

# Opportunities for the Private Sector



**Thomas A. Cellucci, Ph.D., MBA**  
Chief Commercialization Officer  
Department of Homeland Security  
Science and Technology  
Email: [Thomas.Cellucci@dhs.gov](mailto:Thomas.Cellucci@dhs.gov)

# Discussion Guide

- Overview of Department of Homeland Security
- Commercialization initiatives at DHS
- Capstone Integrated Product Teams (IPTs)
- Market Potential is Catalyst for Rapid New Product Development
- Getting on the Same Page
- SECURE Program
- Safety Act Protection
- Tech Clearing House
- SBIR Opportunities
- Getting Involved
- Summary



**Homeland  
Security**

# Homeland Security Mission

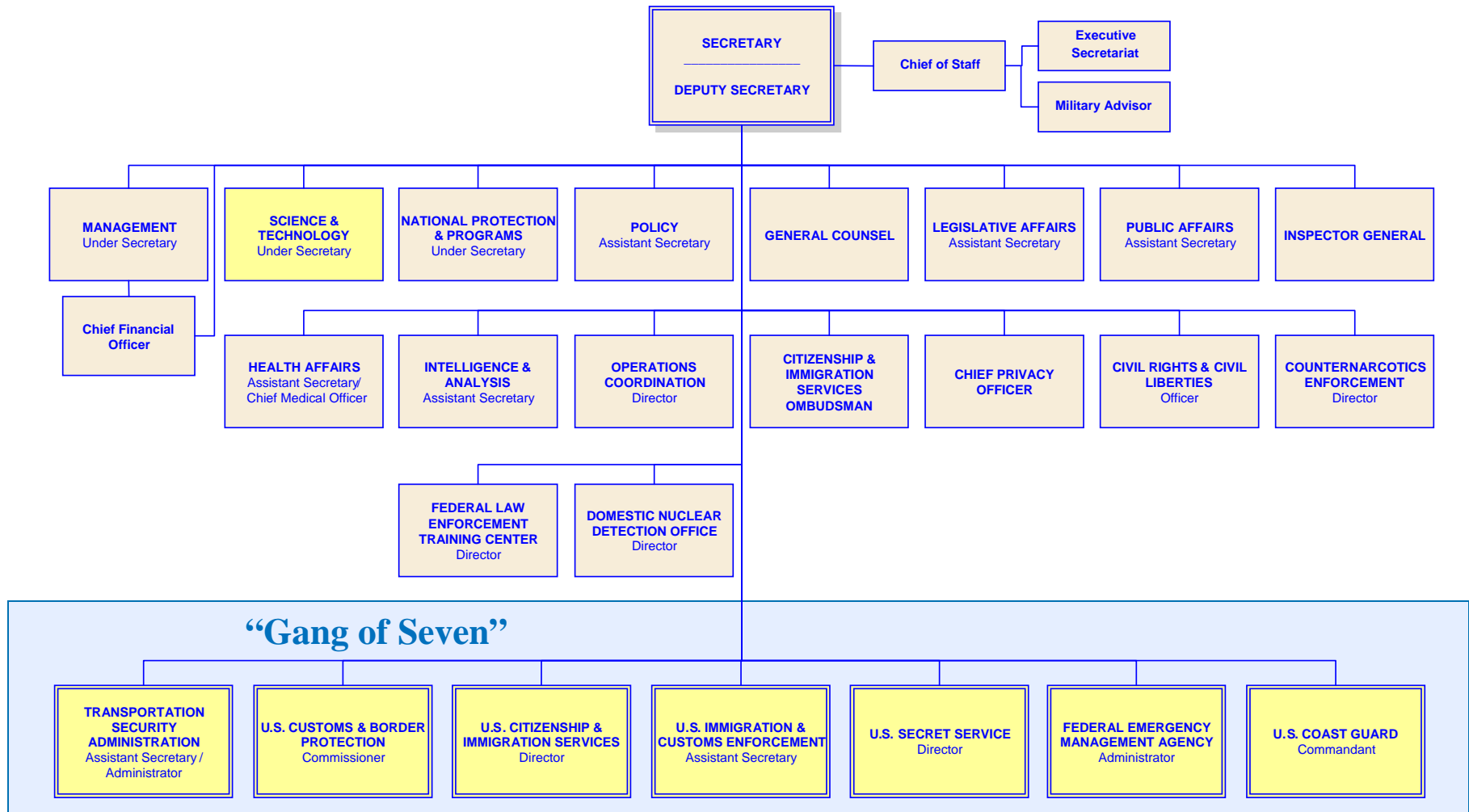


- Lead Unified National Effort to Secure America
- Prevent Terrorist Attacks Within the U.S.
- Respond to Threats and Hazards to the Nation
- Ensure Safe and Secure Borders
- Welcome Lawful Immigrants and Visitors
- Promote Free Flow of Commerce

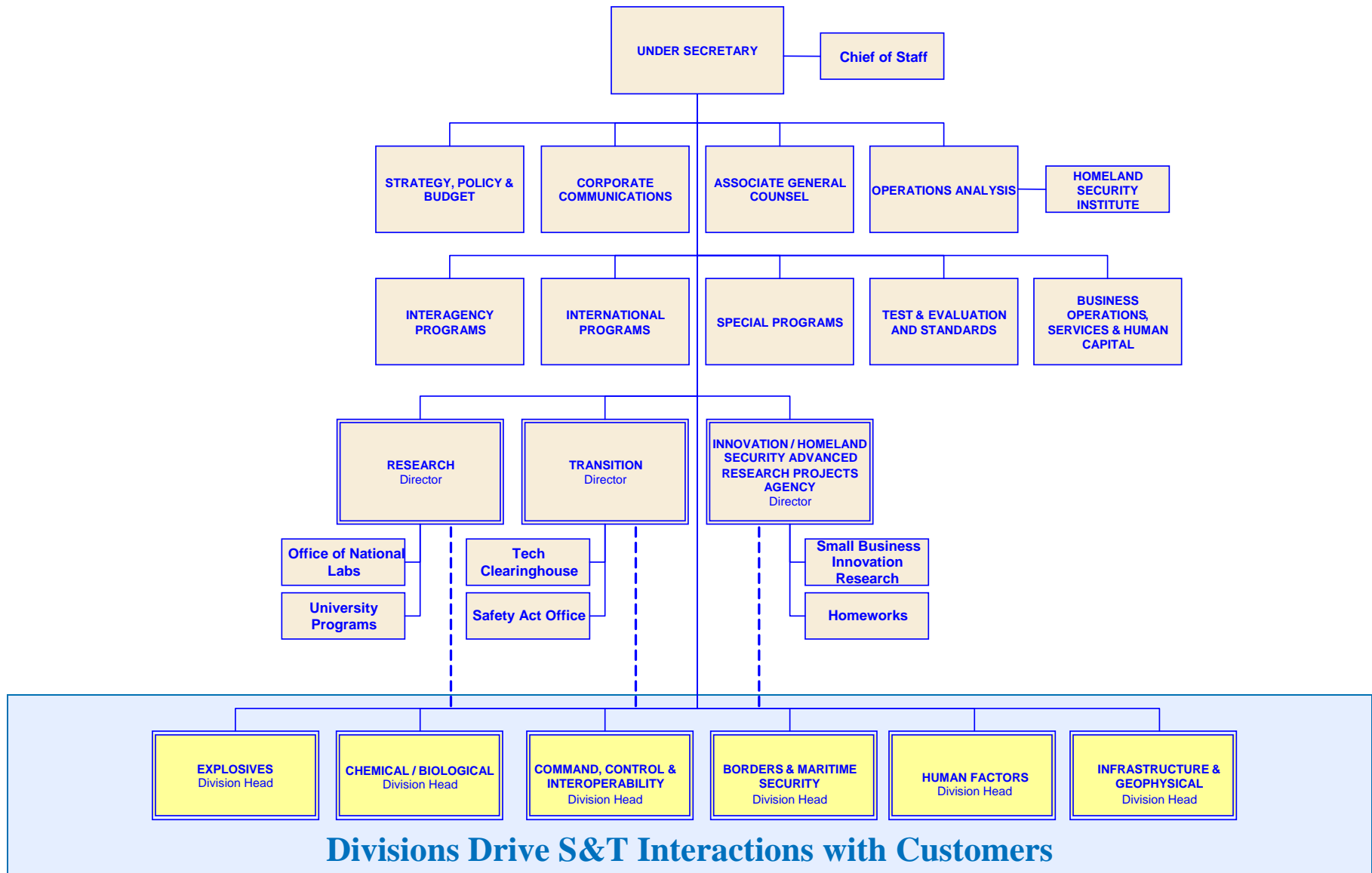


**Homeland  
Security**

# U.S. Department of Homeland Security



# Office of the Under Secretary for Science and Technology



# S&T Goals

## Consistent with the Homeland Security Act of 2002

- **Accelerate the delivery of enhanced technological capabilities** to meet the requirements and fill capability gaps to support DHS agencies in accomplishing their mission.
- Establish a lean and agile world-class S&T management team to deliver the technological advantage necessary to ensure DHS Agency mission success and prevent technological surprise.
- Provide leadership, research and educational opportunities and resources to develop the necessary intellectual basis to enable a national S&T workforce to secure the homeland.



**Homeland  
Security**

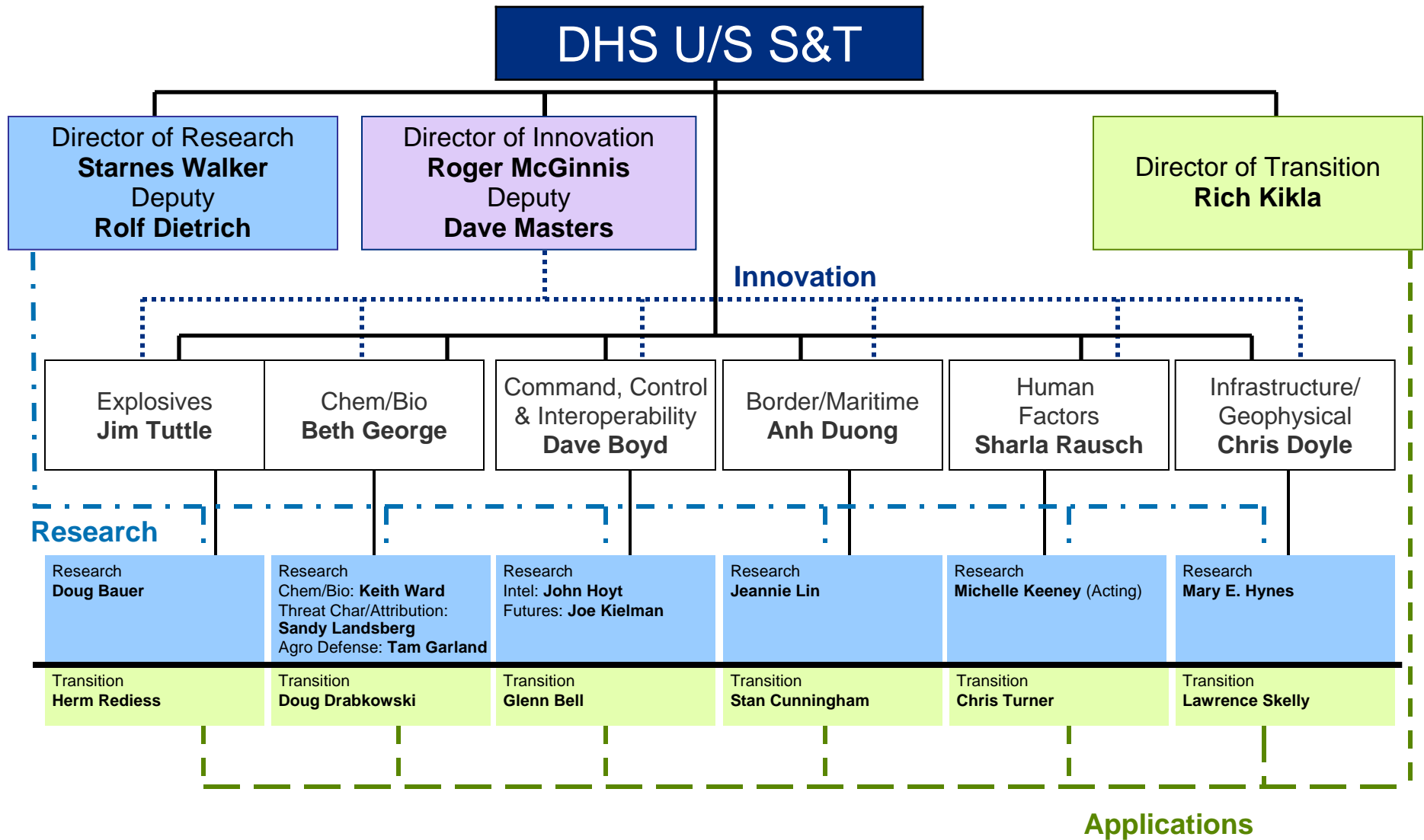
# DHS S&T Investment Portfolio

Balance of Risk, Cost, Impact, and Time to Delivery

<b>Product Transition (0-3 yrs)</b> <ul style="list-style-type: none"><li>• Focused on delivering near-term products/enhancements to acquisition</li><li>• Customer IPT controlled</li><li>• Cost, schedule, capability metrics</li></ul>	<b>Innovative Capabilities (1-5 yrs)</b> <ul style="list-style-type: none"><li>• High-risk/High payoff</li><li>• “Game changer/Leap ahead”</li><li>• Prototype, Test and Deploy</li><li>• HSARPA</li></ul>
<b>Basic Research (&gt;8 yrs)</b> <ul style="list-style-type: none"><li>• Enables future paradigm changes</li><li>• University fundamental research</li><li>• Gov’t lab discovery and invention</li></ul>	<b>Other (0-8+ yrs)</b> <ul style="list-style-type: none"><li>• Test &amp; Evaluation and Standards</li><li>• Laboratory Operations &amp; Construction</li><li>• Required by Administration (HSPDs)</li><li>• Congressional direction/law</li></ul>

**Customer Focused, Output Oriented**

# S&T Organization



# Three Step Approach:

## Keep it Simple and Make it Easy



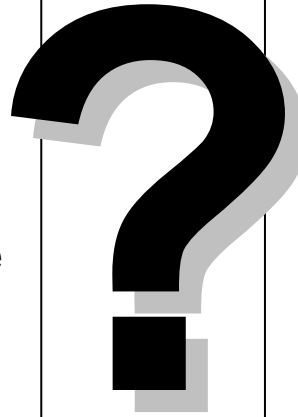
# Two Models for Product Realization

## Big-A Acquisition

1. Requirements derived by Government
2. RFP and then cost-plus contract(s) with developer(s) (which incentivizes long intervals)
3. Focus on technical performance
4. Production price is secondary (often ignored)
5. Product price is cost-plus
6. Product reaches users via Government deployment

**Performance is King**

**Relationship between end users and product developer is usually remote**



**Is there a  
“Middle Ground”**

## Pure Commercialization

1. Requirements derived by Private Sector
2. Product development funded by the developer (which incentivizes short intervals)
3. Technical performance secondary (often reduced in favor of price)
4. Focus on price point
5. Product price is market-based
6. Product reaches users via marketing and sales channels

**Performance/Price is King**

**Relationship between end users and product developer is crucial**

# A new model for Commercialization...

1. Development of Operational Requirements Document (ORD)
2. Assess addressable market(s)
3. Publish ORD and market assessment on public DHS web portal, soliciting interest from potential partners
4. Execute no-cost agreement (CRADA-like) with multiple Private Sector entities, transferring technology (if necessary)
5. Develop supporting grants and standards as necessary
6. Assess T&E after product is developed
7. New Commercial off the Shelf (COTS) product marketed by Private Sector with DHS support

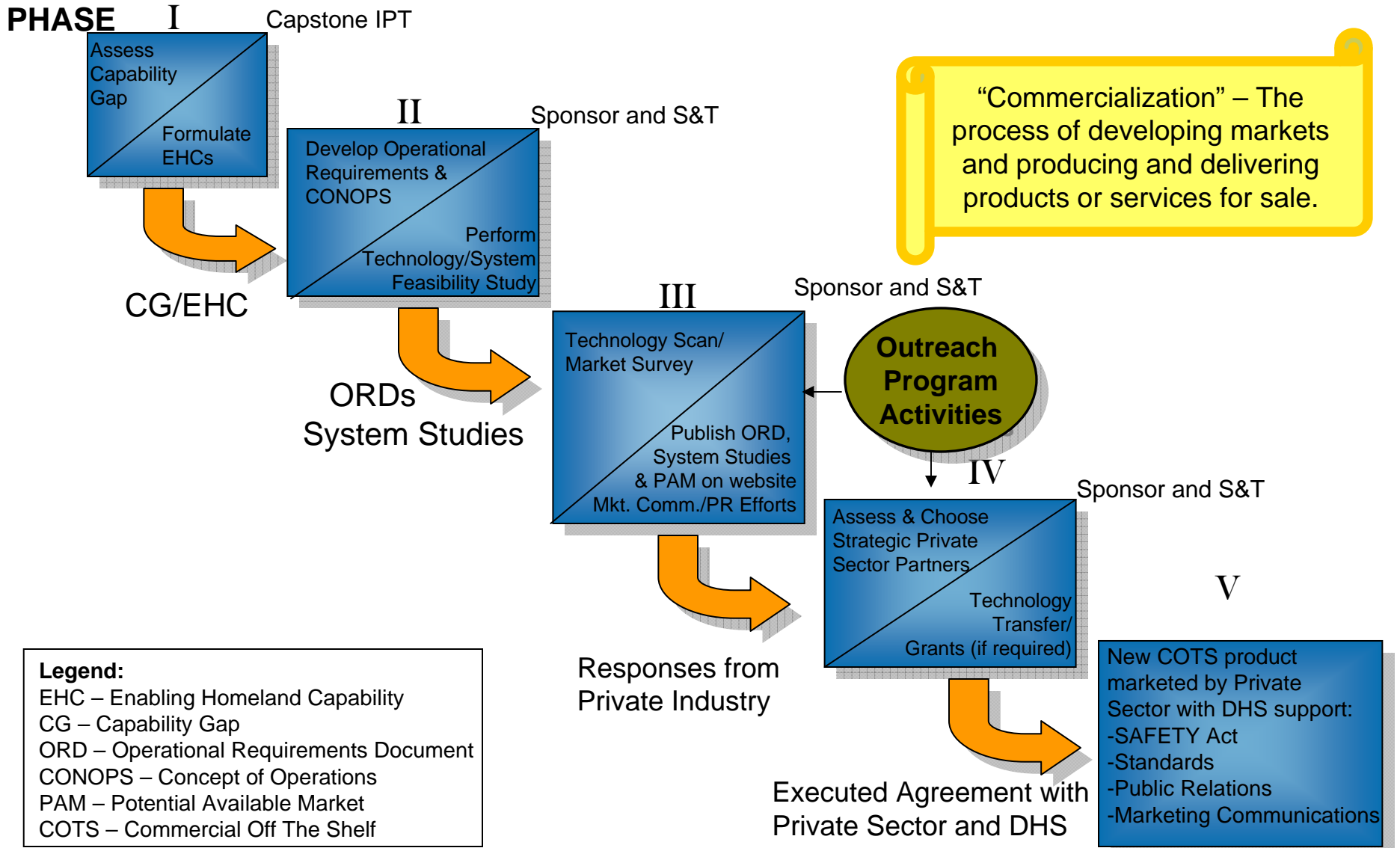
## **Differences from the Acquisition model:**

- **Primary criteria for partner selection is market penetration, agility, and performance/price ratio**
- **Product development is not funded by DHS**
- **Government involvement is limited to inherently governmental functions (e.g., Grants and Standards)**



**Homeland  
Security**

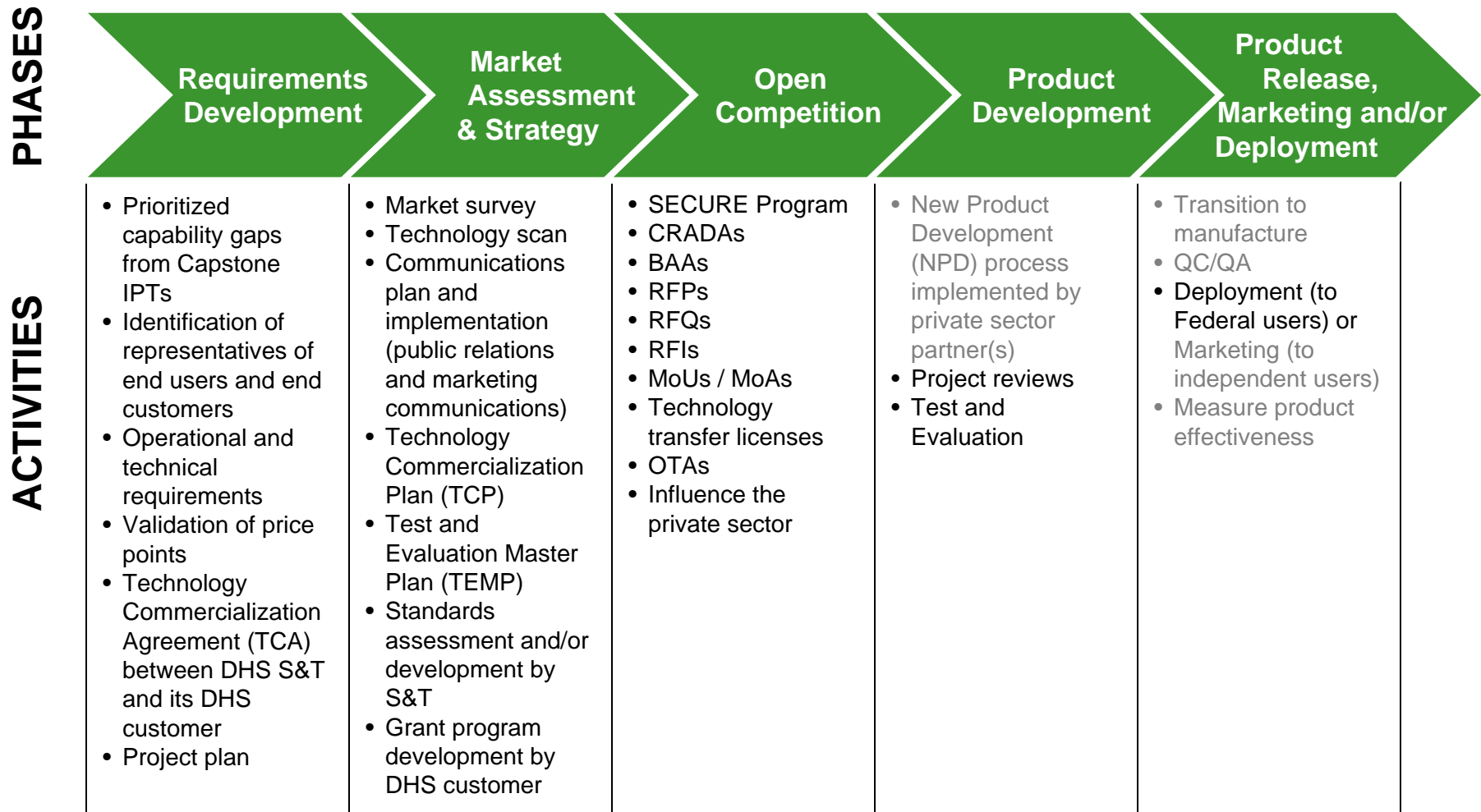
# Commercialization Process



**Homeland Security**

# Private Sector Outreach Process

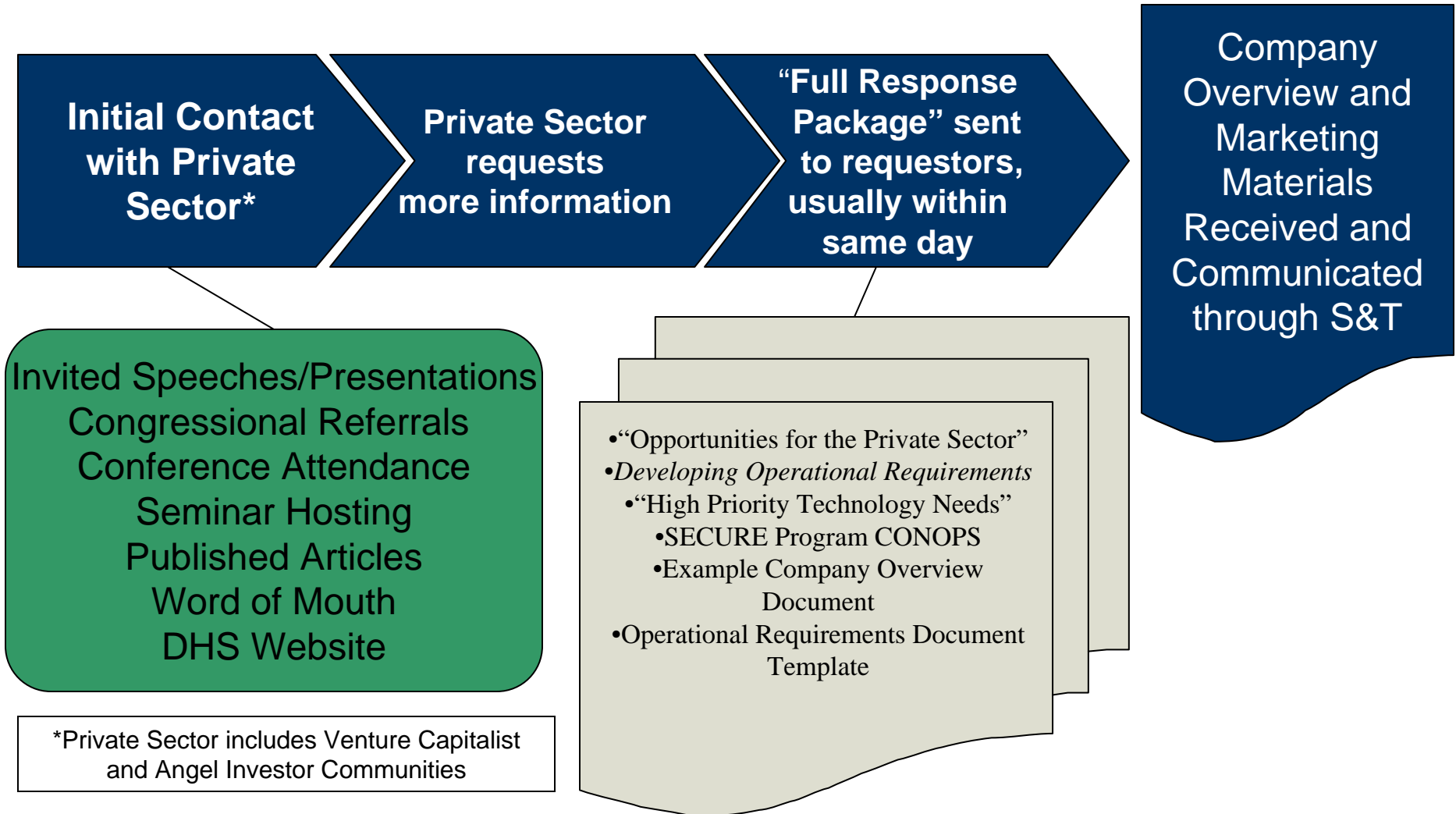
## Requirements Development through Product Release



Legend: Black text = Government activities

Grey text = Private-sector activities

# Contact with the Private Sector



**Homeland Security**

# *10 Reasons to Partner with DHS Science & Technology*

## **Reasons Color Legend:**

**Economics-based**

**Public Relations-based**

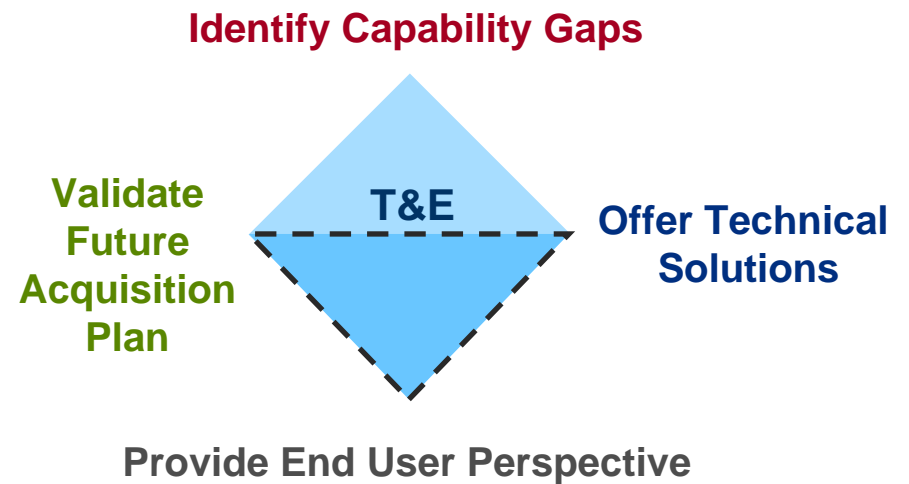
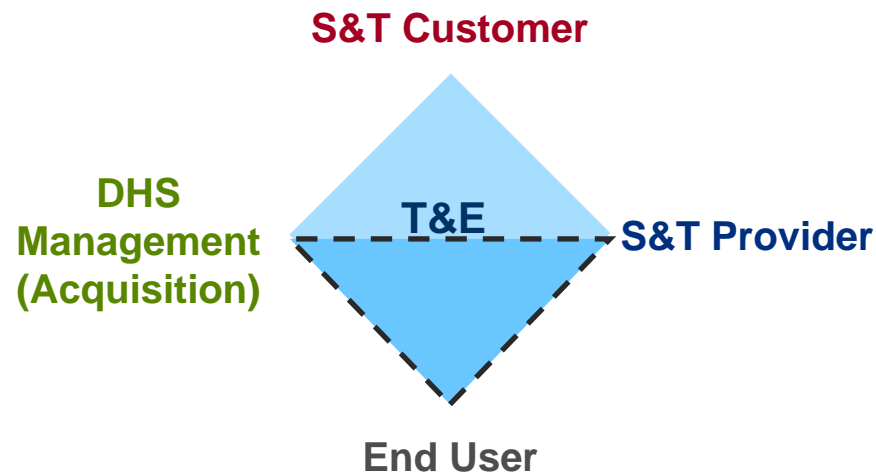
**Business Development-based**

**Strategic Marketing-based**

**Technical Resources-based**

1. Access to Sizeable DHS Market and Ancillary Markets
2. Leverage the Financial Strength/Stability of DHS and off-set R&D costs through participation in mutually beneficial cost-sharing Programs
3. Utilize the SAFETY Act to gain liability protection and access DHS' array of PR and Market Communications services
4. Effectively reach the First Responders Market through FEMA-sponsored grant programs, the AEL (Approved Equipment List), other sponsored equipment lists and fast-track programs
5. Team with Science & Technology Personnel to leverage a vast Network of Laboratory Facilities for Technology and Product Development
6. Gain access to Test and Evaluation (T&E) Facilities for Product Development and actively participate in the generation of Standards, T&E methods and Regulations used at the tribal, local, state, and federal levels
7. Meet and establish Partnerships with others in the University, Business, and National Lab Communities
8. Potentially generate Licensing revenue and capture potential Derivative Product revenue
9. Leverage SBIRs, HITS and HIPS to gain experience with homeland security applications
10. Make a Real Difference by Developing Products to Defend the Homeland for Generations to come as well as gain recognition as a Corporate Citizen contributing to the Security of our Homeland

# S&T Transition Capstone IPTs Members and Function



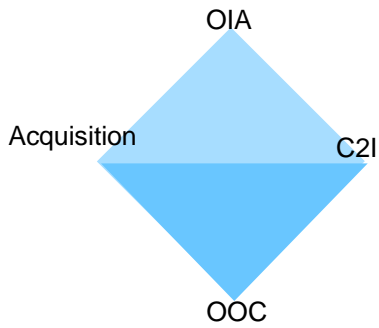
- Industry Board of Directors Model
- Consensus-driven Process

End Result :  
Prioritized Investments in S&T

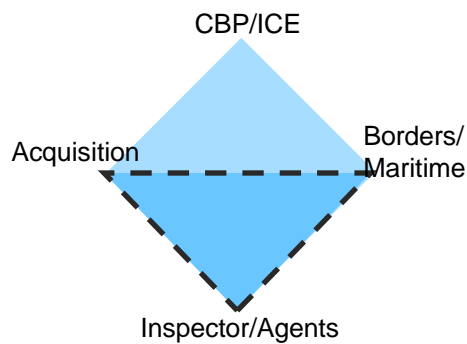
# DHS Requirements/Capability Capstone IPTs

## DHS S&T Product – “Enabling Homeland Capabilities” (EHCs)

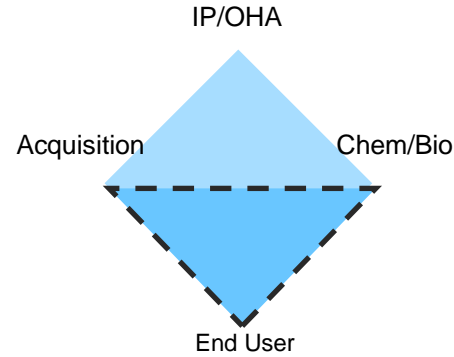
### Information Sharing/Mgmt



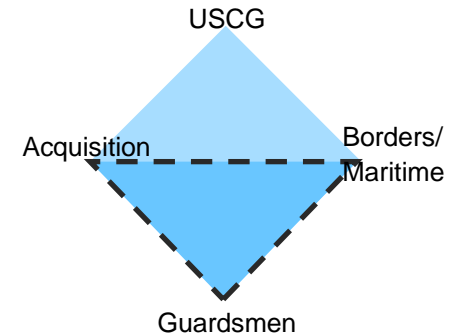
### Border Security



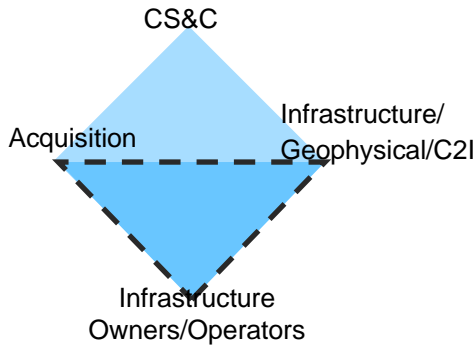
### Chem/Bio



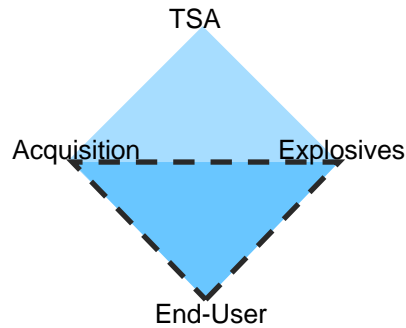
### Maritime Security



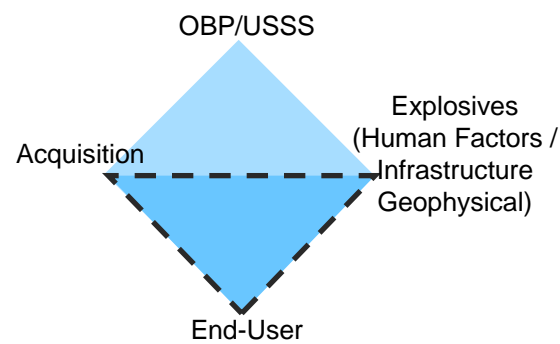
### Cyber Security



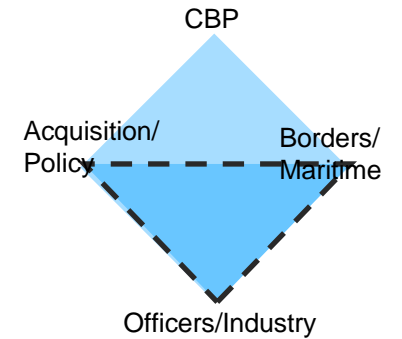
### Transportation Security



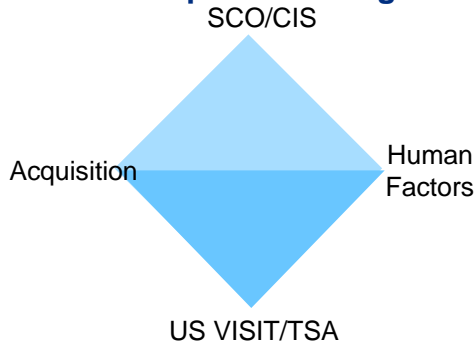
### Counter IED



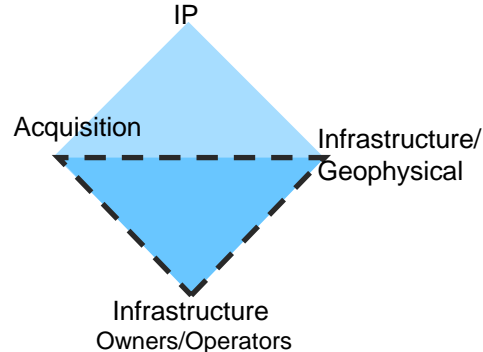
### Cargo Security



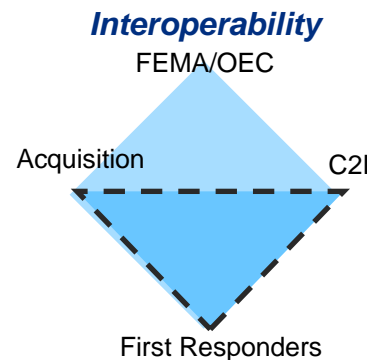
### People Screening



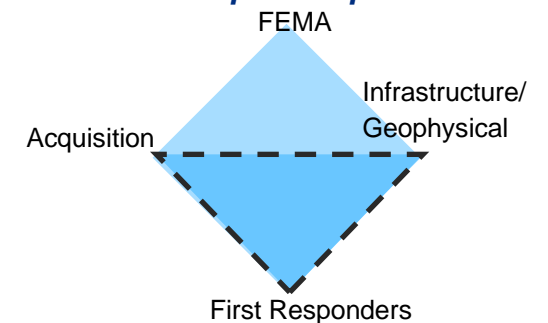
### Infrastructure Protection



### Incident Management

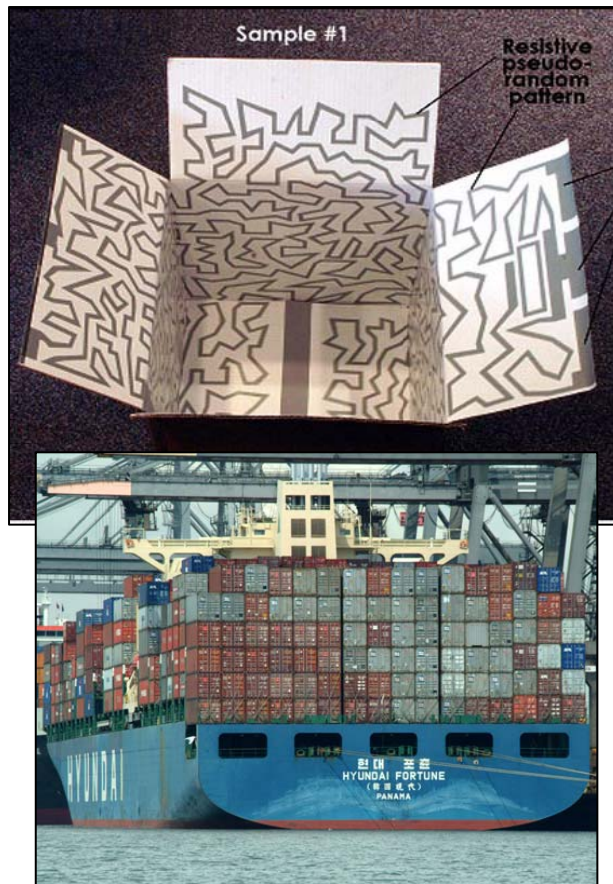


### Prep & Response



# Cargo Security

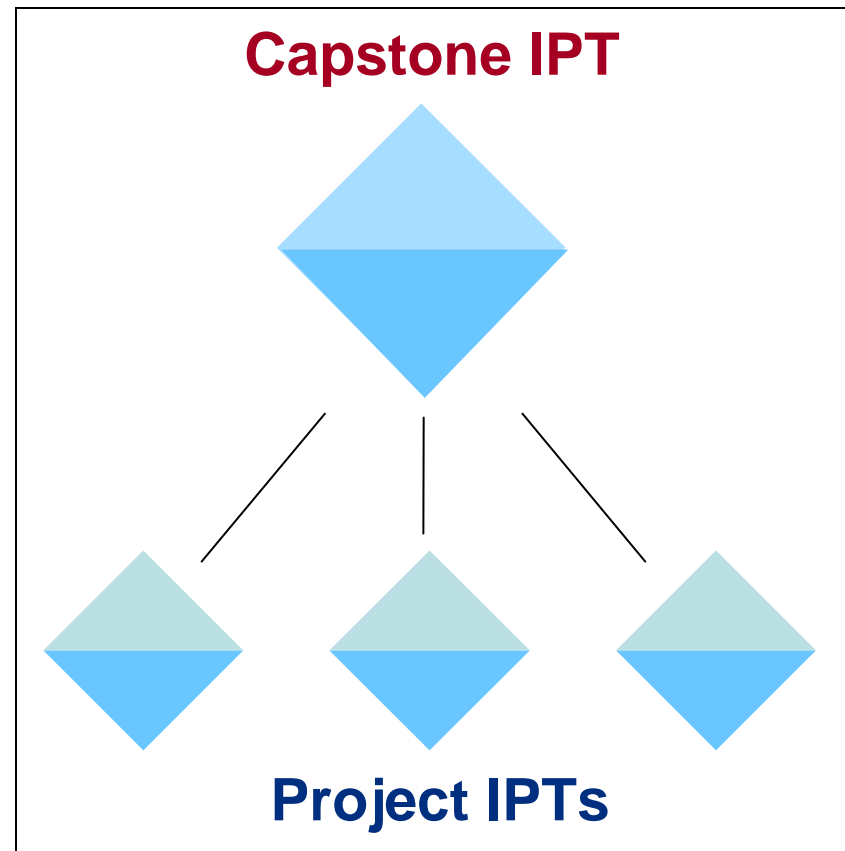
## Representative Technology Needs



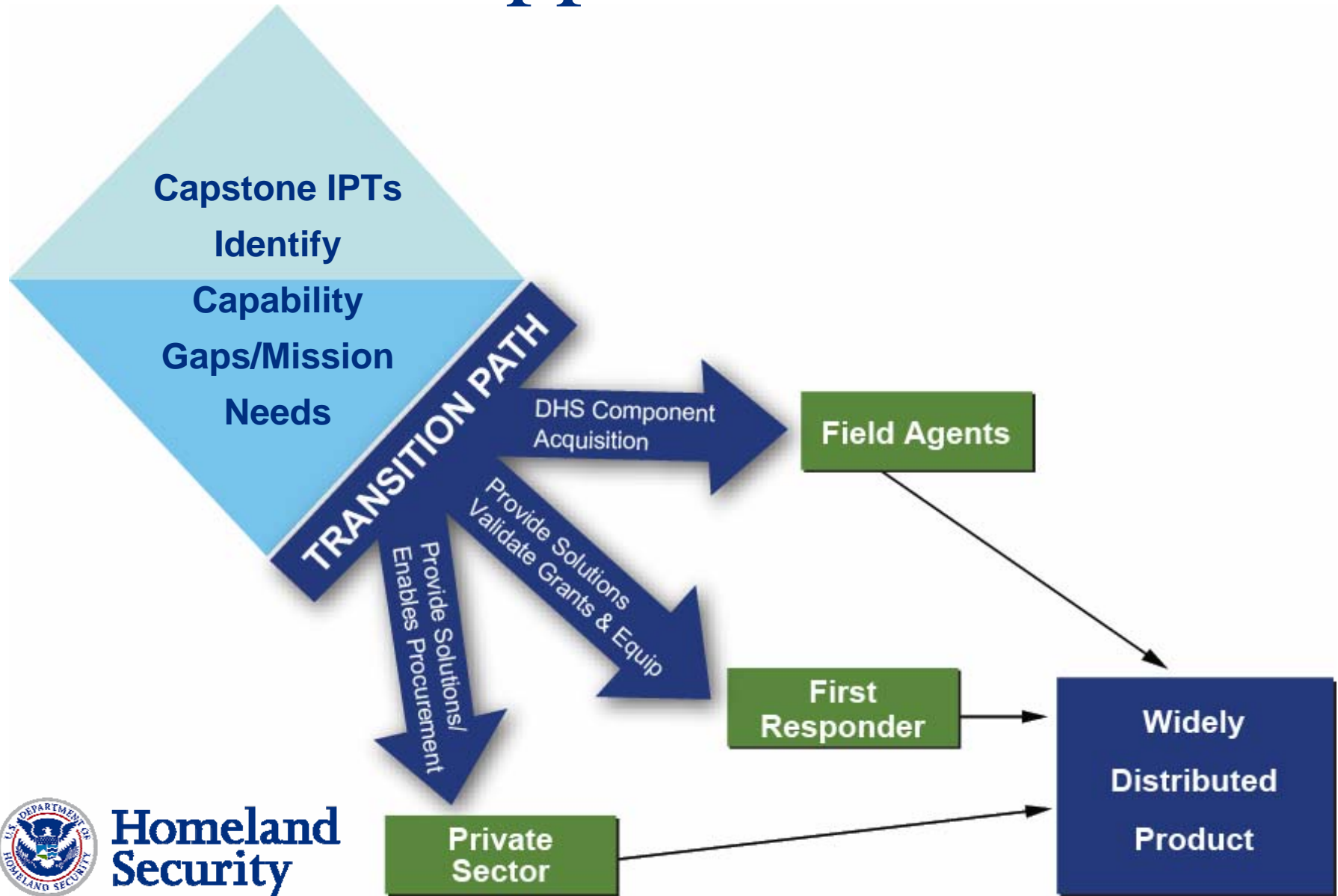
- Enhanced screening and examination by non-intrusive inspection
- Increased information fusion, anomaly detection, Automatic Target Recognition capability
- Detect and identify WMD materials and contraband
- Capability to screen 100% of air cargo
- Test the feasibility of seal security; detection of intrusion
- Track domestic high-threat cargo
- Harden air cargo conveyances and containers
- Positive ID of cargo and detection of intrusion or unauthorized access

# Establishment of Project IPTs: Detailed Specifications/Requirements

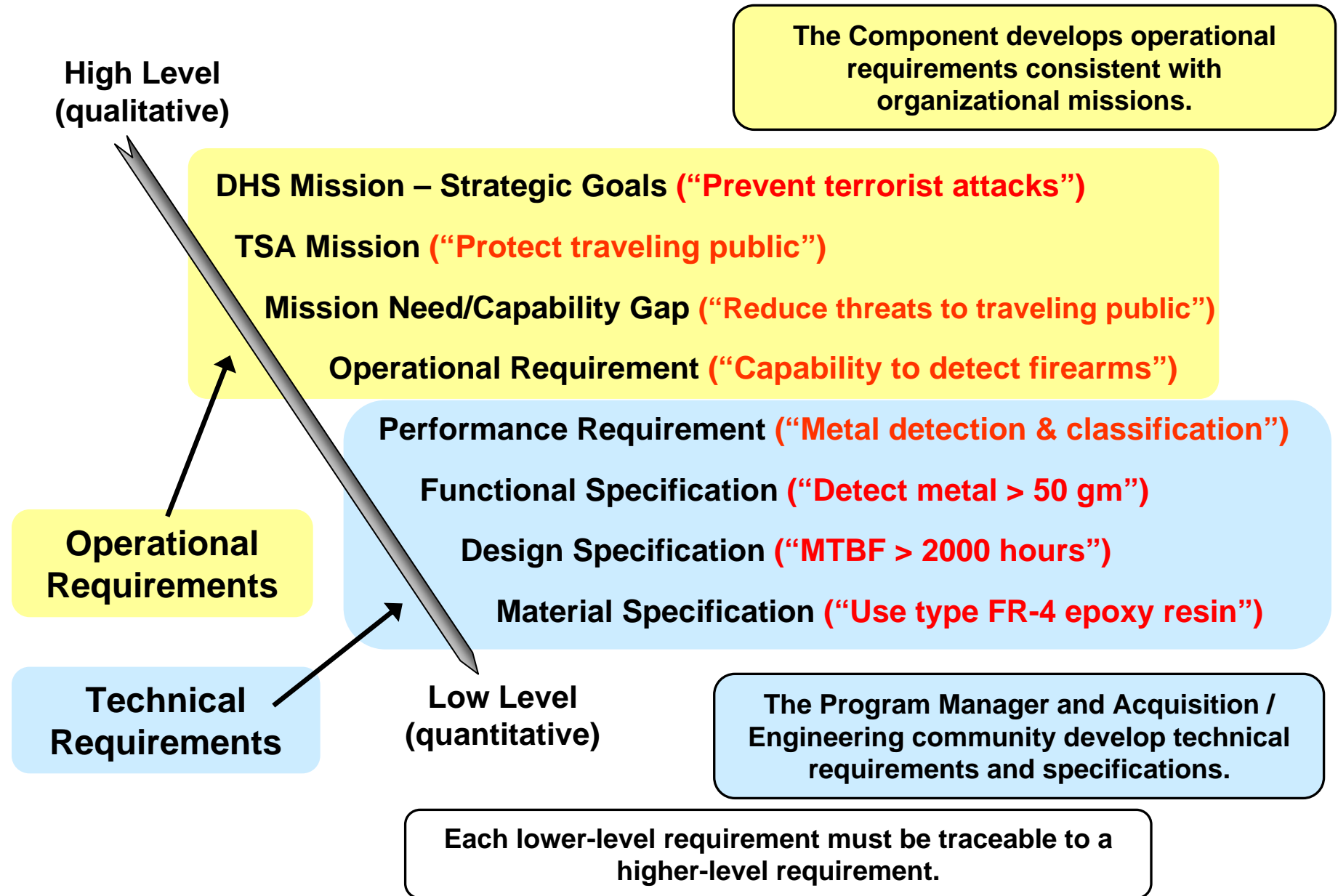
- Members:
  - S&T Program Manager(s)
  - Operating Component's Program Manager(s)
  - End-User(s)
  - Supplier/Provider
- Meet at Least Monthly
- Report to Capstone IPT Quarterly



# Transition Approaches



# Requirements Hierarchy (TSA example)



# ORD: Operational Requirements Document

**What:** ORDs provide a clear definition and articulation of a given problem.

**How:** Training materials have been developed to assist drafting an ORD.

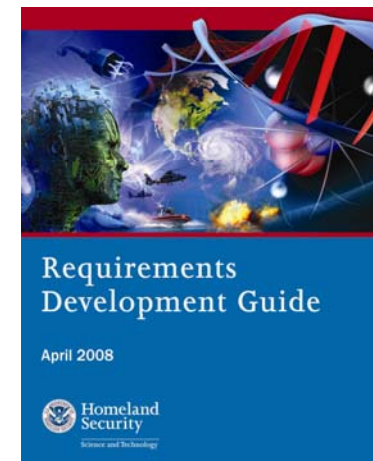
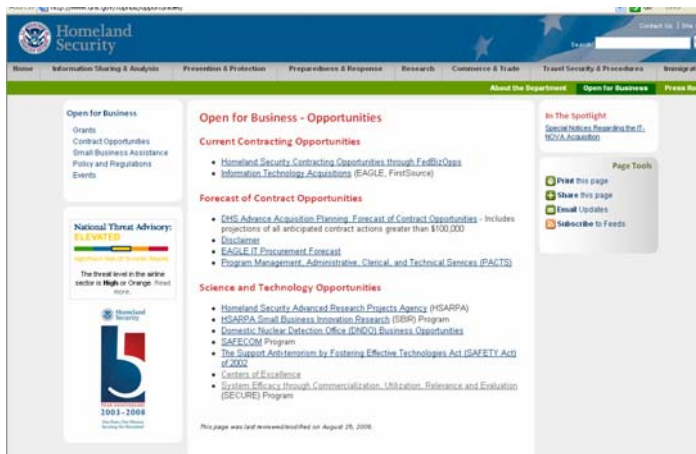
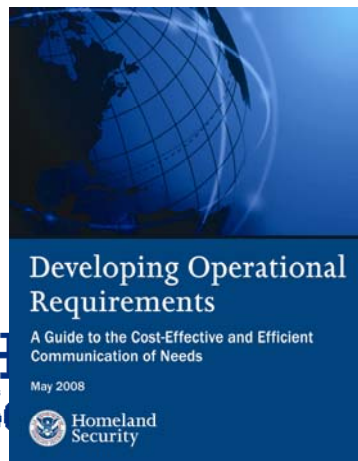
- *Developing Operational Requirements*, 194pp. Available online: [http://www.dhs.gov/xlibrary/assets/Developing\\_Operational\\_Requirements\\_Guides.pdf](http://www.dhs.gov/xlibrary/assets/Developing_Operational_Requirements_Guides.pdf)

**When:** For Use in Acquisition, Procurement, Commercialization and Outreach Programs –Any situation that dictates detailed requirements ( e.g. RFQ, BAA, RFP, RFI, etc.)

**Why:** It's cost-effective and efficient for both DHS and all of its stakeholders.



DHS



# Does this look familiar?!



How the customer explained it



How the Project Leader understood it



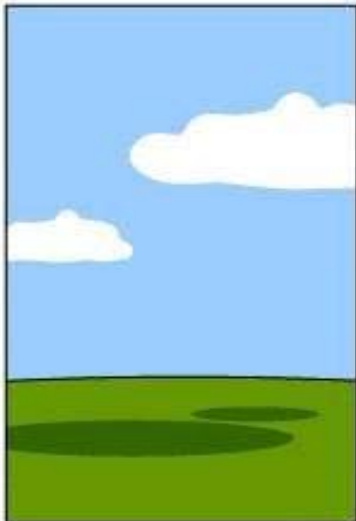
How the Analyst designed it



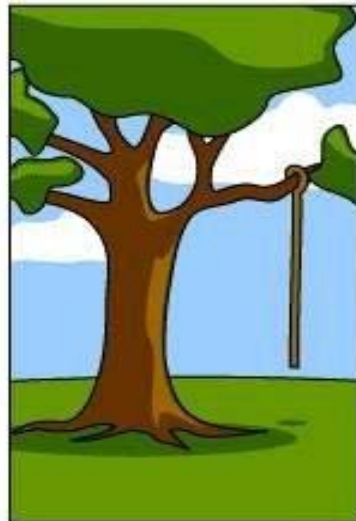
How the Programmer wrote it



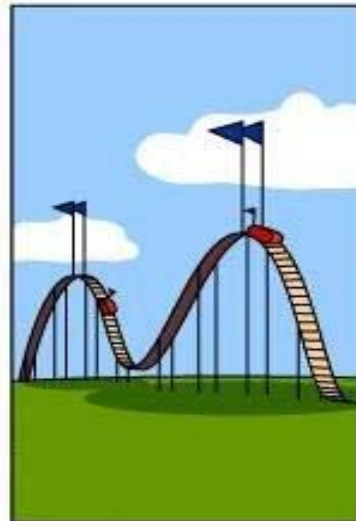
How the Business Consultant described it



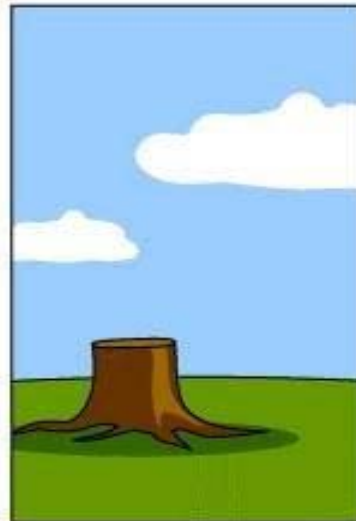
How the project was documented



What operations installed



How the customer was billed



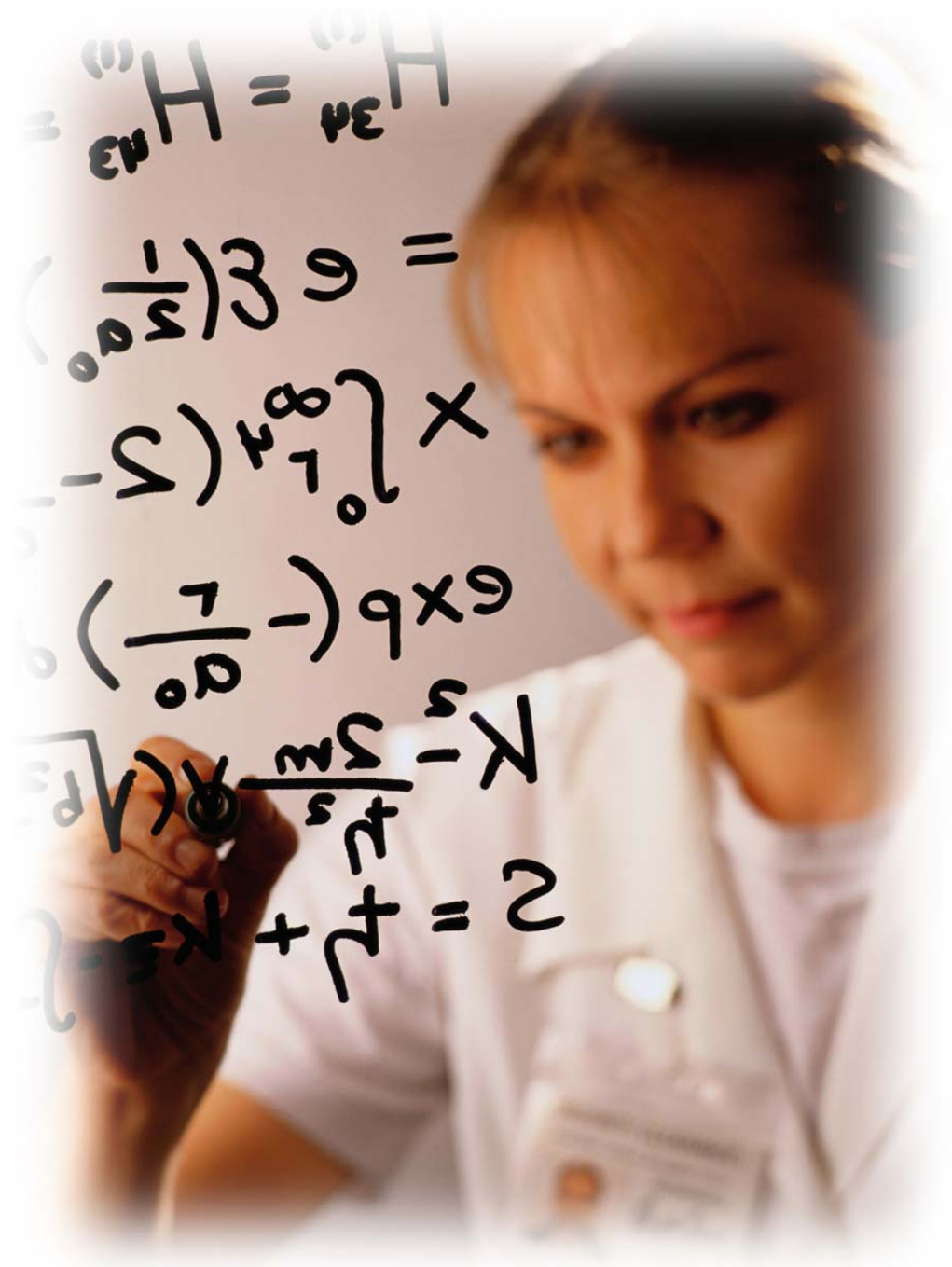
How it was supported



What the customer really needed

# Getting on the “Same Page”

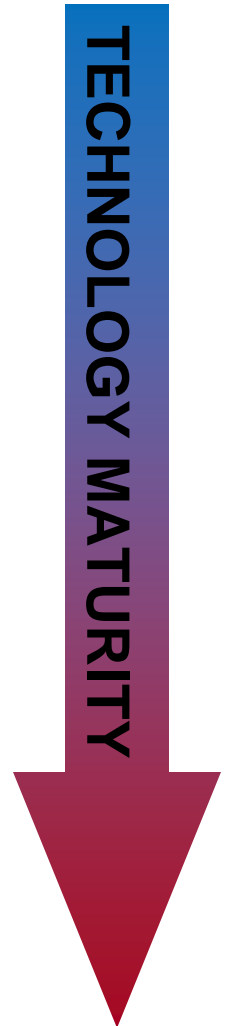
- Historical Perspective
- Language is Key
- Communication is Paramount



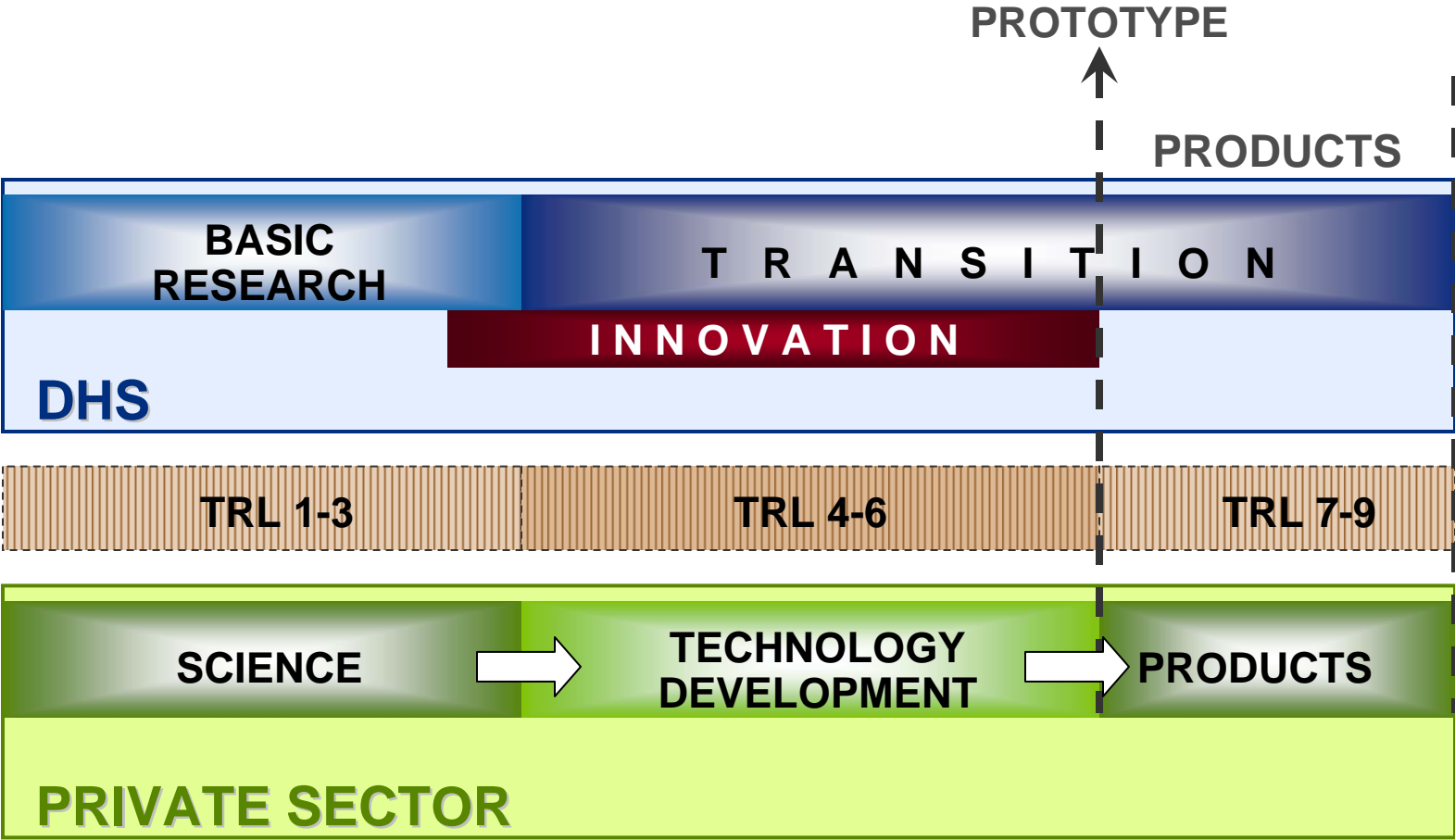
# Technology Readiness Levels (TRLs): Overview

TRLs are NASA-generated and Used Extensively by DoD

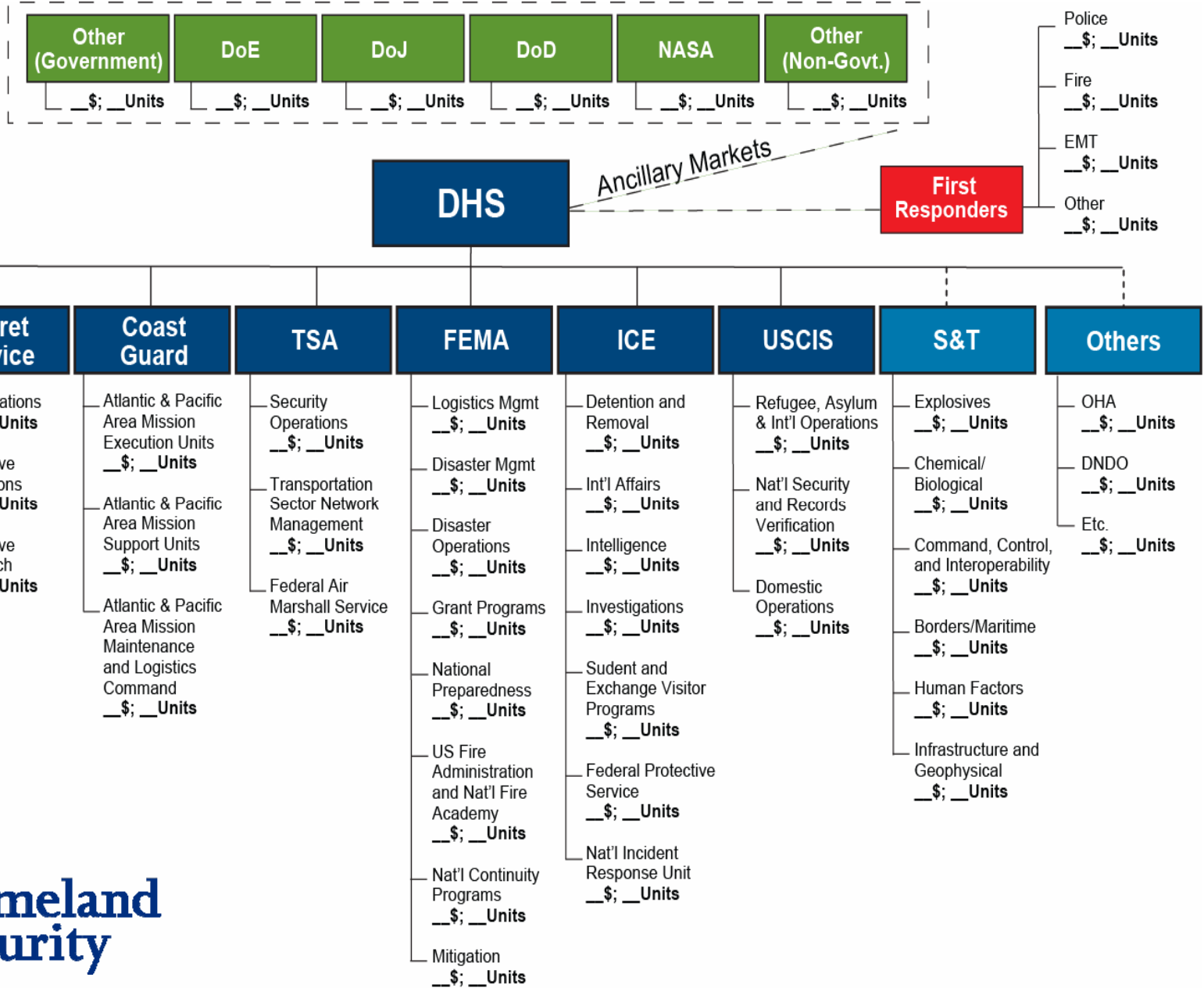
Basic principles observed and reported	<b>1</b>	Basic
Technology concept and/or application formulated	<b>2</b>	
Analytical and experimental critical function and/or characteristic	<b>3</b>	
Component and/or breadboard validation in laboratory environment	<b>4</b>	Advanced
Component and/or breadboard validation in relevant environment	<b>5</b>	
System/subsystem model or prototype demonstration in a relevant environment	<b>6</b>	Applied
System prototype demonstration in a operational environment	<b>7</b>	
Actual system completed and 'flight qualified' through test and demonstration	<b>8</b>	
Actual system 'flight proven' through successful mission operations	<b>9</b>	



# TRL Correlation: DHS and Private Sector



# Market Potential Template

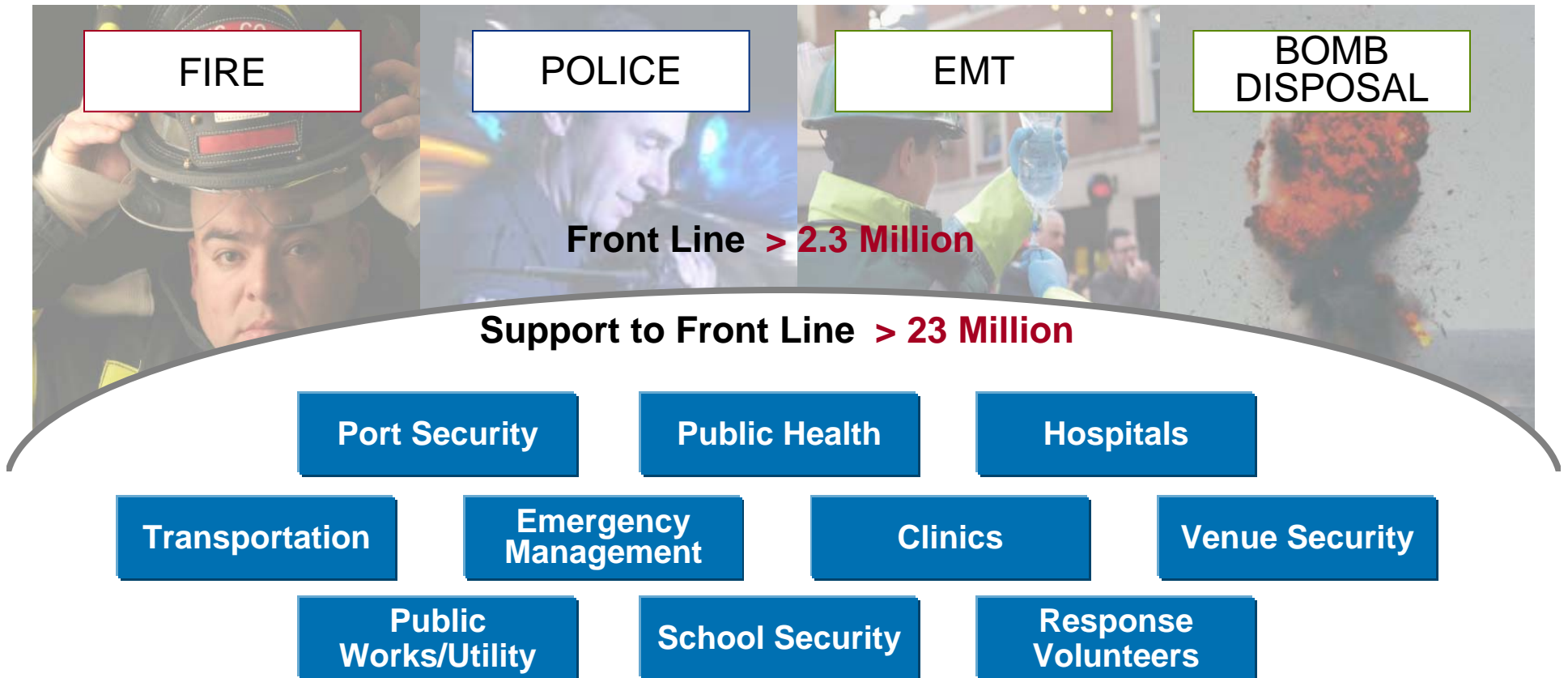


**Homeland Security**

# Conservative Estimate: Number of First Responders in the US

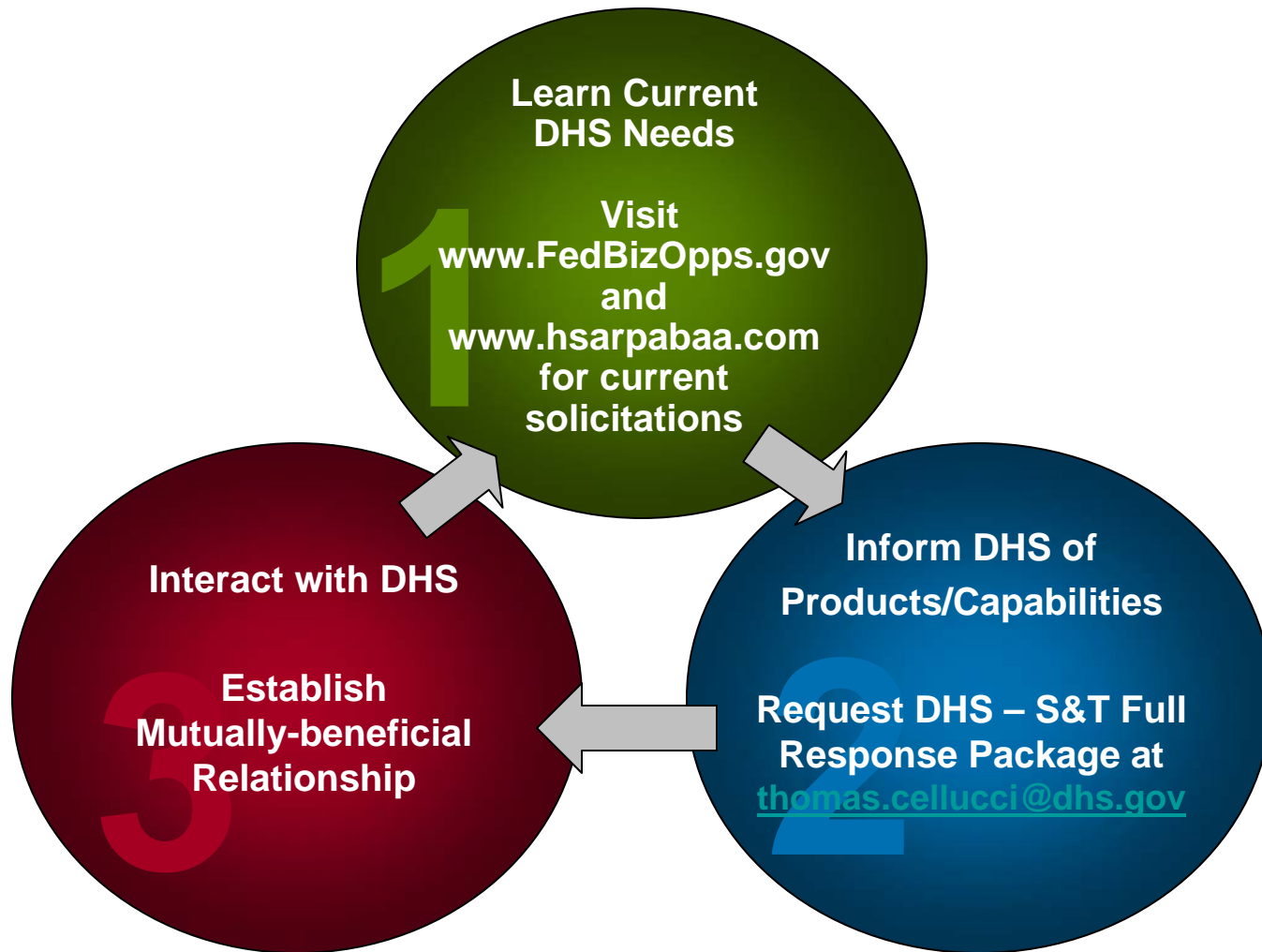
- Homeland Security Presidential Directive 8
- Steve Golubic (FEMA)

**Total: > 25.3 Million Individuals**



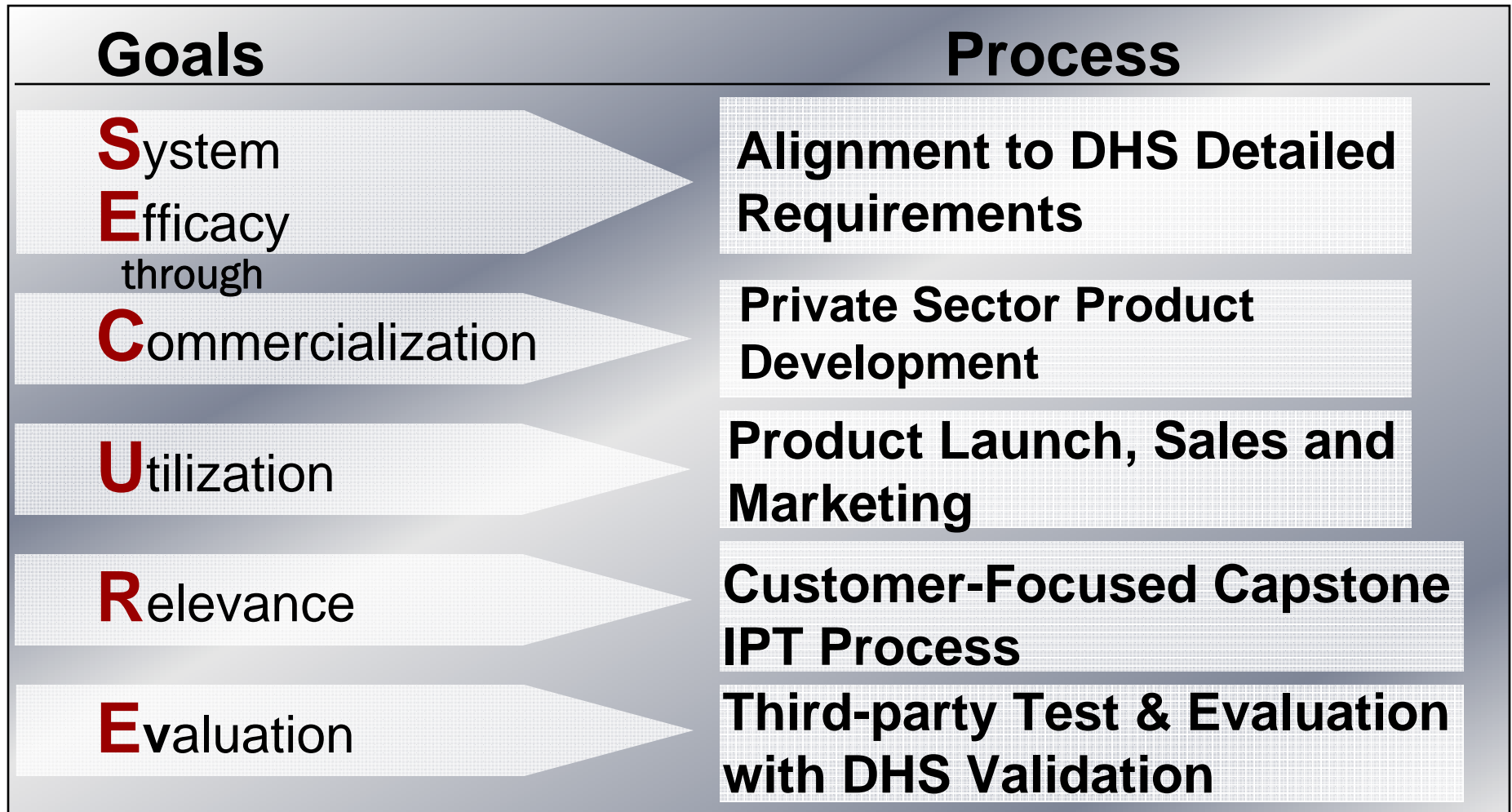
# Call to Action: Mutual Benefits

## Create “Win-Win-Win” Relationships



# SECURE Program

“Mutually-Beneficial Goals Achieved Through Rigorous Process”



**Homeland  
Security**

# SECURE Program

## Concept of Operations



- Application – Seeking products/technologies aligned with posted DHS requirements
- Selection – Products/Technologies TRL-5 or above, scored on internal DHS metrics
- Agreement – One-page CRADA-like document. Outlines milestones and exit criteria
- Publication of Results – Independent Third-Party T&E conducted on TRL-9 product/service. Results verified by DHS, posted on DHS web-portal

### Benefits:

- Successful products/technologies share in the imprimatur of DHS
- DHS Operating Components and First Responders make informed decisions on products/technologies aligned to their stated requirements
- DHS spends less on acquisition programs → Taxpayers win.

# SECURE Program

## Benefit Analysis “Win-Win-Win”

Taxpayers	Private Sector	Public Sector
1. Citizens are better protected by DHS personnel using mission critical products	1. Save significant time and money on market and business development activities	1. Improved understanding and communication of needs
2. Tax savings realized through Private Sector investment in DHS	2. Firms can genuinely contribute to the security of the Nation	2. Cost-effective and rapid product development process saves resources
3. Positive economic growth for American economy	3. Successful products share in the “imprimatur of DHS”; providing assurance that products really work	3. Monies can be allocated to perform greater number of essential tasks
4. Possible product “spin-offs” can aid other commercial markets	4. Significant business opportunities with sizeable DHS and DHS ancillary markets	4. End users receive products aligned to specific needs
5. Customers ultimately benefit from COTS produced within the Free Market System – more cost effective and efficient product development	5. Commercialization opportunities for small, medium and large business	5. End users can make informed purchasing decisions with tight budgets

http://www.dhs.gov/xopnbiz/



Open for Business

- Grants
- Contract Opportunities
- Small Business Assistance
- Policy and Regulations
- Events

National Threat Advisory: ELEVATED

Significant Risk Of Terrorist Attacks

The threat level in the airline sector is High or Orange. Read more.



Open For Business

Open For Business centralizes information to let every business in America work with the Department of Homeland Security. Designed to assist the community, we include links to contracts, grants, small business opportunities and development and contacts.

Spotlight

- Information Technology Acquisitions** Homeland Security is establishing two department-wide contracts for information technology services and commodities.
- E-Verify Program** allows employers to check employees' eligibility. Under Secretary for Management Paul Schneider encourages vendors to participate. [Read more \(PDF, 2 pages - 223 KB\)](#).

Programs and Services

- Acquisition Policies and Regulations** Links to the Federal Acquisition Regulations and the Homeland Security Acquisition Regulations and Acquisition Manual.
- Opportunities** Current contracting opportunities.
- Small Business Procurement Assistance** Information on prime contractors, vendor outreach sessions, and contacts.
- Grants** Information on the grants process.
- Reports and Notices** Includes Acquisition Report, FAIR Act Inventory and Competitive Sourcing Activities Report.
- Forms** Available for download.

Resources

- SAFETY Act** - Part of the Homeland Security Act of 2002, the Support Anti-terrorism by Fostering Effective Technologies (SAFETY) Act was enacted by Congress to encourage the development and deployment of technologies to protect of the nation and provides "risk management" protections for sellers of qualified anti-terrorism products and others in the supply and distribution chain.
- System Efficacy through Commercialization, Utilization, Relevance and Evaluation (SECURE)** Program resources for SECURE.

Open for Business

Page Tools

Print this page

Subscribe to Feeds

Homeland Security Components

- [Office of Chief Procurement Officer](#)
- [Private Sector Office](#)

More from Homeland Security

- [E-Verify Designated as Employment Eligibility Verification](#)
- [E-Verify](#)
- [Links for Businesses](#)
- [Office of Multimedia](#)
- [Exhibit 300: Capital Asset Plan and Business Case Summaries](#)
- [Rights-of-Way Permission for Telecommunications Projects](#)

SECURE Program

# Federal Business Opportunities

Sites where the Office of Procurement Operations (OPO) posts opportunities for prospective suppliers to offer solutions to DHS – S&T's needs:

- [www.FedBizOpps.gov](http://www.FedBizOpps.gov)
- [www.HSARPAbaa.com](http://www.HSARPAbaa.com)
- [www.SBIR.dhs.gov](http://www.SBIR.dhs.gov)
- [www.Grants.gov](http://www.Grants.gov)

take advantage of...

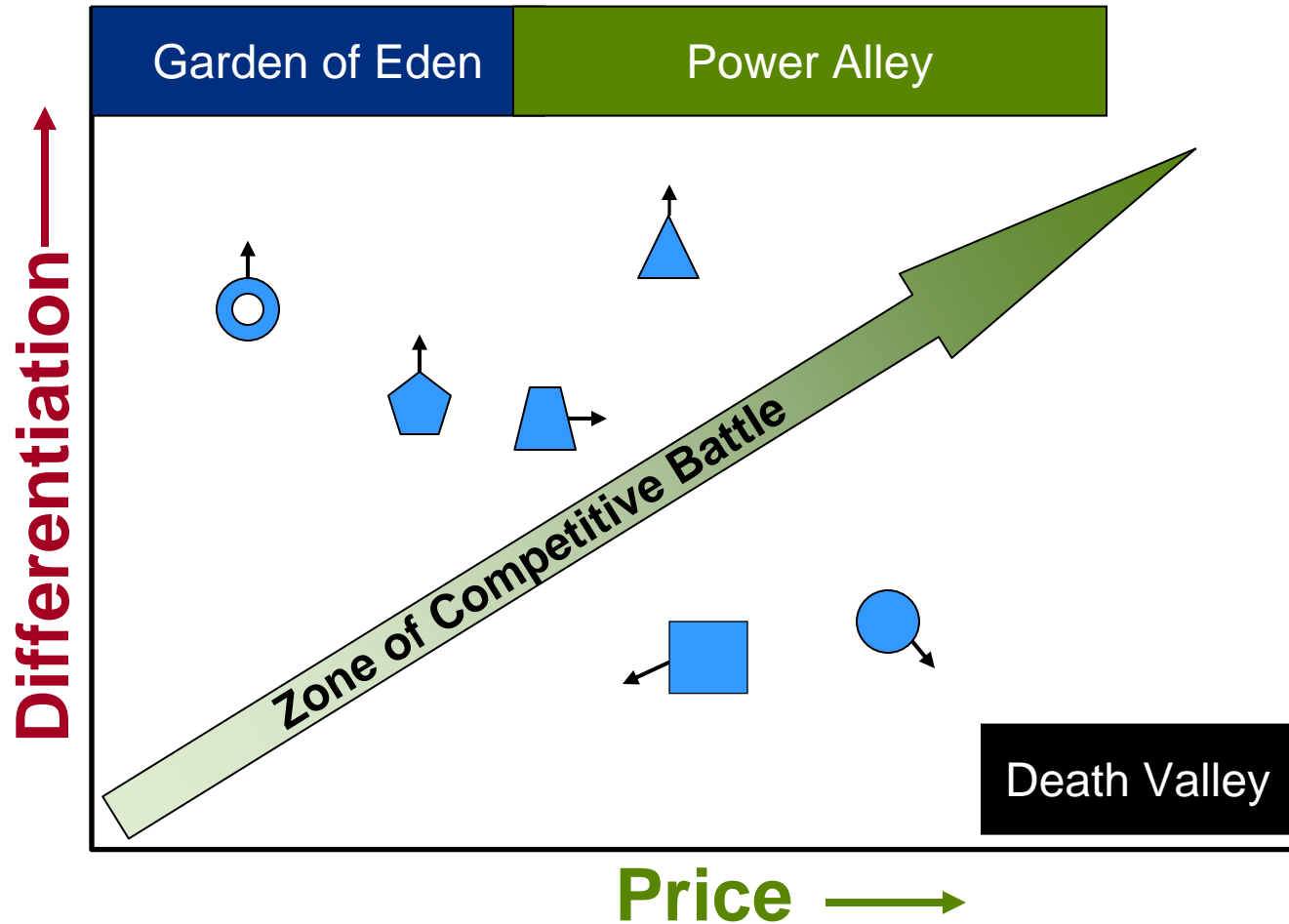
- **Vendor Notification Service:** Sign up to receive procurement announcements and solicitations/BAA amendment releases, and general procurement announcements.  
<http://www.fedbizopps.gov>
- **S&T's HSARPA website:** Register to join the HSARPA mailing list to receive various meeting and solicitation announcements. Link to Representative High Priority Technology Areas, where DHS areas of interest can be found.  
<http://www.hsarpabaa.com>
- **Truly Innovative and Unique Solution:** Refer to Part 15.6 of the Federal Acquisition Regulation (FAR) which provides specific criteria that must be met before a unsolicited proposal can be submitted to Kathy Ferrell.  
[http://www.acquisition.gov/far/current/html/Subpart%2015\\_6.html](http://www.acquisition.gov/far/current/html/Subpart%2015_6.html)

## Contact Information:

Kathy Ferrell  
Department of Homeland Security  
Office of the Chief Procurement Officer  
245 Murray Dr., Bldg. 410  
Washington, DC 20528  
[unsolicited.proposal@dhs.gov](mailto:unsolicited.proposal@dhs.gov)  
202-447-5576

# Show Us the Difference...

Hall's Competitive Model



- As a function of:
- Market
  - Application
  - Technology

$$\text{Differentiation} = (A+B)C/(D+E)$$

The background features a large, faded seal of the Department of Homeland Security. The seal is circular with a red border. Inside the border, the words "DEPARTMENT OF" are at the top and "HOMELAND SECURITY" is at the bottom, both in a light blue font. The central part of the seal depicts an eagle with its wings spread, perched on a shield. The shield is divided into four quadrants: the top-left has stars, the top-right has a mountain, the bottom-left has a green field, and the bottom-right has arrows. The eagle is holding an olive branch in its right talon and arrows in its left.

---

# More Opportunities with DHS Science and Technology

---

# SAFETY Act

## Support Anti-Terrorism by Fostering Effective Technologies Act of 2002

- Enables the development and deployment of qualified anti-terrorism technologies
- Provides important legal liability protections for manufacturers and sellers of effective technologies
- Removes barriers to industry investments in new and unique technologies
- Creates market incentives for industry to invest in measures to enhance our homeland security
- The SAFETY Act liability protections apply to a vast range of technologies, including:
  - Products
  - Services
  - Software and other forms of intellectual property (IP)

### Examples of eligible technologies:

- Threat and vulnerability assessment services
- Detection Systems
- Blast Mitigation Materials
- Screening Services
- Sensors and Sensor Integration
- Vaccines
- Metal Detectors
- Decision Support Software
- Security Services
- Data Mining Software

Protecting You, Protecting U.S.

# Criteria as stated in the SAFETY Act

- Is it an Anti-Terrorism Technology?
- Is it effective and available?
- Does it possess large potential third party liability risk exposure?
- Does Seller need SAFETY Act?
- Does it perform as intended?
- Does it conform to Seller's specifications?
- Is it safe for use as intended?

Addition SAFETY Act information...

Online: [www.safetyact.gov](http://www.safetyact.gov) Email: [helpdesk@safetyact.gov](mailto:helpdesk@safetyact.gov)

Toll-Free: 1-866-788-9318

# Award Criteria

	<b>Developmental Testing and Evaluation (DT&amp;E)</b>	<b>Designation</b>	<b>Certification</b>
<b>Effectiveness Evaluation Conclusion</b>	Needs more proof, has potential	Demonstrated effectiveness, i.e. Developmental testing (with confidence of repeatability)	Consistently proven effectiveness, i.e. operational performance (with high confidence of enduring effectiveness)
<b>Protection</b>	Liability cap <ul style="list-style-type: none"> <li>• only for identified test event(s) and for limited duration (=3yrs)</li> </ul>	Liability cap <ul style="list-style-type: none"> <li>• for any and all deployments in 5-8 year term</li> </ul>	Government Contractor Defense (GCD) <ul style="list-style-type: none"> <li>• for any and all deployments in 5-8 years term</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• EDS not yet TSL Certified</li> <li>• Novel incident pattern matching service</li> </ul>	<ul style="list-style-type: none"> <li>• Radiological detector with <u>laboratory</u> success Opt-out screeners, only similar projects completed</li> </ul>	<ul style="list-style-type: none"> <li>• EDS TSL Certified</li> <li>• Well-documented infrastructure protection service with history of excellent performance and meeting DoE standards</li> </ul>

EDS=Explosive Detection System TSL=Transportation Security Laboratory (TSA)

- SBIR Home
- News and Events
- Solicitation Deadlines
- Proposal Submission
- SBIR Solicitations
- Awards
- Awardee Portal
- SBIR Contact Information
- FAQ
- Links
- Topic Recommendations
- Presentations
- Site Search
- Privacy Policy
- Mailing List



Homeland Security

SBIR Program



[Homeland Security](#) | [Science & Technology](#) | [HSARPA BAA](#) | [OSDBU](#) | [SBA](#) | [SAFETY Act](#) | [Contact Us](#) | [Privacy Policy](#) | [Join HSARPA Mailing List](#)

The DHS S&T SBIR FY08.2 solicitation closed on July 8, 2008.

**Department of Homeland Security  
Science and Technology Directorate (S & T Directorate)  
Small Business Innovation Research (SBIR) Program**

The DHS S&T SBIR Program was initiated in 2004. For the DHS S&T SBIR Program, two solicitations are issued per year. Generally, they will be issued in November and May.

Solicitation topics are developed by Program Managers in each of the Science and Technology (S&T) Divisions, and from time to time, by the Offices of Innovation and Basic Research. The annual solicitations consist of topics that are relevant to the Chemical and Biological, Borders and Maritime Security, Human Factors, Explosives, Infrastructure and Geophysical, and Command, Control and Interoperability Divisions.

Similar to the R&D programs of the S&T Directorate, the SBIR topics generally address the needs of the seven DHS Operational Units, i.e., U.S. Coast Guard, U.S. Transportation Security Administration, U.S. Customs and Border Protection, Federal Emergency Management Agency, U.S. Citizenship and Immigration Services, U.S. Immigration and Customs Enforcement, and U.S. Secret Service, as well as First Responders.

For the Phase II SBIR effort, the DHS S&T SBIR Program has a Cost Match feature for SBIR projects that attract matching cash from an outside investor. The purpose is to focus SBIR funding on those projects that are most likely to be developed into viable new products that DHS and others will buy and that will thereby make a major contribution to homeland security and/or economic capabilities. Click here for more information about the [Cost Match feature](#).

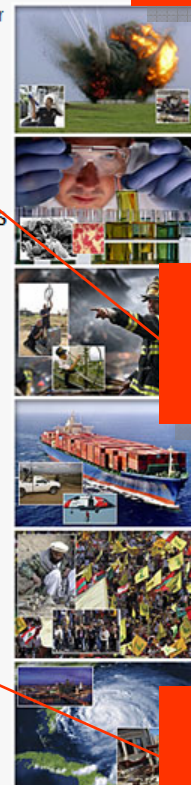
The DHS S&T SBIR Program has several processes in place to accelerate the Phase I and Phase II award process to further satisfy operational requirements and commercial application.

- Phase I awards are typically made within 90 days of selection.
- Invited Phase II projects will be reviewed and awards will be made incrementally, as quickly as possible under the Jump Start feature, to maintain the momentum of the Phase I effort. The Phase II proposal invitation process expeditiously identifies those Phase I awardees deserving of Phase II awards.

To learn more about the SBIR Program, please visit <http://www.sba.gov/SBIR/indexsbir-str.html>.

[Click Here to Print](#)

**\*\*WARNING\*\*WARNING\*\*WARNING\*\***



# Tech Clearinghouse Mission

To rapidly disseminate technical information concerning existing and desired products and services to/between Federal, State, Local, and Tribal Government and the Private Sector in order to encourage technological innovation and facilitate the mission of the Department of Homeland Security.

- Establishes Central Federal Technology Clearinghouse
- Issues Announcements for Innovative Solutions
- Establishes S&T Technical Assessment Team
- Provides guidance for the evaluation, purchase, and implementation of homeland security enhancing technologies
- Provides users with information to develop or deploy technologies that would enhance homeland security
- Enables technology transfer

**Improved Knowledge Sound Acquisition Decisions**

# TechSolutions

The mission of TechSolutions is to rapidly address technology gaps identified by Federal, State, Local, and Tribal first responders

- Field prototypical solutions in 12 months
- Cost should be commensurate with proposal but less than \$1M per project
- Solution should meet 80% of identified requirements
- Provide a mechanism for Emergency Responders to relay their capability gaps
  - Capability gaps are gathered using a web site ([www.dhs.gov/techsolutions](http://www.dhs.gov/techsolutions))
- Gaps are addressed using existing technology, spiral development, and rapid prototyping
- Emergency Responders partner with DHS from start to finish

**Rapid Technology Development**  
Target: Solutions Fielded within 1 year, at <\$1M

# TechSolutions Investments

Seatbelt Safety for  
Emergency Vehicles



Next Generation  
Breathing Apparatus



Fire Ground Compass



-----  
Under Consideration

Vehicle Mounted Chem/Bio  
Sensor Detection



# Getting Involved: S&T Contacts

Division	Email
Jim Tuttle	S&T-Explosives@dhs.gov
Beth George	S&T-ChemBio@dhs.gov
David Boyd	S&T-C2I@dhs.gov
Anh Duong	S&T-BordersMaritime@dhs.gov
Sharla Rausch	S&T-HumanFactors@dhs.gov
Chris Doyle	S&T-InfrastructureGeophysical@dhs.gov
Rich Kikla	S&T-Transition@dhs.gov
Starnes Walker	S&T-Research@dhs.gov
Roger McGinnis	S&T-Innovation@dhs.gov

# Summary

**Detailed Requirements**

**Sizeable Market Potential**

**Delivered Products – PERIOD!**

**How Can You Afford NOT to Partner with DHS S&T?**

Questions/Comments:

Thomas A. Cellucci, Ph.D., MBA

[thomas.cellucci@dhs.gov](mailto:thomas.cellucci@dhs.gov)

## U.S. Department of Homeland Security: Science and Technology Directorate's Chief Commercialization Officer

Thomas A. Cellucci, PhD, MBA was recently appointed Chief Commercialization Officer for the Department of Homeland Security's Science and Technology (S&T) Directorate . The Chief Commercialization Officer (CCO) is responsible for initiatives that identify, evaluate and commercialize technology for the specific goal of rapidly developing and deploying products and services that meet the specific operational requirements of the Department of Homeland Security's Operating Components and its end users. The CCO also develops and drives the implementation of DHS-S&T's outreach with the private sector to establish and foster mutually-beneficial working relationships to facilitate cost-effective and efficient product/service development efforts.



Cellucci is an accomplished serial entrepreneur, seasoned senior executive and Board member possessing extensive corporate and VC experience across a number of worldwide industries. Profitably growing high technology firms at the start-up, mid-range and large corporate level has been his trademark. In 1999, he founded a highly successful management consulting firm--Cellucci Associates, Inc. -- that raises capital and provides strategic business services to top-tier global high technology firms. He serves on both public and private Boards and has authored or co-authored over 120 articles on Nanotechnology, Laser physics, Photonics, Environmental disturbance control, MEMS test and measurement, Mistake-proofing enterprise software, and Sales & Marketing. He has also held the rank of Lecturer or Professor at institutions like Princeton University, University of Pennsylvania and Camden Community College. Cellucci also co-authored ANSI Standard Z136.5 "The Safe Use of Lasers in Educational Institutions".

As a result of his consistent achievement in the commercialization of emerging technologies, Cellucci has received numerous awards and citations from industry, government and business.

Cellucci earned a PhD in Physical Chemistry from the University of Pennsylvania, an MBA from Rutgers University and a BS in Chemistry from Fordham University. He has also attended and lectured at executive programs at the Harvard Business School, MIT Sloan School, Kellogg School and others. Dr. Cellucci is regarded as an authority in rapid time-to-market new product development and is a frequent public speaker.



Homeland  
Security