



**HR001117S0055
ARCHITECTURES
Software Defined Hardware (SDH)**

Proposers Day

September 19 , 2017

**Michael Blackstone
Contracting Officer
DARPA Contracts Management Office**





Proposers Day Disclaimer

- **Plenty of good information is made available to potential proposers to help clarify program goals/objectives and proposal preparation instructions - those things that are stipulated in the BAA.**

- **However:**
 - **Only the information/instructions in the BAA counts (prop prep & eval).**
 - Proposals will only be evaluated in accordance with the instructions provided in the BAA.
 - Any response provided by the Government in the FAQ that's different than what is provided in the BAA will be effected by an amendment to the BAA.
 - Such responses will make note of an impending BAA amendment.

- **Only a duly authorized Contracting Officer may obligate the Government.**



Situational Awareness

- **Electronics Resurgence Initiative (ERI)**

- **Page 3 Investments (Three Thrusts)**
 - Design Thrust (HR001117S0054)
 - **Architectures Thrust (HR001117S0055)**
 - Materials and Integration Thrust (HR001117S0056)

- **Architectures (Two Programs)**
 - **Software Defined Hardware (SDH)**
 - Domain-Specific System on Chip (DSSoC)

- **Both SDH and DSSoC are separately addressed in the Architectures BAA (primarily from a technical perspective).**

- **Both SDH and DSSoC share common proposal preparation instructions and evaluation criteria.**
 - Only exception is the Technical Proposal page count restrictions.

- **Each Program (SDH and DSSoC) must be proposed to separately.**



Situational Awareness

➤ **Cost Share (it matters for Page 3)**

- Cost Realism Evaluation Factor: “Specifically for these programs, for which simultaneous impacts to the commercial sector and DoD are expected, the level of cost share will be considered as a significant element of the Cost Realism evaluation.”

[BAA Forward – Page 3 “reflects a **collaborative spirit** that we hope will lead an electronics industry capable of meeting its own commercial needs and ambitions while simultaneously advancing defense”..]

- Eligibility Information: “Cost sharing is not required; however, it will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument (OTs). Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.”

➤ **Non-traditional Performers (have a role in Page 3)**

- “Proposers looking for innovative, commercial-like contractual arrangements are encouraged to consider requesting Other Transactions (OTs). To understand the flexibility, options [and cost share requirements] associated with Other Transactions, consult www.darpa.mil/work-with-us/contract-management#OtherTransactions.”
- ERI/Page 3 Investments OT “Model” is available on the ERI webpage (see BAA).
- **If you have questions about OTs, send an email early in the process. I will talk to you!**



BAA Process - Overview

- **BAA allows for a variety of technical solutions and award instrument types.**
 - The BAA defines the problem set, the proposer defines the solution (and SOW).
 - Allows for multiple award instrument types:
 - For SDH & DSSoC: **All instrument types are available** (Procurement Contracts, OTs, Grants, Cooperative Agreements).

- **DARPA Scientific Review Process.**
 - Proposals are evaluated on individual merit and relevance as it relates to the stated research goals/objectives rather than against one another (there is no common statement of work).
 - Selections will be made to proposers whose proposals are determined to be most advantageous to the Government, all factors considered, including potential contributions to research program and availability of funding.

 - **Government may select for negotiation all, some, or none of the proposals received.**
 - **Government may accept proposals in their entirety or select only portions thereof.**
 - **Government may elect to establish portions of proposal as options.**



Eligibility Issues

- **All interested/qualified sources may respond** subject to the parameters outlined in BAA.
- Foreign participants/resources may participate to the extent allowed by applicable Security Regulations, Export Control Laws, Non-Disclosure Agreements, etc. (No classified proposals anticipated).
- **FFRDCs and Government entities:**
 - Are not prohibited by the BAA from proposing.
 - Are, however, subject to applicable direct competition limitations.
 - Are, however, required to demonstrate eligibility (sponsor letter).
- **The burden to prove eligibility for all such team members rests with the proposer** - coordinate with each entities legal/contracting representative(s).
- **All elements of a proposal (tech and cost, prime and subs – even FFRDC team members) must be included in the prime's submission.**



Proposal Preparation (Volume I - Technical & Management)

● Page Limitations

- SDH: TA1 & TA-2 (combined) = 30 pages
TA1 or TA2 (separately*) = 20 pages

*DARPA will pair teams after source selection (Joint TA1/TA2 Prototypes & Demos)

*Associate Contractor Agreements (ACAs) required (acknowledge and plan for this)

● Detailed Proposal Information (9 topics in total)

- Technical Approach (centerpiece of proposal)
- Statement of Work (SOW) (by TA and Phase)(+Technology Transfer Task)(sub's as well)
- Technology Transfer (priced task in all phases)

➤ **Make sure to include every proposal topic (above) - the point is to ensure the Gov't fully understands what you are proposing.**

➤ **Make sure to review “Funding Opportunity Description” for additional proposal preparation information/instructions of a technical nature.**

➤ **Propose to the program (goals, objectives, schedule, cross TA interaction, deliverables, etc.) the BAA has defined, not the program you want (wish) it to be.**



Proposal Preparation (Volume II - Cost Proposal)

- **No Page Limit.**

- **Provide an accurate and complete cost proposal.**
 - Summary Cost Breakdown: Full cost build-up/estimate by Phase & Performer Fiscal Year. (MS Excel)
 - Detailed Cost Breakdown: Full cost build-up/estimate by Phase, task/sub-task, and month (with all necessary supporting documentation)(MS Excel).
 - Failure to do this will, at a minimum, negatively impact the assessment of your proposal (cost realism evaluation criterion).
 - Weak cost proposals are an indicator that the proposed technical approach is likely not fully understood.

- **Subcontractor Proposal(s):**
 - The prime contractors submission **MUST** include, at a minimum, a non-proprietary, subcontractor proposal for EACH subcontractor. **NO ROMS!**
 - All subcontractors **must** be able to submit a fully disclosed version of their proposal directly to the Government immediately upon request.
 - FFRDC & Gov't Org: The prime proposal **must** included the supporting eligibility information and cost proposal.



Proposal Preparation (Submission)

- **Abstract Due Date:** 1pm (EST), 11 October 2017 (to DARPA BAA website only)
- **Proposal Due Date/BAA Closing Date:**
 - “The full proposal must be submitted via the DARPA BAA website on or before 1pm (EST), 4 December 2017. If deemed compliant, the Government will evaluate all such proposals in the initial round of selections.”
 - “Proposals may be submitted after the above due date until 1pm (EST), 31 January 2018 which, if deemed compliant, will be reviewed at the Government’s discretion, depending upon availability of funding.”
“Proposers are warned that the likelihood of available funding is greatly reduced for proposals submitted after the initial closing date deadline.”
- **Expected Funding Type: 6.2 (Applied Research)**
 - Universities (on campus) – Fundamental Research (no publication restriction)
 - For-Profit Organizations – Restricted Research (publication restriction)
- **Assistance Proposals: Submit via grants.gov only.**
- **Procurement Contracts & OTs: Submit via the DARPA BAA website only.**
– YOU MUST CLICK THE ‘FINALIZE FULL PROPOSAL’ BUTTON (DARPA BAA site)



Data Rights

- **Government desires Unlimited Rights to data and/or software deliverables**
 - Leveraging pre-existing IP is ok – but needs to support technology transition approach
 - Creating and leveraging open source technology/architecture is encouraged to facilitate adoption of research

- **If asserting less than Unlimited Rights (e.g., Restrictions):**
 - Provide and justify basis of assertions using the prescribed format
 - Explain how each item will be used to support the proposed research project
 - Explain how the Government will be able to reach its program goals (including transition)
 - Prime provides for the entire team
 - Provide even if you are proposing other than a contract
 - This information is assessed during evaluations (transition plan & barriers)



Communications

- **Prior to Receipt of Proposals (Solicitation Phase): No restrictions, however Gov't (PM/PCO) shall not dictate solutions or transfer technology.**
 - Typically handled through the FAQ (ask questions – look for FAQ updates).
- **After Receipt of Proposals/Prior to Selections (Scientific Review Phase): Limited to Contracting Officer or BAA Coordinator (with approval) to address clarifications requested by the review team.**
 - Proposal cannot be changed in response to clarification requests.
- **After Selection/Prior to Award (Negotiation Phase): Negotiations are conducted by the Contracting Officer.**
 - PM and/or COR typically tasked with finalizing the SOW (with PI).
 - PM and/or COR typically involved in any technical discussions (i.e., partial selection discussions).
- **Informal Feedback Sessions (Post Award): May be requested/provided once the selection(s) are made.**
 - If made on a timely basis (~2 wks after letter), all requests will be accepted.



Pitfalls That Delay (or prevent) Proposal Review

- **Failure to submit proposal on time**
- **Failure to submit using the correct mechanism**
 - Procurement Contracts & OTs = DARPA BAA site only (hit the button!)
 - Assistance Instruments = Grants.gov (hardcopy/mail submissions are permitted too)
- **Failure to submit both proposal volumes**
 - Volume 1, Technical/Management
 - Volume 2, Cost
- **Failure to submit subcontract proposals or submitting ROMs instead**
- **Excess pages in technical proposal (these will not be reviewed)**
- **Note to PIs: Manage/monitor the process all the way through until the proposal has been submitted and do not wait until the last minute (or even the last day?) to submit.**



Other Transactions

● Technology Investment Agreements (**Page 3 Fits Best Here**)

- To engage nonfederal entities in **working collaboratively with the Government** on basic, applied, or advanced research projects
- **These instruments are premised on the resulting technology being dual-use**
- Considered an **assistance arrangement**
- Guidance provided in **Part 37 of the DoDGARs** (Department of Defense Grant and Agreement Regulations)
- Applicable Statute(s): 10 U.S.C. 2371 and 10 U.S.C. 2358
 - **Cost Share Required:** 50/50 share to the maximum extent practicable. Sets the expectation (dual-use), but not a firm requirement – it's negotiable.

● OTs for Prototypes (purely military needs)

- Allows DoD to enter into OT agreements to carry out “**prototype projects that are directly relevant to enhancing** the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the Department of Defense, or to improvement of platforms, systems, components, or materials in use by the armed forces.”
- Considered an **acquisition arrangement** (supplies or services for the direct benefit or use of the Federal Government)
- DoD has issued an OT for Prototype Guide (Jan 2017) – available on the web.
- Applicable Statute: 10 U.S.C. 2371b



Other Transactions

● Why use an OT?

- Attracts companies that would normally avoid doing business with the DoD
- Promotes trust and a spirit of cooperation with industry
- Removes rigidity of traditional Government procurement
- Attractive to contractors looking for elasticity in their agreements
- Any apparent risk allows parties to change the terms to be more suitable to the party absorbing most of the risk
- Invokes commercial practices, such as negotiating terms and conditions

● Why is cost share required by statute?

1. The usual Government procurement safeguards are removed and risks to the Government increased (TIA & OT for Prototype)
 2. The arrangement is a partnership between the Government and the Performer, not just the usual Government (Customer)/Performer relationship (TIA)
 3. Non-Traditional Defense Contractor or Small Business not contributing significantly (OT for Prototype)
- The inclusion of cost share does favorably influence the negotiation of terms and conditions (even more flexibility and typically less time).
 - The inclusion of cost share supports the overall Page 3 goals and objectives (solving a mutual problem)!



Other Transactions

- **Don't let the unknown (or misinformation) prevent you from submitting a proposal!**
- **Speaking of misinformation...the Government is not out to steal your IP.**
 - ✓ The Performer owns the IP that is created (all award instruments).
 - ✓ The Government seeks only a license to use the IP that is created (Patent and Data Rights).
 - ✓ The extent of the Government use rights (data) is negotiable and depends on such factors as program goals and objectives, non-federal (performer) cost share, the nature of each specific data/software deliverable, etc.
 - ✓ You have an obligation to report subject inventions (**the definition can vary**).
 - ✓ Yes – the Government typically seeks/prefers Unlimited Rights (no use restrictions at all – but, as noted, it is negotiable).
 - ✓ **The Performer owns all pre-existing IP.**
 - ✓ Any rights the Government has to use pre-existing IP (typically data/software) is negotiable.
- **OTs can often take longer to negotiate than procurement contracts.**



Other Transactions (TIAs)

● How do we negotiate OTs?

1. It starts with the Statement of Work (TDD) & Payable Milestones (PI and PM)

- Well defined tasks
- Well defined data deliverables
 - What are they?
 - What is the Government going to use them for once delivered?
- Well defined payment milestones (**don't forget to include in your proposal**)

2. Taking the time immediately after selection to ensure each party fully understands the technical goals, objectives and expectations specific to the proposed/selected project

- Work to quickly **mutually** resolve any misunderstandings and to set expectations

3. When the above has been accomplished, we work to negotiate (fine-tune) the agreement terms and conditions to ensure it fits the above

4. Cost is negotiated along the way – the extent is at least somewhat related to the amount of non-federal (Performer) cost share involved

- **Negotiation time varies (each OT is unique) – can take longer than other instruments**



Other Transactions

Backup Slides

See Also:

<http://www.darpa.mil/work-with-us/electronics-resurgence-initiative>

– Page 3 TAI “Model” (template) & Companion Document

<http://www.darpa.mil/work-with-us/contract-management#OtherTransactions>



Other Transactions

- **No matter the type of OT – most of the acquisition statutes don't apply, and none of the acquisition regulations apply:**
 - Competition in Contracting Act (CICA)
 - Truth in Negotiations Act (Truthful Cost and Pricing)
 - Cost Accounting Standards
 - Contract Disputes Act
 - Procurement Protest Process
 - P.L. 85-804 and indemnification
 - Cost plus a percentage of cost prohibition
 - Buy American Act (in part)
 - Bayh-Dole Act (patents)
 - FAR/DFARS/Agency specific acquisition regulations
 - Termination for Convenience or Default
 - Changes Clause
 - Mandatory flowdowns to subcontractors

- **But! Some laws (not considered acquisition regulations) still do apply:**
 - Criminal Laws (false claims/statements)
 - Laws of general applicability (Civil Rights Act)
 - Laws that would apply to anyone doing business in the U.S. (e.g. environmental laws, import/export control)



Other Transactions (TIAs)

● Factors to consider (TIAs)

– The Nature of the Project

- Does it involve the support or stimulation of research?
- Is it relevant to integrating the technology into the commercial industrial base?

– The Type of Recipient

- Is a for-profit performer involved in the research?
- Will the program be more successful with a team approach or a single performer?
 - These efforts often work well with consortia or teams to facilitate collaboration
 - Single firms are permissible, especially when there will be collaboration between their government and commercial divisions

– The Recipient's Commitment

- Is there evidence of commitment to incorporate the technology into future products?
- Are they prepared to cost-share and is the cost-share high quality?

– The Degree of Government Involvement

- Is the expectation that the Government will be part of the team with insight into progress?
- Is the recipient or team prepared to self-police and take a leadership role in managing the program?



Program/ Teaming Models

- **Standard Procurement Contract = Prime and Subcontractors (Vertical)**
- **Standard Technology Investment Agreement (TIA) = Prime and Subcontractors (Vertical)**
- **Consortium (multi-party) TIA = All team members are equals and have a contractual relationship with the Government (Horizontal)**
 - This is managed by use of a document entitled “Articles of Collaboration.”
 - One team member serves as the administrator (modifications, distributing the payments, etc.).
- **Loosely connected performers operating under their own contractual instruments (contracts, OTs, etc.) but, as necessary, bound to each other via Associate Contractor Agreements (ACAs)* (Horizontal)**

*Note: Keep an eye on this across the Page 3 BAAs. Even when no formal requirement for ACAs is stipulated in the BAA (for a particular program) it may still be necessary after selections.