

## Recommendation 81: Clarify and expand the authority to use Other Transaction agreements for production.

### Problem

The current statutory authorities do not adequately allow use of Other Transaction agreements (OTs) for follow-on production and use of OTs for rapid fielding existing technologies when necessary.

### Background

Congress has provided DoD with broad authority to use OTs to carry out prototype projects under 10 U.S.C. § 2371b, but the path to using OTs for follow-on related production is limited to when competitive procedures were used, the prototype was successfully completed, and a participant in the prototype project is involved in the production OT. Creating additional opportunities to use OTs for production will facilitate DoD's ability to address emergent challenges that senior DoD officials determine to have national security implications.

OTs are widely recognized as important tools to address the current threat environment and allow DoD to make purchases in a manner more consistent with private-sector practices. Congress provided permanent authority in the FY 2016 NDAA for follow-on production in an effort to accelerate fielding technologies that could offset technological advantages of potential adversaries, specifically in directed energy, high-speed munitions, autonomous systems, undersea warfare, cyber technology, and intelligence data analytics.<sup>1</sup> Despite changes in technology development, DoD's acquisition process has not adequately kept pace, as Under Secretary of Defense (Acquisition and Sustainment) Ellen Lord, informed Congress: "Inarguably . . . the current pace at which we develop advanced capability is being eclipsed by those nations that pose the greatest threat to security, seriously eroding our measure of overmatch."<sup>2</sup>

The primary purpose of using OTs is to leverage the flexibility they provide to do the following:

- Attract innovative ideas and solutions from industry sectors that would not typically participate in the traditional invasive, cumbersome, and costly government contracting process.
- Allow for leveraging private-sector research and development investments that have military utility, thereby lowering required DoD investment and reducing development lead time and the cost of fielding capabilities.
- Encourage traditional DoD contractors to invest in and pursue innovation, especially in those areas that may have broader application (e.g., commercial market).

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<sup>1</sup> Section 815 of FY 2016 NDAA, Pub. L. No. 114–92, 129 Stat. 784 (2015).

<sup>2</sup> Ellen Lord, *Testimony Statement Before the Committee on Armed Services, United States Senate, First Session, 115th Congress*, December 7, 2017, accessed October 30, 2018 [https://www.armed-services.senate.gov/imo/media/doc/Lord\\_12-07-17.pdf](https://www.armed-services.senate.gov/imo/media/doc/Lord_12-07-17.pdf).

- Allow for highly flexible, creative contract arrangements that more directly capture the *best deal* between the parties (e.g., unique funding and financial contribution schemes, intellectual property rights, outcome-based performance milestones).<sup>3</sup>

For a number of years, DoD's ability to use these agreements was tightly controlled. When DoD was first granted authority in 1989, only the Defense Advanced Research Project Agency (DARPA) could grant authorization to enter into an OT, for basic, applied, or advanced research projects.<sup>4</sup> In 1993, DARPA's authority was expanded to include prototyping under Section 845 of the NDAA, and in 1996, the rest of the DoD was authorized to use OT.<sup>5</sup> In 2001, Congress amended Section 845 to include a provision to allow for limited follow-on production to participants in the original prototype project, provided the production did not exceed the specific number of units at specific target prices set in the original transaction.<sup>6</sup>

In 2015, Congress rescinded the temporary prototype authority and codified it under a new section, 10 U.S.C. § 2371b, Authority of the Department of Defense to Carry Out Certain Prototype Projects. The FY 2016 NDAA removed many of restrictions in place for follow-on production, and allowed the award for production to be in the form of a contract, pursuant to the FAR, or transaction under its Other Transaction authority (OTA).<sup>7</sup> Congress intended the new authority to be used to attract "firms and organizations that do not usually participate in government contracting due to the typical overhead burden and 'one size fits all' rules."<sup>8</sup> Expanded use of OTs in DoD, Congress reasoned, was to support efforts to access new sources of technical innovation, including Silicon Valley startup companies and small commercial firms.<sup>9</sup>

Congress provided for follow-on production of successful prototype projects in 10 U.S.C. § 2371b(f).<sup>10</sup> Subsection (f) provides for the award of a follow-on production contract or transaction, pursuant to the following:

*(f) Follow-on Production Contracts or Transactions.*

*(1) A transaction entered into under this section for a prototype project may provide for the award of a follow-on production contract or transaction to the participants in the transaction. A transaction includes all individual prototype subprojects awarded under the transaction to a consortium of United States industry and academic institutions.*

*(2) A follow-on production contract or transaction provided for in a transaction under paragraph (1) may be awarded to the participants in the transaction without the use of competitive procedures, notwithstanding the requirements of section 2304 of this title, if—*

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<sup>3</sup> Gary Kyle, email to the Section 809 Panel, September 20, 2018.

<sup>4</sup> Section 251 of FY 1990-1991 NDAA, Pub. L. No. 101-189, 103 Stat. 1403 (1989). Research Projects: Transaction Other Than Contracts and Grants, 10 U.S.C. § 2371.

<sup>5</sup> Section 845 of FY 1994 NDAA, Pub. L. No. 103-160 (1993). Section 804 of FY 1997 NDAA, Pub. L. No. 104-201, 110 Stat. 2605 (1996).

<sup>6</sup> Section 822 of FY 2002 NDAA, Pub. L. No. 107-107, 115 Stat 1182 (2001).

<sup>7</sup> Section 815 of FY 2016 NDAA, Pub. L. No. 114-92, 129 Stat. 893 (2015).

<sup>8</sup> FY 2016 NDAA, Senate Rep. No 1356, Pub. L. No. 114-92, at 700, May 2015.

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

(A) *competitive procedures were used for the selection of parties for participation in the transaction; and*

(B) *the participants in the transaction successfully completed the prototype project provided for in the transaction.*

(3) *Contracts and transactions entered into pursuant to this subsection may be awarded using the authority in subsection (a), under the authority of chapter 137 of this title, or under such procedures, terms, and conditions as the Secretary of Defense may establish by regulation.*<sup>11</sup>

Within the context of Subsection (f), Congress clarified *competitive procedures* refers to a competition for award of an OT to a consortium or to a competition for a particular project, known as a standalone OT.<sup>12</sup> A consortium is an association of two or more individuals, companies, organizations, governments, or combination of the above designed to facilitate mutually beneficial collaborative research and development activities among the government, industry, and/or academia, resulting in an agreement for consortium members to build a prototype that demonstrates solutions to problems. A consortium generally reflects a unique sector of industry, such as cyber, robotic systems, or vertical lift. Congress explicitly addressed its intent to maximize use of follow-on production contracts and transactions entered into pursuant to this section to promote access to the participants' products, as appropriate, by any organization within DoD.<sup>13</sup>

Additionally, Section 806 of the FY 2017 NDAA, codified in 10 U.S.C. § 2447d, Mechanisms to Speed Deployment of Successful Weapon System Component or Technology Prototypes for Major Weapons Systems, provides the following authority:

(a) *Selection of Prototype Project for Production and Rapid Fielding.*—*A weapon system component or technology prototype project may be selected by the service acquisition executive of the military department concerned for a follow-on production contract or other transaction without the use of competitive procedures, notwithstanding the requirements of section 2304 of this title, if-*

(1) *the follow-on production project addresses a high priority warfighter need or reduces the costs of a weapon system;*

(2) *competitive procedures were used for the selection of parties for participation in the original prototype project;*

(3) *the participants in the original prototype project successfully completed the requirements of the project; and*

(4) *a prototype of the system to be procured was demonstrated in a relevant environment.*

Further increasing DoD's ability to rapidly field successful prototype projects, this provision authorizes use of OTs for follow-on production under circumstances similar to those in 10 U.S.C. § 2371b(f) but

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<sup>11</sup> Ibid. FY 2018 NDAA, Pub. L. No. 115-91 (2017).

<sup>12</sup> FY 2018 NDAA, Report 115-125 to accompany S. 1519, Subtitle H—Other Transactions, Other Transaction Authority, 191, accessed November 2, 2018, <https://www.congress.gov/115/crpt/srpt125/CRPT-115srpt125.pdf>.

<sup>13</sup> Ibid.

without requiring the follow-on contract or agreement to be with a participant in the prototype project. This section lays out funding and flexible acquisition approaches for DoD to “experiment with, prototype, and rapidly deploy” only “weapon system components and other technologies.”<sup>14</sup> DoD has yet to issue implementing guidance, but if it is determined that *weapon system* modifies both *components* and *other technologies*, the application of § 2447b could be rather limited.

## Discussion

OTs can help overcome barriers to commercial participation in the government market. Stripped of most of the government procurement regulatory and legal idiosyncrasies, OTs allow the government to conduct business with industry on more familiar terms and fosters nontraditional contractors’ willingness to provide innovative solutions. The Senate Armed Services Committee instructed agreements officers to use any acquisition tool available, including modification to the original consortium-based or individual prototype project award, a separate OT, or a FAR acquisition instrument to maximize DoD’s ability to move from successful prototype to production.<sup>15</sup> By using broader follow-on production authority, DoD can achieve a “swifter, seamless transition of cutting-edge technologies to the warfighter throughout the acquisition process.”<sup>16</sup>

To address rapidly emerging threats, Congress provided DoD authority to pursue rapid prototyping and rapid fielding for efforts intended to be completed within 2 to 5 years, as opposed to the typical 10 to 14 year timeline for major systems.<sup>17</sup> Using OTs is not explicitly authorized by this *middle tier acquisition* authority. Although an OT could be used for rapid prototyping and follow-on production, an OT would not be authorized for rapid fielding of existing technology. The rapid fielding authority does not help DoD overcome the barriers to accessing nontraditional sources in the same way that OTs do. Delivering capability and lethality at the speed of relevance, at least from certain nontraditional sources, may require expanded OT authority.

Although there is a trend of increased OT use, recent events have demonstrated that DoD has yet to resolve all the challenges associated with moving quickly from prototype to production. In one example, the Defense Innovation Unit, with contracting support from the Army, issued the largest follow-on production award to date in February 2018, to REAN Cloud.<sup>18</sup> The follow-on production award under 10 U.S.C. § 2371b(f) was for cloud migration services, and while the prototype award was originally valued at a total of \$2,426,799, the follow-on production OT had a not-to-exceed value of \$950,000,000.<sup>19</sup> Oracle protested on numerous grounds to GAO, despite having not competed for the original prototype OT.<sup>20</sup> In the first-ever follow-on production award protest, GAO found that Oracle was an interested party due to the difference between the solicitation and work contemplated in the follow-on award. GAO sustained the protest because the agency failed to include the option for a

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<sup>14</sup> FY 2017 NDAA, Conference Report 114-840 to accompany S. 2943, November 30, 2016, accessed November 2, 2018, <https://www.congress.gov/114/crpt/hrpt840/CRPT-114hrpt840.pdf>.

<sup>15</sup> FY 2018 NDAA, Report 115-125 to accompany S. 1519, Subtitle H—Other Transactions, Other Transaction Authority, 191, accessed November 2, 2018, <https://www.congress.gov/115/crpt/srpt125/CRPT-115srpt125.pdf>.

<sup>16</sup> *Ibid.*

<sup>17</sup> Section 804 of FY 2016, Pub. L. No. 114–92, 129 Stat. 882 (2015).

<sup>18</sup> GAO, *Decision: Matter of Oracle America, Inc., B-416061*, May 31, 2018, accessed November 2, 2018, <https://www.gao.gov/assets/700/692327.pdf>.

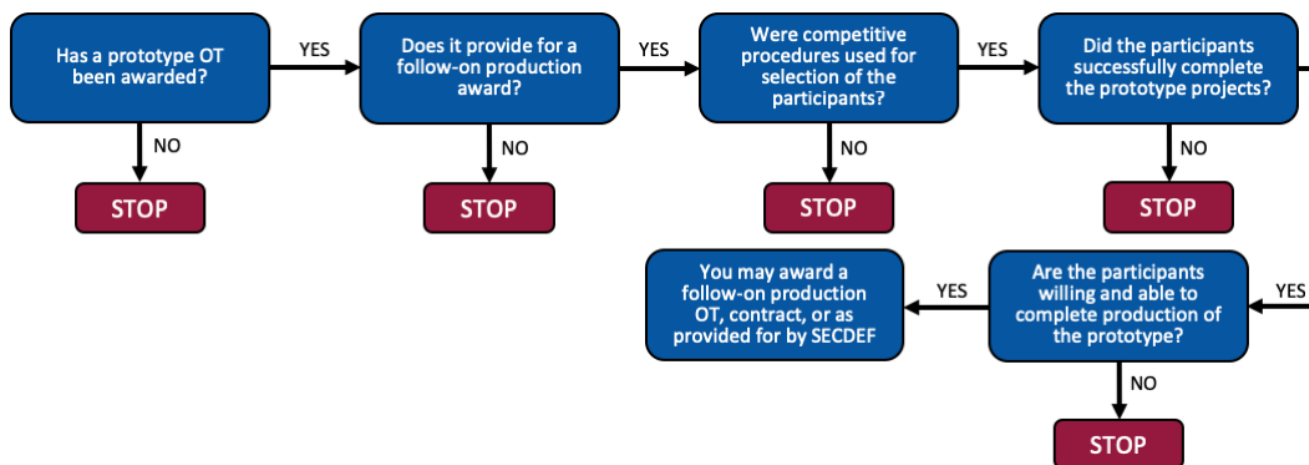
<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

follow-on production award in the original prototype OT and because the entire prototype project provided for in the prototype OTA had not been completed prior to award of the follow-on production OT.<sup>21</sup>

In the FY 2019 NDAA, Congress addressed one aspect of the Oracle protest by detailing when a prototype project reaches *successful completion*.<sup>22</sup> Section 211 provides an update to 10 U.S.C. § 2371b(f), giving the Secretary of Defense the ability to determine that an individual prototype or subproject as part of a consortium is successfully completed by the participants. Use of a follow-on production OT is still not available in situations for which the prototype OT does not include the option of a follow-on production OT. Additional scenarios for which a production OT may be necessary but would not be authorized under § 2371b(f) are depicted in Figure 7-3.

**Figure 7-3. Paths to a Production OT under the Current 10 U.S.C. § 2371b**



The decision in *Oracle* highlights two limitations on use of production OTs to get capabilities developed or prototyped by technology firms and start-ups into production under § 2371b. In the Oracle case, GAO made several findings that will shape the conversation within DoD on follow-on production OTs for the foreseeable future.

GAO’s findings are the result of a strict interpretation of the statutory language in § 2371b(f), at least as it relates to Subsection (f) requiring that the prototype OT affirmatively reserve the option of the follow-on production contract or transaction to use the noncompetitive follow-on production authority.<sup>23</sup> The statutory language states that “a prototype project may provide for the award of a follow-on production contract or transaction.”<sup>24</sup> This narrow interpretation can leave existing OTs without the option of a follow-on production transaction, even if, as in the REAN Cloud case, the

<sup>21</sup> Ibid.

<sup>22</sup> Section 211 of FY 2019 NDAA, Pub. L. No. 115–232 (2018).

<sup>23</sup> GAO, *Decision: Matter of Oracle America, Inc., B-416061*, May 31, 2018, accessed November 2, 2018, <https://www.gao.gov/assets/700/692327.pdf>.

<sup>24</sup> Authority of the Department of Defense to Carry Out Certain Prototype Projects, 10 U.S.C. § 2371b(f)(1).

publication and solicitation of the prototype OT provided notice of the potential for sole-source follow-on production award to the awardee of the prototype OT.<sup>25</sup>

Including the follow-on production option in the prototype OT does not ensure notice to potential awardees, as its inclusion is only required in the actual agreement and not the solicitation. Thus, this interpretation has the effect of ensuring strict compliance for compliance's sake with a statute that Congress has repeatedly pleaded with DoD to interpret broadly and use liberally. It provides no additional transparency to potential competitors, which Subsection (f) appears most concerned about as it permits award of the follow-on production contract or transaction without additional competition provided competitive procedures were used to select participants to the original transaction.<sup>26</sup> It is a box-check procedure with no underlying purpose other than the statute, arguably, says to include it in the prototype OT. This or similar language is not included in the § 2447d prototype and production OTA. Removing this language from § 2371(f) would harmonize the two production OTAs.

The requirement for participants to successfully complete the prototype project is a more straight forward analysis, though it illuminates a limitation with the statute. It is unclear what *successfully completed* means; accordingly, GAO made the determination for the agency, finding that work on the prototype project, including all modifications made under the OT, must be completed according to the specifications in the OT.<sup>27</sup> Using the plain meaning of *successfully completed* yielded a result that Congress likely did not intend when it gave the follow-on production authority to DoD—that GAO, not the requiring activity, would be the ultimate arbiter of what constitutes a successfully completed prototype.

In this case, REAN Cloud completed all work required under the original prototype OT; however, it had not completed additional work required by a later modification at the time the agency signed the determination and findings approving the production OT award.<sup>28</sup> Again, this decision supports the idea of strict compliance of a statute intended to be interpreted broadly. It also incentivizes agencies to modify transaction agreements prior to awarding a follow-on transaction to remove requirements that are incomplete or identify new subprojects to move forward with production. In the absence of CICA applicability, such modification cannot be challenged. This approach could fuel the argument that the regulatory free space that OTs operate in lacks transparency and fairness. If the original prototype project or subproject is not completed but a different result that DoD needs to rapidly field is produced, the current authority would preclude the use of a follow-on noncompetitive production OT.

Outside of limitations highlighted by the *Oracle* protest, there are other limitations to follow-on production authority. Follow-on awards through either contract or production OT can be made without competition if the requirements under § 2371b(f) or § 2447d(a) are met. These requirements are not entirely consistent and there is no explicit authority for awarding a production OT through competitive procedures. Another limitation that exists in § 2371b(f) but does not exist in § 2447d(a) is

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<sup>25</sup> GAO, *Decision: Matter of Oracle America, Inc., B-416061*, May 31, 2018, accessed November 2, 2018, <https://www.gao.gov/assets/700/692327.pdf>.

<sup>26</sup> Authority of the Department of Defense to Carry Out Certain Prototype Projects, 10 U.S.C. § 2371b(f)((2)(A).

<sup>27</sup> GAO, *Decision: Matter of Oracle America, Inc., B-416061*, May 31, 2018, 18-19, accessed November 2, 2018, <https://www.gao.gov/assets/700/692327.pdf>.

<sup>28</sup> *Ibid*, 18.

that the follow-on production contract or transaction may only be awarded to the participants of the original prototype OT.<sup>29</sup> This limitation could force agreements officers to initiate a traditional procurement, including a new competition under CICA, if the participants of that project are unwilling or unable to develop or scale the prototype in follow-on production. This limitation is also included in the flow chart in Figure 7-3.

Without a path to awarding a follow-on OT in § 2371b(f) to a consortium or contractor that was not a participant in the prototype project, except under § 2447d authority, DoD would struggle to field technology fast enough to be relevant and timely. OTs are more flexible than other contracting methods, but relegating their use to the prototype stage in all but a few projects that meet the other statutory requirements and are performed by participants willing and able to carry out production, unnecessarily restrains DoD's ability to efficiently transition from prototype to fielding emerging technology. One consortium that is performing on multiple prototype OTs for DoD explained that the consortium has no interest in entering into follow-on production OTs. The members want to provide prototype solutions and then move on to the next hard problem DoD needs help solving. Under the current § 2371b(f) authority, unless one of the consortium members that participated in the prototype project was willing to accept a follow-on production OT outside of the consortium umbrella, that option would not be available to DoD.

Authority does not yet exist to use OTs when DoD needs to acquire more mature capabilities from nontraditional companies that are unwilling to do business with DoD under a FAR-based contract. Professional Services Council Senior Advisor for Research and Defense, Bill Greenwalt, recently argued that "OTAs (Other Transactions Authority) are currently the only way to remove the barriers necessary to get these non-traditional sources of innovation to do business with the military."<sup>30</sup> If a nontraditional source of innovation has already produced a working prototype or production-ready solution, rendering a prototype OT unnecessary, the only option available to DoD to rapidly field that capability would be a FAR-based production contract. The authority to use a production OT may be required for DoD to procure emergent technologies that have already been successfully prototyped at private expense or are otherwise ready for production. The effectiveness of the rapid fielding authority in § 804(c)(3) of the FY 2016 NDAA will be limited by the inability to use production OTs when a prototype is not needed. OTA should not be seen as a convenient means of avoiding the FAR, and their use should be limited to exceptional circumstances as determined by the agency's service acquisition executive (SAE).

In addition to expanding the SAE's ability to authorize follow-on production OTs, one clarification to the statutory language would be prudent. It is unclear whether follow-on production OTs are subject to the same participation requirements as prototype OTs are under subsection (d). For prototype projects performed exclusively by traditional defense contractors under § 2371b(d)(1)(C), it is unclear whether a cost share of at least one-third of the total cost of the follow-on production from nonfederal sources would be required. Given the potential scale of production, it is unlikely Congress intended to require nonfederal funding of production from traditional defense contractors. The statute should be clarified

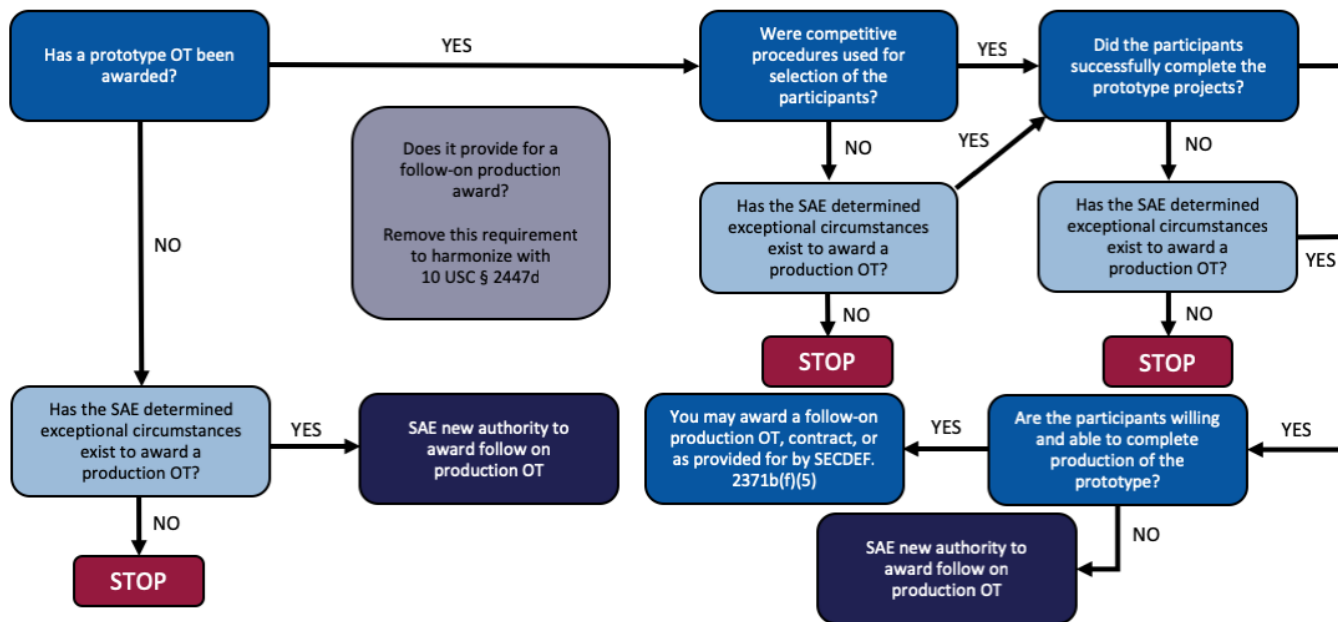
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<sup>29</sup> Authority of the Department of Defense to Carry Out Certain Prototype Projects, 10 U.S.C. § 2371b(f)(1).

<sup>30</sup> "GAO Decision Threatens US Military Dominance; Reject It," Bill Greenwalt, Breaking Defense, June 27, 2018, accessed October 30, 2018, <https://breakingdefense.com/2018/06/gao-decision-threatens-us-military-dominance-reject-it/>.

to exempt the participation requirements from follow-on production transactions. These proposed prototype authorities are listed in Figure 7-4.

**Figure 7-4. Recommended Changes to 10 U.S.C. § 2371b Paths to Production**



### Conclusions

Expanding and clarifying follow-on production authorities under § 2371b and better aligning them with those available in § 2447d would address the challenges of moving quickly from a prototype to production and ensure DoD has access to nontraditional sources of innovation. Agency SAEs should be granted authority to approve use of production OTs under each of the circumstances depicted in Figure 7-4 above and discussed in this section SAEs should be granted production OTA under exceptional circumstances to address a high priority warfighter need that would be at risk for going unmet if an OT were not awarded in the following three scenarios:

- The production OT is being used to rapidly field an existing technology.
- The prototype project has not been successfully completed.
- The competitive procedures were not used to award the prototype project

The authority to determine if a prototype project has been successfully completed should be maintained at the lowest possible level within DoD.

Making these adjustments should provide participants in the prototype project the right of first refusal for a follow-on production, as well as allow a different supplier to receive the production OT when the participants refuse or do not have the capacity to move into production. The SAE should have authority to award follow-on production OTs in situations where the prototype OT does not specify the option for follow-on production. In each of these circumstances, the SAE should have the authority to enter into an OT structured as determined appropriate for the requirement (whether sole source or competitive). To maintain whatever technological edge the U.S. military currently has over its near-peer competitors and to adapt as rapidly as the nonstate actors that threaten our national security are



able to adapt, DoD must have an OTA that provides more opportunity for rapid fielding of innovative capabilities.

## **Implementation**

### ***Legislative Branch***

- Revise 10 U.S.C. § 2371b to correspond with the clarification and expansion of follow-on production transaction authority recommended above.

### ***Executive Branch***

- Direct the Military Services and Defense Agencies to delegate authority to the lowest practicable level to determine a prototype or prototype subproject as part of a consortium is successfully completed by the participants under 10 U.S.C. § 2371b(f)(3).

### ***Implications for Other Agencies***

- There are no cross-agency implications for this recommendation.