

DHS S&T BAA and Topics Introduction

**BAA Industry Day
WDC
June 26, 2014**



***Douglas Maughan, Ph.D.
Division Director
Cyber Security Division
Homeland Security Advanced
Research Projects Agency (HSARPA)
douglas.maughan@dhs.gov
202-254-6145 / 202-360-3170***



BAA Terms & Conditions

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Cyber Security R&D Broad Agency Announcement (BAA)

- Delivers both near-term and medium-term solutions
 - To **develop new and enhanced technologies** for the detection of, prevention of, and response to cyber attacks on the nation's critical information infrastructure, based on customer requirements
 - To perform research and development (R&D) aimed at **improving the security of existing deployed technologies** and to ensure the security of new emerging cybersecurity systems;
 - To **facilitate the transfer of these technologies** into operational environments.
- Proposals Received According to 3 Levels of Technology Maturity

Type I (New Technologies)

- ✓ Applied Research Phase
- ✓ Development Phase
- ✓ Demo in Op Environ.
- ✓ 36 months

Type II (Prototype Technologies)

- More Mature Prototypes
- Development Phase
- Demo in Op Environ.
- 24 months

Type III (Mature Technologies)

- ✓ Mature Technology
- ✓ Demo Only in Op Environ.
- ✓ 12 months

Note: Technology Demonstrations = Test, Evaluation, and Pilot deployment in DHS "customer" environments



Past Solicitations

- <http://baa2.st.dhs.gov> – Broad Agency Announcement
 - Develop new technologies, Improve existing technologies, facilitate technology transition
- 2004-2006: 7 topics, 17 awards totaling \$13.9M
 - 9 Academic (CA,GA,DE,NJ,VA,MI,NH)
 - 8 Private Sector (NY,MD,MN,NJ,MA,TX)
 - 8 commercial products, 2 open source products
- 2007-2009: 9 topics, 17 awards totaling \$13.7M
 - 6 Academic (CA,GA,WA,CO,MD)
 - 10 Private Sector (NY,CO,CA,FL,WI,VA)
 - 1 National Lab (NM)
 - 2 commercial products, 4 open source products

HSARPA BAA Statistics

Solicitations Published	White Papers Received	White Papers Encouraged	White Papers Percent	Proposals Received	Entered Negotiations	Proposal Percent	Contracts to date
RA	517	73	14.12%	126	40	31.75%	17
BAA				11	3	27.27%	
BAA	315	75	23.81%	79	40	50.63%	
BAA	212	35	16.51%	63	TBD	TBD	
BAA	215	40	18.60%	50	TBD	TBD	
BAA	71	10	14.08%	30	TBD	TBD	
BAA	26	19	73.08%	20	9	45.00%	
Total	1356	252	18.58%	379	92	38.98%	17
Notes:							
1. N/A includes some ongoing projects included in contract total, and therefore not competitive.							
2. Proposal Percent Total includes only those completed through "Entered Negotiations," i.e., any "TBD" is excluded.							

- White papers are done to help all involved
 - ◆ An early “opinion” of your idea without spending lots of \$
 - ◆ Reduces the number of full proposals
- We will be **VERY** selective during white paper phase

BAA 11-02 Technical Topic Areas (TTAs)

TTA-1	Software Assurance	DHS, FSSCC
TTA-2	Enterprise-Level Security Metrics	DHS, FSSCC
TTA-3	Usable Security	DHS, FSSCC
TTA-4	Insider Threat	DHS, FSSCC
TTA-5	Resilient Systems and Networks	DHS, FSSCC
TTA-6	Modeling of Internet Attacks	DHS
TTA-7	Network Mapping and Measurement	DHS
TTA-8	Incident Response Communities	DHS
TTA-9	Cyber Economics	CNCI
TTA-10	Digital Provenance	CNCI
TTA-11	Hardware-Enabled Trust	CNCI
TTA-12	Moving Target Defense	CNCI
TTA-13	Nature-Inspired Cyber Health	CNCI
TTA-14	Software Assurance MarketPlace (SWAMP)	S&T

- 1003 White Papers
- 224 Full Proposals encouraged
- 36 Awards



Encouraged White Papers: By Proposal Type

TTA	# of Submitted White Papers	# of Encouraged White Papers	Encouraged WP by Type Counts		
			Type 1	Type 2	Type 3
TTA 01	85	25	13	12	0
TTA 02	82	13	6	5	2
TTA 03	67	13	8	5	0
TTA 04	143	32	14	18	0
TTA 05	125	19	13	5	1
TTA 06	141	30	11	17	2
TTA 07	50	17	8	6	3
TTA 08	33	8	7	1	0
TTA 09	42	11	10	1	0
TTA 10	42	11	5	4	2
TTA 11	73	12	8	4	0
TTA 12	69	19	11	7	1
TTA 13	31	8	7	1	0
TTA 14	20	6	6	0	0
Totals	1003	224	127	86	11

- From SUBMITTED
 - 726 WPs from industry
 - 214 WPs from academic institutions
 - 63 WPs from labs/government

- From ENCOURAGED
 - 132 from industry 58.93%
 - 82 from academia 36.61%
 - 10 from lab/government 4.46%



BAA 11-02 Full Proposal Statistics – Type by TTA

TTA	Encouraged White Papers	Full Proposals Submitted	Full Proposal Type Counts		
			Type I	Type II	Type III
TTA 01	25	25	13	12	0
TTA 02	13	12	5	5	2
TTA 03	13	13	9	4	0
TTA 04	32	32	20	12	0
TTA 05	19	17	11	4	2
TTA 06	30	29	10	19	0
TTA 07	17	17	8	6	3
TTA 08	8	8	7	1	0
TTA 09	11	9	8	1	0
TTA 10	11	9	4	4	1
TTA 11	12	12	7	4	1
TTA 12	19	16	9	6	1
TTA 13	8	8	7	1	0
TTA 14	6	6	6	0	0
TOTALs	224	213	124	79	10

■ From SUBMITTED

- 131 from Industry 33.8%
- 72 from Academia 61.5%
- 10 from Lab/Government 4.7%

■ From FUNDED

- 20 from Academia 55.6%
- 14 from Industry 38.9%
- 2 from Lab/Government 5.5%

BAA 11-02 Winning Awards

Applied Visions, Inc	Oak Ridge National Laboratory
Carnegie-Mellon University	Pacific NW National Laboratory
Columbia University	Raytheon BBN Technologies
Def-Logix	Rutgers University
George Mason University	Princeton University
Georgia Tech Research Corp.	University of Alabama at Birmingham
HRL Laboratories, LLC	University of North Carolina
IBM Research	Dartmouth College
International Computer Science Institute	Indiana University
ITT Exelis	University of California, San Diego
Kestrel Technology, LLC	University of Houston
Merit Network Inc	University of Illinois at Urbana-Champaign
Morgridge Institute for Research	University of Maryland
Naval Postgraduate School	University of Washington
Northrop Grumman Information Systems	USC Information Sciences Institute

2014 Broad Agency Announcement

■ Anticipated Schedule

- 23 Apr: BAA released incl. to participating countries
 - \$95M over 5 year period
- <https://www.fbo.gov/spg/DHS/OCPO/DHS-OCPO/HSHQDC-14-R-B0005/listing.html>
- S&T BAA Website: <https://baa2.st.dhs.gov>
- 1 June+: Publish BAA Topic Calls
 - Open to all respondents – foreign and domestic
- June 2014 – March 2015: BAA White Paper and Proposal Review process and Contracting Activities

International
Collaborations



2014 BAA – Initial Topics (1)

- Industry Day – June 24
 - Mayflower Hotel - 1127 Connecticut Ave, WDC
 - Deadline: Thursday, June 19, 2014

- Data Privacy: <http://go.usa.gov/8JZ9>
 - TTA #1 - Privacy Policy Compliance Tools
 - TTA #2 - Privacy-Preserving Federated Search
 - TTA #3 - Mobile Computing Privacy

- Mobile Tech Sec: <http://go.usa.gov/8JBY>
 - TTA #1 - Mobile Device Instrumentation
 - TTA #2 - Transactional Security Methods
 - TTA #3 - Mobile Security Management Tools
 - TTA #4 - Protecting Mobile Device Layers

2014 BAA – Initial Topics (2)

- Industry Day – June 26
 - Mayflower Hotel - 1127 Connecticut Ave, WDC
 - Deadline: Monday, June 23, 2014
- CPSSEC: <http://go.usa.gov/8JBQ>
 - TTA #1 - Security Models and Interactions
 - TTA #2 - Secure System Design and Implementation
 - TTA #3 - Experiments and Pilots
- DDoSD: <http://go.usa.gov/8JBB>
 - TTA #1 - Measurement & Analysis to Promote Best Current Practices (BCP 38, SAC004)
 - TTA #2 - Tools for Communication and Collaboration
 - TTA #3 - Novel DDoS Attack Mitigation and Defense Techniques

TTA / Proposal Type Matrix

	36 months	24 months	12 months	
	Type I	Type II	Type III	TOTAL
Topic 1				
Topic 2	<p style="text-align: center; color: blue; font-size: 2em; font-weight: bold;">Will depend on the number and types of proposals received</p>			NO pre-set amounts
Topic 3				
Topic 4				
...				
...				
...				
...				
...				
...				
...				
TOTAL				





DHS S&T BAA

Anticipated Schedule

- White Paper Registration – Due July 22, 2014
- White Papers – Due July 22, 2014
- **White Paper reviews DUE – August 31, 2014**
- White Paper Notifications – Week of September 1, 2014
- Full Proposals – Due September 30, 2014
- Full Proposal Reviews – Week of November 3, 2014
- Full Proposal Selections – Week of November 10, 2014
- Funding Notification – Week of November 17, 2014
- Contract Awards NLT March 31, 2015



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Science and Technology

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<http://www.dhs.gov/cyber-research>