Report to Congress

An Assessment of Cost-Sharing in Other Transactions Agreements For Prototype Projects



Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

March 2017

The estimated cost of this report or study for the Department of Defense is approximately \$47,000 in Fiscal Years 2016 - 2017. This includes \$0 in expenses and \$47,000 in DoD labor.

> Cost Estimate generated on February 24, 2017 RefID: A-EA09A1B

Table of Contents

Introduction	1
Reference	2
Background	3
Context	3
Survey	4
Research	4
Prototype	4
Production	5
Framework	5
Category	5
Advantage	6
Hierarchy	7
Cost-Sharing	8
Participation	8
Trend	9
Incentive	9
Nonprofit	0
Conclusion 1	.1
Recommendation1	2

Introduction

Title 10, United States Code (U.S.C.), section 2371b allows the Department of Defense (DoD) to enter into transactions for prototype projects using a legal instrument *other than* a contract, grant, or cooperative agreement. This legal instrument, known as an "other transactions" agreement (OTA), is not defined in law. Rather, an OTA is only specified in law by what the legal instrument is not. This construction gives DoD greater flexibility than otherwise permitted under the statutes and regulations that apply to other legal instruments.

Although section 2371b gives DoD the flexibility to decide *how* to tailor OTAs in most aspects, the statute specifies *who* besides the Federal Government is required to share the total cost. This has not always been the case. At first, DoD had discretion on whether to require cost-sharing and to decide the contribution amounts.¹ The law later required participants to share at least a third of the total cost as a condition for award if other conditions for the "appropriate use" of OTA authority were not met. Namely, one nontraditional defense contractor had to participate in the prototype project to a significant extent or an exceptional circumstance justified the transaction.²

While cost-sharing in section 2371b can depend on the extent to which certain parties other than the Federal Government participate in a prototype project, the criteria for being excluded from the requirement altogether has recently changed. First, the law also now allows DoD to use section 2371b authority without having to cost-share when all participants in the transaction are nontraditional defense contractors <u>or</u> small businesses.³ Second, the statutory definition for nontraditional defense contractor is no longer tied to whether a contractor has submitted certified cost or pricing data; instead, eligibility now depends solely on whether a business entity was awarded a contract or subcontract subject to "full coverage" under cost accounting standards (CAS) in the one-year period preceding the solicitation of sources.⁴

These accommodations have made section 2371b an even more attractive business proposition to participants that qualify into a named category. However, outside exceptional circumstances, all others are required to cost-share without any explicit regard for technical or financial prospects.

This report reviews the cost-sharing requirement as set forth in section 2371b. Specifically, and as directed in section 815 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016, Public Law 114-92, DoD submits to the congressional defense committees an assessment of:

- (1) the benefits and risks of permitting not-for-profit defense contractors to be awarded transaction agreements under title 10, U.S.C., section 2371b, for the purposes of cost sharing requirements of subsection (d)(1)(C) of such section; and
- (2) the benefits and risks of removing the cost-sharing requirements of subsection (d)(1)(C) of such section in their entirety.

¹ Senate Report 101-81 (page 126-127) to section 251 of the NDAA for FY 1990 and 1991 (Pub. L. 101-189)

² Section 803 of the NDAA for FY 2001 (Pub. L. 106-398)

³ Section 812 of the NDAA for FY 2015 (Pub. L. 113-291)

⁴ Section 815 of the NDAA for FY 2016 (Pub. L. 114-92)

Reference

Before proceeding, here are pertinent provisions from section 2371b.

First, use of this OTA variant is limited to carrying out:

prototype projects that are directly relevant to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the Department of Defense, or to improvement of platforms, systems, components, or materials in use by the armed forces.

Second, DoD may not use this OTA authority unless one of the following conditions are met:

- (A) There is at least one nontraditional defense contractor participating to a significant extent in the prototype project.
- (B) All significant participants in the transaction other than the Federal Government are small businesses or nontraditional defense contractors.
- (C) At least one third of the total cost of the prototype project is to be paid out of funds provided by parties to the transaction other than the Federal Government.
- (D) The senior procurement executive [SPE] for the agency determines in writing that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a contract, or would provide an opportunity to expand the defense supply base in a manner that would not be practical or feasible under a contract.

Third, the term "nontraditional defense contractor" means:

an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense for the procurement or transaction, any contract or subcontract for the Department of Defense that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section.⁵

Lastly, the term "small business" means a "small business concern" as used in the Small Business Act of 1953, as amended. Furthermore, this law allows the Small Business Administration (SBA) to "specify detailed definitions or standards by which a business concern may be determined to be a small business concern..."⁶ And under that authority, except for small agricultural cooperatives, the SBA defines a "business concern or concern" to be "...a business entity organized for profit, with a place of business located in the United States, and which operates primarily within the United States..."⁷

⁵ 10 U.S.C. 2302(9)

⁶ Small Business Act (Pub. L. 85-536, as amended)

⁷ 13 CFR 121.105

Background

Nonprofit or not-for-profit organizations⁸ are non-business entities that generally operate to serve charitable, scientific, educational, or other statutory purposes whose net earnings do not benefit any shareholder or individual.⁹ Their counterparts are for-profit organizations, which are business entities established to benefit private interests by distributing earnings (i.e., net profit).

Nonprofit and for-profit entities often differ in their motives, prospects, and measures of success. Nonprofits generally perform work to earn social returns, not financial returns, on investment. This, as will be seen later, makes this form of organization to be especially suited for taking on intermediary roles between for-profit entities and the Federal Government. However, nonprofits may still legally and ethically earn a profit and keep their tax-exempt status if the net earnings are used only to further the organization's cause, goal, or mission.

Still, nonprofits are not established for purposes of producing profit by maximizing net earnings. Instead, nonprofits are organized to pursue, create, or deliver a benefit to the public through activities that support or further certain specific statutory purposes. Since what defines "success" may not always be quantifiable, monetary return on investment is often less important than meeting other intangible or qualitative goals. That being said, section 2371b attracts both types of organizations to DoD for the same practical reasons: to avoid complex or lengthy contracting processes, and to avoid having to adopt business systems that serve only Government accounts.

In any event, section 2371b does not treat a nonprofit entity any different than a for-profit entity. Instead, only nontraditional defense and small business contractors are recognized categories. These two named categories are singled out in section 2371b for preferential treatment and, as a result, are not subject to mandatory cost-sharing requirements when certain conditions are met. Furthermore, when entities from either category do not sufficiently participate, DoD is not permitted to award a prototype under section 2371b authority unless at least a third of the total cost (i.e., cost-share) is paid out of funds provided by parties to the transaction other than the Federal Government or a SPE determines that an exceptional circumstance applies.

With this as background, this report assesses the benefits and risks of having nonprofits cost-share and the benefits and risks of removing the requirement from section 2371b entirely.

Context

The provision that requires cost-sharing as a condition for an appropriate use of OTA authority is not unique to section 2371b. Similar provisions apply to other Federal agency OTA authorities.

Differences between provisions across technology development phases, though, are more instructive than differences across agency authorities. This is because differences in the former allow cost-sharing to be seen in various contexts, while differences in the latter are minimal since the other cost-sharing provisions are modeled on DoD's authority.

⁸ Nonprofit and not-for-profit organizations are assumed to be equivalent entities for purposes of simplicity ⁹ 26 U.S.C. 510(c)(3)

Survey

Cost-sharing applies to projects that occur early in the technology development spectrum.

A report published by the Government Accountability Office in January 2016 identified 11 Federal agencies, including DoD, that have OTA authority.¹⁰ Most of these agencies have specific statutory limitations or requirements that affect how OTA authority may be used.

Cost-sharing as a condition for appropriate use of OTA authority only applies to four agencies. When the condition applies, its application is limited to research and development (R&D) and prototype projects, all of which occur early in the technology development process. Cost-sharing is not required for awards that rely on OTA authorities that are used in later acquisition phases.

Research

Cost-sharing in the research phase is used to show commitment and self-interest in success.

Besides OTAs pursuant to section 2371b, DoD also carries out "OTAs for research."¹¹ This authority most notably permits DoD to award technology investment agreements (TIAs), which are used for projects that are in the basic, applied, or advanced research phases.

With regard to mandatory cost-sharing requirements, TIAs require entities to fund <u>at least</u> <u>half</u> the cost of a project, unless DoD makes a determination that this is impracticable, in order "to ensure that the recipient incurs real risk that gives it a vested interest in the project's success."¹²

Furthermore, participants may not receive fee or profit in a TIA.¹³ TIAs are also only awarded to for-profit business entities or nonprofits that have a tentative agreement with a for-profit entity.¹⁴ Both of these requirements are in place to ensure that participants do not enter into a TIA unless they can recoup investments later in the commercial marketplace.

Prototype

Cost-sharing in the prototype phase is used to attract new entrants into national defense.

Section 2371b requires <u>at least a third</u> cost-share, but only when other conditions are not met. This structure creates a dynamic that affects how entities interact with each other before bidding on a prototype project. In some situations, this may mean that an entity's participation can depend on tradeoffs made to satisfy a statutory condition for receiving a section 2371b award.

This can occur for the following reason: First, each condition represents an "appropriate" use of OTA authority in section 2371b. Depending on the circumstance, certain entities are required to cost-share, while other entities are not. Entities that are subject to cost-sharing requirements by one condition can maneuver to meet the requirements of another condition that

¹⁰ GAO-16-209

¹¹ 10 U.S.C. 2371

¹² 32 CFR 37.215

¹³ 32 CFR 37.230

^{14 32} CFR 37.210

does not include the statutory mandate. This can make partnerships or other business structures (e.g., consortiums) a beneficial arrangement.

Production

Competition (not derived from a cost-sharing dynamic) is emphasized in the production phase.

Section 2371b also includes a provision for follow-on production contracts or transactions. Similar to other agency OTA production authorities, this provision has few limitations or requirements (e.g., there is no cost-sharing).

One stipulation is that an award may be made only if "competitive procedures were used for the selection of parties for participation in the transaction" for a successful prototype project.¹⁵ This is a change from the standard that applies to OTAs carried out in earlier phases, which is to use competition procedures "to the maximum extent practicable."¹⁶ Instead of a dynamic that is used in part to attract new entrants, this provision simply makes competition a required activity.

These differences across the technology development spectrum provide the necessary context for assessing the benefits and risks of cost-sharing. When used as a device to influence market behavior, this tool has been used in various ways to promote policy objectives. This report will now turn to specific implications to nonprofits and the effects of removing the requirement.

Framework

Section 2371b identifies two categories—nontraditional defense and small business contractors. As previously mentioned, these two categories allow DoD to award OTAs without having to turn to more complex alternative conditions. Because these entities are not subject to mandatory cost-sharing requirements, their participation and the mandate have an inverse relationship (i.e., cost-sharing is required by statute only when certain entities *do not* sufficiently participate). This dynamic is complicated and is dependent on how all the contractors interact with each other.

Category

Nontraditional defense contractors are entities that *have not* received \$50 million or more in contract awards that were subject to "full coverage" under CAS in the one-year period preceding a relevant solicitation.¹⁷ On the other hand, a small business is a contractor that operates below a given size standard, either annual receipts or the number of employees, that is set for each of the industries classified and tracked by the SBA.

These two categories are not mutually exclusive. A nontraditional defense contractor can be a small business, and a small business can be a nontraditional defense contractor.

¹⁵ 10 U.S.C. 2371b(f)

¹⁶ 10 U.S.C. 2371b(b) and 32 CFR 37.400

¹⁷ 48 CFR 9903.201-2

When a nontraditional defense contractor exceeds the SBA size standard for a particular industry required by DoD in a given solicitation, that entity does not have "small business" status. By the same token in reverse, an entity that receives \$50 million or more in CAS-covered contracts does not have "nontraditional defense contractor" status.

Moreover, an entity that qualifies for small business status in one industry but receives \$50 million in CAS-covered contracts *in another* industry is not a nontraditional defense contractor. This result is possible because, for SBA purposes, small business status depends on the industrial classification assigned to a contract—nontraditional defense contractor status is tied to the entity.

Still, when a small business exceeds the size standard for one industry, that entity is likely to exceed the size standard in all other industries since the standards across a group of related industries are not altogether uncorrelated. Also, small businesses generally focus limited resources into a single industry. For these reasons, it is uncommon for entities to have small business size status in some, but not all, awarded contracts. There are exceptions, of course, but entities that do not exceed SBA size standards, as a general rule, will always qualify for nontraditional defense contractor status. This is because contracts and subcontracts with small businesses are exempt from all CAS requirements,¹⁸ and therefore categorically meet the definition of a nontraditional defense contractor.

Advantage

While DoD can use section 2371b authority when any of four conditions are met, the first two conditions depend only on whether a contractor qualifies for a certain status. When it comes to being subject to the condition that requires mandatory cost-sharing, those with legal status required by the statute have an advantage over other entities that are not recognized in section 2371b (i.e., traditional defense contractors and contractors other than small businesses).

Accordingly, entities that qualify for status in accordance with section 2371b realize the following benefits:

- Prototype projects can be developed without committing net earnings or non-cash items.
- Receiving DoD funds eliminates the need to finance debt or equity from capital markets.
- Qualifying entities have generally not been required by DoD to contribute into cost-sharing pools that are not mandated by statute, even for commercial and military "dual-use" items.

Entities that do not qualify for status under section 2371b can be awarded a section 2371b OTA; however, as previously mentioned, they are required to cost-share or have a SPE determine an exceptional circumstance. These alternatives are both less desirable options: First, cost-share contributions makes investment decisions less attractive, and second, SPE determinations introduces a degree of uncertainty into the process. As a result, entities that do not qualify into a category named in section 2371b are motivated to partner with entities that do not have a cost-sharing requirement.

This motivation is due to prime awardees being able to leverage a non-prime awardee's status if the latter participates in the transaction to a significant extent. With section 2371b

^{18 48} CFR 9903.201-1

structured in a way that allows advantages to be shared, the condition creates a dynamic that helps DoD attract "new source(s) of technical innovation, such as Silicon Valley startup companies and small commercial firms."¹⁹

These partnerships can create synergies that benefit all participants of the transaction. In return, DoD gets access to technologies from nontraditional defense and small business contractors that would otherwise not work with DoD unless offered advantageous terms. The risk in eliminating cost-sharing is that if certain entities are no longer motivated to form partnerships, the number and diversity of non-prime awardees would be negatively affected.

This dynamic allows entities that do not qualify for status under section 2371b to quantify the value of a partnership. This is accomplished by comparing benefits of the partnership against cost-share contributions. If the net benefit is positive, an awardee is better off in a partnership. If not, cost-share contributions represent the amount for which an entity must be willing to invest in order to demonstrate commitment and self-interest in the success of a project.

Without the cost-sharing condition in section 2371b, these entities would no longer be able to rationalize the cost-share amount they would be willing to invest in order to be awarded an OTA. Instead, the decision to sign a partnership agreement or to pursue an exceptional circumstance would be a binary "yes or no" and not based on the incremental net benefit over cost-sharing.

Hierarchy

Entities that qualify into a named category under section 2371b enjoy an advantage over all other contractors. However, a comparison of the two categories reveals that small businesses have a relative edge over nontraditional defense contractors.

Specifically, while a nontraditional defense contractor is limited to \$50 million in CAS-covered awards, CAS as previously mentioned does not apply to contracts or subcontracts awarded to small businesses. Instead, small business size in many relevant industries is only limited by an SBA size standard that varies between 1,000 and 1,500 employees.²⁰ This includes manufacturing industries that produce items of military interest such as aircrafts, ships, armored vehicles, ordnance, guided missiles, space vehicles, and all separate R&D activities. As a result, small businesses with fewer employees could foreseeably be in a position to earn much more than nontraditional defense contractors in the same industry and yet trigger cost-sharing only much later. By being able to earn over \$50 million in otherwise CAS-covered contracts from DoD, section 2371b gives small businesses an edge.

The advantage does more than give small businesses an edge in potential earnings from DoD. As discussed earlier, because small business contracts are exempt from CAS, small businesses *generally* qualify for nontraditional defense contractor status. This infers that DoD may exercise OTA authority when "[t]here is at least one nontraditional defense contractor [or small business] participating to a significant extent in the prototype project."²¹ The implication being that not only do small businesses have more permissive size standards, but small

¹⁹ Joint Explanatory Statement to the NDAA for FY 2016 (Pub. L. 114-92)

²⁰ https://www.sba.gov/sites/default/files/files/Size_Standards_Table.xlsx

²¹ This reading makes the second condition in section 2371b unnecessary; the first condition generally supersedes

businesses, in general, also have the same standing as nontraditional defense contractors under section 2371b.

Finally, while the two named categories are not mutually exclusive to each other, the two do relate to a third class, nonprofit entities, differently. Whereas a nontraditional defense contractor can either be a nonprofit or for-profit entity when eligibility criteria are met, a small business by definition can only be the latter because an entity must be organized for profit in order to qualify.

This difference excludes nonprofit entities from the full range of benefits provided to small businesses. As a result, the cost-sharing dynamic, as structured, does not serve nonprofit entities as well.

Cost-Sharing

Cost-sharing is a transaction where a portion of "the total cost of the prototype project is to be paid out of funds provided by parties to the transaction other than the Federal Government."²² Contributions can be in cash or non-cash form, and costs can be either direct or indirect, so long as contributions are allowable, allocable, reasonable, and consistently accounted for by the awardee. This may include labor, materials, equipment, and facilities costs, as well as independent R&D costs that may be reimbursed later by DoD through other awarded efforts.

Participation

DoD generally does not require participants to cost-share when any conditions for OTAs are met. Should participants not qualify, section 2371b motivates contractors to partner with an entity that does qualify, but that entity must participate in the prototype project to a significant extent.

Deciding whether an entity's participation is significant requires DoD to assess many factors. This includes determining whether, how, and to what extent, the contribution from a participant supplies a key technology or product; accomplishes a significant amount of the effort; causes a material reduction in cost or schedule; delivers an improvement in performance; or provides use of unique skilled personnel, facilities, equipment, etc.²³

Qualifying the requirement on these grounds does more than just support the goal of attracting new sources of technical innovation. This also ensures that arrangements between and amongst participants are not diluted by entities in a named category that do participate in a prototype project, but not to a significant extent. This distinction is important to note and preserve in any congressional enactment that provides nonprofit entities status as a third named category for purposes of section 2371b.

²² 10 U.S.C. 2371b

²³ Other Transactions Guide for Prototype Projects. USD(AT&L). January 2017

Trend

While a requirement to cost-share ensures that contractors bear some portion of the total cost, the premise for doing so—as has long been DoD policy—is not to supplement appropriations.²⁴ Trend data in Figure 1 shown at right corroborates this.²⁵

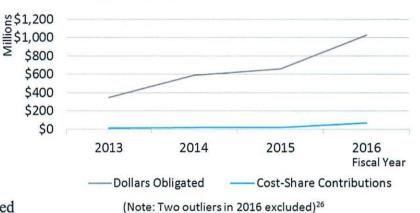


Figure 1: Trends in Section 2371b and Cost-Sharing

In FY 2016, DoD obligated \$1 billion in section 2371b awards and

received \$68 million in cost-share contributions after excluding two significant trend outliers.²⁶ This reflects an average cost-share rate over four fiscal years of approximately 4 percent (or 8 percent including the two outliers in FY 2016). This year-over-year trend in cost-share contributions has remained fairly static despite growth in obligations and pressure on Federal budgets.

This suggests that the statute, as structured, has been effective in attracting nontraditional defense contractors, promoting small businesses, and influencing all others to partner with entities that do not have cost-sharing requirements. If this was not the case, the data would have shown high cost-share contribution rates or more cases of exceptional circumstances granted under section 2371b.²⁷ Instead, only 11 percent of the dollars obligated in FY 2016, 18 percent if including the two outliers, were awarded to prototype projects that did not have significant participation from nontraditional defense and small business contractors.

Notwithstanding this assessment, less than 2 percent of dollar obligations were awarded to small businesses directly as prime awardees in FY 2016. In contrast, over 55 percent of dollar obligations were awarded to nonprofit entities over the same period.²⁸ These two points of data may at first seem to show that nonprofit entities dominate small businesses in this market; however, as demonstrated later in this report, the data actually only shows that a particular type of nonprofit entity has found a niche in the incentive structure that is made possible by the cost-sharing condition in section 2371b.

Incentive

Section 2371b acts to incentivize potential contractors to work on DoD projects in many ways. Chief among them is the ability to enter into innovative business arrangements or structures that would not be feasible or appropriate under a contract, grant, or cooperative agreement. While this flexibility can be used to remove differences between parties, the express purpose is to make working with DoD "attractive to firms and organizations that do not usually

²⁴ Contractor Cost Sharing. USD(AT&L) Memorandum. May 16, 2001

²⁵ https://www.fpds.gov

²⁶ Two \$40 million OTAs with total cost-share of \$270 million were excluded; if added, DoD cost-share rate = 33%

²⁷ There has been only one award in the past four fiscal years based on an exceptional circumstance

²⁸ https://www.fpds.gov and https://www.sam.gov

participate in government contracting due to the typical overhead burden and 'one size fits all' rules."²⁹

By finding technologies and encouraging partnerships with new entrants that participate in the project to a significant extent, all participants of the transaction benefit—new entrants can leverage a partner's capital and expertise; traditional defense contractors can maximize their return on investment by avoiding cost-sharing requirements; and DoD can access innovative technologies from vendors that typically do not participate in Government contracting.

Cost-sharing supports this purpose, albeit indirectly. Specifically, section 2371b requires certain entities, namely traditional defense contractors, to cost-share, but the requirement does not apply if the prototype project involves significant participation by an entity from either one of two named categories. This incentive structure motivates traditional defense contractors to enter into partnership agreements with other entities (e.g., nontraditional defense contractors, small businesses) that may not have otherwise known about OTA authority and the possibility of engaging with DoD in a manner that is more familiar to "hi-tech" startups.

This incentive structure has benefitted some, but not all, nonprofit entities. In fact, in reviewing individual awards, there are not many nonprofit entities present on the prime awardees list (e.g., educational institutions, scientific research organizations, trade associations), and the dollars obligated to nonprofit entities are mostly to consortium management organizations (CMOs). This suggests that this one type of nonprofit entity is better adapted to this incentive structure.

This may be because, unlike other nonprofits that participate in a prototype project, CMOs are established to efficiently broker transactions between participants. This indirect relationship also allows CMOs to avoid having to directly contribute into a cost-share. In contrast, other nonprofits cannot bypass cost-sharing requirements since they participate as an end-recipient of the awarded OTA.

Nonprofit

Nonprofits that receive \$50 million or more in CAS-covered contracts in the year before a solicitation of interest are subject to cost-sharing requirements, unless another condition for appropriate uses of OTA authority is met. This is the same statutory scheme that applies to all nontraditional defense contractors. And, while more entities qualify into this named category since the statutory definition was recently changed, not all nonprofits have fully benefited to the same extent. This is largely due to limitations that distinguish nonprofits from small businesses and other nontraditional defense contractors.

In the first case, nearly all section 2371b OTAs fell under the Federal category management "product service code" for R&D in FY 2016. The small business size standard assigned to R&D is 1,000 employees. This size standard, though, does not apply to nonprofits because a business entity must be organized for profit in order to qualify as a "small business concern." Instead, section 2371b limits the size of nonprofits that choose to work with the Federal Government to no more than \$50 million in CAS-covered contracts over the past 1-year period before being required to cost-share. Effectively, this translates into a size standard of 250

²⁹ Joint Explanatory Statement for section 815 of the NDAA for FY 2016 (Pub. L. 114-92)

employees.³⁰ Consequently, nonprofits and small businesses face significantly different constraints under section 2371b, yet the only objective difference between the two could be profit motive.

Moreover, this issue is complicated by limitations placed on a nonprofit's financial activities. This includes constraints on billing amounts or rates, prohibitions on accepting work that may lead to conflicts of interest, curtailed fees for "non-reimbursable" or "unallowable" costs, and restrictions on how profit, if any, can be used. For-profit nontraditional defense contractors, in contrast, can use profit from commercial work to meet cost-share commitments, which is a prerequisite since Federal funding would be an inappropriate source.

These examples highlight the limitations that nonprofits uniquely face that contrast with other entities that may be the same size, operate in the same industry, and primarily do the same work.

Conclusion

Cost-sharing represents both a financial and organizational commitment to a project's success. Instead of being an expression of cost-consciousness, though, section 2371b uses the device to promote judicious risk-taking by certain entities to attract new entrants into the defense arena.

Cost-sharing is typically reserved for situations that allow entities to recoup contributions later. When applied appropriately, cost-sharing supplies an unambiguous motivation that instills in participants a measure of commitment to accomplish the goals of a sponsored prototype project.

Although the dynamic created by the cost-sharing requirement targets traditional defense contractors, this group can include nonprofit entities. However, nonprofits are a distinct form of organization and may not always qualify into this named category, nor do they qualify for small business status. Because nonprofit entities do not fit neatly into either of the two categories recognized in section 2371b, not all nonprofit entities enjoy the same benefits. Furthermore, while CMOs currently receive more than 50 percent of total obligated OTA dollars as the prime awardee, this does not signal a category-wide advantage since only entities that participate in a prototype project to a significant extent can be considered end-recipients of an OTA transaction.

Meanwhile, DoD recognizes that "[n]onprofit research institutions are critical components of the research ecosystem, and offer tremendous capabilities to the research and development portfolios...³¹ DoD also recognizes that "...many government Federally Funded Research and Development Centers [FFRDCs] are developing cutting-edge technology that could be used for defense purposes in support of the Secretary of Defense's Third Offset Strategy.³² In both cases, though, nonprofits would be subject to cost-sharing requirements, which is impracticable since contributions can only come from non-Federal resources with few exceptions.

³⁰ Assumes a fully-burdened labor rate of \$200 thousand per employee x 250 employees = \$50 million

³¹ Committee Report (H. Rept. 113-102) to NDAA FY 2014

³² Committee Report (S. Rept. 114-263) to NDAA FY 2017

Accordingly, requiring contractors to cost-share based on size standards or criteria alone does not factor in an ability (or inability) to contribute into a cost-share pool or the likelihood of an investment being recouped later. When recoupment is impracticable, as is the case for nonprofit entities, the cost-sharing requirement creates undue burdens that may not fully align with policy interests, especially when compared to small business peers that qualify under an appropriate OTA condition, as required by section 2371b, but only differ in their motivation to earn a profit.

Removing the cost-sharing condition from section 2371b entirely, though, could adversely impact a dynamic that is structured to attract nontraditional defense contractors, promote small businesses, and influence all others to partner with entities that have status under section 2371b. Cost-sharing is accordingly relied on to influence market behavior that otherwise may not occur. When cost-sharing is preferred over a partnership, this signals that an entity is willing to make a strong commitment to a project because significant commercial profit is expected. In either case, DoD benefits from how the cost-sharing condition in section 2371b is presently structured.

This report assessed the benefits and risks of permitting nonprofits to be awarded OTAs for prototype projects with a cost-sharing requirement and the benefits and risks of removing the cost-sharing requirement entirely from section 2371b. Taken together, these tasks are about gauging opportunities—gained or lost—under a dynamic that relies on cost-sharing to work. The flexibility of OTAs and conditional constraints in section 2371b form a delicate balance.

Recommendation

- 1. Modify section 2371b(d)(A) to read: "There is at least one nontraditional defense contractor [or nonprofit entity] participating to a significant extent in the prototype project."
- 2. Maintain the mandatory cost-sharing requirement currently in section 2371b as a condition that applies to awardees that do not qualify under another condition for using OTA authority.