

Comprehensive Other Transaction (OT) Training

Advanced Research Projects Agency for Health (ARPA-H)
Other Transaction Community
January 28-29, 2026

Approved for Public Release: Distribution Unlimited



Purpose and Expectations

Purpose:

- Complete Other Transaction (OT) training
- Obtain information and resources to assist with real-world application

Expectations:

- Gain awareness of ARPA-H's OT Community (OTC) and its purpose/mission
- Understand OT authorities (OTs), agreements, terms, stakeholders, responsibilities, processes, and common uses
- Enhance OT knowledge of and use for planning, execution, and administration

Course Admin/Logistics Items

- Attendees can receive 12 hours of training credit from attending the entire course
 - Send requests for training certificates to OTCommunity@arpa-h.gov **after** completion
- Presentation materials will be shared
- Open environment → sessions will **not** be recorded, but **avoid** discussing sensitive or confidential topics
- Participation is encouraged → ask questions in Q&A area or during defined Q&A sessions
- No AI bots or recordings of the course permitted
- 10-minute breaks throughout
- 1-hour lunch break
- Provide feedback for ARPA-H to enhance future offerings

Course Roadmap – Day 1, Jan. 28

Session/Topic	Notional Time (ET)	Audience
Intro	0900-0920	All
Federal Contracting & Acquisition Review	0920-0950	All
OT Overview: <ul style="list-style-type: none">• Terms/Definitions/Stakeholders• What Applies/What Does Not Apply• Review of OT Use Cases• Real World OT Use Cases	1000-1200 (includes break)	All
Business Strategy & Approaches	1300-1400	Government
Value Analysis	1410-1450	Government
Intellectual Property (IP)	1450-1550	All
Resource Sharing	1600-1630	All
Open Q&A/Ask Us Anything	1630-1700	All

Course Roadmap – Day 2, Jan. 29

Session/Topic	Notional Time (ET)	Audience
Day 1 Recap/OT Community Overview/Open Q&A	0900-0930	All
Teaming	0930-1020	All
Payable Milestones	1030-1130	All
Property (Government Furnished Property)	1130-1140	Government
Sample Agreement	1140-1250	All
Conclusion/Wrap	1250-1300	All



Federal Contracting & Acquisition Review

Federal Contracting History and Events

- 1948:** Armed Services Procurement Act/Armed Services Procurement Regulation (ASPR)
- 1958:** Grants Act & National Aeronautics and Space Administration (NASA) Space Act signed (created NASA & “Space Act Agreements”)
- 1959:** General Services Administration issues civilian procurement regulation
- 1972:** Other Transaction Authority (OTA) granted to the NIH
- 1974:** Procurement regulations total about 3,000 pages
- 1977:** ASPR becomes the Defense Acquisition Regulation (DAR)
- 1978:** Federal Grant and Cooperative Agreement Act
- 1984:** The Federal Acquisition Regulation (FAR) codified in Title 48 Code of Federal Regulations

Federal Contracting History and Events (cont.)

- 1989:** OTA granted to the Defense Advanced Research Projects Agency (DARPA)...later the broader Department of Defense (DoD)
- 1993:** Era of “procurement reform” – Federal Acquisition Streamlining Act
- 1994:** DARPA’s OTA expanded to include prototype projects...later to the broader DoD
- 2001:** OTA for follow-on production introduced to the DoD
- 2006:** OTA granted to BARDA -- within ASPR (Health & Human Services)
- 2011:** OTA granted to the Advanced Research Projects Agency for Energy
- 2022:** Creation of ARPA-H (with OTA granted)
- 2025:** Executive Orders to simplify and streamline the FAR and prefer use of Commercial Solutions Openings and OTAs to spur innovation

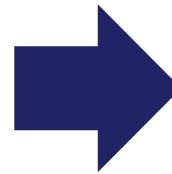
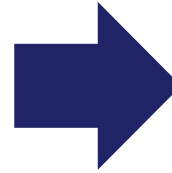
Science & Technology (S&T) Community

PAST

Innovation fueled by the government

Commercial sector wanted to work with the government

The government was the primary driver of technology innovation by making substantial research and development (R&D) investments



PRESENT

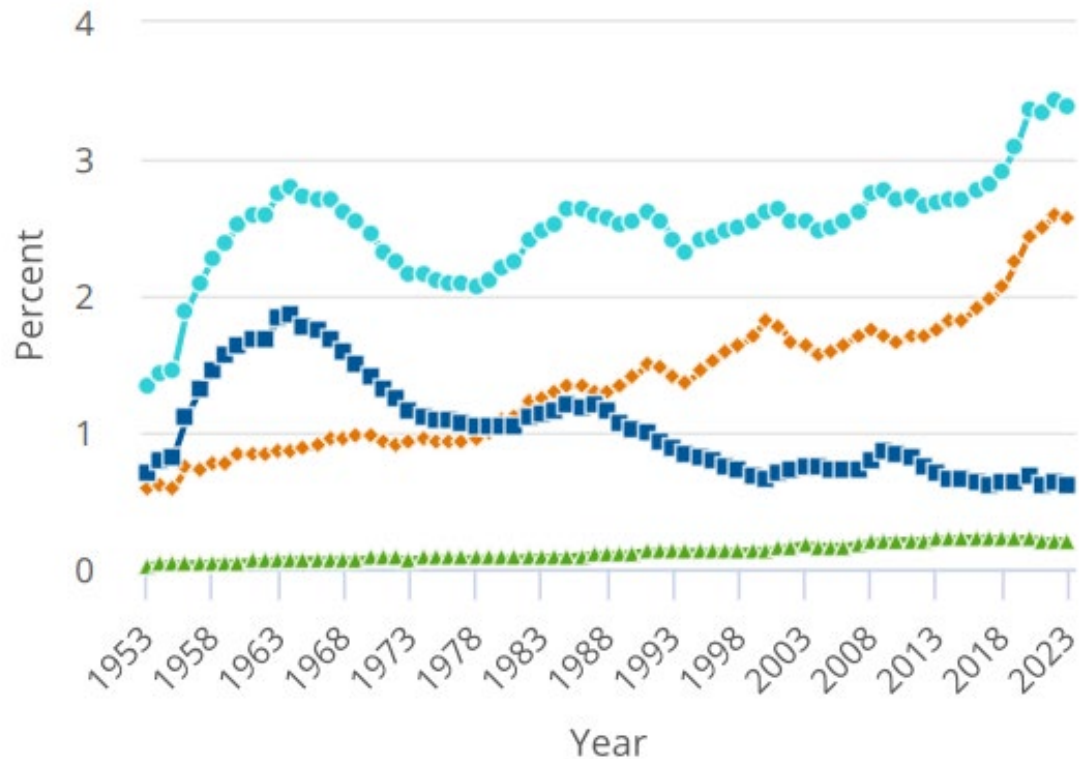
Innovation fueled by the commercial sector

Cutting edge commercial firms with large R&D investments are reluctant to work with the government

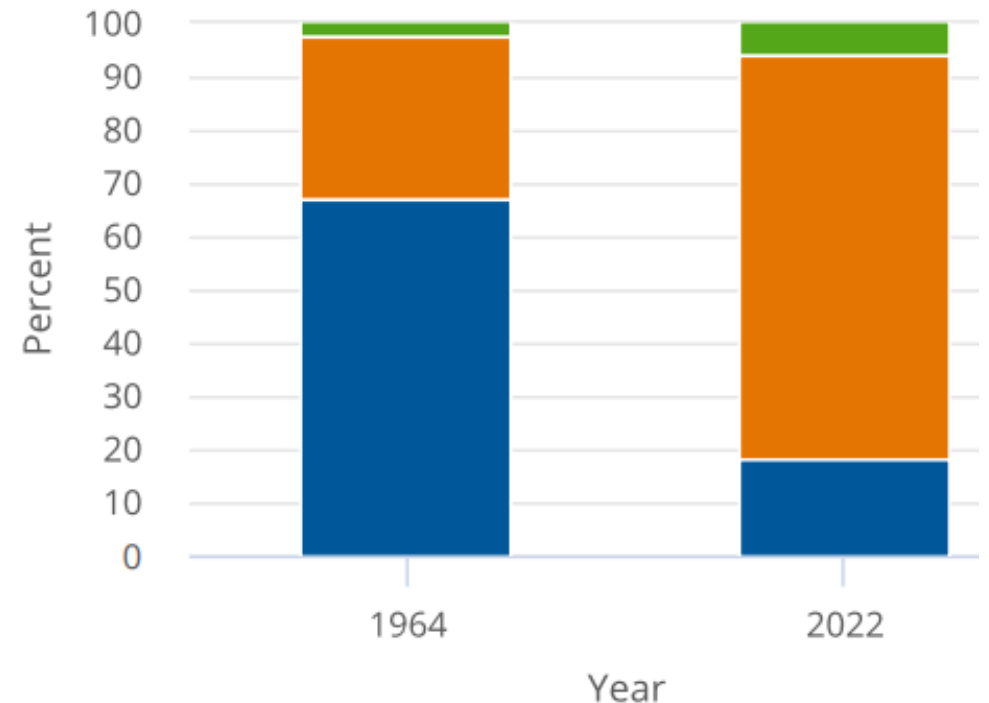
Focus and pace of S&T innovation in leading technology areas have shifted from government to the commercial sector (industry spends nearly 10 times more on R&D than the government)

U.S. R&D Expenditures

Ratio of U.S. R&D to GDP by Source



U.S. R&D Share by Source



Impediments to Commercial Sector Participation

- Traditional procurement process is too slow, bureaucratic, and doesn't effectively incorporate commercial best practices
- Traditional procurement contracts (FAR-based contracts) are based on “regulation” rather than “negotiation”
- Government's cost-based pricing system is **cumbersome**
 - Specialized accounting and audit systems
 - Actual and perceived oversight excesses
- Small businesses and start-ups may be able to secure funding much more quickly and more easily from venture capitalists
- Government's approach to intellectual property (IP) and technical data rights can be **overreaching**



Acquisition Reform Initiatives and OT Preferences

- The Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act of 2022
- EO 14179, “Removing Barriers to American Leadership in Artificial Intelligence,” Jan 24, 2025
- EO 14265, “Modernizing Defense Acquisitions and Spurring Innovation in the Defense Industrial Base,” Apr 9, 2025
- EO 14275, “Restoring Common Sense to Federal Procurement,” Apr 15, 2025
- OMB Memorandum, “FY 2027 Administration Research and Development Budget Priorities and Cross-Cutting Actions,” Sep 23, 2025
- DoD Acquisition Transformation Strategy, Nov 2025
- DoD Memorandum, “Directing Modern Software Acquisition to Maximize Lethality,” Mar 6, 2025
- Army Memorandum, “Army Transformation and Acquisition Reform,” Apr 30, 2025


Acquisition Reform Initiatives and OT Preferences (cont.)

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Toolbox (ARPA-H Example)

Acquisition

Non-Acquisition

Procurement Contracts		Non-FAR Contracts	Grants	Cooperative Agreements	OTs
31 U.S.C. § 6303  Federal Acquisition Regulation (FAR)		Non-Appropriated funds (NAF) contracts NASA Space Act Unique authority at 9 civilian agencies ARPA-H OT authority HHS Policies Exceptions to Bayh-Dole Act	31 U.S.C. § 6304 2 CFR Part 200 Bayh-Dole Act	31 U.S.C. § 6305 2 CFR Part 200 HHS/NIH Policies Bayh-Dole Act	ARPA-H OT authority Single/Multi-Party New/Unique Arrangements Bailments Lease Arrangements Loan-to-Own Exceptions to Bayh-Dole Act
PART 15 Contracting by Negotiation	PART 12 Commercial Items				
Cost/Price Based	Price Based				

Cooperative Research & Development Agreement (CRADA): A legal agreement between a federal laboratory and industry used for the transfer of commercially useful technologies from federal laboratories to the private sector and to make accessible unique technical capabilities and facilities

Partnership Intermediary Agreement (PIA): A contract, agreement, or memorandum of understanding with a nonprofit partnership intermediary to bring together academia and industry on behalf of the government to speed up tech transfer and licensing

Acquisition vs. Non-Acquisition

- Acquisition Instruments

- Procurement contracts or OTs
- Used to acquire goods and services for the government's direct benefit
- Procurement contracts are traditionally subject to the acquisition statutes and the FAR and supplements (i.e., Health and Human Services Acquisition Regulation (HHSAR), Defense Federal Acquisition Regulation Supplement (DFARS), National Aeronautics and Space Administration Federal Acquisition Regulation Supplement (NASA FAR Supplement))

- Non-Acquisition Instruments*

- Grants, cooperative agreements, and OTs
- Used to support and stimulate an activity for the general public good
- Traditionally subject to the assistance statutes and regulations in 2 CFR Part 200

* Grants and cooperative agreements are federal financial assistance instruments

Instrument Definitions

- OT
 - A legally binding agreement (other than a procurement contract, grant, or cooperative agreement) with industry for the government to conduct research and development efforts and promote innovation to achieve its goals.
- Procurement contract
 - A legally binding instrument which shall be used only when the principal purpose is the acquisition of supplies or services for the direct benefit or use of the Federal government.
- Grant
 - A legally binding instrument used to transfer a thing of value to the government or other recipient to carry out a public purpose of support or stimulation instead of acquiring property or services for the direct benefit or use of the government.
 - **Substantial involvement** is not expected between the government and the recipient when carrying out activity contemplated.
- Cooperative agreement
 - A legally binding instrument used to enter the same kind of relationship as a grant except **substantial involvement** between the government and recipient is expected when carrying out the activity contemplated.



OT Overview

OTs – What They Are and What They Are Not

What They Are:

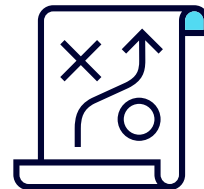
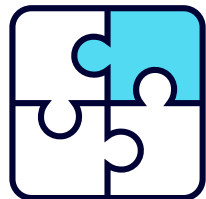
- Flexible/innovative/streamlined contract vehicles with characteristics similar to those within the commercial industry
- Require personnel with business acumen and negotiation skills (and OT training or experience)
- Require performance measurement and management (cost, schedule, and technical progress)
- Vehicles with limited protestability or challengability (i.e., Government Accountability Office (GAO))

What They Are Not:

- Appropriate for all offices, divisions, and projects
- Procurement contracts (FAR-based), grants, or cooperative agreements
- Subject to all acquisition laws and regulations
- New vehicles available to the Government
- One-size-fits-all vehicles with standard checklists
- Vehicles used strictly to avoid following the FAR
- Guarantee teams to complete awards faster than traditional contracts

OTs – Purposes and Potential Benefits

- Provide the flexibility to adopt and incorporate business practices similar to those within commercial industry
- Provide the government access to state-of-the-art technology solutions
- Foster new relationships and practices with solutions providers, especially those that may not be interested in entering FAR-based contracts with the government
- Broaden the Public Health Industrial Base (PHIB), Defense Industrial Base (DIB), or other
- Encourage flexible, quicker, agile, and cost-effective project design and execution when compared to other vehicles
- Leverage commercial industry investments in science/technology and research/development
- Collaborate in innovative and flexible arrangements

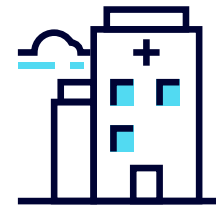


OTs – Potential Performers

The government can enter OTs with various types of entities and organizations*:

- Large business, including traditional government performers
- Nontraditional performers, including:
 - Those that have not previously worked with the Federal government
 - Small businesses, including those participating in Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) programs
- Nonprofit organizations
- Academic institutions, including Minority Serving Institutions (i.e., Historically Black Colleges and Universities, Hispanic Serving Institutions, and Native American-Serving Non-Tribal Institutions)
- Other: Foreign entities, Consortium Management Firms (CMFs), etc.

* Use competitive procedures to the maximum extent practicable



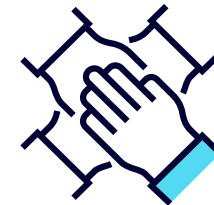
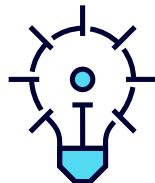
OTs – Risks and Challenges*

- Nontraditional form of Federal government doing business
- OT usage not meeting Congress' intent
 - Insufficient transparency, reporting, and controls
- Not obtaining or maintaining adequately trained personnel with appropriate skills sets
- Limited training available on subject matter
- Lack of structured procedures or “guardrails”
- Compliance with federal funding requirements (Bona Fide Needs rule)
- Avoiding sufficient competition
- Not maintaining or expanding the performer base
- Inadequate means to measure/manage performance
- Inconsistent processes/practices and lack of transparency with consortia use

* Sources: Various GAO and Office of Inspector General reports

Key Elements to Effective OT Use

- Top level (leadership) interest and support
- Cohesive team from project initiation (e.g., PM, Acquisition, Legal, Comptroller)
 - Buy-in from entire team and key stakeholders is crucial
 - Culture: collaboration, communication, inclusion, mutual trust, empowerment, and measured risk
- Program Managers (PMs) or Project Managers and OT Agreements Officers (AOs) who understand the OTA and identify opportunities to use OTs
- Participation by and cooperation among various functional areas (“right people on the bus”)
- **Not** following/mimicking the FAR/HHSAR/DFARS/etc. and inhibiting the flexibility provided by the OTA
- Choosing OTs as the appropriate award vehicle after fully determining program or project goals and objectives



Common OT Terms and Definitions

Other Transaction (OT) Authority

- The authority allowing government entities to enter OTs

Agreement File

- A collection of important files to maintain key supporting documents related to each OT (similar to contract file)

Articles

- Terms and conditions for OT agreements (similar to clauses for procurement contracts)

Industrial Base (Ecosystem)

- A network of people, organizations, facilities, and resources that provides the Federal government with materials, products, and services (e.g., Public Health, Defense, Transportation)

Resource Sharing

- A portion of the total project costs paid by sources other than the Federal government

Common OT Terms and Definitions (cont.)

Advance Payment

- A form of payment made by the government to the Performer in advance of its normal schedule

Consortium

- A collection of business entities (such as nonprofits, academic institutions, or contractors) and individuals focusing on a specialize technology area working together to achieve a common goal and solve a defined challenge

Key Supporting Documents (KSDs)

- Necessary documents, physical or electronic, that support each OT and the associated business or acquisition activities throughout the project life-cycle (typically maintained within OT agreement files) → examples include written determinations for approval authority, business strategy documentation, and correspondence with potential Performers

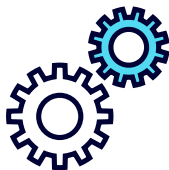
OTs – “The Project Team”

- Each OT project will differ in size, scope, and duration (not a one-size-fits-all)
- The PM or Team Lead should consider involvement from various offices/divisions (ARPA-H example below):
 - Director’s Office
 - Mission Offices → PMs
 - Business Innovation Division (BID) → AOs
 - Comptroller Office
 - Division of Communications
 - Division of Government Relations and Strategy
 - Office of Commercialization
 - Division of General Counsel

Ideal AO Characteristics*

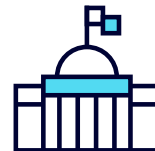
- Business acumen
- General understanding of traditional government contracting and commercial best practices
- Innovative / creative
- Collaborative
- Calculated risk-taking (thriving in “the gray” area)
- Understanding of respective industrial base(s)
- Experience with negotiations (terms & conditions)

* Also applicable to Program Managers and other team members involved



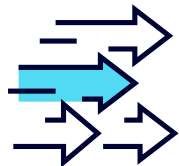
OTs – What Laws and Regulations Apply?

Laws & Regulations That Apply to OTs
False Claims Act – 31 U.S.C. § 3729
False Statements – 18 U.S.C. § 1001
Civil Rights Act – 42 U.S.C. § 1981
Clean Air Act – 42 U.S.C. § 7401
Clean Water Act – 33 U.S.C. § 1251
Endangered Species Act – 16 U.S.C. § 1531
National Environmental Policy Act – 42 U.S.C. § 4321, et seq.
Antideficiency Act (ADA) – 31 U.S.C. § 1341/1342/1517
Restrictions on Obtaining and Disclosing Certain Information (formerly Procurement Integrity Act) – 41 U.S.C. § 2101, et seq.
Federal Property and Administrative Services Act – 40 U.S.C. Subtitle I
Debarment and Suspension – 2 CFR 376
Research Misconduct – 42 CFR 93
Human Subjects Protections – 45 CFR 46
Humane Care and Use of Laboratory Animals – Public Health Service Policy

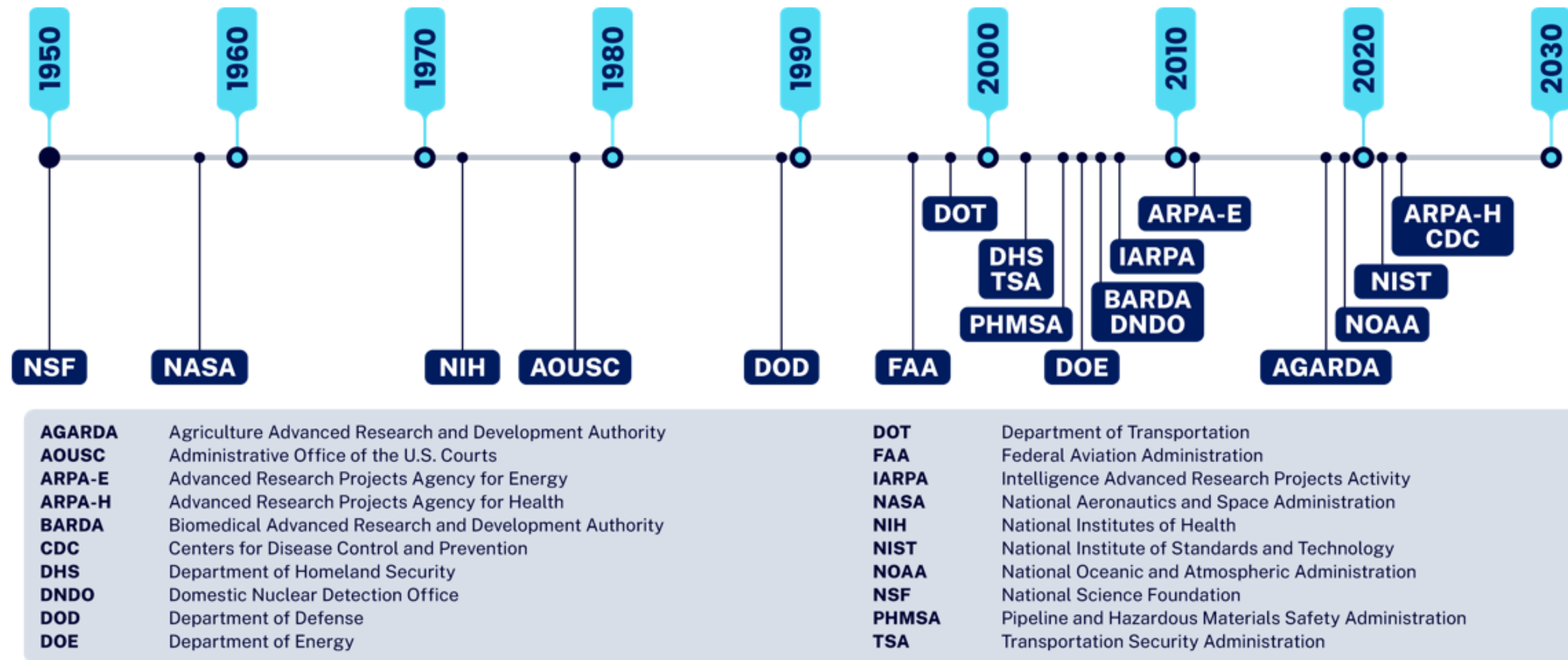


OTs – What Laws and Regulations Do Not Apply?

Laws & Regulations That Do Not Apply to OTs
Competition in Contracting Act (CICA) – 41 U.S.C. § 3301
Truthful Cost and Pricing Data Act (formerly Truth in Negotiations Act) – 41 U.S.C. § 3501, et seq.
Cost Accounting Standards – 41 U.S.C. § 1502
Contract Disputes Act – 41 U.S.C. § 7102
Procurement Protest System – 31 U.S.C. § 3551, et seq.
Bayh-Dole Act – 35 U.S.C. § 202-204
Buy American Act (in part) – 41 U.S.C. § 83
Antikickback Act of 1986 – 41 U.S.C. § 51-58
Service Contract Act – 41 U.S.C. § 351 et seq.
Procurement Protest Process – 48 CFR 33.1
Federal Acquisition Regulation (FAR)
HHS Acquisition Regulation (HHSAR), or other FAR supplemental regulations (DFARS, NFS, TAR, HSAR, etc.)



Government Entities With OT Authority



Review of OT Authorities (1 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
<p>6 U.S.C. § 391(a)*</p> <p>* Pilot program (authority available until 9/30/2024)</p>	Department of Homeland Security (DHS)	<ul style="list-style-type: none"> Permits OTs for basic, applied, and advanced R&D projects or prototype projects exercising the same authority with respect to projects the DoD may exercise (reference 10 U.S.C. § 4021 and 10 U.S.C. § 4022) Requires a determination that a contract, grant, or cooperative agreement is not feasible or appropriate Requires annual report to Congress on authority use
<p>7 U.S.C. § 3319k**</p> <p>** Pilot program (authority terminated on 12/21/2023)</p>	Agriculture Advanced Research and Development Authority (AGARDA) – within Department of Agriculture	<ul style="list-style-type: none"> Permits OTs for advanced R&D of agricultural technology, qualified products and projects, and research tools Prioritizes projects: 1) that address critical R&D needs for technology for specialty crops or 2) prevent, protect, and prepare against intentional and unintentional threats to agriculture and food OT authority shall be used in the same manner and subject to the same terms and conditions as DoD OTs under 10 U.S.C. § 4021 May negotiate terms for technology transfer in the same manner as a Federal laboratory Requires Performers to make all data relating to or resulting from the activities available on an ongoing basis May use milestone-based awards and payments and terminate a project for not meeting technical milestones

Review of OT Authorities (2 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
10 U.S.C. § 4021	Department of Defense (DoD)	<ul style="list-style-type: none">• Permits OTs for basic, advanced, or applied research• 50/50 resource sharing to maximum extent practicable (default position)• Research conducted should not duplicate research done by other DoD programs
10 U.S.C. § 4022	Department of Defense (DoD)	<ul style="list-style-type: none">• Permits OTs for prototype projects and follow-on production efforts• Requires competition to the maximum extent practicable• Four possible conditions for use (at least one nontraditional defense contractor (NDC), all significant participants are small businesses or NDCs, 1/3 resource sharing, or exceptional circumstances as determined by SPE)• Written determinations required for OTs > \$100M• “Successful completion” a prerequisite for follow-on production efforts• Competition may not be required for follow-on production efforts
15 U.S.C. § 272	National Institute of Standards and Technology (NIST)	<ul style="list-style-type: none">• Enter into and perform OTs as may be necessary in the conduct of its work and on such terms as it may determine appropriate
15 U.S.C. § 8531	National Oceanic and Atmospheric Administration (NOAA)	<ul style="list-style-type: none">• May use transaction agreements for the construction, use, operation, or procurement of new, improved, innovative, or value-adding systems• Can only be used when NOAA objectives cannot be met using a CRADA, procurement contract, grant, or cooperative agreement

Review of OT Authorities (3 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
28 U.S.C. § 604	Administrative Office of the United States Courts (AOUSC)	<ul style="list-style-type: none"> Enter into and perform OTs as the Director may deem appropriate to the conduct of the work of the judicial branch of government
42 U.S.C. § 284(n)	National Institutes of Health (NIH)	<ul style="list-style-type: none"> Permits OTs for projects that carry out the Precision Medicine Initiative Cannot use > 50% of annual appropriations available through the Common Fund (funding for bold scientific programs) Intended for high-impact research that fosters scientific creativity and increases fundamental biological understanding leading to the prevention, diagnosis, or treatment of diseases and disorders, or research urgently required to respond to a public health threat Requires approval by NIH Director for each use of authority Requires annual reporting to NIH Director for each project
42 U.S.C. § 285b-3(b)(3)	National Heart, Lung, and Blood Institute (NHLBI) – an NIH institute	<ul style="list-style-type: none"> Specific OT authority for National Heart, Blood Vessel, Lung, And Blood Diseases and Blood Resources Program Permits OTs necessary in the conduct of the NHLBI Director’s functions
42 U.S.C. § 287a(e)(3)(C)	National Center for Advancing Translational Sciences (NCATS) – an NIH center	<ul style="list-style-type: none"> Permits OTs for research projects in support of the Cures Acceleration Network Program An option if goals and objectives cannot be adequately carried out by contract, grant, or cooperative agreement Cannot use > 20% of annual appropriations available for funds specifically designated to the program

Review of OT Authorities (4 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
42 U.S.C. § 242c(e)(1)	Centers for Disease Control and Prevention (CDC) – an HHS operating division	<ul style="list-style-type: none">• Permits OTs for the purposes of infectious disease research, biosurveillance, infectious disease modeling, and public health preparedness and response• Written determination required for any OTs expected to cost > \$40M• Requires establishment of guidelines and auditing requirements regarding OT use
42 U.S.C. § 247d-7e	Biomedical Advanced Research and Development Authority (BARDA) – part of ASPR (an HHS operating division)	<ul style="list-style-type: none">• Can use OTs for projects supporting BARDA's mission/goals and to respond to public health emergencies• Intended to promote: 1) innovation in technologies that's may assist with countermeasure and advanced R&D; 2) research on and development of research tools/devices/technologies, and; 3) research to promote strategic initiatives• Requires competition to the maximum extent practicable• Written determination required for any OTs expected to cost > \$100M

Review of OT Authorities (5 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
42 U.S.C. § 1862	National Science Foundation (NSF)	<ul style="list-style-type: none">• Permits other arrangements to initiate and support basic science research and programs to strengthen education programs at all levels in the mathematical, physical, medical, biological, social and other sciences, and to initiate and support research fundamental to the engineering process and engineering education programs at all levels in the various fields of engineering• Permits arrangements to initiate and maintain a program for scientific and engineering research, including facility construction• Permits arrangements to initiate and support specific scientific and engineering activities in connection with matters relating to international cooperation, national security, and the effects of scientific and engineering applications upon society
42 U.S.C. § 290c	Advanced Research Projects Agency for Health (ARPA-H) – part of HHS	<ul style="list-style-type: none">• Requires competition to the maximum extent practicable• Requires an approved written determination for each use of the authority• Requires annual reporting to ARPA-H Director for each project• Prioritize awards to entities that will conduct work in the US

Review of OT Authorities (6 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
42 U.S.C. § 7256	Department of Energy	<ul style="list-style-type: none"> Permits OTs for research, development, and demonstration projects exercising the same authority with respect to projects the DoD may exercise (reference 10 U.S.C. § 4021 and 10 U.S.C. § 4022) Requires competitive, merit-based selection procedures Requires written determination that the use of a standard contract, grant, or cooperative agreement is not feasible or appropriate Requires annual report to Congress on OT use
49 U.S.C. § 106(l)(6)	Federal Aviation Administration (FAA)	<ul style="list-style-type: none"> Permits OTs to carry out the functions of the Administrator or Administration
49 U.S.C. § 114(m)	Transportation Safety Administration (TSA)	<ul style="list-style-type: none"> Permits OTs for the same purposes as provided to the FAA
49 U.S.C. § 5312(b)	Department of Transportation (DOT)	<ul style="list-style-type: none"> Permits OTs for projects and activities to advance innovative public transportation R&D Requires an annual report of project activities to be made available on DOT's public website Government share of costs may not exceed 80% (exceptions apply)

Review of OT Authorities (7 of 7)

U.S.C. Reference	Organization	Authority Details / Highlights
49 U.S.C. § 601	Pipeline and Hazardous Materials Safety Administration (PHMSA)	<ul style="list-style-type: none">Permits OTs for the development, improvement, and promotion of one-call damage prevention programs, research, risk assessment, and mapping
50 U.S.C. § 3024(n)	Director of National Intelligence (DNI)	<ul style="list-style-type: none">Permits OTs for basic, applied, and advanced R&D projects or prototype projects exercising the same authority with respect to projects the DoD may exercise (reference 10 U.S.C. §§ 4021 and 4022)OTs cannot exceed \$75MRequires annual reporting to Congress on use of the authority
51 U.S.C. § 20113(e)	National Aeronautics and Space Administration (NASA)	<ul style="list-style-type: none">Permits Space Act Agreements for the conduct of the Administration's work

Real-World OT Uses (1 of 2)

- DarkStar
- Global Hawk
- Future Combat Systems
- Electronics Resurgence Initiative
- Long-Range Hypersonic Weapon
- Future Long-Range Assault Aircraft
- Hypersonic and Ballistic Tracking Space Sensor
- Artificial Intelligence and Machine Learning capabilities
- Robotics and drones
- Aviation and vessels



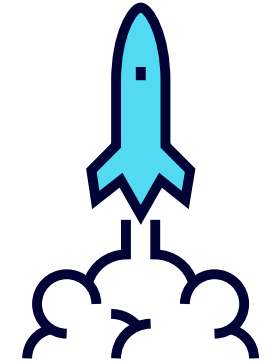
Source: National Museum of the US Airforce
(<https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/195774/lockheed-martin-rq-3-darkstar/>)



Source: Army News(<https://www.congress.gov/crs-product/IF11991>)

Real-World OT Uses (2 of 2)

- Commercial launch services
- Operation Warp Speed (COVID-19 response)
- Hydrogen production
- Cancer and disease research
- Osteoarthritis treatment
- Vehicles for advanced medical services
- Cybersecurity
- IT and business systems (cloud computing, security, background investigations, travel, etc.)
- Facilities and base operations

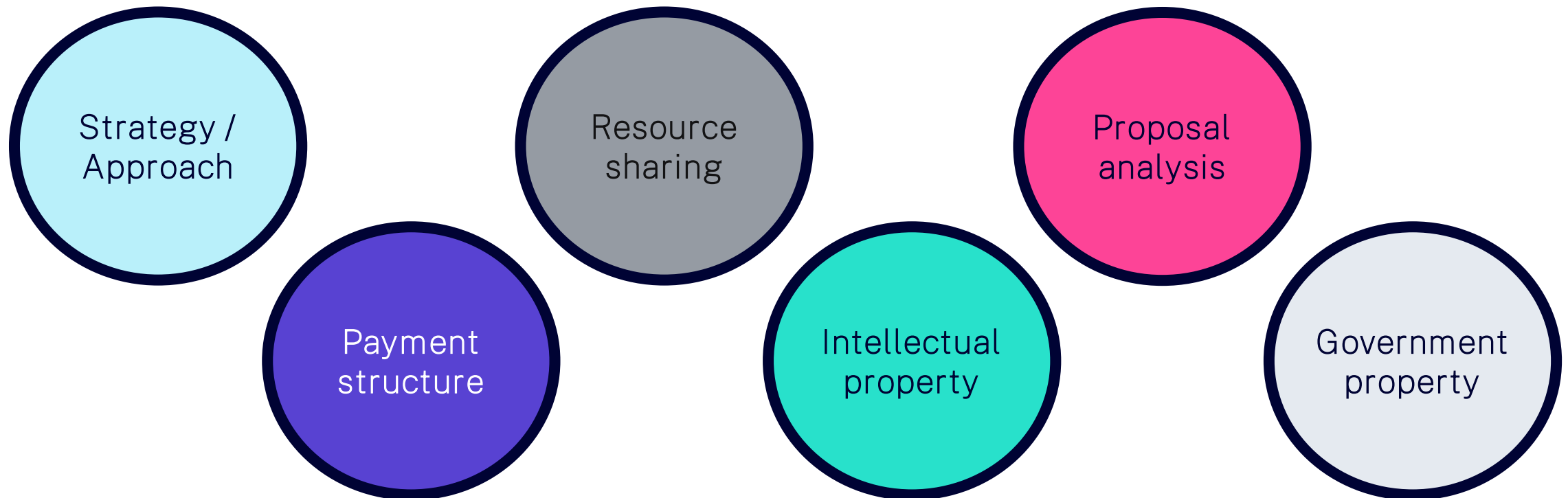




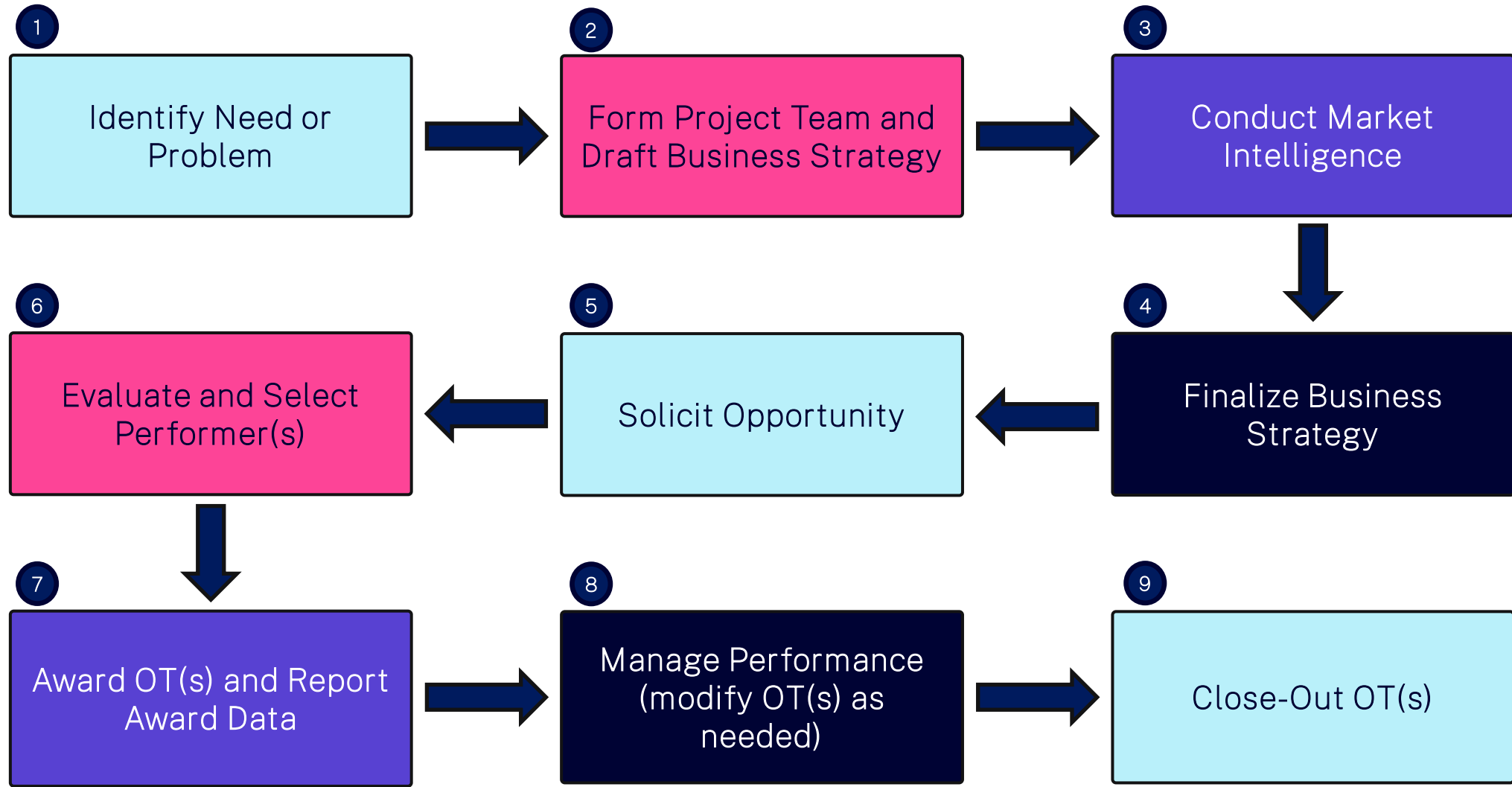
Business Strategy & Approaches

Disclaimer

We provide general information and details for some elements of the OT process; however, adhere to local Agency-level policies and guidance, when required, on certain topics.



OT Process (General)*



* Each OT will possess unique characteristics

Business Strategy

- The culture of requirements generation is part of the Federal government affordability problem
- Determine what impediments exist and what tool(s) will best address the current situation
 - Analyze the pros, cons, and risks of potential approaches
 - Verify that preferred approach is compliant with applicable statutes and OTA
- Government teams must involve all relevant personnel from various disciplines as early in the planning stages as possible
 - Contracts, technical, legal, finance, industry, etc.
- Market research per FAR Part 10 does not apply, so creatively leverage outreach activities based on the need and technology area

Business Strategy (cont.)

Industry has an important role to play and can provide valuable information and insight to the government team

- Early involvement can help determine program/project direction
- Identify requirements barriers
 - What the government needs
 - How the government inspects
 - What the government desires as a deliverable
- Identify teaming barriers
- Overcoming preconceived notions of government requirements
- Demonstrate business norms in the technology sector



OT Approaches – Potential Pathways*

1. Open Announcement → award(s) via a Broad Agency Announcement (BAA) or other merit-based solicitation (usually covering a wide array of scientific or technology areas)
2. Direct → award(s) via a specific scientific or technology area
3. Consortium → award(s) via existing or new consortium management firm
4. “Stacking” Authorities → award(s) in conjunction with another authority (i.e., Prize Challenges via 15 U.S.C. § 3719)
5. Cosponsoring projects → award(s) by or in conjunction with another government entity (common goals/interests)

* The above are not intended to be limiting... be creative in your approach

Soliciting Opportunities (1 of 3)

Plainly word program/project solicitations

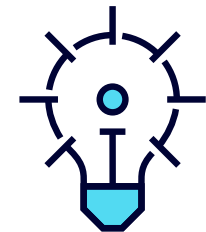
- Include a detailed discussion of the entire program/project plan, including all phases and follow-on potential, schedule, budget, management processes, and risks
- Consider issuing a draft solicitation for industry to review and provide comments
 - Include any true requirements
 - May include notional Task Description Document (TDD) or Statement of Work (SOW), payable milestone, deliverables
 - Include a draft agreement with the government preferred terms and conditions
- Remind potential Proposers that everything (except for any true requirements) is negotiable
 - Emphasize that the notional TDD, milestones, and agreement terms are offered to give them somewhere to begin
 - Industry is expected to design and propose their solution to the problem

Consider holding an Industry Day event (aka Proposers Day), especially if the government or the potential Performers are new to OTs

- Publish the draft or final solicitation and FAQs prior to event
- Allow the questions and even private (one-on-one) breakout sessions
- Facilitate attendee networking for teaming purposes

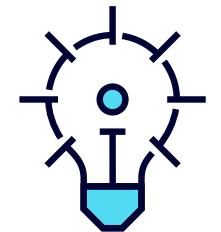
Soliciting Opportunities (2 of 3)

- Remain fair and transparent throughout process
- Creatively announce/market/post opportunities:
 - SAM.gov
 - Government website
 - Proposers' day events / Reverse industry day events
 - Industry resources:
 - Conferences / conventions / seminars / trade shows
 - Trade publications (magazines, blogs, posts, internet articles)
 - Technology demonstrations
 - Social media (commensurate with government policies):
 - LinkedIn
 - X
 - YouTube
 - Facebook



Soliciting Opportunities (3 of 3)

- Creatively announce/market/post opportunities (cont.):
 - Technology scouting events
 - Standards committee (e.g., FDA)
 - Communities of interest events
 - Crowdsourcing events / surveys
 - Academic institutions (outreach and research departments)
 - APEX Accelerators (formerly Procurement Technical Assistance Centers)
 - Industry associations



Selection Process

Use any process that works well for your organization and results in the receipt of quality proposals

- Not required to use the processes in the FAR (Parts 13, 15, or 35), but can incorporate useful aspects
- Keep the process streamlined and simple (put yourself in the potential Performer's position)
- Key aspects to include in any selection process:
 - Give the Proposers detailed notice in the solicitation
 - Clearly describe the selection process to Proposers
 - Clearly describe what is expected from Proposers
 - Include evaluation factors and stick with them
 - One big difference is the level of documentation
 - Evaluator consensus report to the Selection Authority may be the sole documentation describing the detailed technical, cost, and management evaluation and deliberations
 - Selection Authority's ultimate decision will be documented in a separate memo

Selection Process (cont.)

- Consider the following options (where appropriate) to engage industry and maximize interest:
 - Panel pitches / oral presentations
 - Rolling down-selections
 - Video proposals
 - “Shark Tank”-like presentations
 - Technology demonstrations
 - Design sprints
 - Hackathons
 - Innovation workshops



Rolling Down-Selections

Programs/projects can be structured into phases *without* having to pre-negotiate options at the time of award – additional phases will be negotiated and included in the agreement at the end of the prior phase.



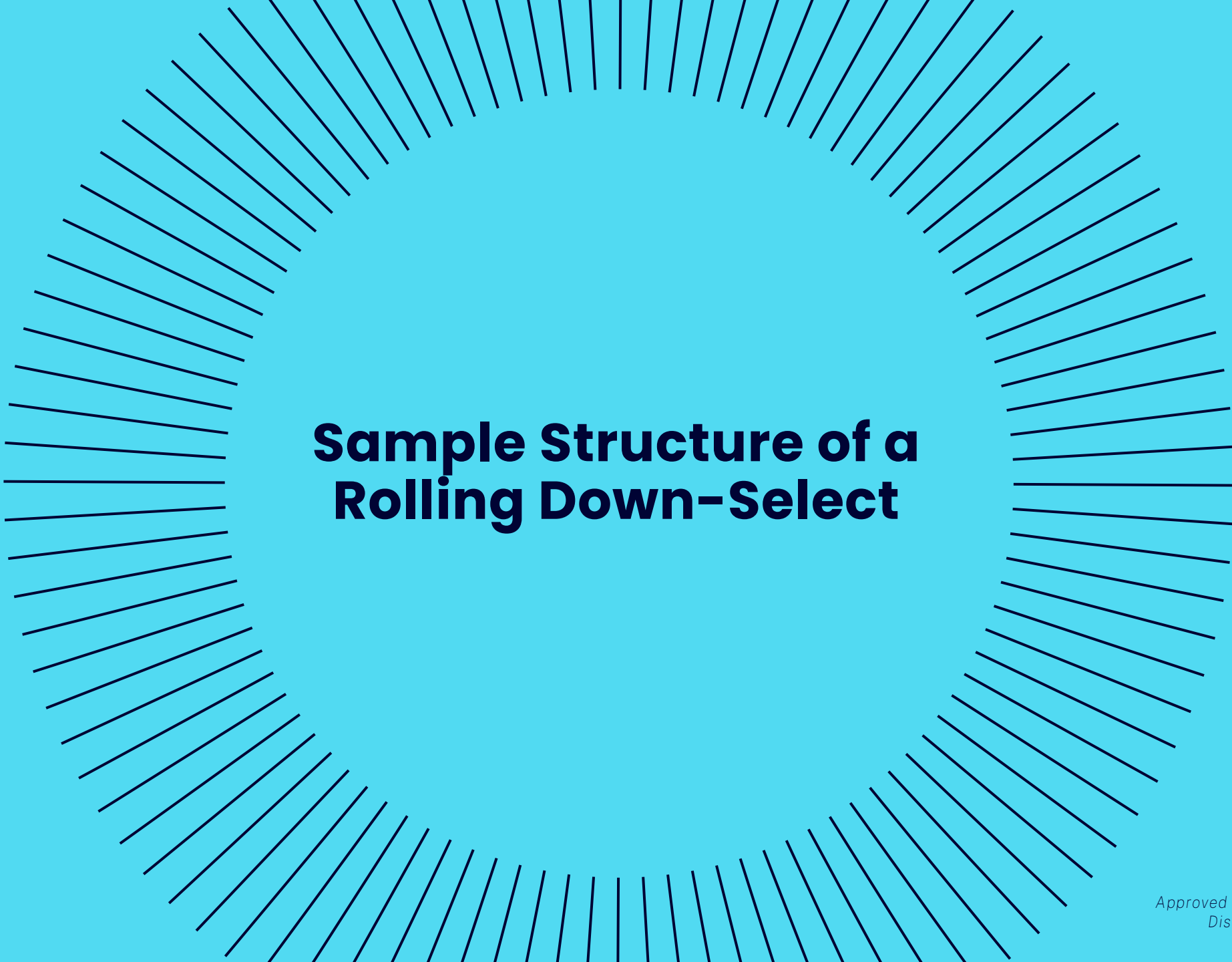
Advantages

- Allows the negotiation process to move more quickly
 - In earlier phase, the terms and conditions are simpler or some can be deferred
 - Cost/price is generally lower and easier to estimate
- Allows the government to watch and learn during each phase before soliciting for the next phase
- Maintains the government competitive leverage until later in program/project
 - Low dollar value initial phases allows for award to multiple competitors
 - Puts off the decision of “the winner” until later in the program
- Allows for discrete programmatic decision points

Disadvantages

- Can be time-consuming to track multiple teams, issue multiple solicitations, and/or renegotiate at various decision points
- Too much work for small programs/projects

No issue of scope or competition issues as the program/project continues since OTs are not subject to CICA.



Sample Structure of a Rolling Down-Select

Phase I

- **Scope** = Detailed design
- **Duration** = Generally longer duration (often 12 months or more)
- **Payment terms** = Milestone payments are often the most reasonable/specific approach should consider program, cost and technical risks
- **Terms and conditions** = If there's still on-going competition, terms will be more detailed but many difficult negotiation issues (i.e. IP) may not be addressed/finalized
- **Awards** = Multiple

Phase II

- *Scope* = Design concepts and/or trade studies
- *Duration* = Generally shorter duration (i.e., less than 12 months)
- *Payment terms* = Often payable milestones with fixed Government obligation
- *Terms and Conditions* = Usually simple and flexible/little need to address difficult negotiation issues yet like IP rights as long as competition is maintained
- *Awards* = Multiple

Phase III

- **Scope** = Test and Evaluation
- **Duration** = Usually based on negotiated test plan
- **Payment terms** = Fixed price with incentives or reasonable approach to address risk
- **Terms and Conditions** = No additional terms generally needed
- **Awards** = One

Phase IV

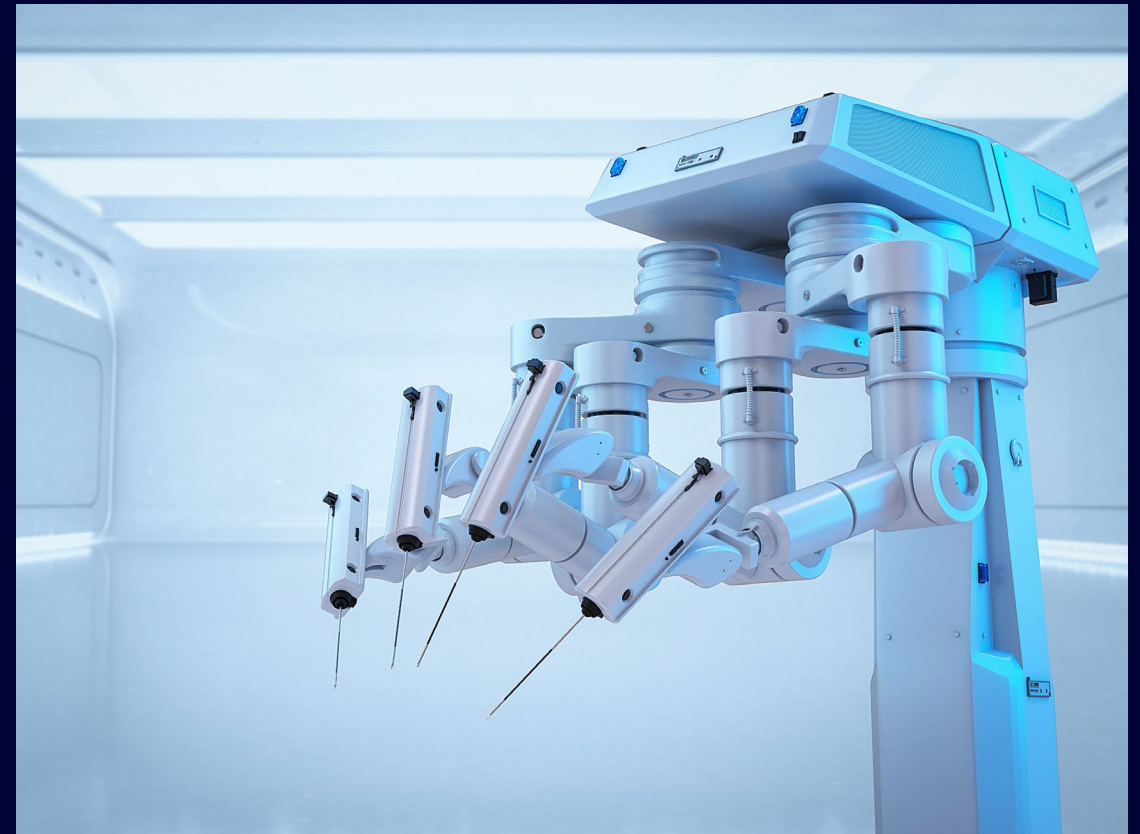
- **Scope** = Prototype build
- **Duration** = Will depend on the complexity and number of prototypes (often 12 months or more)
- **Payment terms** = Milestone payments often still most reasonable/specific approach should consider program, cost and technical risks
- **Terms and Conditions** = Terms and conditions must be fully negotiated before competition leverage is lost
- **Awards** = One

Phase V

- **Scope** = Fabrication of additional prototypes or production quantities
- **Duration** = Dependent on complexity and quantity
- **Payment terms** = Firm fixed price, payable milestones
- **Terms and Conditions** = If any, additional terms might be necessary relating to production
- **Awards** = One

Phase VI

- **Scope** = Life-cycle operations and support



OT Negotiations Topics

Perspective Type	Survey Ranking 1 (Most Important)	Survey Ranking 2	Survey Ranking 3	Survey Ranking 4	Survey Ranking 5	Survey Ranking 6	Survey Ranking 7 (Least Important)
Government Perspective Contracting	Intellectual Property (IP)/Data Rights	Deliverables and Milestones	Payment Terms and Invoicing	Termination	Foreign Licensing/Export Control	Disputes	Government Property
Government Perspective Technical	Deliverables and Milestones	Intellectual Property (IP)/Data Rights	Payment Terms and Invoicing	Termination	Foreign Licensing/Export Control	Disputes	Government Property
Government Perspective Legal	Intellectual Property (IP)/Data Rights	Deliverables and Milestones (Equal with Termination)	Termination (Equal with Deliverables and Milestones)	Foreign Licensing/Export Control	Payment Terms and Invoicing	Disputes	Government Property
Industry/Performer Perspective	Deliverables and Milestones	Intellectual Property (IP)/Data Rights	Payment Terms and Invoicing	Termination	Disputes	Government Property	Foreign Licensing/Export Control

NOTES:

- Feedback requested by ARPA-H in October 2025
- Feedback received from various government and performer personnel

OT Negotiations Lessons Learned (Government)

- Outcome-based approach > rules-based approach
- Risk-appropriate vs. risk-averse approach
- OT training for key personnel
- Start negotiations with a model agreement (with terms and conditions) or a blank sheet of paper
- Remember the intent of OT authority is to avoid “business as usual”
- Avoid incorporating unnecessary requirements (FAR-related or other)
- Focus on the agreement award → do not exhaust resources perfecting details
- Pick your battles, prioritizing most likely and most consequential terms
- A good business relationship and mutual commitment outweighs specific wording

OT Negotiations Lessons Learned (Industry/Proposers)

- Seek out OT training for key personnel
- Ask, do not assume
- Focus less on language and more on motivation
- Understand the history of Other Transactions and the Agency
- Closely review the Government's model agreement with terms and conditions if available/provided
- Establish effective collaboration, communication, and buy-in among stakeholders (e.g., teaming partners, sub-proposers)
- Identify non-negotiables and timely share concerns/risks
- Focus on the agreement award → do not exhaust resources perfecting option period details
- Right people in the room > number of people in the room



Value Analysis

Why is Analysis Important?

- The Government must be responsible stewards of taxpayer dollars, even with OTs
- In general, there are no required analyses techniques for OTs
- Analysis is required for any type of award where funding is involved
- AOs are responsible for evaluating the proposed price/costs to ensure the final price/costs are reasonable
- The government negotiation position may be formed by technical analysis performed by the Program Manager and analysis of value/costs/price by the AO
- Various analyses types:
 - Value analysis
 - Cost/price analysis
 - Technical analysis
- Solicitations should reflect planned analysis as much as possible

Cost Analysis and Cost Realism

- Cost analysis → the evaluation of separate cost elements and profit or fee in a proposal to determine a reasonable price or to determine cost realism, and the application of judgment to determine how well the proposed costs represent the proposed scope of work
- Cost analysis is performed on cost elements such as:



- Contracting personnel seek advice technical experts (PMs and AORs) by the way of technical/analysis and completed for all instrument types (new awards, effort changes, and cost growths)

Technical Analysis

- Should be performed by personnel with expertise in engineering, science, or management
- Should examine proposed elements that require technical expertise to determine whether costs are reasonable
- Potential elements or components:
 - Direct labor
 - Material, equipment, and other direct costs
 - Subcontracts
 - Travel
 - Profit or fee
 - Non-cost elements
- Should note any technical issues that will be need to be resolved during negotiations

Price Analysis

- Price analysis → the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit
- Preferred methods
 - Competitive pricing
 - Historical pricing
- Alternative methods (independent government estimate, parametric method, price lists, etc.)
- Value analysis



Value Analysis: What is it?

- Method to determine the government receives **at least** \$1 in value for every \$1 of taxpayer money spent (i.e., a reasonable price) without considering the make-up of each \$1 or using other price analysis techniques (e.g., competitive pricing)
- Way to formalize analysis contracting professionals perform (consciously and subconsciously) when they spend their own money
 - If I decide to go out for dinner, how do I decide which restaurant?
 - Afterwards, what makes me feel like it was a good choice, like I received a good value?
- Well-suited for OTs
- Strongest in conjunction with other analysis techniques
 - Price or cost analysis of specific elements of total price (e.g., labor rates proposed with market sources)
 - For FAR procurements, it **must** be used in conjunction with other price analysis techniques
 - For OTs, there are no requirements to use other techniques
- While subjective in nature, look for ways to quantify objectively, and above all else; be able to tell the story of why what you have identified results in value to the government



Possible Value Analysis Approaches

When strategizing for each project/program and the associated technical requirements (e.g., technical area metrics), consider the following:

- Intellectual property
- Milestones/schedule to develop the solution
- Innovation and scientific merit of solution/science
- Resource share (inherent value because we don't pay the full \$1)
- Anticipated life cycle costs of the solution
- Commercial efficiencies

The above is not all encompassing; and whatever is chosen is ideally quantitative as well as qualitative (e.g., calculating ROI rather than simply speculating about qualitative benefits).

Implementing Possible Approaches

- Which areas of value do you intend to target?
- What information do you **need** from proposers to perform this analysis?
- What areas might you evaluate outside of your value analysis? (e.g., cost element analysis)
- Plan to structure your solicitation, accordingly, recognizing the government must follow whatever approach is articulated in the solicitation.





Intellectual Property

Intellectual Property (IP)

- An intangible creation of the human mind, usually expressed or translated into a tangible form, that is assigned certain rights of property.
- Why is it important?
 - Protection of IP is one of the few specific topics mentioned in the US Constitution (Article I, Section 8, Clause 8) grants Congress the right to create the patent and copyright system.
 - The Patent and Trademark Office and the Copyright Office in the Library of Congress are two of the oldest civilian agencies in the Federal government.
 - The Founding Fathers wanted authors and inventors to share their creative works with society at-large with the understanding that their rights in those works would be protected for a limited period of time.
- What protects it?
 - A myriad of federal and state laws.
 - As to traditional regulatory guidance, the FAR provides the main coverage of patentable inventions for all agencies.

Basic Protection Methods

Over the years, four basic IP protection methods have been created

Patent	Copyright	Trademark	Trade Secret
<ul style="list-style-type: none">• Protects new, unobvious, and useful inventions• Can include utility, design, and plant/animal patents	<ul style="list-style-type: none">• Protects original works of authorship embodies in a tangible medium of expression	<ul style="list-style-type: none">• Establishes exclusive rights to use marks that distinguish one's goods and services from another	<ul style="list-style-type: none">• Protects secret business information from unauthorized use or disclosure

In exchange for making IP public, authors and inventors are granted a limited monopoly to use their IP and prevent others from doing so within their permission

Once the limited monopoly expires, however, the IP becomes available to society for any one to use within restriction

Patents

- To qualify for a patent, an invention must:
 - Be within the statutory subject matter
 - Be useful and novel
 - Not be obvious from the prior art to a skilled person
- Types of patents
 - Utility – covers processes, machines, and manufacturing methods
 - Design – covers visual ornamental characteristics of an item
 - Plant and Animal – covers asexually reproduced plants and animals
- What can't be patented?
 - Laws of nature or scientific principles (i.e., biology, chemistry, physics, math)



Patent	Duration
Utility and Plant/Animal	20 years from application filing date (before 6/8/1995 → 17 years from issue date or 20 years from filing date)
Design	15 years from issuance (before 5/13/2015 → 14 years)

The Bayh-Dole Act

- Major statutory framework governing ownership and use of patentable inventions in government contracts
- Passed in 1980 and codified at 35 U.S.C. § 202-204
- The original statutory language applies to nonprofits, including universities and small businesses
- In 1983, by executive order, the President extended coverage to large businesses
- Applicable to procurement contracts, grants, and cooperative agreements (**not OTs**)
- General policy of the Act
 - Promotion of commercialization and public availability of inventions created under government contracts
 - Assurance that the government would receive sufficient rights in the inventions for its use

The Bayh-Dole Act (cont.)

- What rights does the get in the invention?
 - A license that is Federal Government-wide and:



- What does the license allow the government to do?
 - Practice the invention itself
 - Have it practiced for or on behalf of the government throughout the world
- This type of license is commonly referred to as a “Government Purpose Right” (GPR)

Copyrights

What is covered under copyrights?

- Original works of authorship embodied in a tangible medium of expression
- Confers a bundle of rights
 - Reproduce the work
 - Make derivative works of the work
 - Distribute copies of the work
 - Publicly perform the work
 - Publicly display the work
- The owner can give away one right in the bundle, any combination of rights, or the whole bundle



Unique aspects of copyright:

- You can only copyright your expression of the idea (not the idea itself)
- You cannot prevent someone else from independently creating and disseminating the work
- Your work must be embodied in a tangible medium to be protected
- To be protected it must be original
- It can include published or unpublished works that are marked or unmarked
- U.S. Government employees can never get a copyright for works created during their official duties

Copyrights (cont.)

- Copyright is also unique in that the law allows for infringement in certain situations called fair use. Factors to consider if a use is “fair”:
 - The purpose and character of the use (commercial vs. nonprofit vs. educational)
 - The nature of the work (factual vs creative/ published vs unpublished)
 - The amount and substantiality of the portion used in relation to the whole
 - The effect on the potential market for the work

Copyright	Duration
Works created after 7/1/1987	- Life of the author plus 70 years - For joint works, the 70-year period begins with whoever dies last
Works for hire (anonymous and pseudonymous)	- 95 years from first publication or 120 years from creation (whichever is shorter)

License Rights Levels (FAR 27.4 and 52.227-14)

Type	Definition
Unlimited	Right to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permits others to do so.
Limited	Right of the government in limited rights data as set forth in a Limited Rights Notice.
Restricted	Right of the government in restricted computer software as set forth in a Restricted Rights Notice.

What Rights Does Government Get? (FAR 27.4 and 52.227-14)

Type	Description
Unlimited	<ul style="list-style-type: none">• Data first produced in data first produced in the performance of the contract• Form, fit, and function data delivered under the contract• Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under the contract• All other data delivered under the contract unless provided otherwise for limited rights data or restricted computer software
Limited	<ul style="list-style-type: none">• Data (other than computer software) that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.
Restricted	<ul style="list-style-type: none">• Computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

Regulatory License Rights Types – DoD Example

Type	Definition
Unlimited	Right to modify, reproduce, perform, release or disclose technical data in whole or in part, in any matter, and for any purpose whatsoever, and have or authorize others to do so.
Government Purpose (GPR)	Right to use, modify, reproduce, release or disclose the technical data or computer software within the government without restriction and outside of the government for a government purpose.
Limited*	Right to use, modify, reproduce, release, perform, display, or disclose technical data, in whole or in part, within the government.
Restricted**	Basically a shrink-wrap license. Right to: use a computer program with one computer at one time; transfer a computer program to another government agency without permission of the Contractor if the transferor destroys all copies of the program and related computer documentation; make the minimum number of copies of computer software required for safekeeping (archive); backup or modification purposes; modify computer software; and permits contractors or subcontractors performing services in support of a contract to use computer software for correcting deficiencies.

* Applies only to technical data

** Applies only to noncommercial computer software

What Rights Does Government Get? – DoD Example

Type	Definition
Unlimited	<ul style="list-style-type: none">• Data or software developed exclusively with government funds• Software documentation required to be delivered under the contract• Studies, analyses, test data, and similar data produced by the contract• Form, fit, and function data (describing overall physical, functional, and performance characteristics of an item)
Government Purchase (GPR)	<ul style="list-style-type: none">• Software, items, components, or processes developed with mixed funding• The government gets GPR for five years or other negotiated period, after which the right converts to unlimited
Limited*	<ul style="list-style-type: none">• Items, components, and processes developed exclusive at private expense• This category does allow for release of government support contractors and gives the owner the right to ask for NDAs executed directly with the support contractors
Restricted**	<ul style="list-style-type: none">• Noncommercial computer software developed exclusively at private expense• This category does allow for release to government support contractors and gives the owner the right to ask for NDAs executed directly with the support contractors

* Applies only to technical data

** Applies only to noncommercial computer software

IP Coverage by Contracting Vehicle

Vehicle	FAR / HHSAR / Other	Bayh-Dole	2 CFR 200	Negotiable?
Procurement Contract	YES	YES	NO	Somewhat
Grant	NO	YES	YES	Somewhat
Cooperative Agreement	NO	YES	YES	Somewhat
OT	NO	NO	NO	YES

Questions for Negotiations

- Who owns the invention?
- Does the Proposer or U.S. government have the right to use the invention?
- If the U.S. government has rights, what can they disclose?
- What does the U.S. government intend to use the rights to do?
- What are the Proposer's commercialization plans/goals?
- What does the PM consider negotiable based on project/program objectives?

Lessons Learned and Suggestions (1 of 3)

- OTs allow for **complete flexibility and freedom** in negotiating rights
 - No statutory or regulatory requirements or restrictions
 - FAR/HHSAR/other regulations and statutes are not applicable, but may be leveraged
- Develop and document an IP strategy at project initiation
 - Capture IP rights in initial project phase(s) and consider long-term IP needs (commercialization)
 - Update IP rights as project progresses (as appropriate)
- Model OT IP Article for Patents and Data Rights
 - All aspects of the article are negotiable upon consideration of the project and Proposer's rationale
 - Typical "going-in" position:

Notification of
invention and
patent election
(for patents)

Definition of "data"
(for data rights)

Definition of
(negotiated) rights
(for data rights)

March-in rights

Lessons Learned and Suggestions (2 of 3)

- Negotiation factors:
 - Allocation of rights may depend on the technology or pre-existing commercial rights or license
 - Become familiar with standard rights in the industry
 - Consider Proposer's investment through previous investments and resource sharing
 - Recall the goals of the Performer and government as identified in an agreement vision statement and commercialization plan
 - Remember there are no standard approaches or required positions
 - Use a team approach (PM needs to identify what is key for project/program success and what is negotiable)
- Some items to consider:
 - Dealing with the Freedom of Information Act (FOIA)
 - Government support contractors



Lessons Learned and Suggestions (3 of 3)

- During negotiations, the government should consider leveraging IP rights for cost savings
- The level of IP rights offered by the Proposer can be considered in the evaluation of the overall business deal
- Remember that generally IP rights given to the government live on forever (long after the OT agreement is over):
 - Consider the life-cycle of the technology, not the OT period of performance
 - Negotiate as complete an IP package when possible while the government still has competitive leverage
- If the government is flexible with regards to IP (or cannot be), be upfront and clear with industry and clearly articulate the government's position in the solicitation





Resource Sharing

Resource Sharing (1 of 3)

- May be required as a condition for OT use:
 - DoW research OT has a default 50/50 going-in position but that can be adjusted based on the circumstances
 - DoW prototype OT requires 1/3 of project costs to be paid by parties other than the government if other statutory conditions not met
 - DoT only allows government to cover 80% of project costs (exceptions apply)
- Could be leveraged depending on the Performer's commitment to pursue the technology into commercialization
- Resource sharing requirements should differ based on unique project characteristics and Performer circumstances
- Should make good business sense
- Can be easier with fixed amount agreements
- Performer should **not** get profit/fee when there's resource sharing

Resource Sharing (2 of 3)

- Should be evidence in proposal of Proposer's commitment to and self-interest in project success
 - May reduce the need or level of government oversight
 - Reflected in resource share proposals
- Instances when resource sharing may *not* be appropriate:
 - To attract participants, particularly small businesses or innovative entities
 - Unusual technical or business risks expected with project
 - Performer has limited investment or involvement with prior projects related to focus area
 - The government has inadequate budget(s) for planned efforts and is relying on industry to provide funding
 - Uncertainty with regards to technology's dual-use

Resource Sharing (3 of 3)

- If resource sharing is used:
 - The Offering Team must meet the requirement (does not need to be uniformly imposed on all Performer team members)
 - The government's primary goal should be resource sharing (not resource matching)
 - Involve assets that will be used in the project performance (not just items with inherent value)
 - Expectations should be as straightforward and clear as possible to all parties (clearly defined within articles and other agreement documents as needed)
 - Performers should **not** get profit/fee
- Two components of resource sharing:
 - Cash: funds/outlays to support the project
 - In-Kind: reasonable value of equipment, materials, or other property used in the performance of the work to be done under the OT

Resource Sharing (Cash)

- Components
 - Direct labor
 - Benefits
 - Direct overhead
 - Materials expense
- Sources:
 - Profit or fee from another government contract
 - Overhead or capital equipment expense pool

Resource Sharing (In-Kind)

- Components

- Equipment/space/land – fair market value
- In-house materials
- Intellectual property
 - Must be central to the project
 - Real or incidental resource
 - Fair market value

- Valuation

- Burden of proof is on the Proposer/Performer
- Key elements will be the relevancy to and method of use in the project

Resource Sharing (In-Kind) (cont.)

- Constraints
 - No foregone profit or fee
 - No cost of money or earned profit/fee
 - No sunk costs or prior research unless a reasonable valuation and relevance to the current project can be established
- Key Considerations Before Accepting In-Kind Resources
 - It is necessary to the overall project?
 - Is it under the control of the Proposer's program management team?
 - Is this the only source for the in-kind?
 - Is it reasonably valued?
 - Is it supported by verifiable data?

Resource Sharing (Quality of Sources)

Quality Rating	Resource Sharing Sources
High	<ul style="list-style-type: none">• Cash• Other liquid assets
Moderate	<ul style="list-style-type: none">• In-kind commitments of resources• Fair market value of facilities and equipment dedicated to project
Low	<ul style="list-style-type: none">• Non-dedicated personnel• Non-dedicated in-kind
Poor	<ul style="list-style-type: none">• Cash which availability is not clearly or convincingly demonstrated• In-kind which availability is not clearly or convincingly demonstrated

Resource Sharing – Example (80/20)

OT Financial Summary

- Total OT Project Budget: \$50.0M

Government Resources

- Total Government Resources: \$40.0M (80%)

Performer Resources

- Cash: \$8.0M
- In-Kind (Equipment): \$2.0M
- Total Performer Resources: \$10.0M (20%)

Resource Sharing – Lessons Learned

- Be knowledgeable about:
 - Availability
 - Timeliness
 - Control of resources
- Document details within your agreement file
 - What sources of resourcing sharing were accepted and applied
 - How you determined the value of in-kind contributions
- Document the value of in-kind contributions per Performer team member
- Do *not* overvalue in-kind contributions



Day 2

Course Roadmap – Day 1

Session/Topic	Notional Time (ET)	Audience
Intro	0900-0920	All
Federal Contracting & Acquisition Review	0920-0950	All
OT Overview: <ul style="list-style-type: none"> • Terms/Definitions/Stakeholders • What Applies/What Does Not Apply • Review of OT Use Cases • Real World OT Use Cases 	1000-1200 (includes break)	All
Business Strategy & Approaches	1300-1400	Government
Value Analysis	1410-1450	Government
Intellectual Property (IP)	1450-1550	All
Resource Sharing	1600-1630	All
Open Q&A/Ask Us Anything	1630-1700	All

Course Roadmap – Day 2

Session/Topic	Notional Time (ET)	Audience
Day 1 Recap/OT Community Overview/Open Q&A	0900-0930	All
Teaming	0930-1020	All
Payable Milestones	1030-1130	All
Property (Government Furnished Property)	1130-1140	Government
Sample Agreement	1140-1250	All
Conclusion/Wrap	1250-1300	All



Day 1 Recap

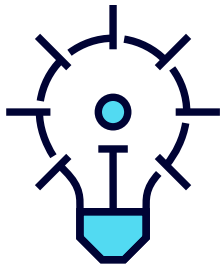
OT Community Overview
Questions

Why is an OTC Needed?

- Broadly speaking, OT authority is misunderstood (not embraced) across the Federal government and not utilized to the greatest extent
- Proposers and performers can better understand OTs and key differences from traditional contracts and financial assistance instruments
- OT training and outreach opportunities are not widely available across the Federal Government
- ARPA-H personnel have diverse OT and professional training experience and are willing to assist others
- Not all Federal government agencies have OT authority, but some have obtained the authority in recent years and some without authority are seeking it

Benefits of the OTC

- Assist entities appropriately and effectively use OTs relative to authorities
- Create and maintain a network of OT experts across the Federal government
- Share OT information/resources (i.e., samples, templates, guides, FAQs, lessons learned, best practices) and promote valuable collaborations between government entities and industry
- Participate in OT policy and guidance development or changes at the Federal/Department/Agency level



How to Connect?

- Website: <https://arpa-h.gov/engage-and-transition/other-transaction-community>
- Email: OTCommunity@arpa-h.gov (for OT questions, request assistance, suggestions to enhance OTC website, etc.)





Teaming

Teaming

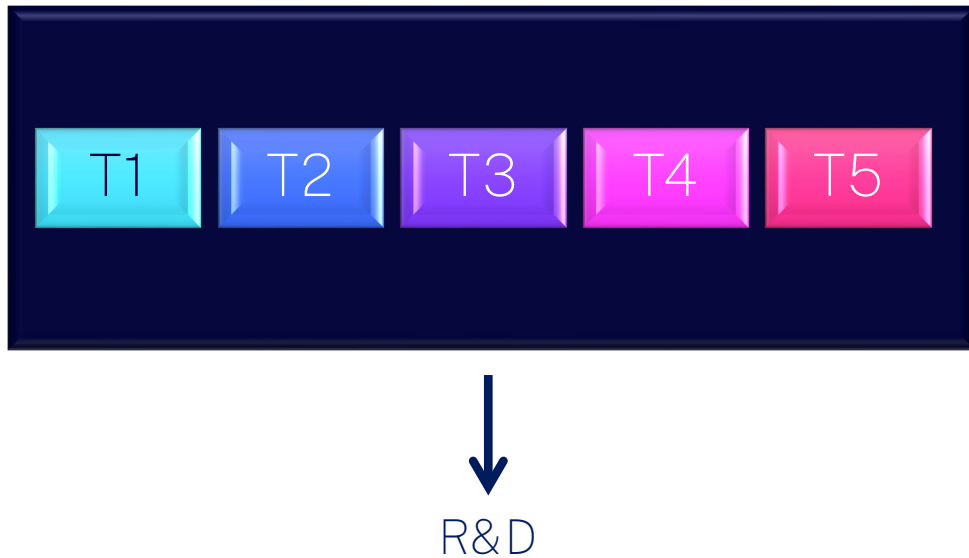
- In complex acquisitions or programs/projects, it is rare that a single Performer can accomplish all tasks
- Performers come together to accomplish a project for a variety of reasons
 - Most common reason is to make money
 - Goal may also be to create strategic alliances (short-term or long-term) in both government and commercial sectors
- Commercial companies often work together in structures based on two different sets of market forces



Teaming Structures

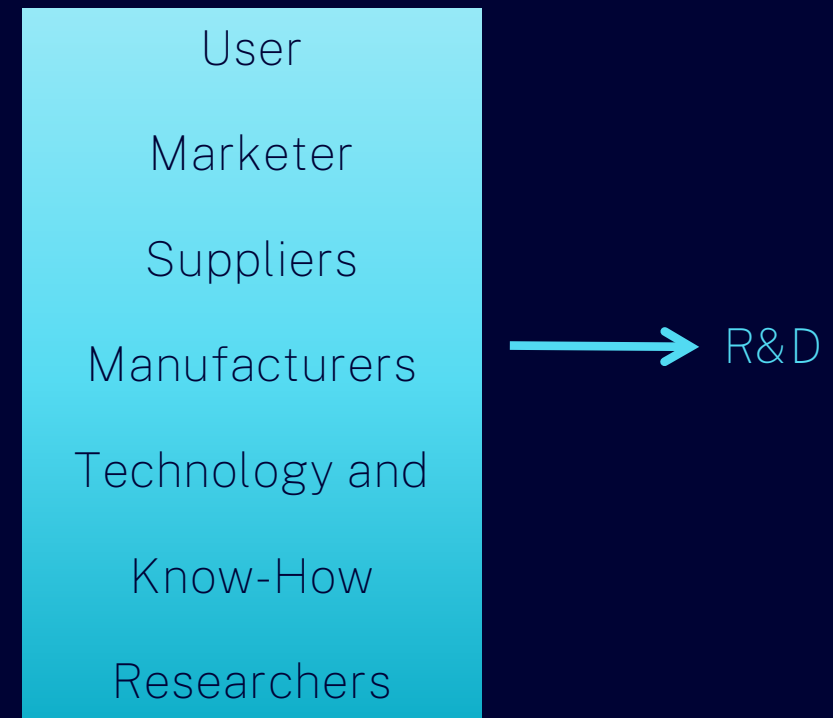
Vertical

- Multiple performers who each play a role at a different stage of a product's life-cycle
- Symbiotic relationships, but time may be an issue



Horizontal

- Multiple competitors who come together to accomplish a common goal or solve a common problem
- Resources plentiful, but trust may be an issue



Teaming Structures (cont.)

There is a variety of team structures that might evolve but they tend to fall under three basic groupings:



Prime/sub
relationship



Partnership



Multi-party
relationship

Each has its advantages and disadvantages

Some entities are more familiar to the Government

Some work better in certain types of arrangements

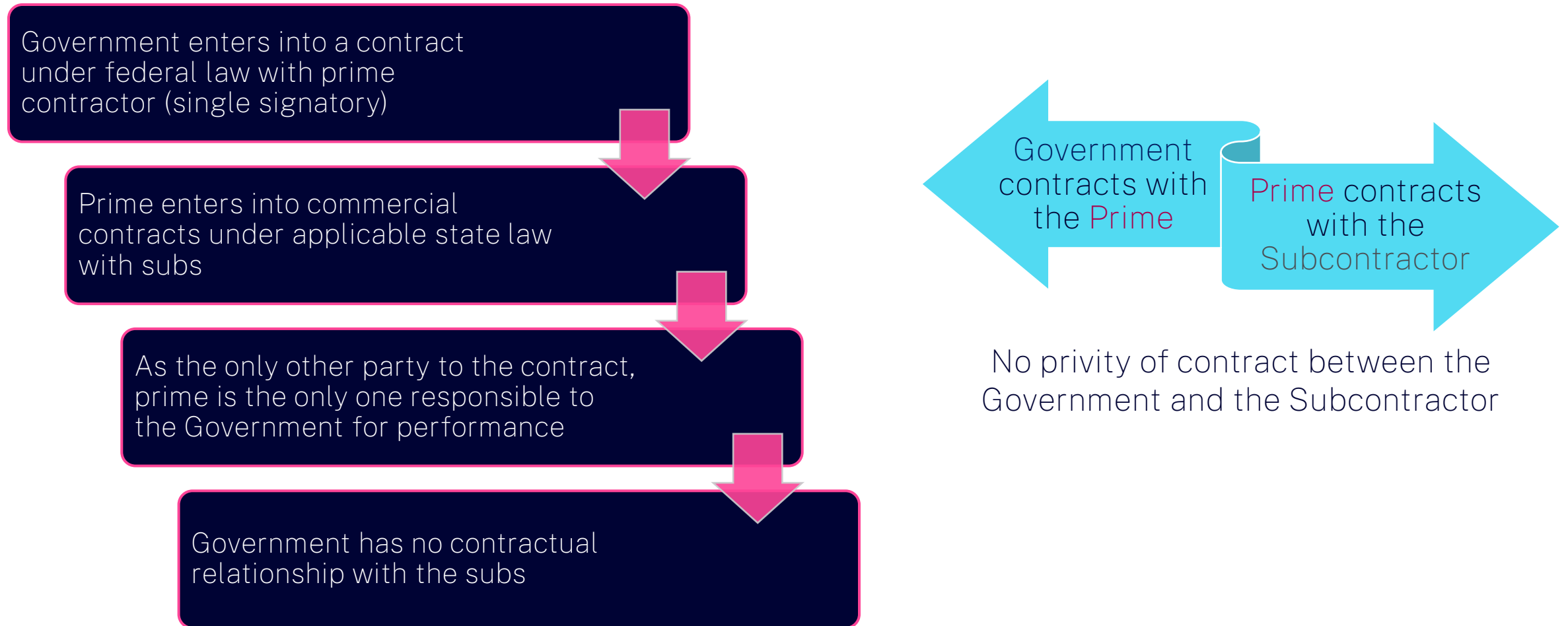
Some are easier to manage (either by the team itself or the Government)

Teaming (Privity of Contract)

- Regardless of structure, before entering into an agreement, the government needs to understand the legal relationship it will have with the Performer team
- A contract law doctrine that prevents any person from seeking the enforcement of a contract or suing on its terms, unless they are a party to the contract
- Privity of contract = the signatories to the contract are the parties and only they will be bound to the contract terms



Privity of Contract in Prime/Sub Relationship



Prime/Sub Relationships



Advantages

- The most familiar arrangement for most people
- There is one person that is clearly responsible to the government
- There is only one person with whom to negotiate
- The prime is responsible for managing the subs and addressing any issues
- Only the prime can file suit with the government

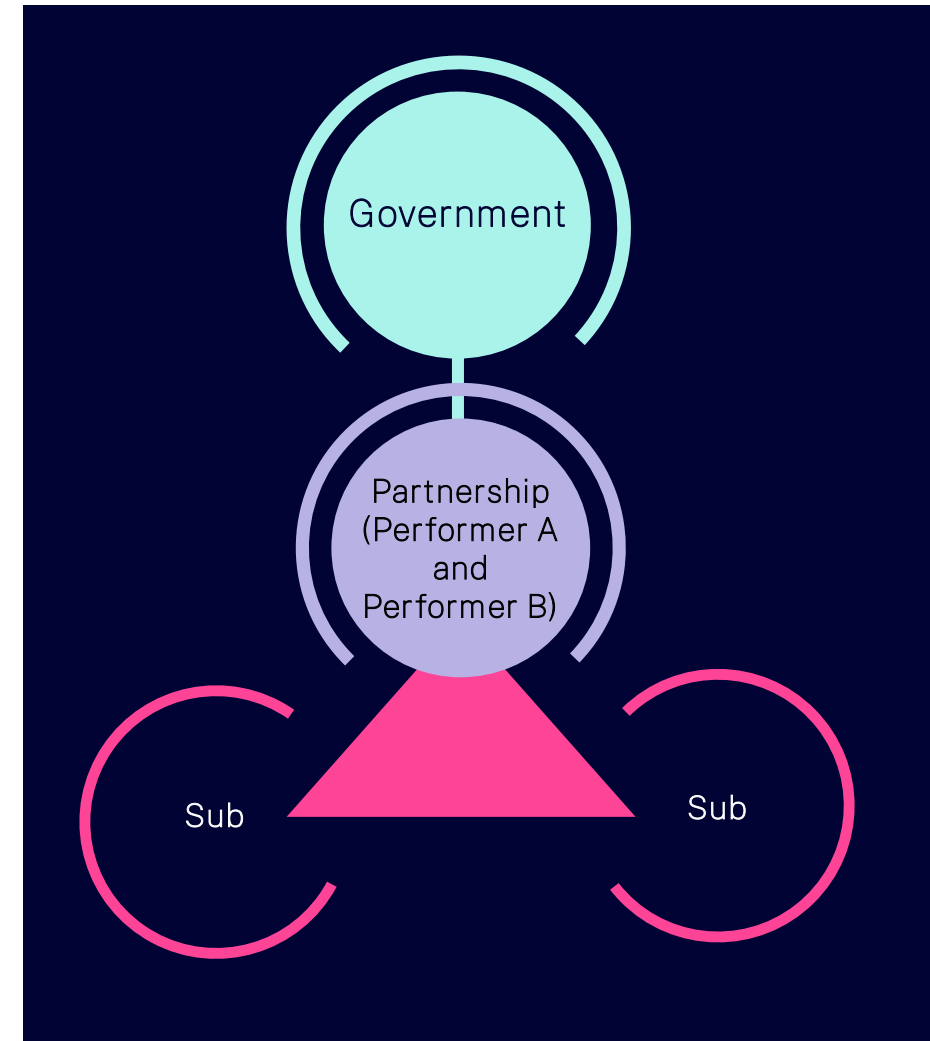


Disadvantages

- Creates an artificial separation between the government and sub-tier participants
- If the prime does not perform, the whole thing falls apart
- If the prime does not manage the team well, it can either fall apart or the government finds itself in the middle
- You cannot change leadership mid-program
- There is a cost to having a prime (pass-through fee)

Privity of Contract with a Partnership

- Performer A and Performer B enter a partnership relationship governed under state law
- Partnership becomes a separate legal entity and is treated like a separate person
- Both partners share jointly in the responsibilities and rewards of the partnership
- Government enters a federal contract with the partnership
- Partnership enters commercial contracts with the subs
- Government has privity of contract with the partnership – and by extension each partner
- Government has no privity of contract with the subs



Partnership Relationships



Advantages

- The partnership is a legal entity so, in many ways, it's like dealing with a prime
- The partnership can leverage the resources and talents of all the partners
- The partnership determines how it will internally manage and present a united front to the government
- The terms of the partnership may allow new members to be added or some to leave the partnership
- Leadership of the partnership can adjust and evolve with program progression
- The partners are generally jointly and severally liable for the partnership performance

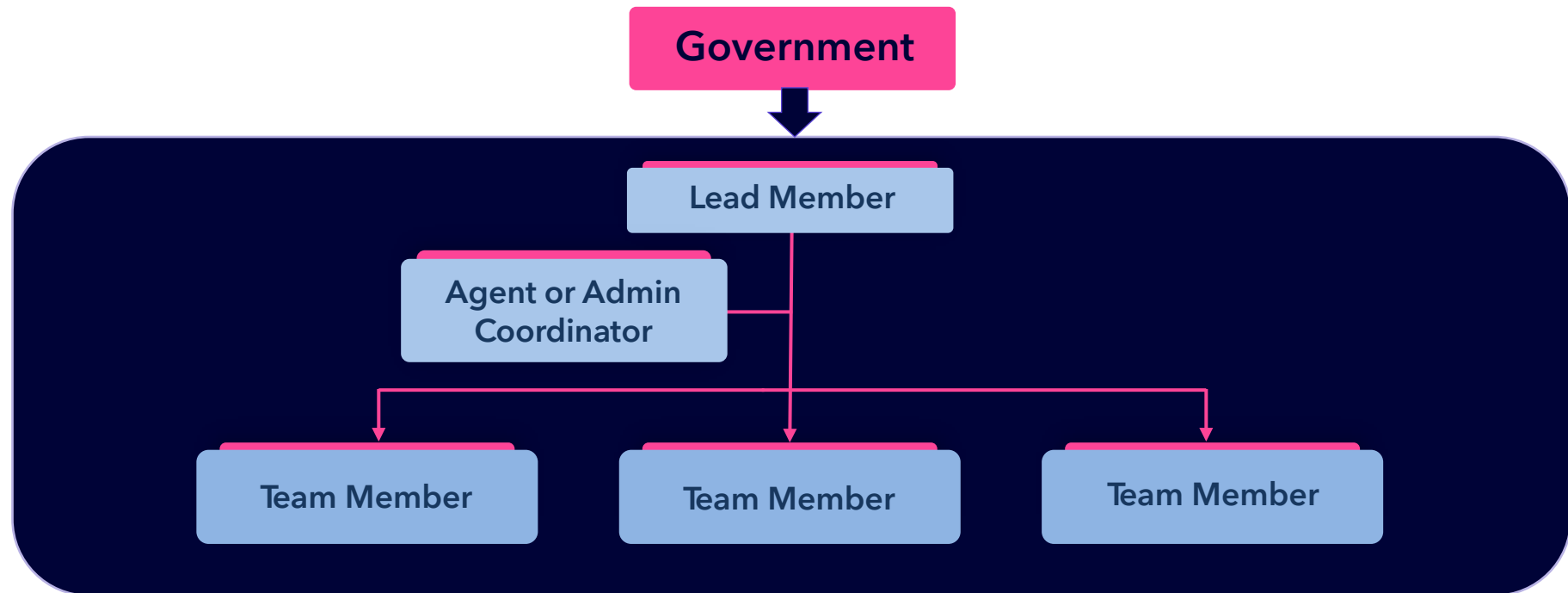


Disadvantages

- The relationship of the partners can cause internal conflict(s)
- If the partners are usually competitors, they may not easily share info or work between them
- If the partners don't have an equal relationship – either in voting on partnership decisions or in benefits received – it can make for a difficult relationship
- The partnership needs to be established and formalized before negotiating with the government (which can add time to the process)

Privity of Contract with a Multi-Party Team

- Team membership and dynamics defined by a contract signed by all members (i.e., Article of Collaboration)
- Team elects one member to act as their agent with the government or hires an administrative coordinator
- Government signs agreement with the team (the team agent signs the agreement)
- Government has direct privity with all team members

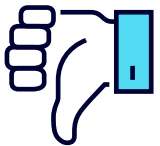


Multi-Party Relationship



Advantages

- Because the team has chosen to work together in a collaborative way, the hope is that the alliance will be advantageous to all members and continue past this agreement
- Since the government has signed the agreement with the entire team, it can have technical insight and visibility into all levels of technical and management actions
- If any resource sharing is required or leveraged, it will come from the team (how they choose to allocate the resource sharing is up to them)
- Since the team is bound to the government and responsible for performance, the responsibility is on the team to self-police the effort and quickly respond to issues
- Leadership of the effort can change as the effort evolves

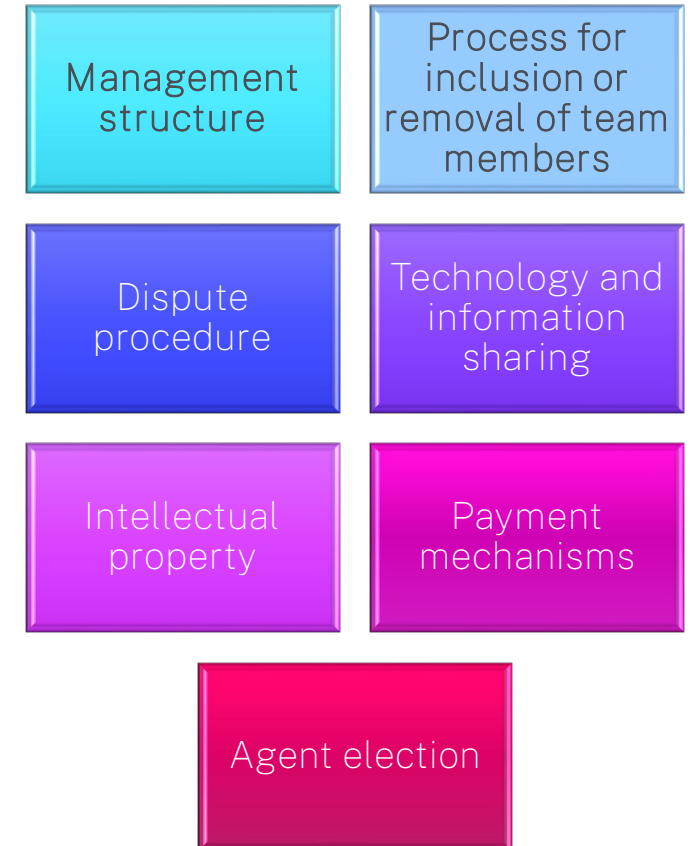


Disadvantages

- While the teams are the party to the agreement and the government has privity with all the members, it is still important that membership select a strong leader to maintain the vision and effort direction
- Loose confederations and management by committee does not really work well
- The larger the team membership, the more important strong leadership and management is
- This type of relationship is relatively unfamiliar to the government and may cause some cultural problems

Multi-Party Relationships – Key Attributes for Success

- The team/consortium does not have to be a legal entity (i.e., partnership, JV), but must be bound together legally before signing the OT with government
 - This binding document will be some type of teaming agreement or Article of Collaboration (includes a set of terms/procedures which will govern the activities and relationships of the participants in the team and how they will interact as a group with the government under the agreement)
 - The government is **not** a party to the document and should **not** dictate its terms
 - It's a commercial arrangement
 - At most, we want to know it's been signed and that the Government does not have any responsibilities under it
- The binding document needs to be in place and executed by the members before the agreement with the government can be signed
 - Ideally it should be in place prior to negotiations with the government
 - The team needs to address how risks, rewards, and responsibilities will be handled internally before they can effectively negotiate terms with the government



Multi-Party Relationships – Consortia or Team

Why might this teaming structure be beneficial?

- *Programs may have different aspects (phases/stages/ complexity), requiring different types of performers to work together*
- *Consortium may be fluid – membership can change, lead member can change*
- *Consortia will generally self-police performance*
- *Contract administration is streamlined*



Multiple performers form one consortium usually to focus on a singular goal, different performers may focus on different aspects of performance. Participating teams agree on (and sign) articles of collaboration or teaming arrangement (forming the consortium). Consortium usually appoints a lead member (may be primary point of contact for administration, performance, payments, etc.,).

Teaming Examples*

- Government IDIQ Consortia
 - Government Sponsor, Consortium Manager, and Consortium Members
- Government non-IDIQ Consortia
 - Government Sponsor and Consortium Members (represented by a lead member)
- Airbus Industrie GIE
 - Comprised of four companies
- Hulu
 - Comprised of four companies



* Not all are organized under the “IDIQ” consortium model

Teaming Best Practices



Generally, teaming works best if it's organic

Teams should generally "live" and flourish past government funding and involvement



There may be reasons for the government to dictate a particular structure, but teams tend to work together better if the decision is left to them



Government should not be "matchmaking" or "marriage brokering"



Government can encourage teaming via solicitations, Proposers' Days



Consider flexible teaming arrangements that may address different goals in different phases (as priorities shift during stages in a program or effort, consortia lead members may rotate in and out)





Payable Milestones

Payment Structures

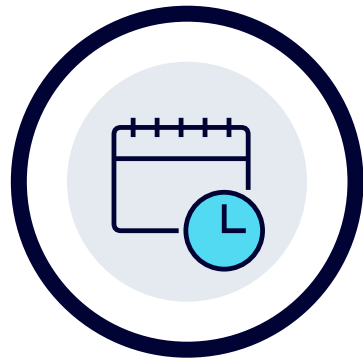
- Two *broad* OT types:
 - Fixed price → Payments **not** based upon amounts generated from the Performer's financial / cost records
 - Expenditure-based → Payments based upon amounts generated from the Performer's financial / cost records
- OT types and payment structures are negotiable (not a one-size-fits-all)
 - Apply good business sense
 - Document OT type and payment structure within agreement file
 - Identify the basis and procedures for payment within OT articles
 - Schedule, delivery, performance incentives are allowable

Payment Structures (cont.)

Considerations when setting up a payment structure



Nature of the agreement



State or phase of the project/program



Risk or complexity involved



Established milestones



Performer's accounting system

- Consider the Performer's current accounting system capabilities
- Avoid imposing system requirement that cause the Performer to revise and/or add system(s)
- Performer registration generally required in existing government procure-to-pay applications for payment processing (i.e., PMS, PIEE, etc.)

Payment Structures – Payable Milestones

- Why create a different payment methodology for OTs?
 - There is a concern in the private sector over the way the government pays
 - Firm Fixed Price
 - Cost Reimbursement
- The government needed to foster a new relationship with industry that included getting them paid more quickly and using their own internal systems/processes



Milestone Payments

- Method to finance the government's share of agreement expenditures
 - Similar to progress payments
 - May help the Performer with cash flow needs
 - Management tool to verify observable achievements on the critical path to ensure OT success
 - Reduce administration burden
 - May be non-consecutive, conditional, contingency-based, incrementally funded, or designed in any other manner or combination of manners
 - May include priced options
- Teams shall clearly document the milestones in the agreement

Milestone Payments (cont.)

- Milestones should typically reflect observable technical events or other key actions
 - Generally quarterly events (i.e., kick-off, management reviews, technical reports, final report)
 - Some activity significant to the progress of the project/program
- Each milestone has a value that is negotiated at the time of award
 - Value typically based on a good faith estimate to reach the milestone
 - Milestones may have to be prospectively adjusted as project progresses
- Payment is dependent on achieving the associated milestone
 - Achievement of milestones does not necessarily mean the technology or event was successful
 - Establish exit criteria for each milestone
 - Focus on the necessary effort to reach the milestone and perform the event
 - Even if the event or technology is a failure, the Performer should still be paid if they put in the necessary effort to be fully prepared

Milestone Payments (cont.)

Fixed Milestones

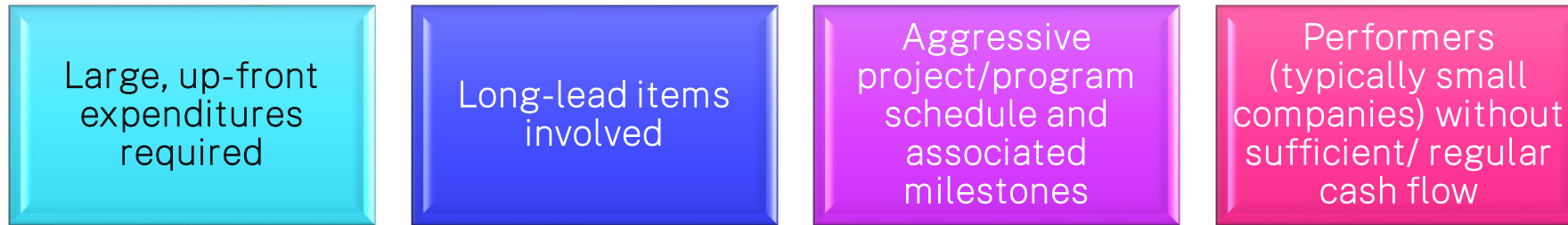
- Each milestone amount is fixed at time of award
- If the Performer achieves the milestone, it is paid the milestone amount (regardless of actual cost)

Expenditure-based Milestones

- Milestones have an estimated amount, but payment may be based on actual costs
- If the Performer achieves the milestone, it is paid based on actual costs (actual payments may or may not match the milestone award amounts)
- Milestone award amounts may not match actual expenditures at the time payment is made

Advance Payments

- OTs allow for advance payments (unless statutory language specifically prohibits use)
- Scenarios where advance payments may be appropriate:



- Exercise sound business judgement before allowing advance payments
- Document if advance payments are used (within agreement file and agreement articles)
- If advance payments are used, address interest earned and the need to establish an interest-bearing account

Milestone Payment Example

Milestone	Task(s)	Due Date (Months after award)	Milestone Definition	ARPA-H Payment
1	10	1	Kickoff and Program Management <i>Exit Criteria:</i> <ul style="list-style-type: none"> Attend kick off meeting Complete hiring of all required personnel; subcontract negotiations underway <i>Deliverables:</i> <ul style="list-style-type: none"> Kickoff slides/materials Project Plan for all tasks deliverables across milestones. Report on progress of subcontract awards (DATA RIGHTS)	\$50K
Appropriation Data/Funding amount:				
2	4	3	Commercialization Plan <i>Exit Criteria:</i> <ul style="list-style-type: none"> Meeting with Government Team to develop commercialization strategy Up to date on technical status reporting requirements <i>Deliverables:</i> <ul style="list-style-type: none"> Report detailing initial commercialization & marketing plan (DATA RIGHTS)	\$100K
Appropriation Data/Funding amount:				

Milestone Payment Example – Advance Payment

Milestone	Task(s)	Due Date (Months after award)	Milestone Definition	ARPA-H Payment
1	10	1	Kickoff and Program Management <i>Exit Criteria:</i> <ul style="list-style-type: none">• Attend kick off meeting• Complete hiring of all required personnel; subcontract negotiations underway <i>Deliverables:</i> <ul style="list-style-type: none">• Kickoff slides/materials• Project Plan for all tasks deliverables across milestones.• Report on progress of subcontract awards (DATA RIGHTS)	\$300K
Appropriation Data/Funding amount: \$300K				

Milestone Payment Example – Incentive Payment

Milestone	Task(s)	Due Date (Months after award)	Milestone Definition	ARPA-H Payment
3a	1, 2, 3	4	Initial Design of “X” technology <i>Exit Criteria:</i> <ul style="list-style-type: none"> Completed design, validation, and optimization of “X” technology Up to date on technical status reporting requirements <i>Deliverables:</i> <ul style="list-style-type: none"> Report detailing the validated technology Phase 1 Final Report (DATA RIGHTS)	\$245K
Appropriation Data/Funding amount:				
3b	1, 2, 3	6	Initial Design of “X” technology <i>Exit Criteria:</i> <ul style="list-style-type: none"> Completed design, validation, and optimization of “X” technology Up to date on technical status reporting requirements <i>Deliverables:</i> <ul style="list-style-type: none"> Report detailing the validated technology Phase 1 Final Report (DATA RIGHTS)	\$215K
Appropriation Data/Funding amount:				



Government Property

Property

- The term “property” means any tangible personal property other than property actually consumed during the execution of work under an OT
 - Does not include IP
- Background statutes and decision:
 - Federal Property and Administrative Services Act (FPASA) of 1949 (P.L. 81-152), Title II
 - Disposal provisions apply
 - Federal Grant and Cooperative Agreement Act of 1977 (P.L. 95-224, as amended)
 - Applies to extramural activities
 - Comptroller General Decision (51 Comp. Gen, 162, 165 (1971))
 - Officers of the government have no authority to give away money or property of the US
 - Per the FPASA, through the disposal process, property may be donated to state and local government, universities, and nonprofit entities
- Title to Property – The government is not required to, and generally should not, take title to physical property acquired or produced by a private party signatory to an OT, except property the agreement identifies as a deliverable (if any)

Property (General Considerations)

- *Do not* take title to property under OT unless specifically necessary
 - The government is **not required** to take title to the property acquired or produced by the Performer
 - Focus on the OT deliverables
 - If possible, acquire property outside of the OT agreement
- The majority of the OT funding should be used for labor related to the scientific/technical efforts
- Consider (whether known or expected in the future) if efforts will be fostered by the government owning the property
- For OTs involving property, the Performer:
 - Retains title and responsibility until delivery
 - Retains responsibility for day-to-day maintenance (assumes risk of loss) of the property until the delivery or agreement ends
 - May use commercial best practices to maintain the property
- When funding an effort when property is acquired, the government should delay taking title until the end of the agreement

Property (General Considerations)(cont.)

- If the government takes title to, or if the government furnishes property (GFP) to the Performer, the OT agreement documents and terms should identify the following:
 - List of property to be furnished for the performance of the OT
 - Entity responsible for maintenance, repair, or replacement of property
 - Entity liable for loss, theft, destruction of, or damage to property
 - Entity liable for loss or damage resulting from property use
 - Procedures for accounting for, controlling, and disposing of property*
 - Guarantees (if any) regarding the property's suitability for intended use
- If the Performer provides physical property as in-kind for resource sharing purposes, the property will become a program asset, will need to be valued, and dispositioned upon agreement completion

* Commercial property management systems can be used



OT Resources

Key OT Stakeholders and Responsibilities

- **Agreements Officer (AO)**
 - The warranted individual with authority to award, administer, modify, and terminate OTs (responsibilities are similar to those of a warranted Procuring Contracting Officer for procurement contracts)
- **Agreements Officer's Representative (AOR)**
 - The individual that assists the AO in the development and management of OTs and helps ensure performers meet the commitments of their OTs (responsibilities are similar to those of a Contracting Officer's Representative for procurement contracts)
- **Approval Authority**
 - The official with authority to approve the use of OTs
- **Performer**
 - The entity(ies) that is/are the signatory authority to an OT agreement and responsible for project performance
- **Sub-Performer**
 - An entity, other than the Performer, performing effort under an agreement via an arrangement with the Performer

Key OT Stakeholders and Responsibilities (cont.)

- Senior Procurement Executive (SPE)
 - The official responsible for the procurement system and providing procurement authority (usually involves managing OT-related processes)
- Program Manager (or Project Manager) (PM)
 - The individual assigned to manage the OT (cost, schedule, and technical progress)
- Project Team
 - A team comprised of personnel from various functional areas with the shared objective to execute an OT project and achieve the project goals
- Consortium Manager (or CMF)
 - The entity that manages a consortium and serves as the primary interface between the government and consortium members for an OT project (if applicable)

OT Resources

- ARPA-H's OT Community
 - <https://arpa-h.gov/engage-and-transition/other-transaction-community>
- National Contract Management Association (NCMA) Agile/Innovative Contracting Community of Practice (must be active NCMA member to join)
- DoD OT Guides (DoD-focused):
 - OTs Guide (2025)
 - Guide to Research OTs (2023)
 - IP Guidebook (2025)
- Defense Acquisition University's OT Community of Practice and Counsel Corner sites (DoD-focused)
 - <https://www.dau.edu/cop/ot>
 - <https://www.dau.edu/events/ot-counsel-corner>
- DARPA Acquisition Innovation site (DoD-focused)
 - <https://acquisitioninnovation.darpa.mil>

OT Resources (cont.)

- BARDA's OT Agreements site (BARDA-focused)
 - <https://aspr.hhs.gov/AboutASPR/ProgramOffices/BARDA/Pages/Other-Transaction-Agreements.aspx>
- NIH's OTs Guide – May 2017 (NIH-focused)
- NIH's OT Authority Training (Participant Guide) – Jan 2018 (NIH-focused)
- Department of Energy (DoE) OT Guide – Aug 2023 (DoE-focused)
- DoE OT site (DoE-focused)
 - <https://www.energy.gov/management/other-transaction-authority>
- MITRE's Current OT Consortia site:
 - <https://aida.mitre.org/ota/existing-ota-consortia>



Sample Agreement



Conclusion

Conclusion (1 of 3)

- OTs are not a new contracting instrument, but opportunities for innovation remain
- Awarding more quickly may be a side effect of using OTs, but it is not the main reason to use the authority
- Organizations may not make OT awards faster (initially) than traditional procurement contracts
 - The organization must fully embrace the inherent flexibility provided by the authority and streamline award processes
 - It may take some time for the government team to get used to the new paradigm and learn how to negotiate terms and conditions
 - There is a learning curve with OTs
- To be truly efficient, the government participants must work from the start of every program/project as a team, including program, contracting, legal, financial and other personnel

Conclusion (2 of 3)

- Marketing your solicitation may be the hardest part
 - Publishing on SAM.gov is not enough for maximum interest from industry
 - It is important to get the solicitation/opportunity to the nontraditional performers
 - The program office will be an important resource
- OTs are not appropriate for all acquisitions – at its heart, it's an R&D tool
- Fairness and transparency are paramount to OT success
- Although there is little policy/guidance (purposely), OT practice is ever evolving
- Use good business judgment, there are no templates or checklists
- With the renewed popularity of OTs, expect some oversight (both internal and external)

Conclusion (3 of 3)

- Apply sound recordkeeping and documentation for agreement files
- OTs have inherent flexibility but will only benefit if people using them are willing to embrace the flexibility
 - Senior leadership buy-in
 - Coordinated team
 - Resistance to replicate FR-like actions
- Educating industry is also valuable
 - Traditional contractors may be resistant
 - Nontraditional contractors may not believe the government is willing to behave differently
- Utilizing discretion and good business sense can be a difficult cultural change
- The government **must** change or the government will continue to miss out on important opportunities

Q&A



ARPA 

Appendix

Slide 17, Toolbox (ARPA-H Example): This slide contains two tables comparing authorities for different award types. On the left is an *Acquisition* table with two columns:

1. Procurement Contracts: 31 U.S.C. § 6303 → Federal Acquisition Regulation (FAR); PART 15 Contracting by Negotiation – Cost/Price Based and PART 12 Commercial Items - Price Based.
2. Non-FAR Contracts: Non-Appropriated funds (NAF) contracts, NASA Space Act, Unique authority at 9 civilian agencies, ARPA-H OT authority, HHS Policies, and Exceptions to Bayh-Dole Act.

On the right is a *Non-Acquisition* table with three columns:

1. Grants: 31 U.S.C. §6304, 2 CFR Part 200, and Bayh-Dole Act.
2. Cooperative Agreements: 31 U.S.C. §6305, 2 CFR Part 200, HHS/NIH Policies, and Bayh-Dole Act.
3. OTs: ARPA-H OT Authority, Single/Multi-party, New/Unique Arrangements, Bailments Lease Arrangements, Loan-to-Own, and Exemptions to Bayh-Dole Act.

Slide 33, Government Entities With OT Authority: This is a horizontal timeline depicting which government agencies have received OT authority and when. The timeline spans from 1950 to 2030. In the 1950s, NSF and NASA appear. In the 1970s, NIH and AOUSC appear. In the late 1980s, DOD appears. In the 1990s, FAA and DOT appear. In the 2000s, DHS, TSA, PHMSA, DOE, BARDA, DNDO, and IARPA appear. In the 2010s, Advanced Research Projects Agency for Energy (ARPA-E), AGARDA, NOAA, National Institute of Standards and Technology (NIST), ARPA-H, and CDC appear. Under the timeline is a list of the represented agency acronyms and their definitions.