

Data and Metrics for the DoD SBIR/STTR Program - NAVSYS Perspectives

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December 8 2023

NAVSYS Overview



MISSION: To provide specialized Positioning Navigation and Timing (PNT) products and services for our customers by leveraging our core technologies, unique technical expertise, innovative engineering, strong work ethic, and high standards of excellence.



- Founded in 1986 by Dr. Alison Brown
- In top 10 companies receiving SBIR awards from DoD in Colorado and have high commercialization success rate for our SBIR projects
- Prestigious Tibbets Award and AFEI Award for Enterprise Integration for Talon NAMATH Phase III deployment

CUI

NAVSYS Assured PNT Successes supported by SBIR developments



WAAS	InterNav [®]	PNTaaS
GEO Satellite CLA WAAS Messages LI & L2 GEO Satellite CPS LI & WAAS Messages CPS LI & L2 GEO Satellite	GPS (Multiple) PayDNCPH, Fosition, Velocity, IC (UTC), Snapriot Assisted (GPS) Network Assisted (GPS) Image, Im	Publisher Publisher Subscriber Subscriber Subscriber
 Pioneered "bent-pipe" GPS augmentation Published seminal WADGPS paper Built first WAAS GES and User Equipment for FAA Chaired SC-159 Integrity Working Group 	 Open Architecture software uses any GPS/Inertial devices Fielded in thousands of air, ground and space systems by customers Operates in GPS-denied environments using external PNT aiding 	 PNTaaS enables existing commercial broadband GEO and NGSO SATCOM to be used for PNT Massive numbers of satellites and C-Ka band frequency allocations provide PNT resilience as a backup to GPS

Challenges for Small Businesses in receiving Phase III awards



- POR pays "tax" to SBIR for Ph I/II but rarely sets aside funds for Phase III tech insertion to achieve ROI
- Burdensome contracting process make it difficult (and slow) for companies to receive Ph III contract awards
- Language in FAR Part 19.502-2 (b)(2) includes language to exempt R&D contracts from normal "rule-of-two" small business contract set-asides so follow-on efforts are turned "full and open"
- GSA Phase III contracting process has been a success but is now over-tasked and not adequately resourced
- Often solicitations demand Government Purpose Rights (GPR) and do not recognize that SBIR data rights are required to be nonnegotiable in Phase III awards
- CUI and No-Foreign restrictions in most DoD topics now make it even more difficult for SB to obtain permission to release marketing information for commercial or government sales

Lack of complete data on Phase III SBIR \$\$ prohibits accurate ROI calculation for DoD



- Phase III awards are self-reported through <u>Company</u> <u>Commercialization Reports</u> but only when applying for new SBIR awards and are unaudited
- FPDS-NG includes <u>SBIR Phase III</u> as a category for contract awards but Phase III funding received through subcontracts is not reported as a category in the electronic Subcontracting Reporting Systems (eSRS.gov)
- Phase III funding for prototype development or continued research through Other Transaction Authorities (OTAs) is not reported. (There is currently no reporting on actual funding provided to non-traditional contractors through OTAs, never mind categorizing as SBIR Phase III.)

Goals and incentives for SBIR/STTR Phase III Transitions are still needed



- National Defense Authorization Act for Fiscal Year 2019 (NDAA) added incentive requirement in all DoD contracts >\$100M for use of SBIR/STTR technologies. (https://www.congress.gov/bill/115th-congress/house-bill/5515/text) Authority
- DoDi 5000.02 included requirement for goals in leveraging SBIR/STTR in POR and adding incentives for primes but has rarely (if ever) been implemented by program offices
- Incentives need to be established for Primes to insert SBIR Phase III technology into their contracts such as proposal evaluation criteria and incentive fees
- SBIR Phase III awards should be reported in Prime's subcontracting plans and used for Past Performance evaluations

Use of Other Transaction Authority (OTA) for Prototyping Efforts



- Prototype projects under 10.U.S.C. Section 2371b (2018) must meet one of the following conditions:
 - There is at least one non-traditional defense contractor or nonprofit research institution participating to a significant extent.
 - All significant participants in the transaction other than the Government are small businesses or non-traditional defense contractors (NDC).
 - At least one-third of the total cost of the prototype project is to be paid out of funds provided by sources other than the Government.
 - The senior procurement executive for the agency determines in writing that exceptional circumstances justify the use of such a transaction.
- Following a successful SBIR/STTR Phase II, the next logical step for a small business is for a Phase III funded prototype effort
 - From FY 2019-2021, DOD obligated over \$24 billion on OTA awards to consortia for prototyping efforts (GAO-22-105357)
- There is no requirement for Consortia to report on SBIR Phase III awards

Consortia managed OTAs could speed SBIR/STTR Phase III Transitions but ...



- Small businesses must pay a fee to a consortia in order to bid on awards which is prohibitive due to the number of consortia
- Recommend providing funding for SBIR/STTR companies to participate in OTA Consortia (e.g. using <u>TABA</u> funds)
- There is a lack of reporting on actual participation of NDCs in OTA awards - DODIG-2022-127
- Consortia managing OTAs should be required to provide annual reporting on NDC awards and Phase III funding
- Recommend DoD establishes Phase III goals and include proposal evaluation factors and incentive award fees for meeting goals in all FAR or OTA awards made to companies other than NDCs