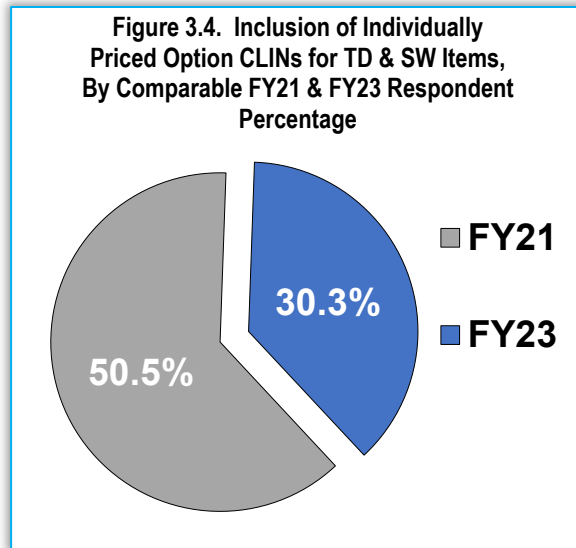
**Figure 3-3(d): Whether Costs of IP-Related LRs Were Considered As Part Of Evaluating Cost Proposals**



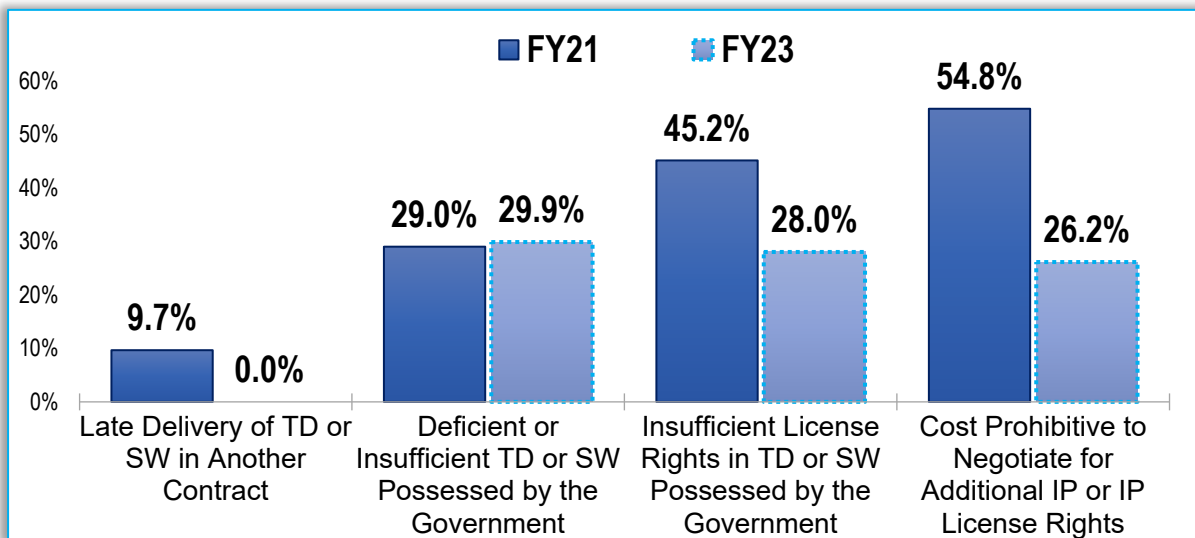
**Figure 3-3(e): Cross-Tabulation Analysis & Associations: Programs That Received Broader IP LRs; That Identified Additional Costs; And That Observed Positive Impacts On Mission Goals From Applied IP-related Evaluation Criteria**



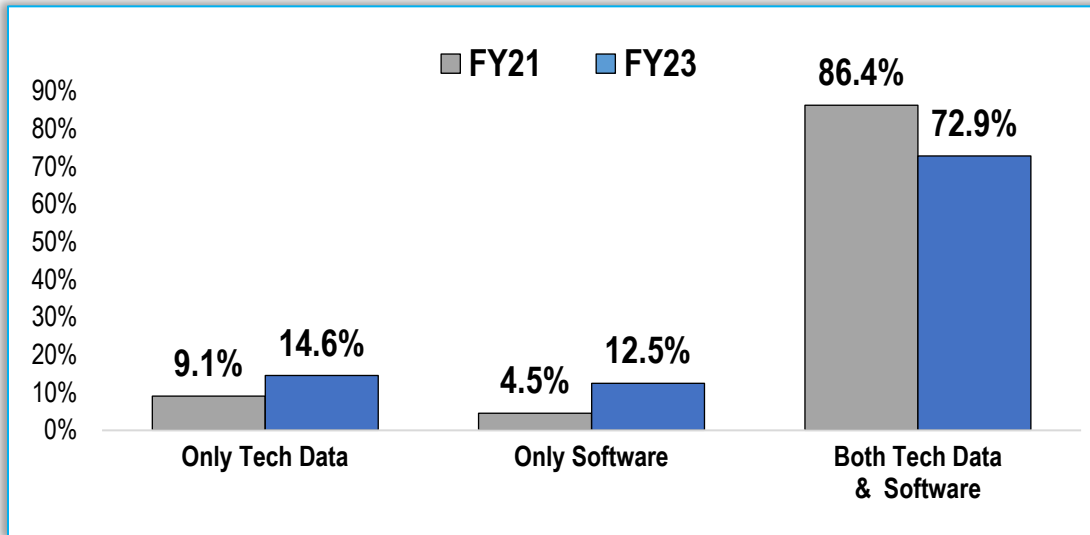
**Figure 3-4: Whether TD Or SW Items Had Individually Priced Option CLINs**



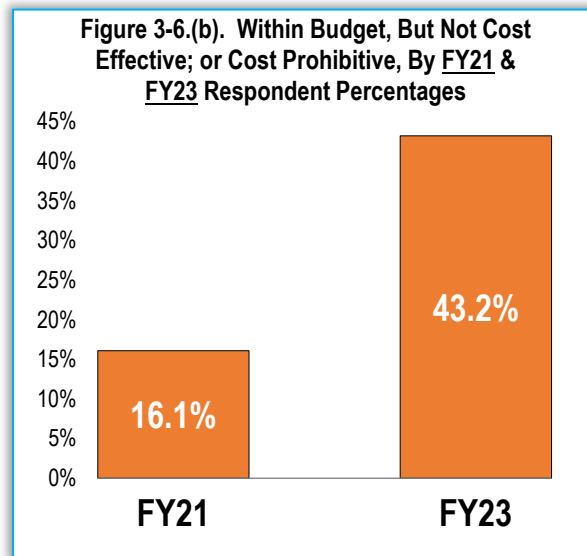
**Figure 3-5: SSAs and Bases of J&As in Support of Asserted IP and/or IP LRs, By Comparable FY21 & FY23 Respondent Percentages**



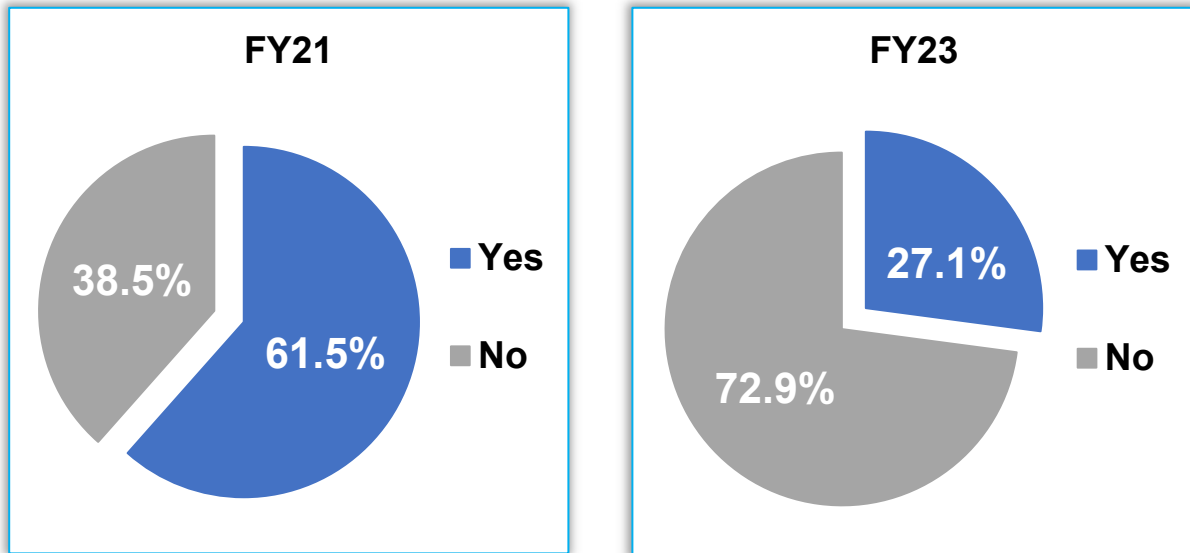
**Figure 3-6(a): Scope of Negotiated LRs in TD, SW, or Both Among Programs With Sole Source Contracts Awards Based on IP and IP LR-Related Concerns, By FY21 & FY23 Respondent Percentages.**



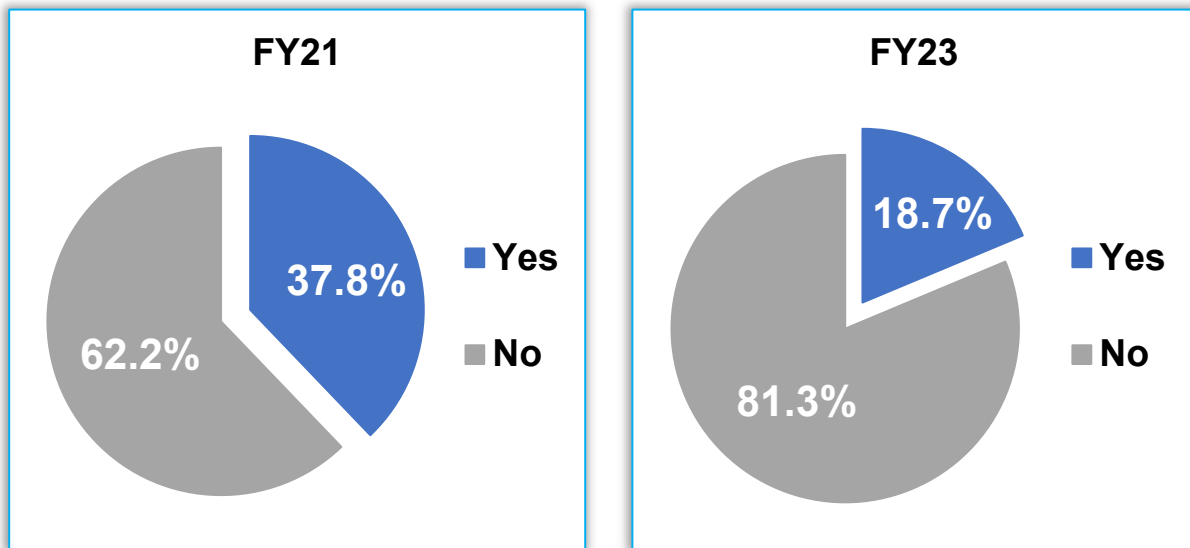
**Figure 3-6(b): Cross-Tabulation Analysis & Associations: Programs With SSAs Based on IP-Related J&As; Programs That Negotiated for Broader LRs in TD & SW; & Programs That Reported Costs Associated With The Negotiated TD, SW, & LRs.**



**Figure 3-7(a): Whether Programs Provided Plans in J&As to Address Asserted IP-Related Deficiencies, By Comparable FY21 & FY23 Respondent Percentages**



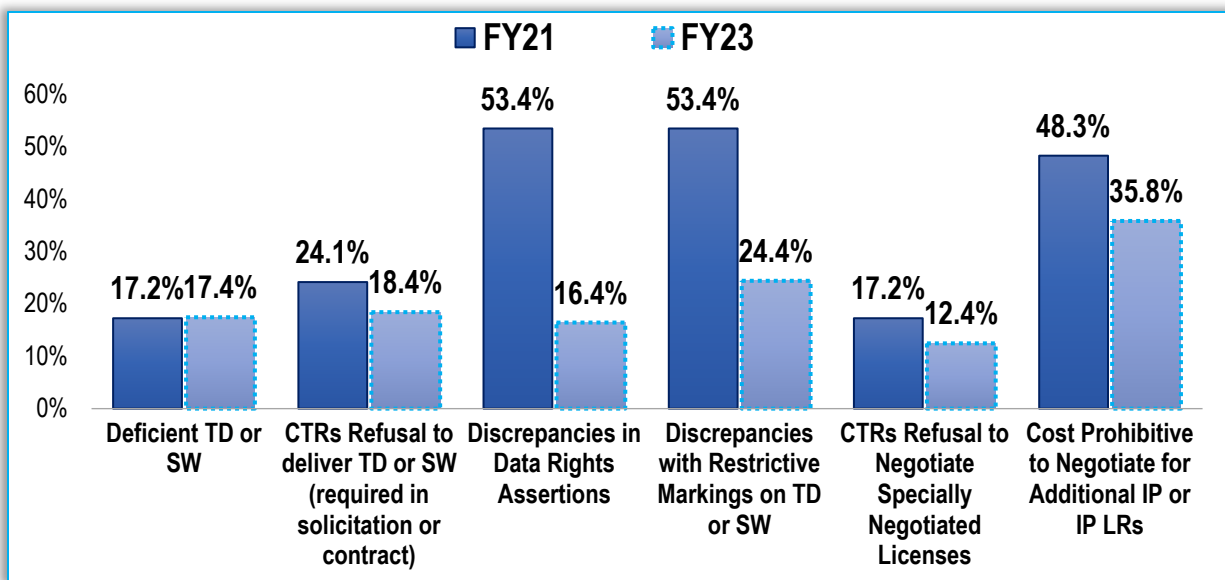
**Figure 3-7(b): Extent of Reverse Engineering Considerations in J&A Products, By Comparable FY21 & FY23 Respondent Percentages**








**Table 3-8: Commonly Applied Program Activities Reported in FY22, Which Could Have Prevented Vendor Lock Scenarios, As Validated By FY23 Respondent Percentages**






<b>Rank #</b>	<b>Preventative Measures that may help Programs Prevent Vendor Lock</b>	<b>Count</b>	<b>Percentage of Respondents</b>
1	<i>Acquisition of TDPs that Enable Competitive Procurement of Hardware, &amp; Hardware Sustainment Services</i>	45	42.1%
2	<i>Negotiating Data Rights At Earlier Stages of A Program</i>	39	36.4%
3	<i>Open System Architecture and Platform Interfaces</i>	38	35.5%
4	<i>Early IP Planning</i>	38	35.5%
5	<i>Contract Option Years To Permit Off-Ramping of Contractors</i>	35	32.7%

**Figure 4-1: Obstacles Encountered in Relation to TD, SW, & IP LRs, By Comparable FY21 & FY23 Respondent Percentages**

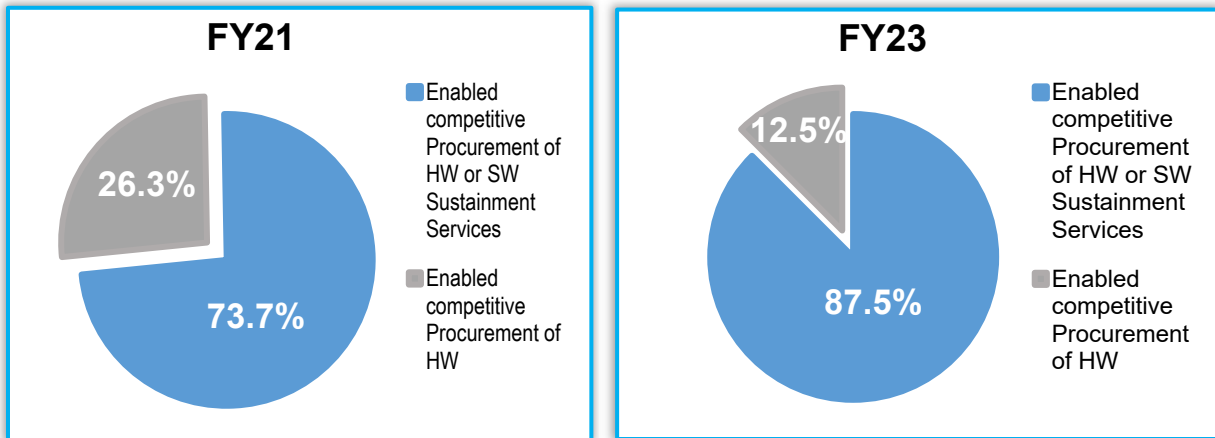


**Table 4-2: Nature of Discrepancies Found in Data Right Assertions, By Comparable FY21 & FY23 Respondent Percentages**

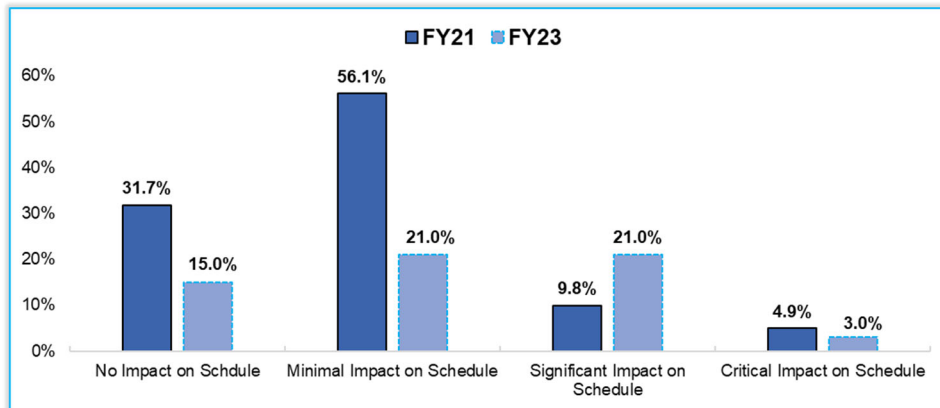
Table Legend	
Indicator	Description
	= Increase (▲ = or > 25%)
	= Moderate Increase (5% < ▲ < 25%)
	= Slight/No Increase or Decrease (0% = ▲ < 5%)
	= Moderate Decrease (-5% < ▲ < -25%)
	= Decrease (▲ = or > -25%)

Common Discrepancies Asserted	FY21 ("n" = 43)		FY23 ("n" = 33)		% Change	+/- Trend
	Count	%age	Count	%age	▲	
▪ FFF Data was Provided with Restrictions	21	48.8%	21	63.6%	14.8%	
▪ OMIT Data was Provided with Restrictions	18	41.9%	17	51.5%	9.6%	
▪ Inaccurate Assertions of Development Funding	14	32.6%	13	39.4%	6.8%	
▪ Assertions Included Items that were Not Deliverables	17	39.5%	12	36.4%	-3.1%	
▪ Vague/ Ambiguous Assertions	15	34.9%	11	33.3%	-1.6%	






**Figure 4-3: Market Impacts of Resolving Discrepancies Found in Data Rights Assertions, By Comparable FY21 & FY23 Respondent Percentages**








**Figure 4-4: Scheduling Impact of Resolving Discrepancies Found in Data Rights Assertions, By Comparable FY21 & FY23 Respondent Percentages**



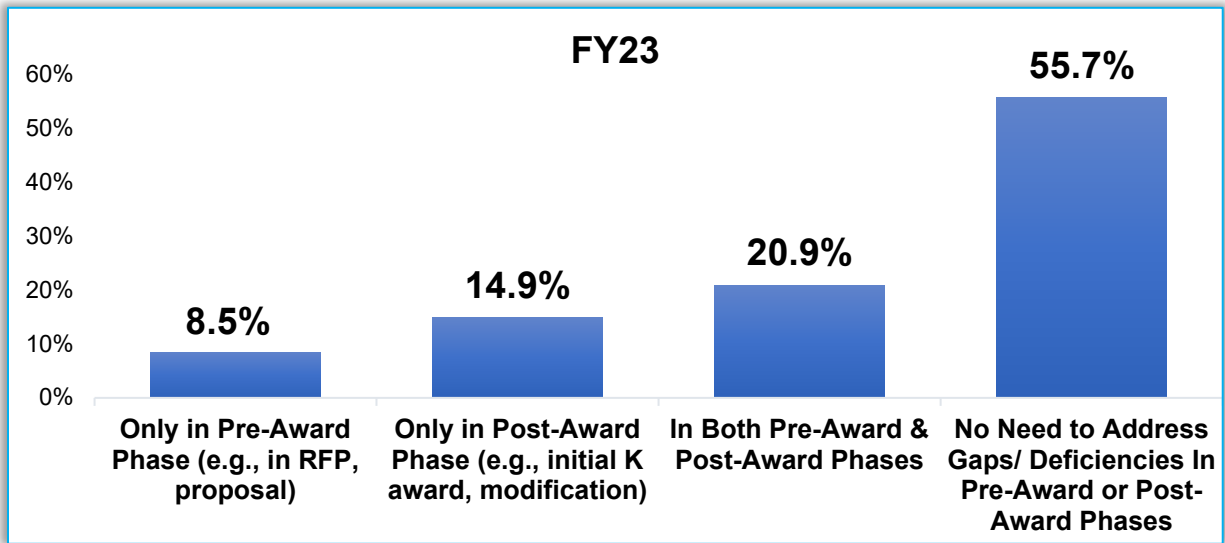
**Table 4-5: “Top 5” Reasons Why Disputes Originate, When Discrepancies Are Found in Data Rights Assertions, By Comparable FY21 & FY23 Respondent Percentages**

Table Legend	
Indicator	Description
	= Increase (▲ = or > 25%)
	= Moderate Increase (5% < ▲ < 25%)
	= Slight/No Increase or Decrease (0% = ▲ < 5%)
	= Moderate Decrease (-5% < ▲ < -25%)
	= Decrease (▲ = or > -25%)

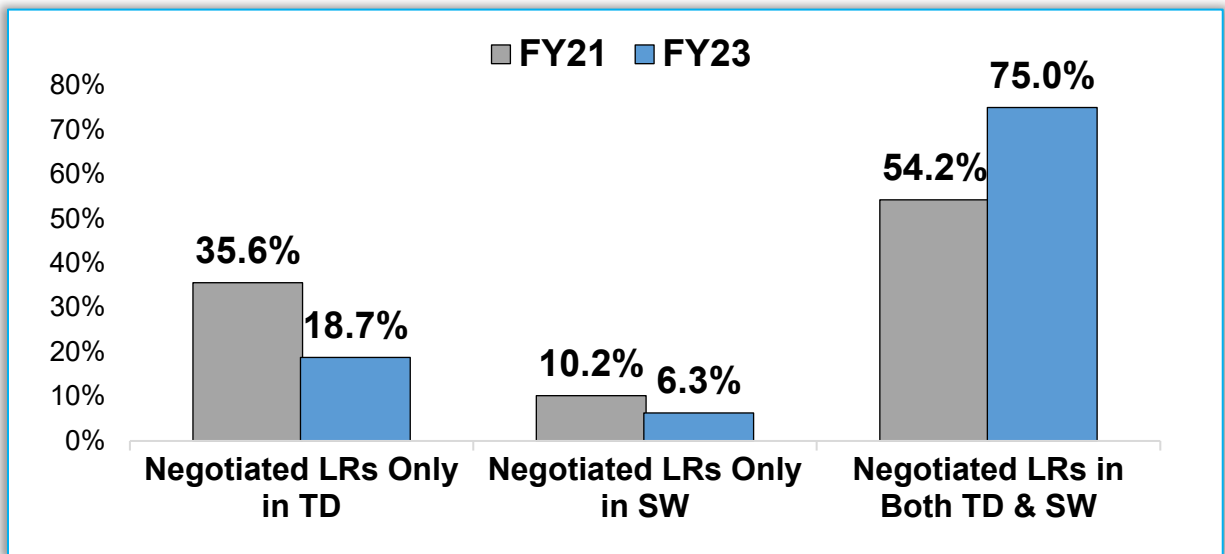
	FY21 (n = 29)			FY23 (n = 33)			% Change	Indicator
	Rank	Count	%age	Rank	Count	%age	▲	+/-
▪ Deficient TD or SW	3	7	24.1%	1	9	27.3%	3.2%	
▪ Deficient Restrictive Markings	2	12	41.4%	2	7	21.2%	-20.2%	
▪ The Government’s Loss of Access to TD or SW in CTR-Controlled Repositories	5	2	6.9%	3	5	15.2%	8.3%	
▪ A CTR’s Refusal to Provide IP LRs Required Under the DFARS Clauses	1	14	48.3%	4	4	12.1%	-36.2%	
▪ CTR Changes to Data Rights Assertions that Would’ve Impacted Source Selection	4	2	6.9%	5	2	6.1%	-0.8%	



**Figure 5-1: Context In Which Programs Addressed Gaps/ Deficiencies (e.g., in TD, SW, or IP LRs), By FY23 Respondent Percentages**

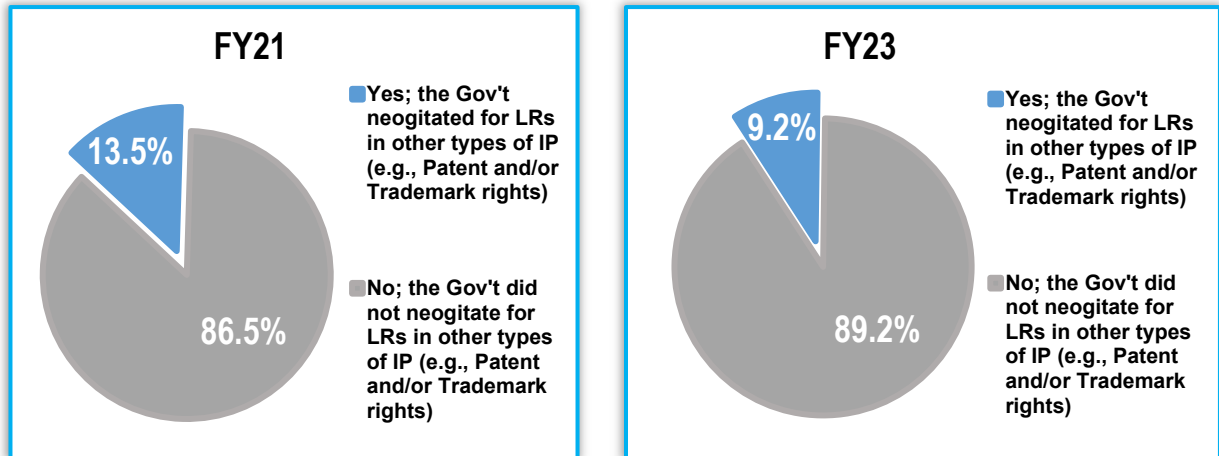


**Figure 5-2: Extent of Programs that Conducted Negotiations for IP LRs in TD, SW, or Both TD & SW, By Comparable FY21 & FY23 Respondent Percentages<sup>6</sup>**

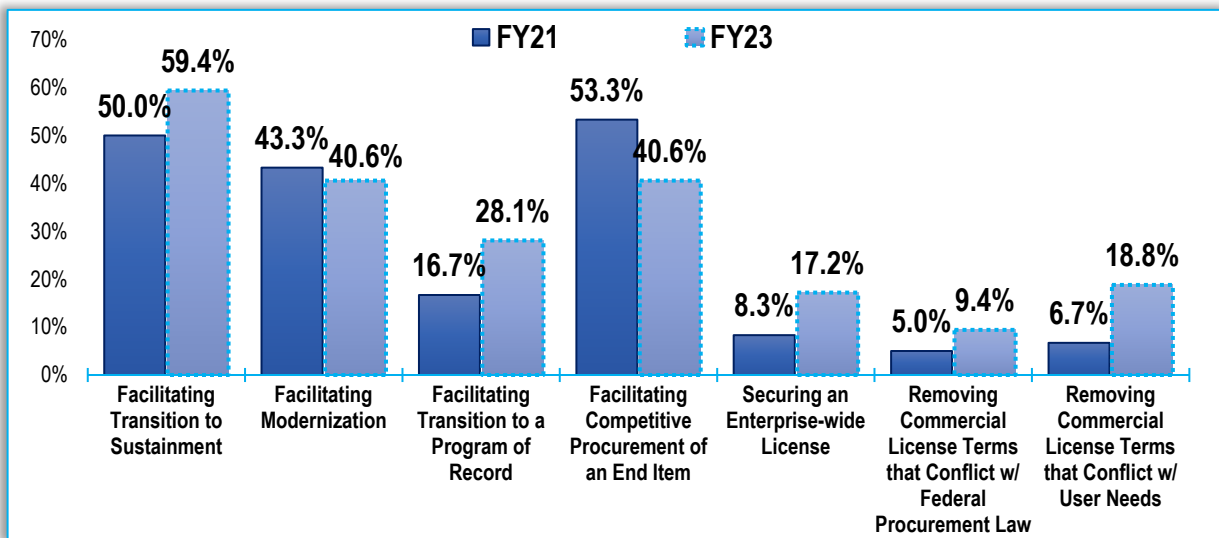


<sup>6</sup> In FY23, 27% of programs indicated that they did not negotiate license rights in technical data or software. Figure 5-2 visualizes the percentage of respondents that chose one of the three key responses listed in Enclosure 2, Question 26.

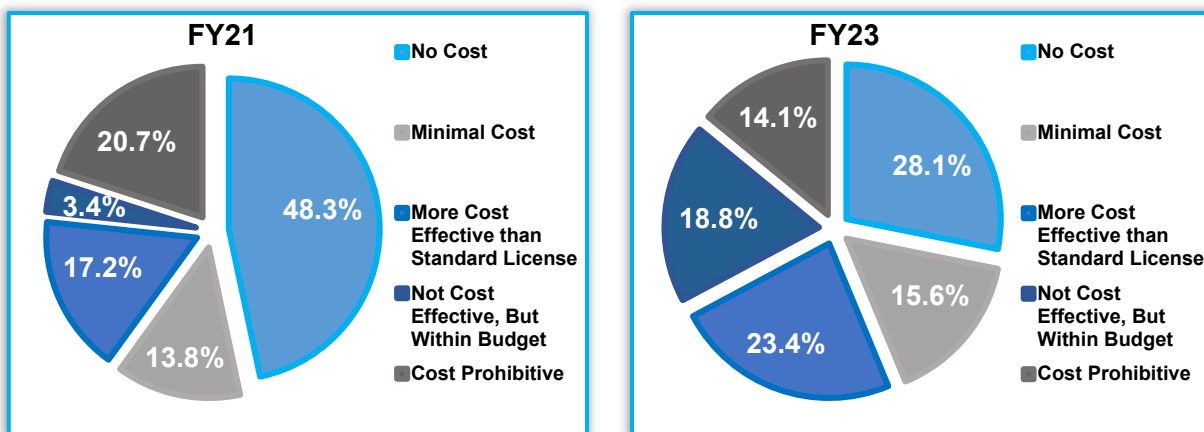
**Figure 5-3: Results of Whether Programs Conducted Negotiations for LRs in Other Types of IP (e.g., in Patents, Trademarks, & Other IP-related LRs), By FY21 & FY23 Respondent Percentages**



**Figure 5-4: Overall Purpose of Negotiations Conducted for IP-Related LRs, By Comparable FY21 & FY23 Respondent Percentages**



**Figure 5-5: Costs Associated With Conducting Negotiations for IP LRs, By FY21 & FY23 Respondent Percentages**



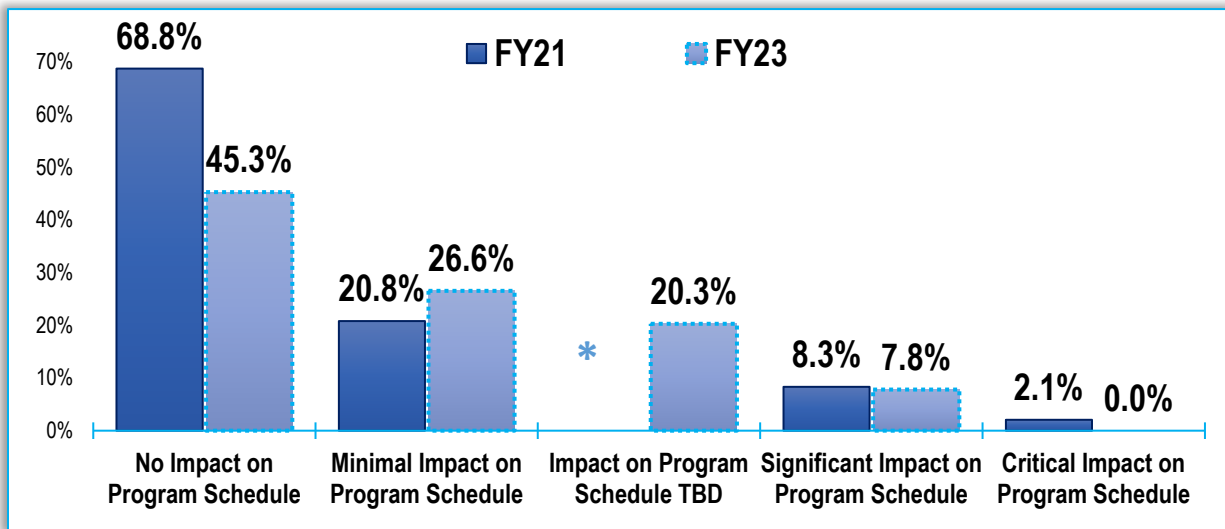
**Table 5-6: Valuation Methods Programs Use For Assessing Fees Associated With IP-Related LRs, By Comparable FY21 & FY23 Percentages<sup>7</sup>**

Types of Valuation Methods	FY21		FY23		% Change	+/-
	Count	%age	Count	%age	▲	Trend
▪ Cost Approach	8	40.0%	9	14.1%	-47.8%	👇
▪ Market Approach	6	30.0%	4	6.3%	-31.9%	👇
▪ Income Approach	1	5.0%	0	0.0%	-14.3%	➡
▪ Combination Approach (i.e., Mixed Methods)	5	25.0%	15	23.4%	23.4%	👆
▪ Valuation Method Used Unknown	-	-	17	47.2%	-	-
▪ None of Valuation Methods Listed Used	-	-	19	52.8%	-	-

Table Legend	
Indicator	Description
👆	= Increase (▲ = or > 25%)
👉	= Moderate Increase (5% < ▲ < 25%)
➡	= Slight/No Increase or Decrease (0% = ▲ < 5%)
👎	= Moderate Decrease (-5% < ▲ < -25%)
👇	= Decrease (▲ = or > -25%)

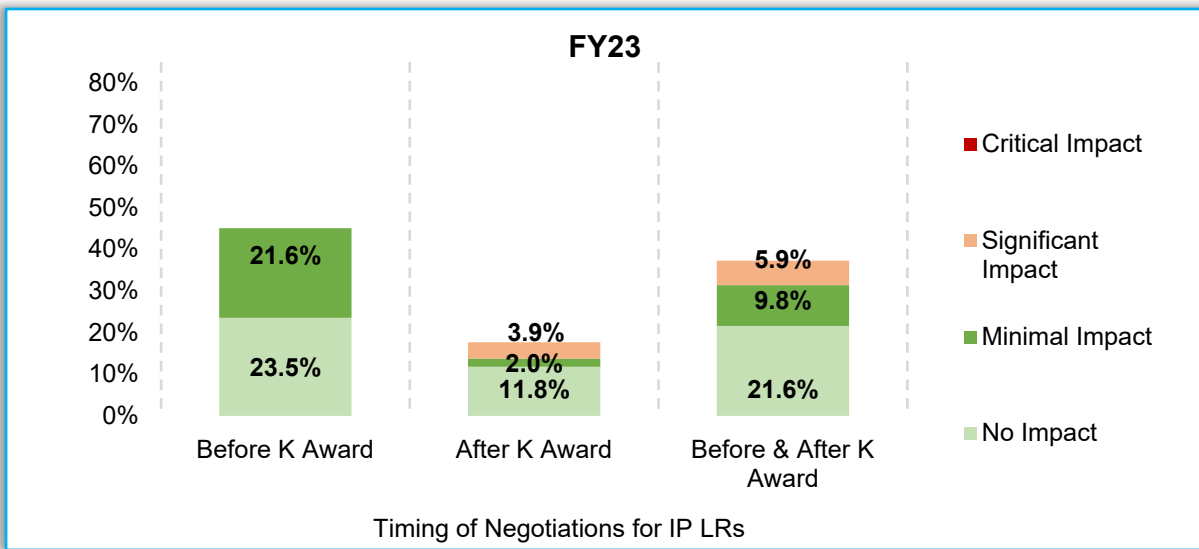
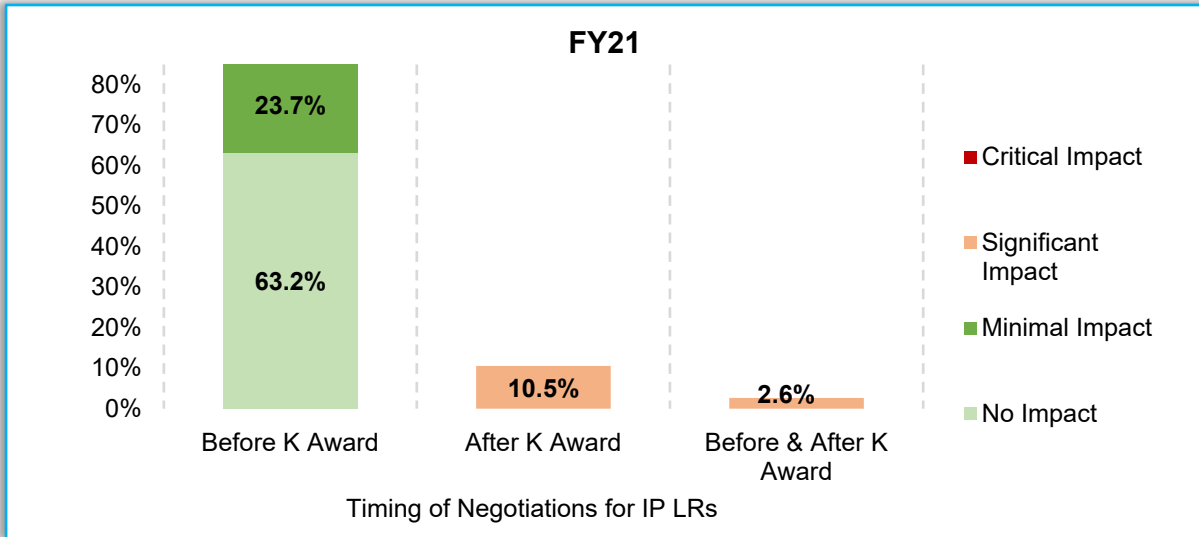
<sup>7</sup> The most common commercial IP valuation approaches to value IP are the cost, market, and income approaches. The cost approach establishes the value of an IP asset by calculating the reproduction or replacement cost of a similar (or exact) IP asset. Under the income approach, the IP value is based on the economic income that the IP asset can or will generate in the future. Under the market approach, the value of the IP asset is based on comparable IP transactions for comparable technologies.

**Figure 5-7(a): Impacts to Program Schedules From Conducting Negotiations for IP-Related LRs, By Comparable FY21 & FY23 Respondent Percentages<sup>8</sup>**

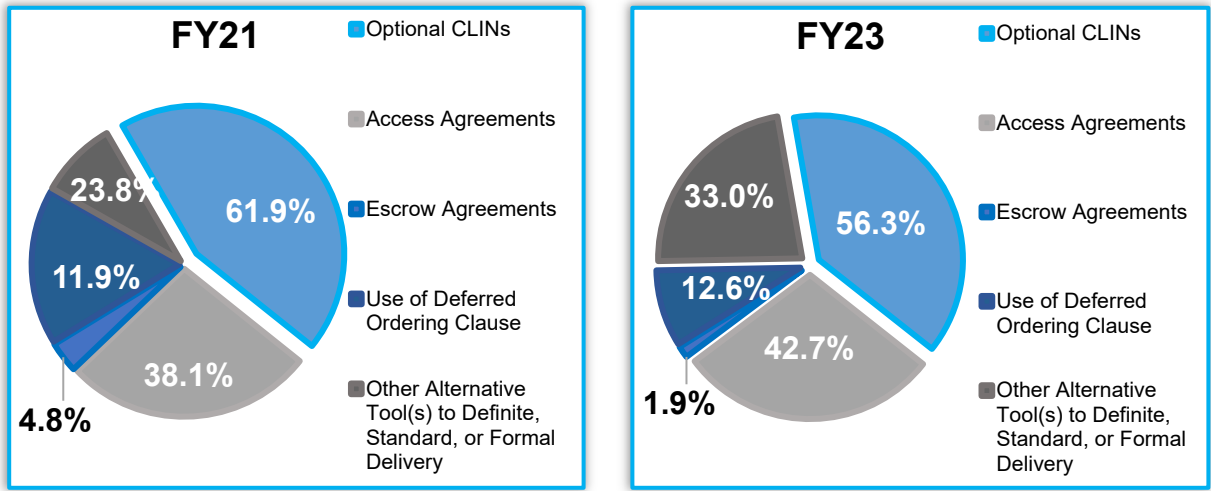


<sup>8</sup> \* Indicates that impact on program schedule TBD was not a response option in FY21.

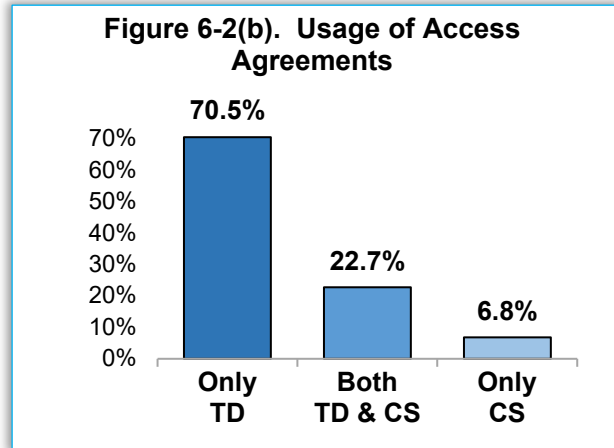
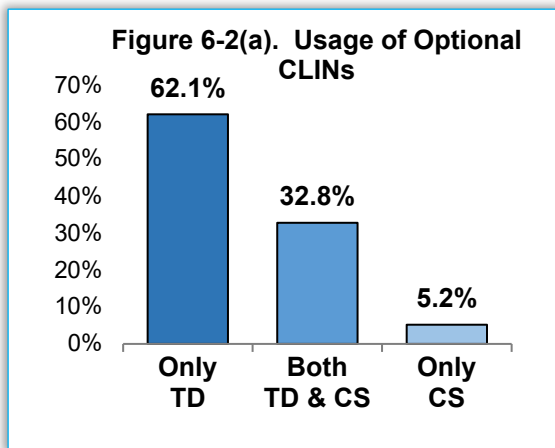
**Figure 5-7(b): Timing of Negotiations Conducted for IP-Related LRs & Impacts to Program Schedules, By Comparable FY21 & FY23 Respondent Percentages**

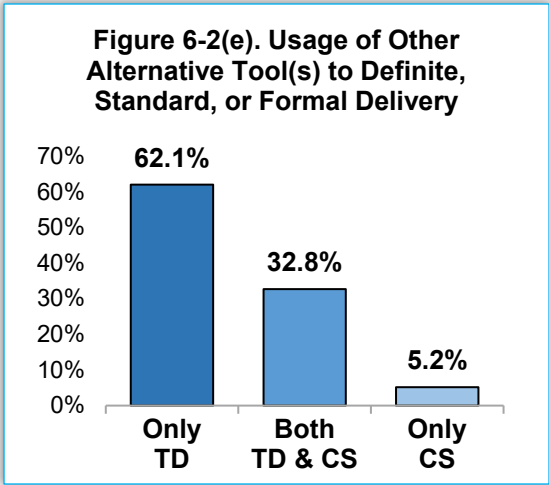
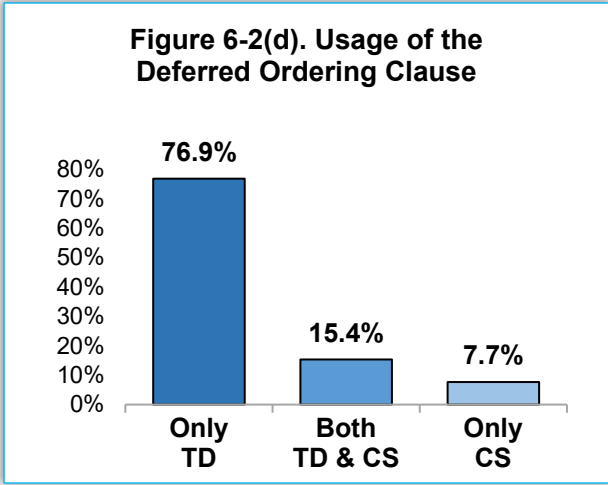
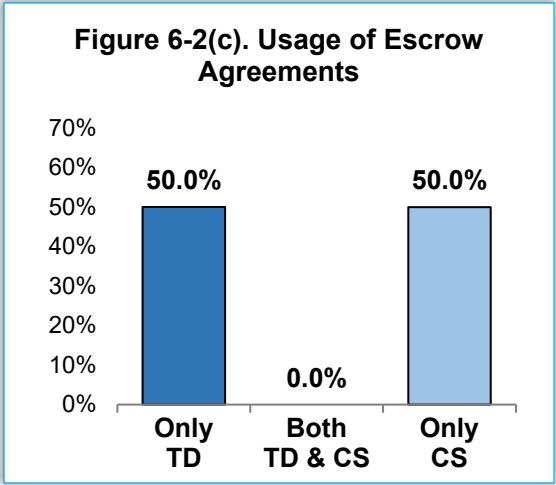


**Figure 6-1: Tools Programs Used to Ensure Delivery of TD, CS, or Both, By Comparable FY21 & FY23 Respondent Percentages**

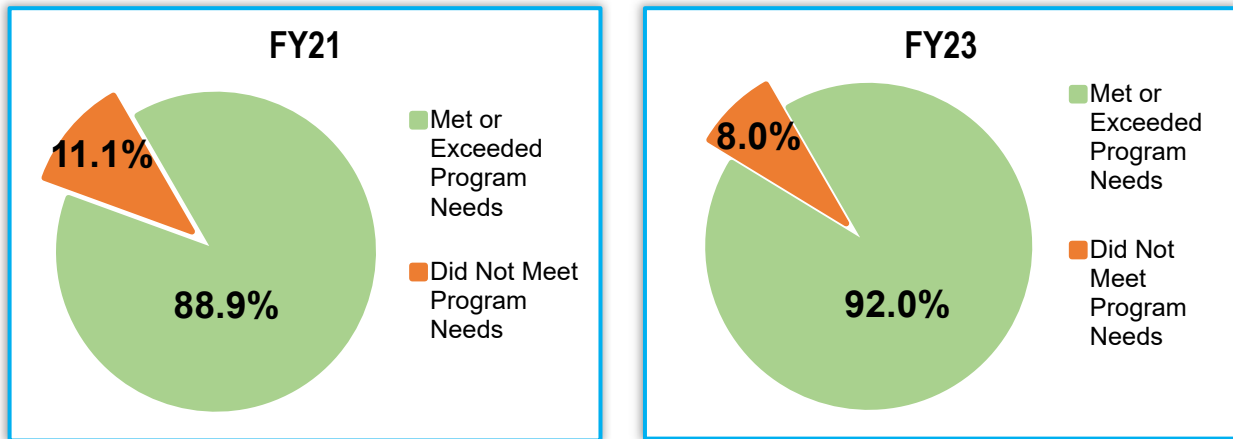


**Figure 6-2(a)-(e): Whether, And For What Purpose Individual Tools Were Used By FY23 Programs For Ensuring Delivery Of TD, And/Or CS**

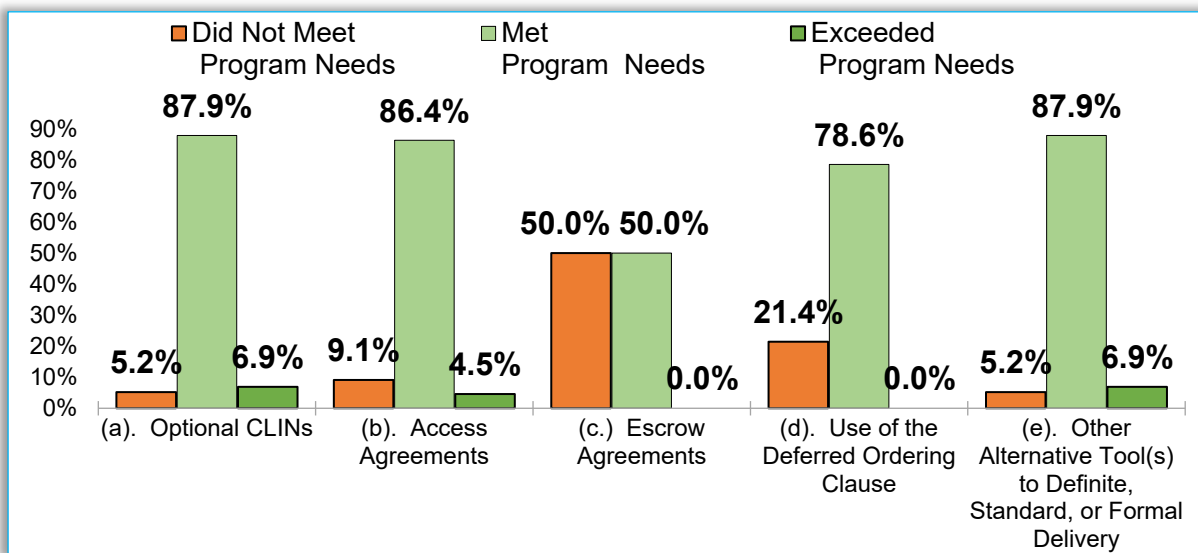




**Figure 6-3: How Programs Characterized Performance of Tools Used for Ensuring Delivery of TD and/or CS Requirements, By Comparable FY21 & FY23 Respondent Percentages**

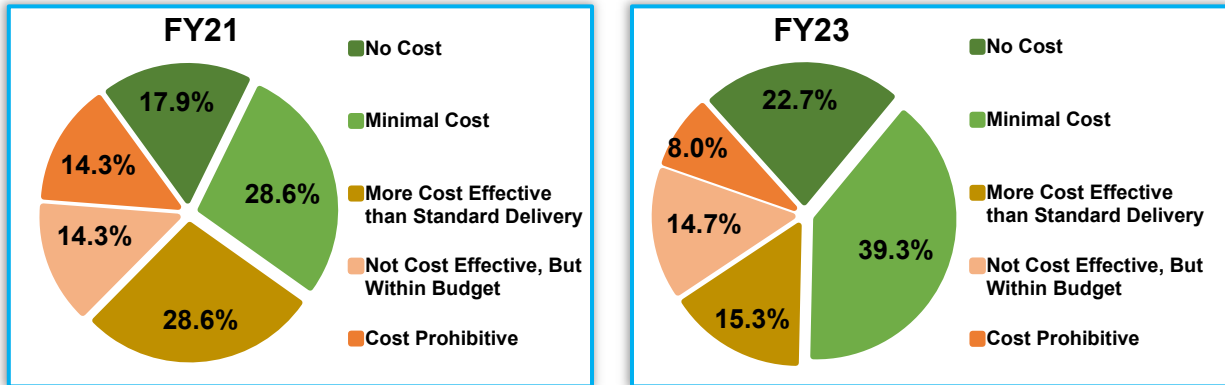


**Figures 6-4(a)-(e): How Programs Characterized the Performance of Each Tool Used for Ensuring Delivery of Required TD, CS, or Both, By FY23 Respondent Percentages**





**Figure 6-5: How Programs Characterized Costs of Tools of Tools Used for Ensuring Delivery of TD and/or CS Requirements, By Comparable FY21 & FY23 Respondent Percentages**



**Figures 6-6(a)-(e): How FY23 Programs Characterized Costs of Tools Used for Ensuring Delivery of TD and/or CS Requirements, By Respondent Percentages**

