

Accelerating Capabilities Acquisition Through OTAs and PIAs: A Contractor Perspective

Note: This White Paper represents the exploratory thoughts and analytic results of contributing CyberPoint senior executives who don't have direct government-side experience in acquisition, nor formal government training regarding OTAs and PIAs; the assertions and recommendations are provided for consideration and validation by our government partners. The opinions expressed herein may not be the same as those held by the owners, investors, or other executives of CyberPoint who were not involved in the writing of this White Paper...but they should be!

Overview and Summary

OTAs (Other Transaction Agreements) are appropriate when you want prototypes (demos, validation, feasibility) of innovative capabilities directly relevant to weapons or weapons systems, and directly related to mission effectiveness (of personnel and supporting platforms, or by improvement of platforms/systems/components thereof). OTAs appear to be most useful as vehicles to foster innovations that bridge known gaps in mission effectiveness. You can start an OTA cheaply – the community won't care, as long as you lay out a plan of funded future tasks and start cranking the engine.

PIAs (Partnership Intermediary Agreements) are appropriate when you are seeking to establish a collaborative community of technology exchange and transfer among government, industry, and academic partners, with an emphasis on joint collaboration to foster acceleration of delivery of innovative capabilities to the warfighter. PIAs appear to be most useful as vehicles to leverage multi-partner collaborative technical interchange towards a common foundational understanding of government missions and relevant mission-enabling technologies, as well as collaborative exploration of innovative solutions to fill mission gaps and define new mission possibilities. You have to start a PIA richly to establish credibility, to show the community that this is a serious endeavor with high potential value and worthy of participation.

Both may use pilots/prototypes/demonstrations to express innovation and prove relevance. Both bring high value, quickly, through innovation and outreach beyond the traditional supplier community.

- OTAs fill today's known, critical mission gaps; PIAs explore the art of the possible for today's mission gaps and tomorrow's missions.

- OTAs will get you innovative solutions now to what you think you need; PIAs will help you discover what you really need.

Mature organization / established community support / missions expanded and modernized amidst technology change and resource constraints? – Choose OTA.

New or consolidated or high-growth organization / nascent community support / new missions, new integration of missions / rapid technology change in industry and academia? – Choose PIA.

Salient Characteristics of OTA and PIAs

Other Transaction Agreements (OTAs):

- Must be for prototypes (demos, validation, feasibility, etc.) & related R&D (spur development of advanced tech that may have commercial apps; creating & promoting new technologies)
 - Have to be directly relevant to weapons or weapon system
 - For example, specifically not for to “support” or “stimulate” – which are “assistance terms,” not prototype terms.
 - Not for A&AS, Engineering Services, Training (alone), Maintenance, LRIP
- Must be directly related to mission effectiveness of military personnel and supporting platforms/systems/components/materials (including future proposed to be acquired stuff)
 - OR Be directly related to improvement of platforms, systems, components or materials proposed to be acquired by DoD
- Must address one or more OTA Technology Objectives (established under the OTA)
- Must include non-traditional defense contractor OR cost sharing
 - (NOTE: “non-traditional” means you haven’t had Prime award of DoD work subject to CAS; since small businesses are exempt from CAS, they are – by definition – “non-traditional”)
- Advanced Payments (Positive Cash Flow) are allowed. (Really helps small businesses!)
- Can be with single companies or with consortia.
- Flexibility to promote cooperation / collaboration towards common goal.
- Government, or contracting company or consortia, funds community resources (e.g., real or virtual environments for task execution).

Partnership Intermediary Agreements (PIAs):

- Must be with non-profits that are at least partially funded by a State or Local government
- Focus on technology transfer, outbound and inbound, and the promotion of exchange of technology with state and local governments, academia, and industry.
- The PIA performs services that increase the likelihood of success in the conduct of cooperative or joint activities with small businesses, academia, and industry.
- Covers support to a broad range of activities that would be difficult to tie to “prototypes,” including (examples):

- Finding companies willing to license government inventions
- Facilitating government support to outside activities (e.g., hosting gov’t SMEs in environments where they can support education, training, contests, small business technology development, etc.)
- Marketing programs, showcases, conferences, etc. that highlight government technology and R&D interests.
- Sponsorship of activities that showcase the capabilities of small businesses and academia to government and industry.
- Government or non-profit Partner, with charitable support from industry, funds community resources (e.g., real or virtual environments for task execution).

Advantages and Disadvantages

ADVANTAGES	
OTAs	PIAs
Generates well-defined, mission/warfighter relevant innovations in areas where the government has an identified need.	Supports mission focus, including both current missions and the future art-of-the-possible
Great when the problems (e.g., mission gaps) are known; excellent for risk-reduction and requirements honing.	Includes support to technology transfer across the community, including valuable early idea collaboration. The PIA enables direct sourcing of new innovations
When OTA is with an open Consortium, everybody can play – including major Defense Contractors who bring either financial “contributions” or include critical small businesses to the game. Basically – anybody can “game the system” and play ball on this field.	Fosters an inviting, collaborative environment across government, academia, and industry. At the relatively low cost of bringing government insight into missions, government inventions, and current needs, the “right” PIA can build an active community of interest that offer great value, building a store of intellectual and knowledge capital that the government can use. The Value Proposition of a PIA can be broad enough to bring everybody in under the same tent – from futurist SMEs to academia to innovative small businesses to commercial vendors of leading edge technology to solutions-oriented major defense contractors.
Allows Offerors to fully leverage their internal investments in support of task objectives to “do more with less.”	Pilots/demos/prototypes can lead to well-defined, mission/warfighter relevant innovations.
You can start out cheaply. No need to fund facilities or project/lab areas or a bevy of SMEs to guide the community. Participation happens when the Government starts putting money on OTA tasks.	Because the PIA is run by a non-profit, expect a rich harvest of FREE and “loaner” equipment and software from vendors eager to showcase their wares. And, if there’s a real value proposition in sight, expect those vendors to offer FREE technology refresh to keep project/lab/demo spaces up to the latest and greatest technology offerings!
Results are tangible and directly measurable in the Government environment, and potentially allocable to missions and measurable mission effectiveness contributions	Some results are measurable in the government environment.

DISADVANTAGES	
OTAs	PIAs
No support services unrelated to prototypes or mission effectiveness. For example, can't hold a conference / tech interchange to foster early idea collaboration.	The low-hanging-fruit of academic participation and small business community support is often hyped, can absorb a lot of resources with little real value. E.g., STEM support for high schools sounds good and is low-risk, but probably has little mission value.
Consortia can become mini-bureaucracies, end up with many members looking for sole-source vehicles and few active innovative participants.	Success depends in part on the PIA awardee having strong current relationships across the community, and on the assignment of PIA awardee team that has the business acumen and technical talents to create a high-value, high participation inviting collaborative environment that clearly offers value to all participants.
Sources of new innovation flow through Government to the OTA, unless the Government is willing to open the broadest scope of prototype tasks.	You can't start on the cheap. Initial investment in facilities / labs / SMES / etc. will be necessary to earn credibility that this PIA is going to be worth collaborating with. If the lab isn't big enough to be credible, people won't bring their wares. If you can't hold a serious technical interchange conference sized for the community of interest, participation will wane. If you want academia to participate, you've got to give early carrots that let them know there's not only room at the table, but value to be had.
"Cost contributions" are generally overstated in value (e.g., old equipment, licenses for using purchasable rather than open-source alternatives, etc., IR&D contributions, etc.).	Some desired results may not be directly measurable in the government environment. Community knowledge capital is hard to assess, and may require indirect measurement (e.g., increase in academic institution participation in other sponsor contracts; increase in competitive activity against competitive solicitations).
Don't expect freebies from vendors in this environment. Keeping project/lab spaces up to current technology refresh may be expensive.	Expect a regular and recurring cost of "show and tell" to satisfy stakeholders, especially state and local government partners and vendors providing free stuff.