

Opportunities for the Private Sector



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Discussion Guide

- Overview of Department of Homeland Security
- Commercialization Office 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
- TechSolutions
- SBIR Opportunities
- Getting Involved
- Effecting Change in Government
- Summary



Homeland
Security

Homeland Security Mission

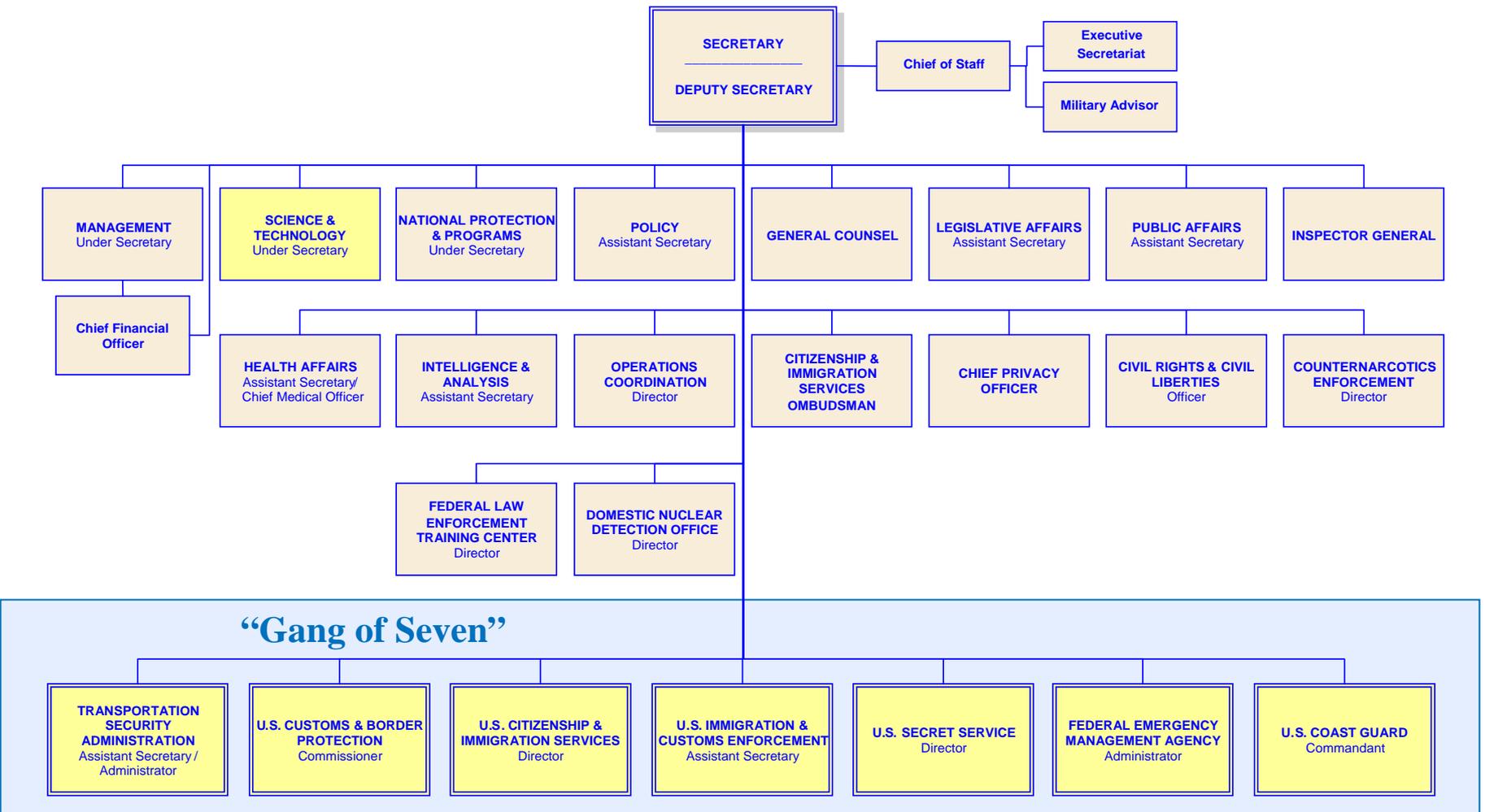


- Lead Unified National Effort to Secure America
- Prevent Terrorist Attacks Within the U.S.
- Respond to Threats and Hazards to the Nation
- Ensure Safe and Secure Borders
- Welcome Lawful Immigrants and Visitors
- Promote Free Flow of Commerce

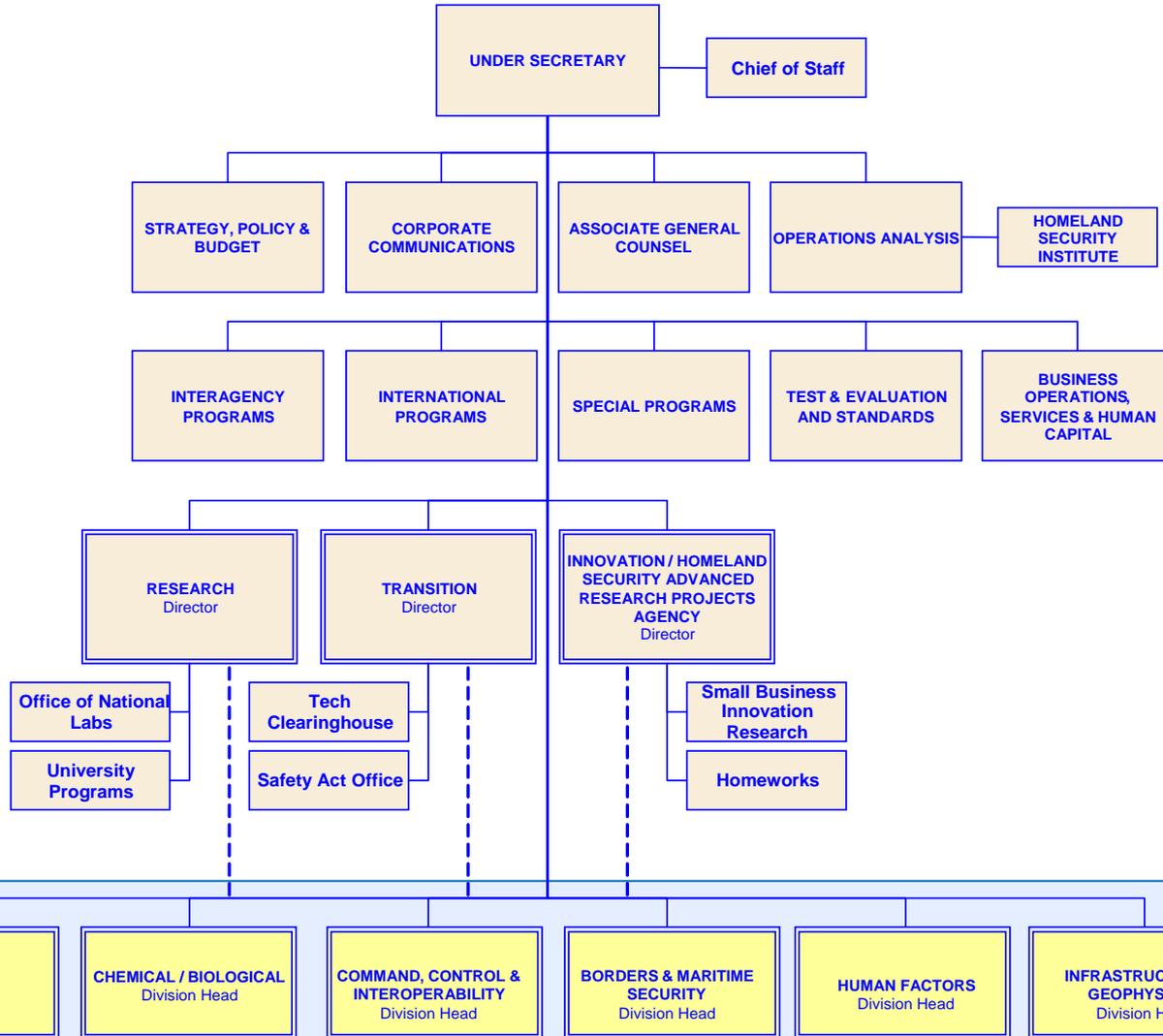


**Homeland
Security**

U.S. Department of Homeland Security



Office of the Under Secretary for Science and Technology



Divisions Drive S&T Interactions with Customers

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

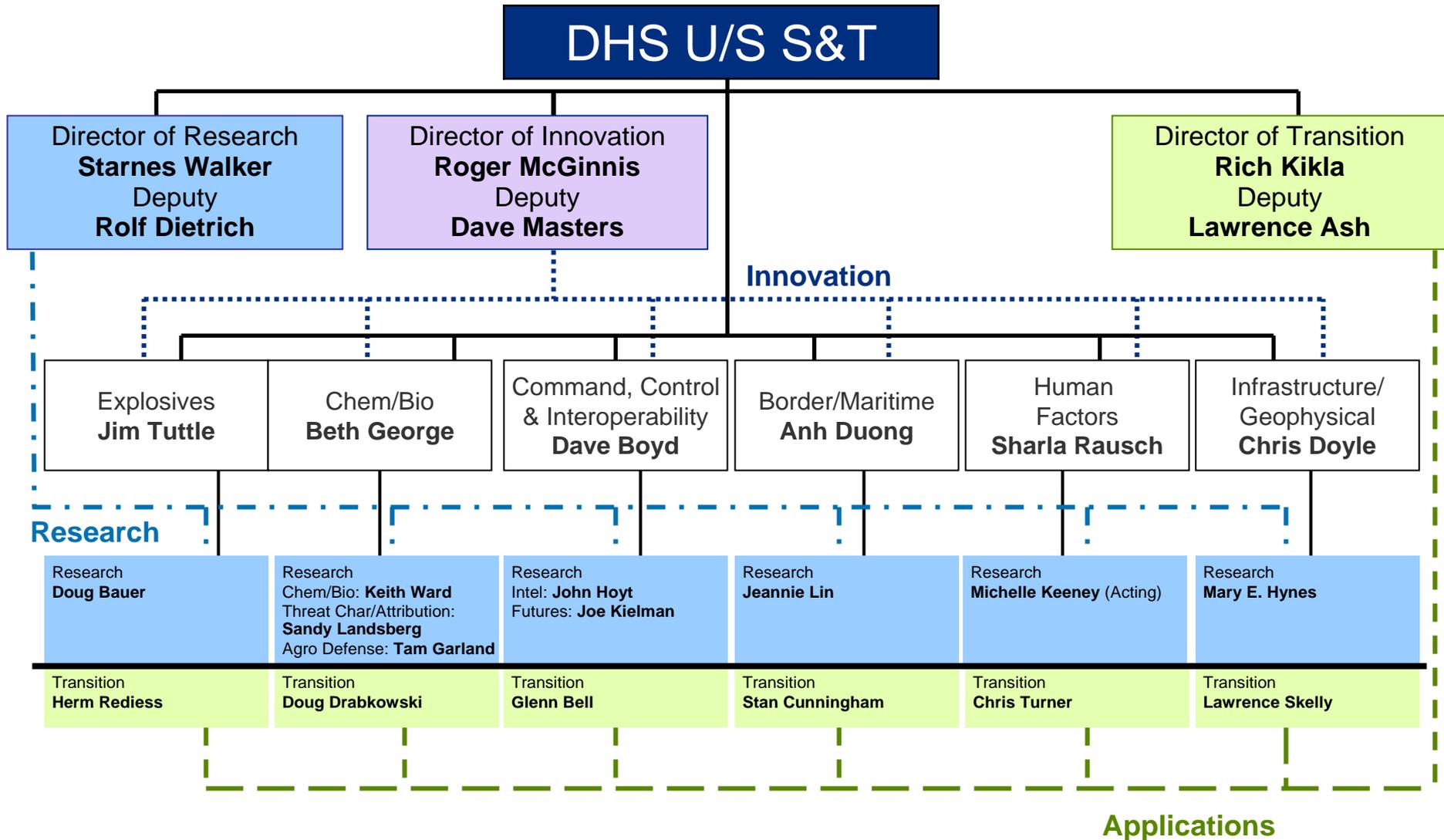
DHS S&T Investment Portfolio

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

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

Customer Focused, Output Oriented

S&T Organization



Three Step Approach:

Keep it Simple and Make it Easy

1

Develop Detailed Requirements
And Relay Conservative Market Potential

Establish Strategic Partnerships

- Business Case Information
- Open Competition
- Detailed Mutual Responsibilities

Deliver Products!

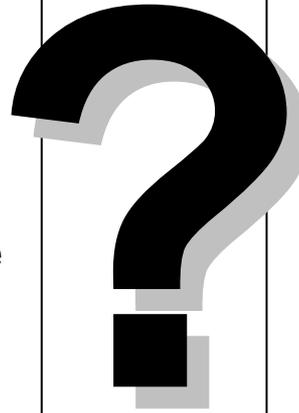
Two Models for Product Realization

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:

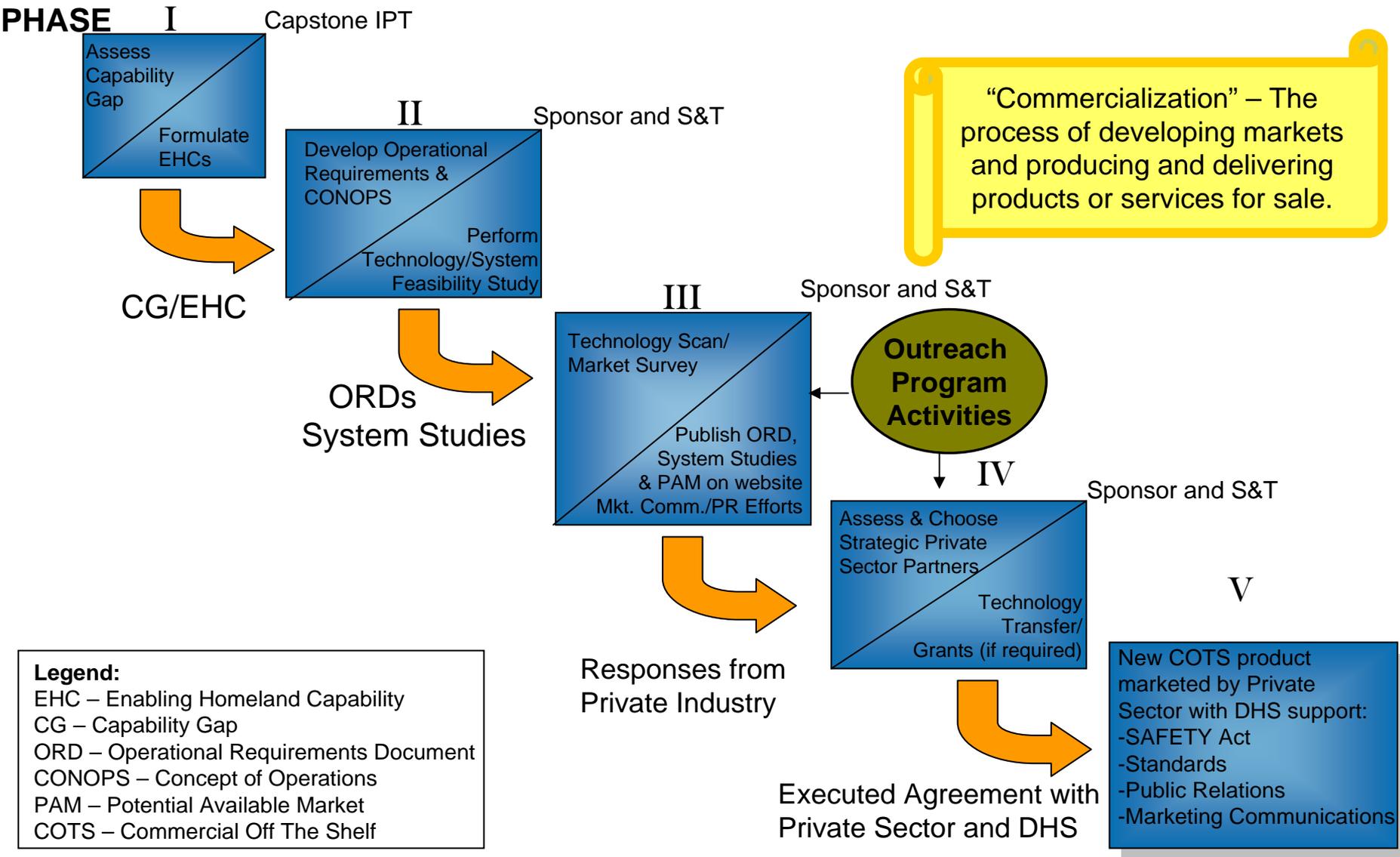
- **Primary criteria for partner selection is market penetration, agility, and performance/price ratio**
- **Product development is not funded by DHS**
- **Government involvement is limited to inherently governmental functions (e.g., Grants and Standards)**



**Homeland
Security**

Commercialization Process

“Commercialization” – The process of developing markets and producing and delivering products or services for sale.



Homeland Security

Contact with the Private Sector

Initial Contact
with Private
Sector*

Private Sector
requests
more information

“Full Response
Package” sent
to requestors,
usually within
same day

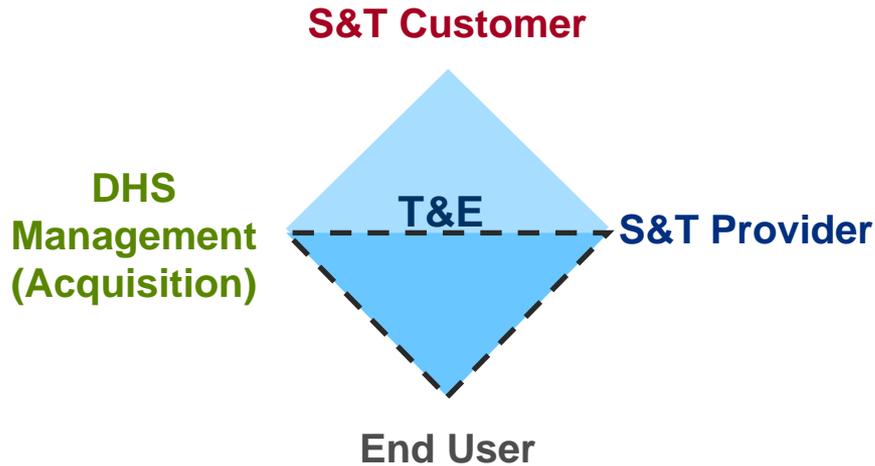
Company
Overview and
Marketing
Materials
Received and
Communicated
through S&T

Invited Speeches/Presentations
Congressional Referrals
Conference Attendance
Seminar Hosting
Published Articles
Word of Mouth
DHS Website

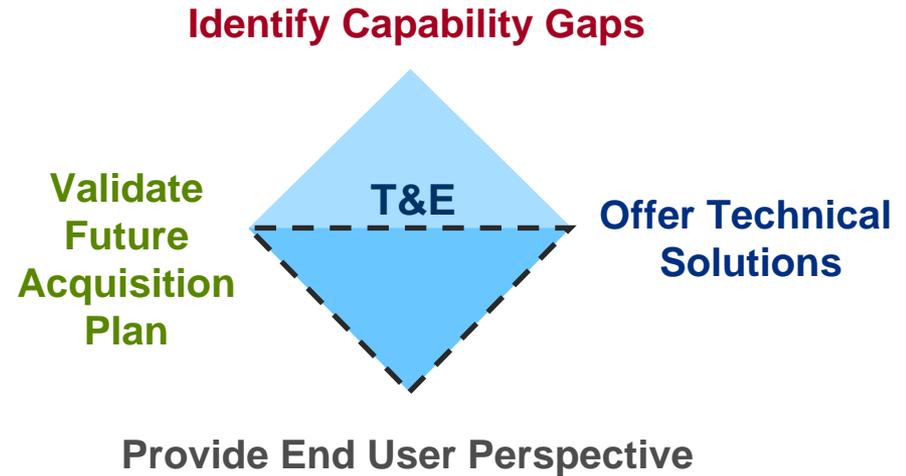
- “Opportunities for the Private Sector”
- *Developing Operational Requirements*
 - “High Priority Technology Needs”
 - SECURE Program CONOPS
 - Example Company Overview Document
- Operational Requirements Document Template

*Private Sector includes Venture Capitalist
and Angel Investor Communities

S&T Transition Capstone IPTs Members and Function



- Industry Board of Directors Model
- Consensus-driven Process

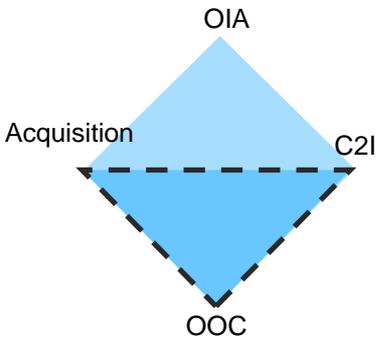


End Result :
Prioritized Investments in S&T

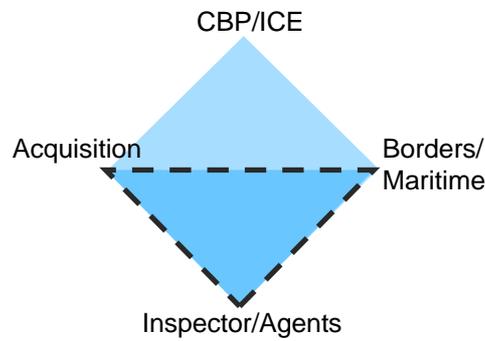
DHS S&T Capstone IPTs

Gathering Mechanism for Customer Requirements:

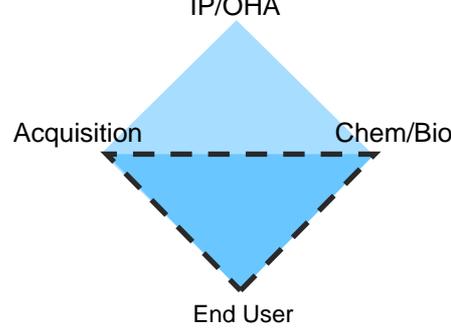
Information Sharing/Mgmt



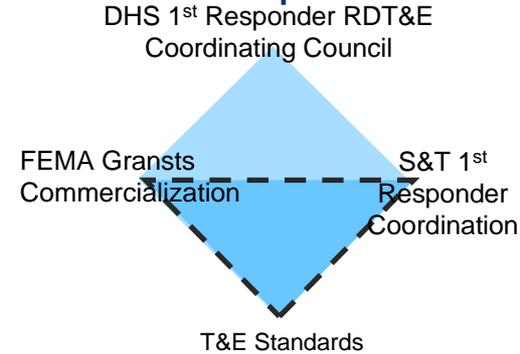
Border Security



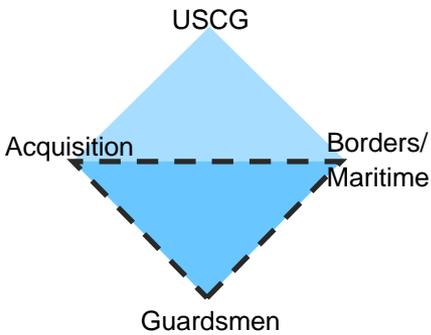
Chem/Bio



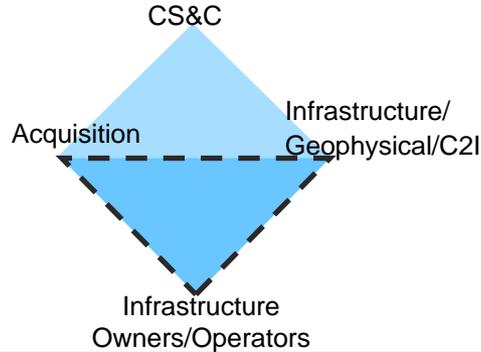
First Responders



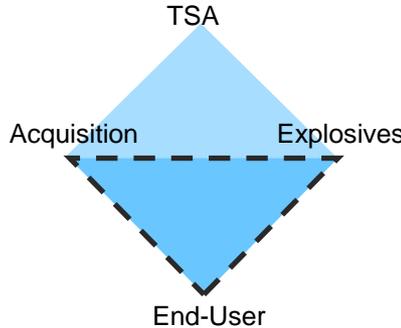
Maritime Security



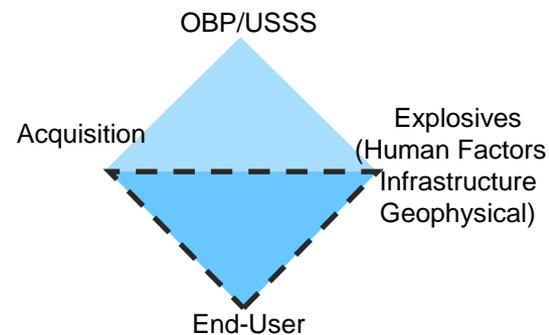
Cyber Security



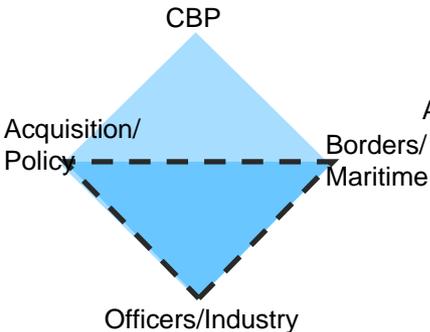
Transportation Security



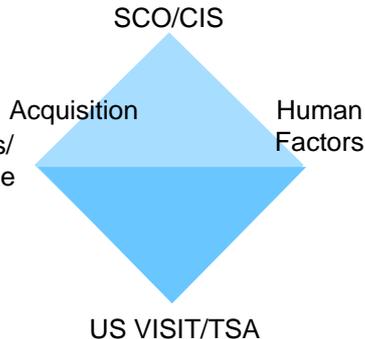
Counter IED



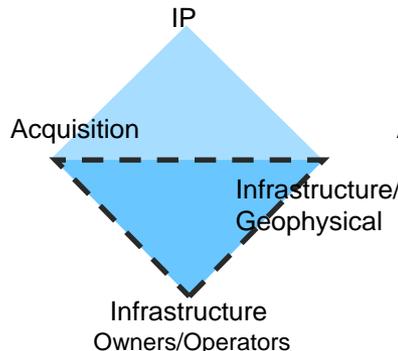
Cargo Security



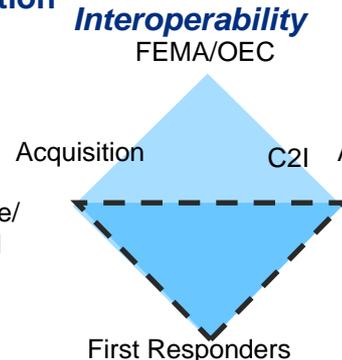
People Screening



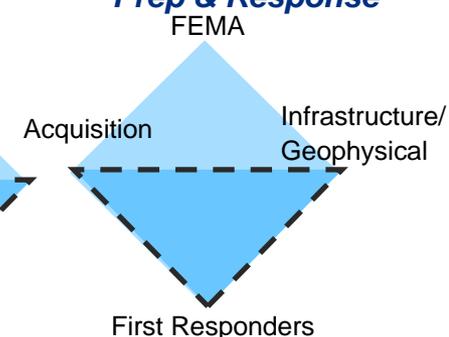
Infrastructure Protection



Incident Management



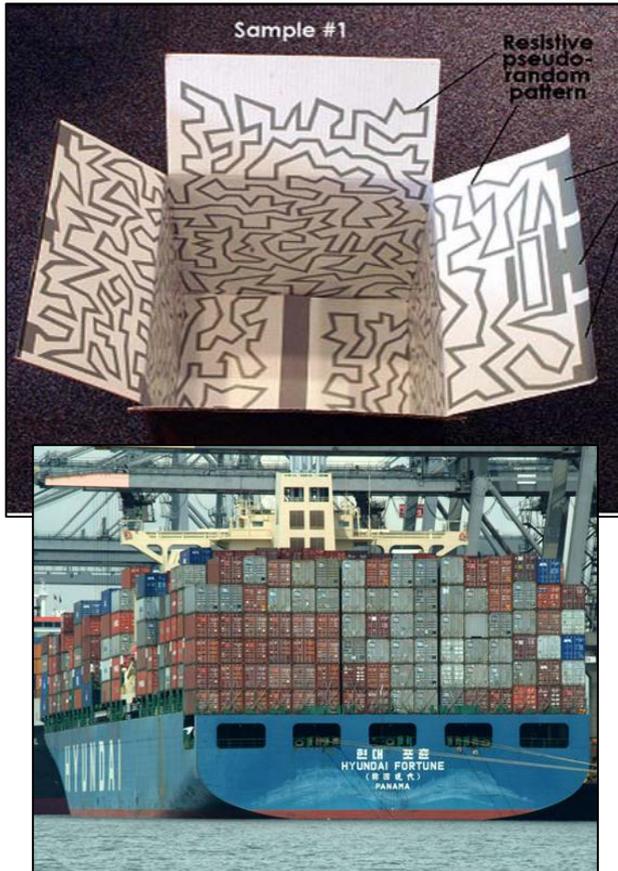
Interoperability



Prep & Response

Cargo Security

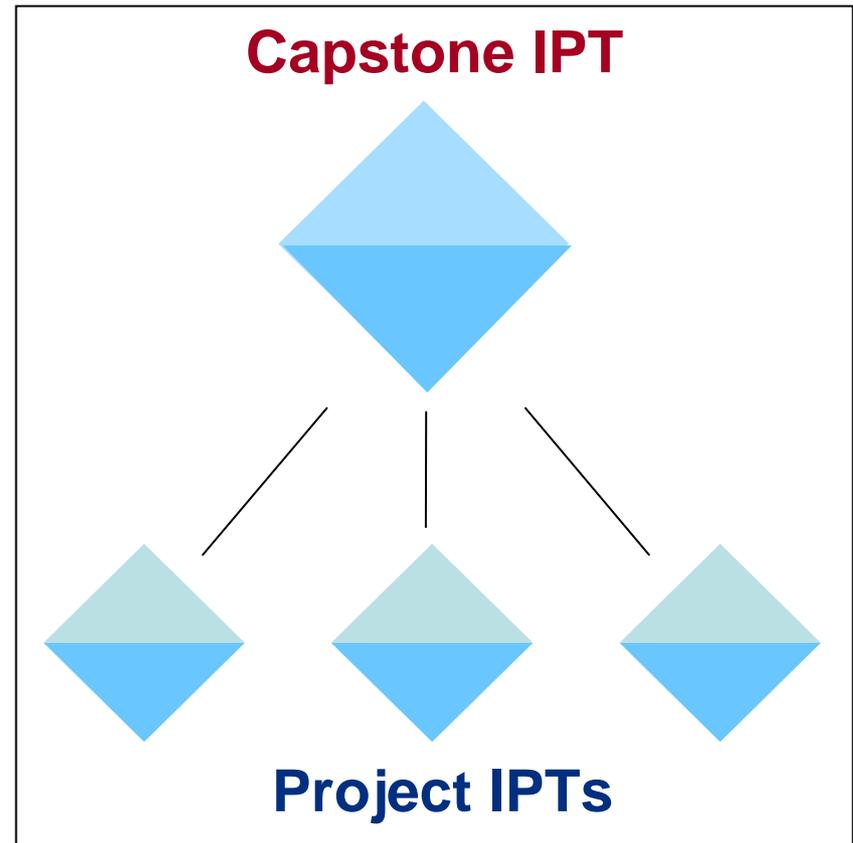
Representative Technology Needs



- 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



Requirements Hierarchy (TSA example)

The Component develops operational requirements consistent with organizational missions.

High Level
(qualitative)

DHS Mission – Strategic Goals (“**Prevent terrorist attacks**”)
TSA Mission (“**Protect traveling public**”)
Mission Need/Capability Gap (“**Reduce threats to traveling public**”)
Operational Requirement (“**Capability to detect firearms**”)

Operational
Requirements

Performance Requirement (“**Metal detection & classification**”)
Functional Specification (“**Detect metal > 50 gm**”)
Design Specification (“**MTBF > 2000 hours**”)
Material Specification (“**Use type FR-4 epoxy resin**”)

Technical
Requirements

Low Level
(quantitative)

The Program Manager and Acquisition /
Engineering community develop technical
requirements and specifications.

Each lower-level requirement must be traceable to a
higher-level requirement.

ORD: Operational Requirements Document

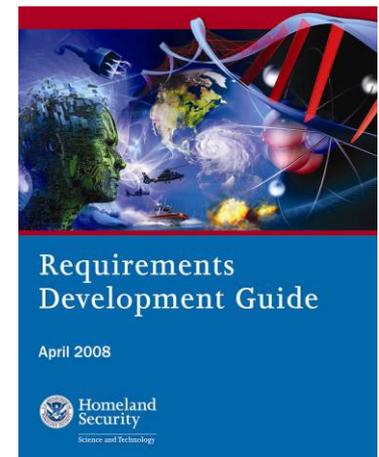
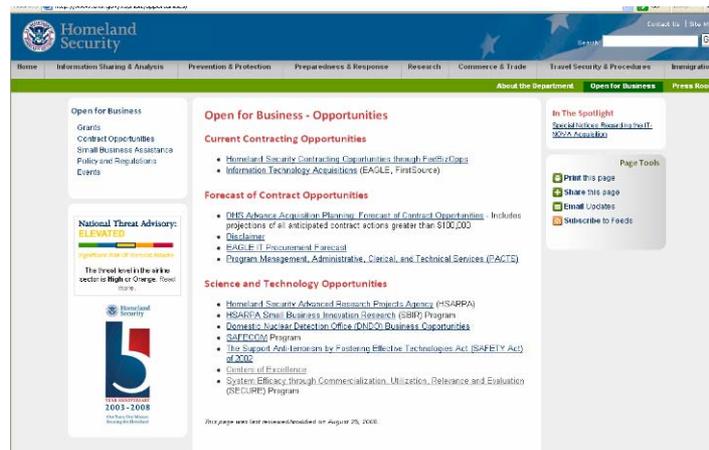
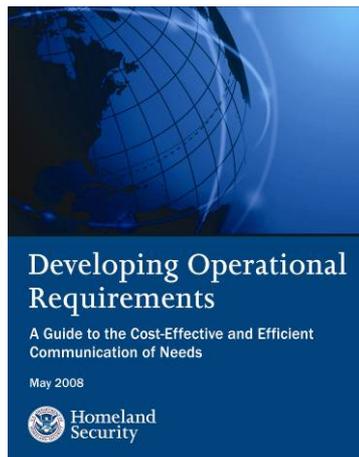
What: ORDs provide a clear definition and articulation of a given problem.

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

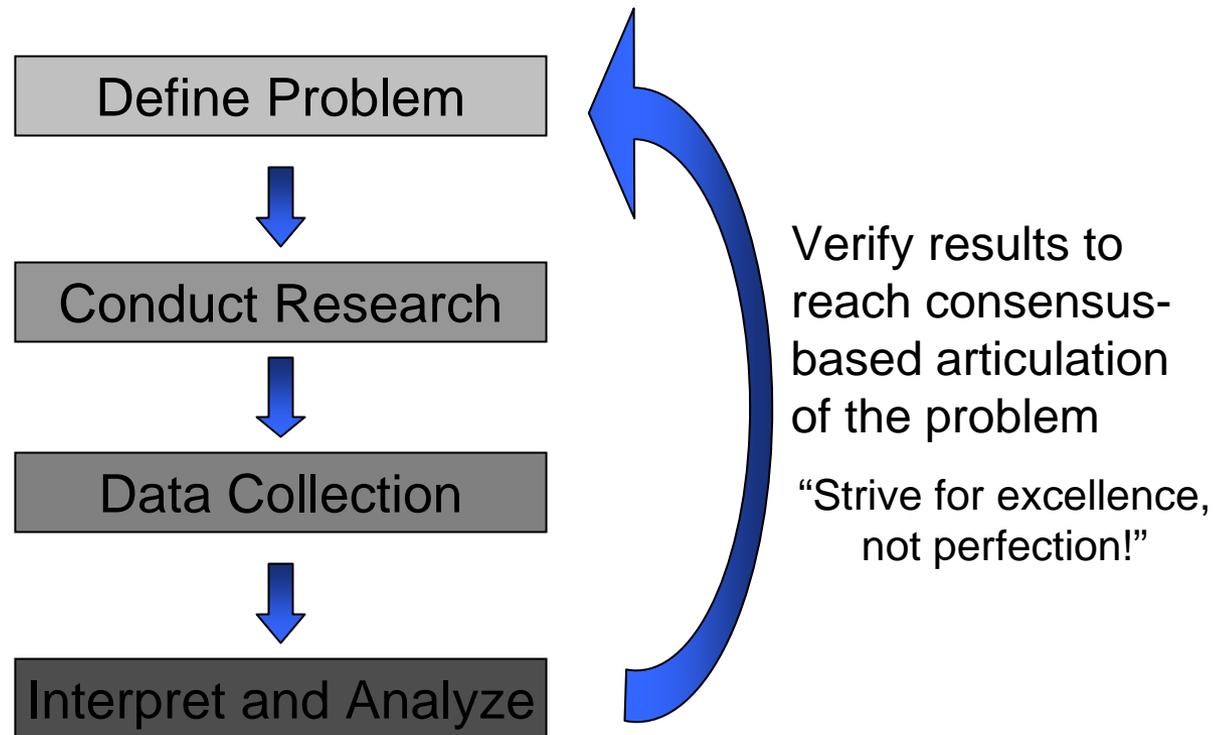
When: For Use in Acquisition, Procurement, Commercialization and Outreach Programs –Any situation that dictates detailed requirements (e.g. RFQ, BAA, RFP, RFI, etc.)

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



“Good” ORDs

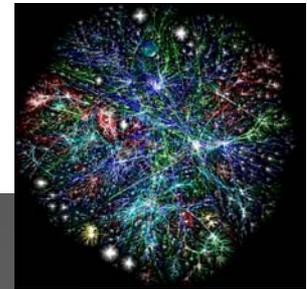
- Solution Agnostic
- Take into account the varying needs and wants of markets/market segments/market sub-segments



Source: Kaufman, et. al.

Evolution of Change: DHS Providing Better Information about its Needs

DoD, DoE, DHS,
DoJ, DoT, etc.

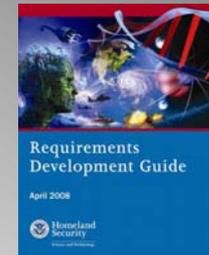


Semantic Web 3.0
(The Future)

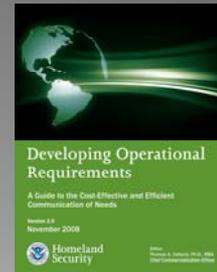
DHS, First Responders, CI/KR
Federal Stakeholders

Science
&
Technology
Directorate

Capstone
IPT
Process
(August 2006)



*Requirements
Development
Guide (May 2008)*



*Developing
Operational
Requirements
(Nov. 2008)*



*Harnessing the Valuable
Experience and
Resources of the Private
Sector (Feb. 2009)*

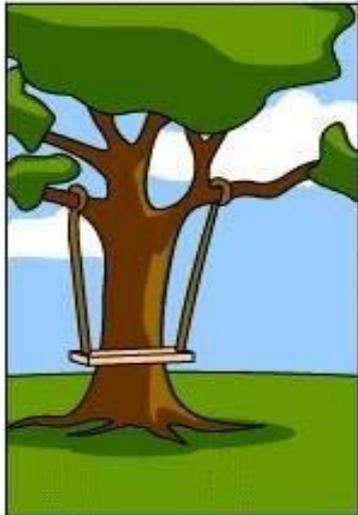
Industry

Business, Venture Capital/Angel Investment, Strategic Partnerships

Does this look familiar?!



How the customer explained it



How the Project Leader understood it



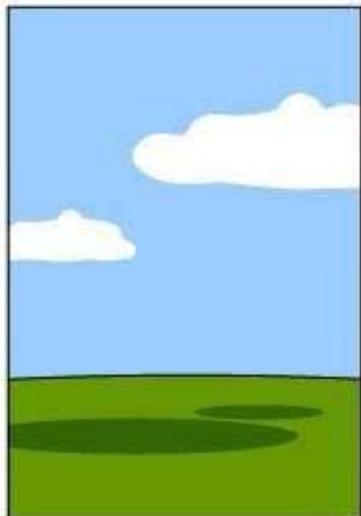
How the Analyst designed it



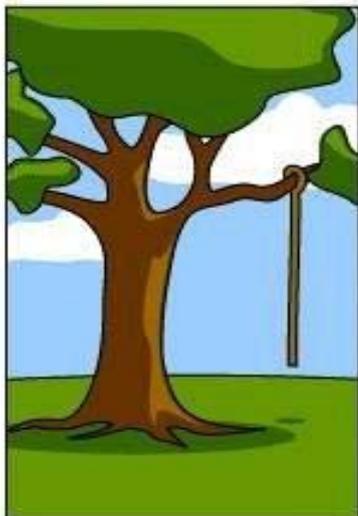
How the Programmer wrote it



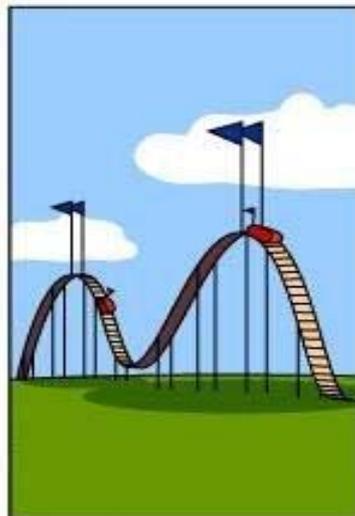
How the Business Consultant described it



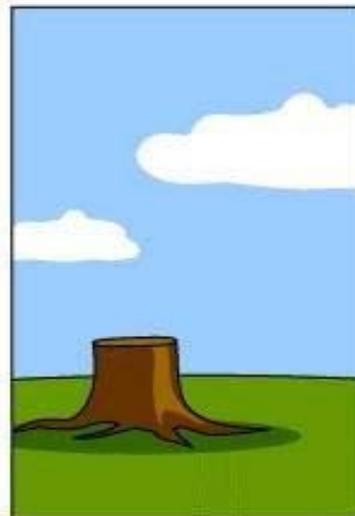
How the project was documented



What operations installed



How the customer was billed



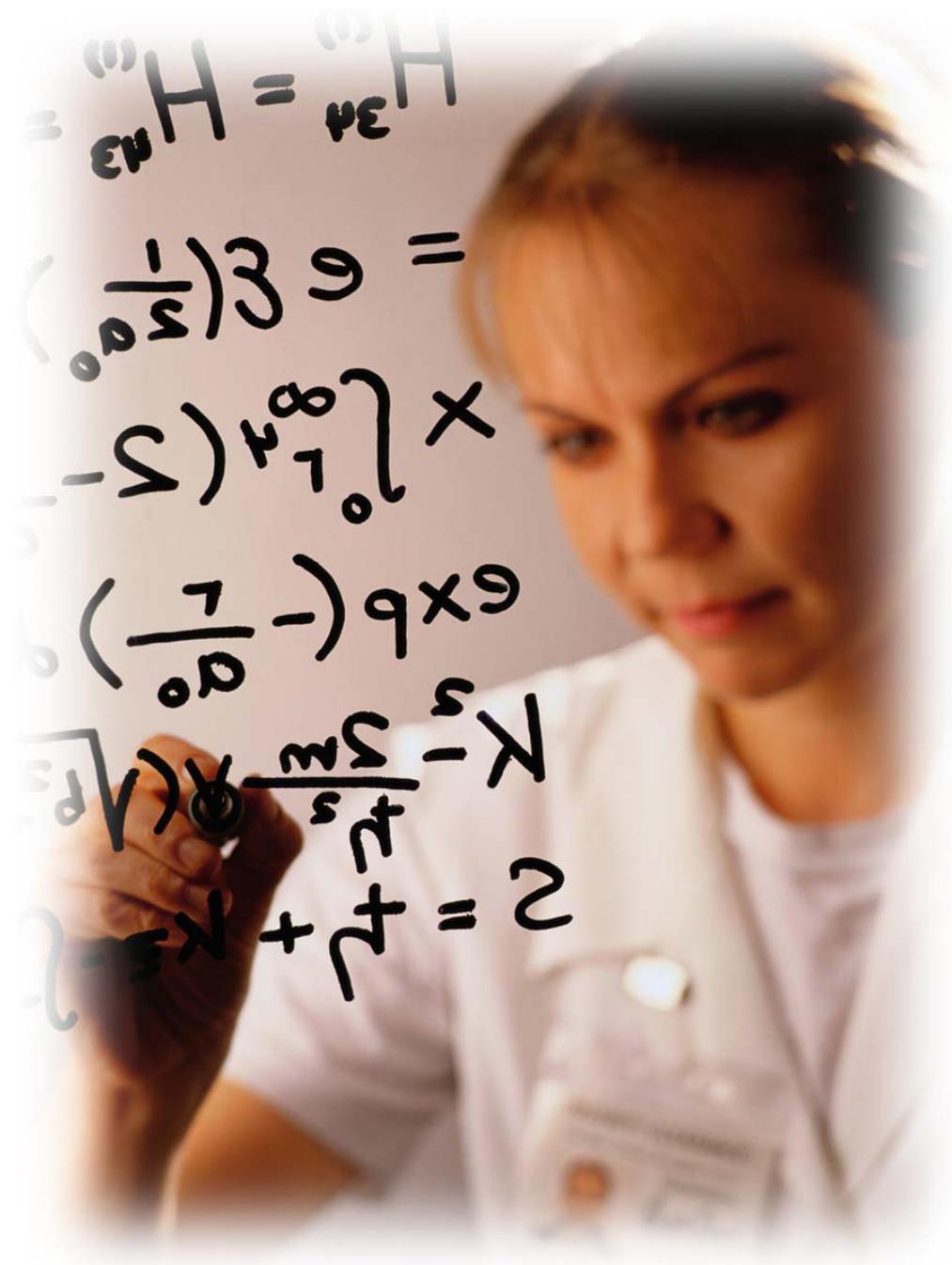
How it was supported



What the customer really needed

Getting on the “Same Page”

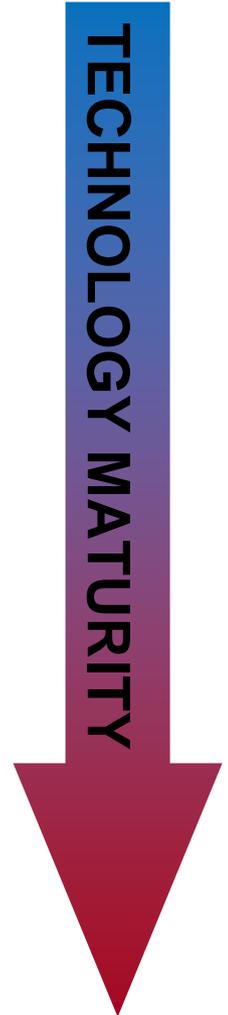
- Historical Perspective
- Language is Key
- Communication is Paramount



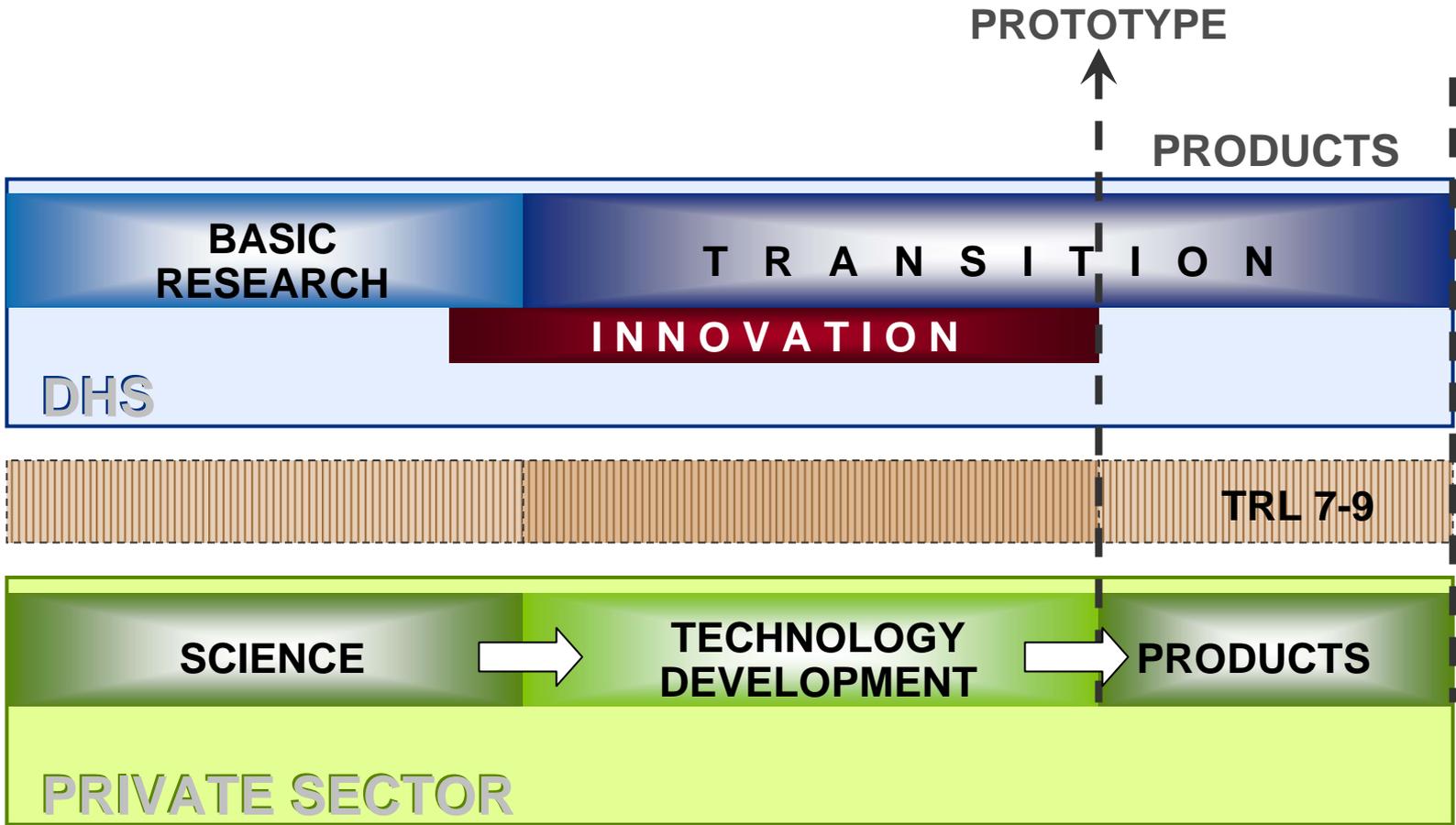
Technology Readiness Levels (TRLs): Overview

TRLs are NASA-generated and Used Extensively by DoD

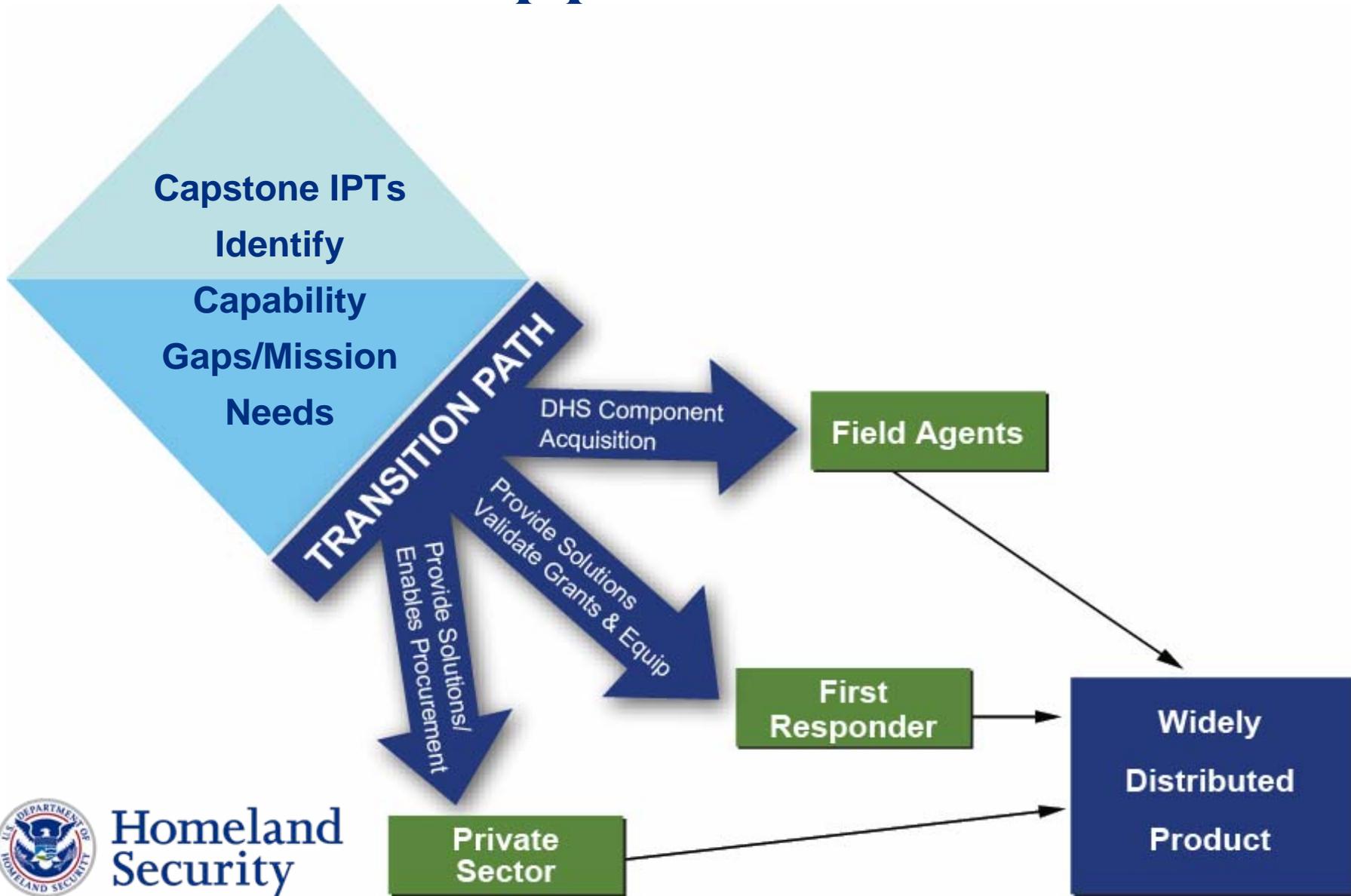
Basic principles observed and reported	1	
Technology concept and/or application formulated	2	Basic
Analytical and experimental critical function and/or characteristic	3	
Component and/or breadboard validation in laboratory environment	4	
Component and/or breadboard validation in relevant environment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



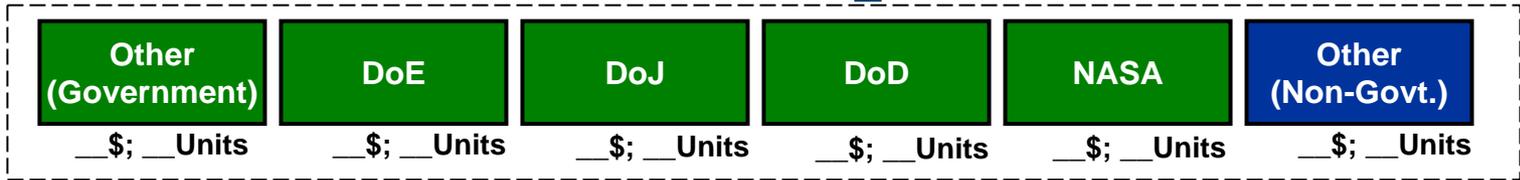
TRL Correlation: DHS and Private Sector



Transition Approaches



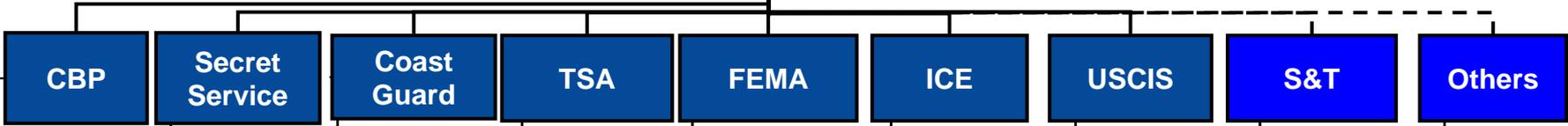
Market Potential Template



DHS

Ancillary Markets

First Responders



- Field Operations __ \$; __ Units
- Border Patrol __ \$; __ Units
- Air & Marine __ \$; __ Units
- Int'l Trade __ \$; __ Units

- Investigations __ \$; __ Units
- Protective Operations __ \$; __ Units
- Protective Research __ \$; __ Units

- Atlantic & Pacific Area Mission Execution Units __ \$; __ Units
- Atlantic & Pacific Area Mission Support Units __ \$; __ Units
- Atlantic & Pacific Area Mission Maintenance & Logistics Command __ \$; __ Units

- Security Operations __ \$; __ Units
- Transportation Sector Network Management __ \$; __ Units
- Federal Air Marshal Service __ \$; __ Units

- Logistics Mgmt __ \$; __ Units
- Disaster Mgmt __ \$; __ Units
- Disaster Operations __ \$; __ Units
- Grant Programs __ \$; __ Units
- National Preparedness __ \$; __ Units
- US Fire Admin. & Nat'l Fire Academy __ \$; __ Units
- Nat'l Continuity Programs __ \$; __ Units
- Mitigation __ \$; __ Units

- Detention and Removal __ \$; __ Units
- Int'l Affairs __ \$; __ Units
- Intelligence __ \$; __ Units
- Investigations __ \$; __ Units
- Student and Exchange Visitor Program __ \$; __ Units
- Federal Protective Service __ \$; __ Units
- Nat'l Incident Response Unit __ \$; __ Units

- Refugee, Asylum, Int'l Operations __ \$; __ Units
- Nat'l Security and Records Verification __ \$; __ Units
- Domestic Operations __ \$; __ Units

- Explosives __ \$; __ Units
- Chemical/Biological __ \$; __ Units
- Command, Control, Interoperability __ \$; __ Units
- Borders/Maritime __ \$; __ Units
- Human Factors __ \$; __ Units
- Infrastructure and Geophysical Protection __ \$; __ Units

- OHA __ \$; __ Units
- DNDO __ \$; __ Units
- Etc. __ \$; __ Units

Conservative Estimate: Number of First Responders in the US

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

Total: > 25.3 Million Individuals

FIRE

POLICE

EMT

BOMB
DISPOSAL

Front Line > 2.3 Million

Support to Front Line > 23 Million

Port Security

Public Health

Hospitals

Transportation

Emergency
Management

Clinics

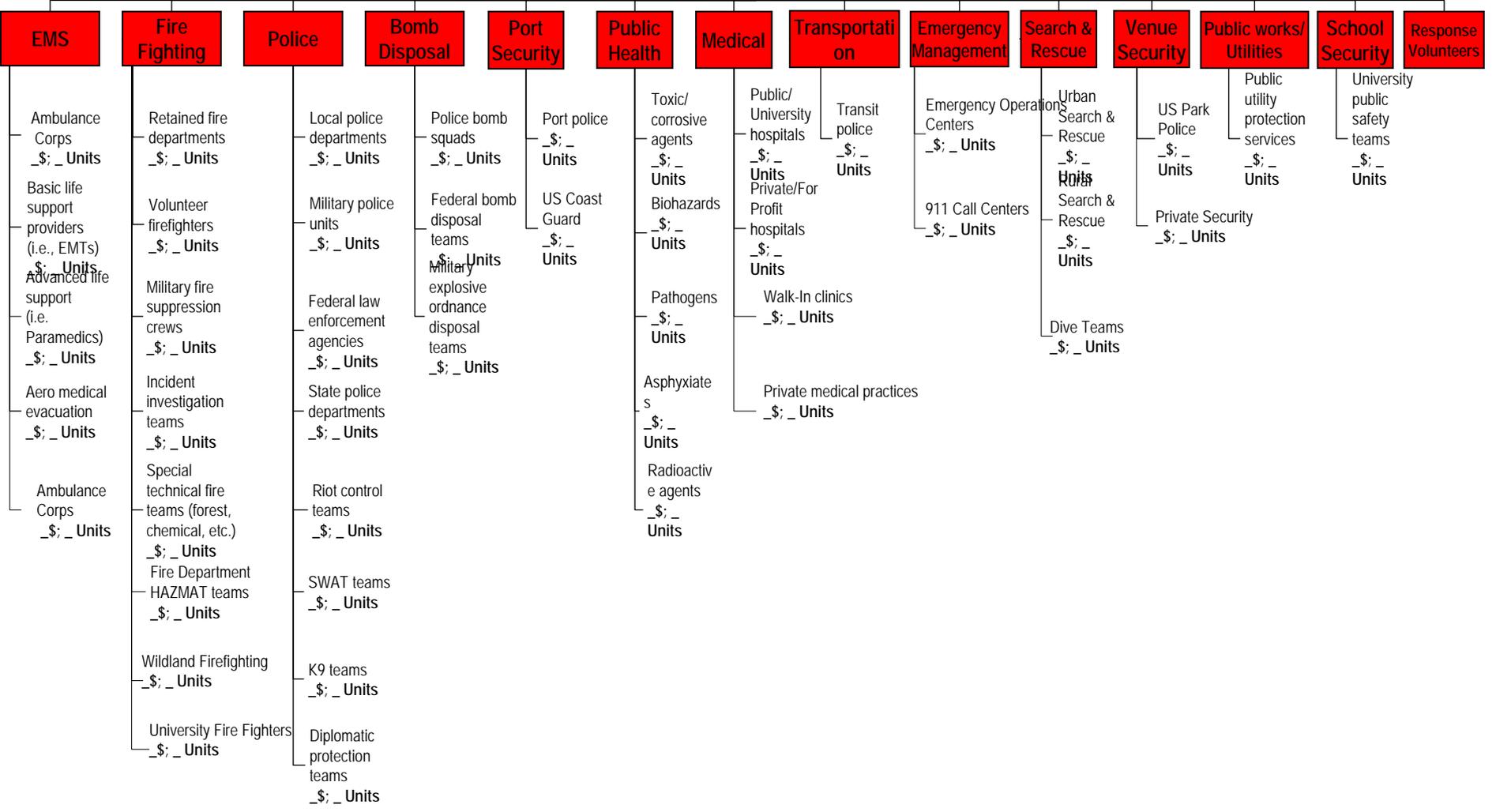
Venue Security

Public
Works/Utility

School Security

Response
Volunteers

First Responders

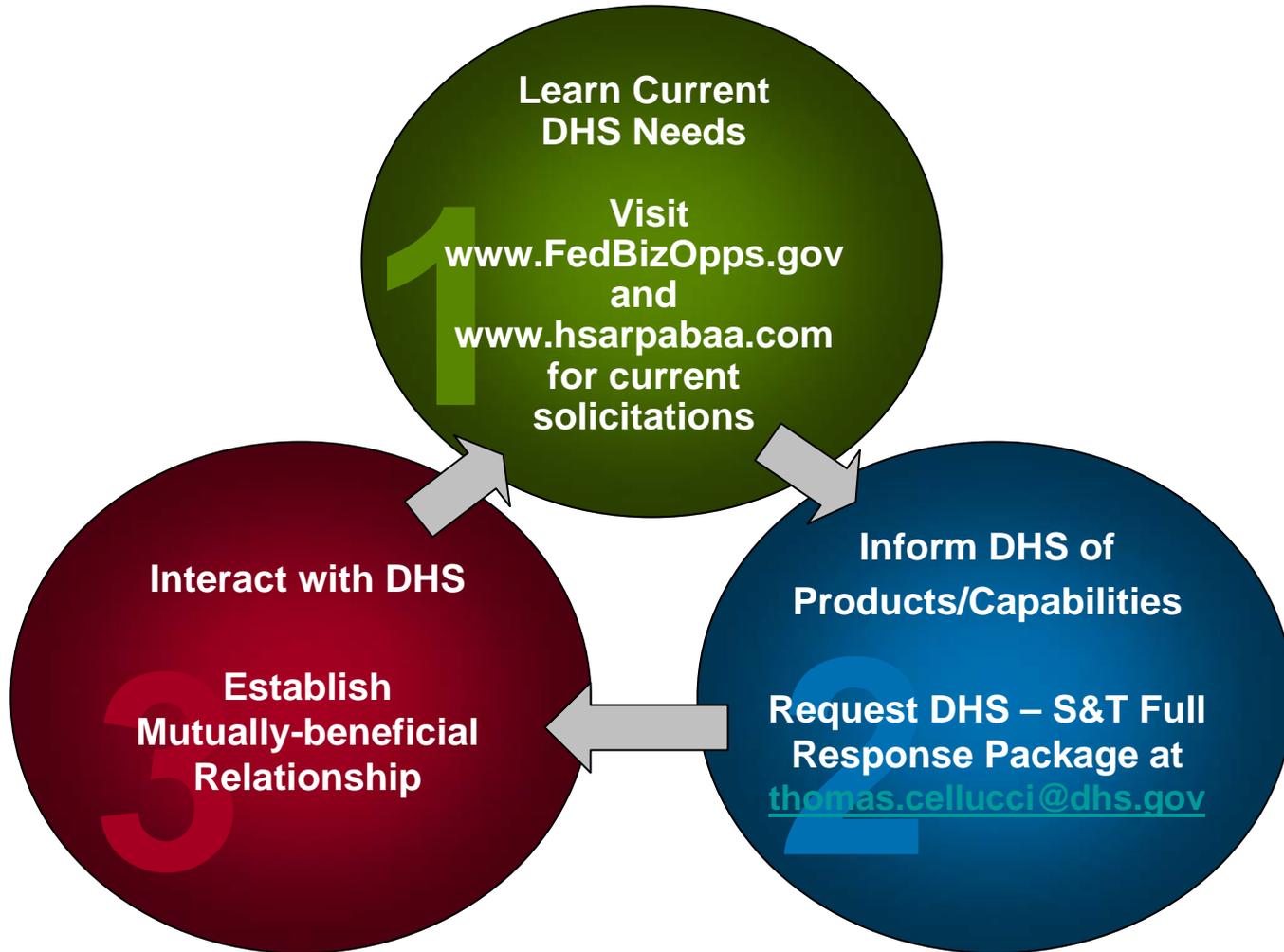


Critical Infrastructure Key Resources (CIKR)

Agriculture and Food	Defense Industrial Base	Energy	Public Health and Healthcare	National Monuments and Icons	Banking and Finance	Water	Chemical	Commercial facilities	Emergency Services	Nuclear Materials, Reactors and	Telecommunications	Critical Manufacturing	Postal and Shipping Services	Transportation	Information Technology
Food Retail _\$_; _ Units	Defense Contractors _\$_; _ Units	Coal mining operations _\$_; _ Units	Public/University hospitals _\$_; _ Units	Guided tour services _\$_; _ Units	Credit lending institutions _\$_; _ Units	Public utilities _\$_; _ Units	Inorganic chemical production _\$_; _ Units	Hotels _\$_; _ Units	Fire Departments _\$_; _ Units	Electric utilities _\$_; _ Units	Telephone/Cellular services _\$_; _ Units	Iron and Steel mills _\$_; _ Units	United States Postal Service _\$_; _ Units	AMTRAK _\$_; _ Units	Hardware providers _\$_; _ Units
Farm Equipment _\$_; _ Units	Industry analysts _\$_; _ Units	Coal power plants _\$_; _ Units	Private/For Profit hospitals _\$_; _ Units	Travel services _\$_; _ Units	Commercial banking _\$_; _ Units	Desalinization plants _\$_; _ Units	Organic industrial production _\$_; _ Units	Shopping centers _\$_; _ Units	Law enforcement agencies _\$_; _ Units	Reactor and associated materials _\$_; _ Units	Satellite data transmission _\$_; _ Units	Aluminum production and processing _\$_; _ Units	High volume document and parcel shipping _\$_; _ Units	Commuter rail _\$_; _ Units	IT Conglomerates _\$_; _ Units
Meat/Poultry Processing _\$_; _ Units	Think tanks/research institutions _\$_; _ Units	Coal equipment manufacturers _\$_; _ Units	Clinics _\$_; _ Units	Lodging/Hotel services _\$_; _ Units	Private equity _\$_; _ Units	Treatment plants _\$_; _ Units	Ceramics _\$_; _ Units	Stadiums and sport arenas _\$_; _ Units	Search and rescue teams _\$_; _ Units	University and educational institutions _\$_; _ Units	Broadcasting entities _\$_; _ Units	Nonferrous metal production and processing _\$_; _ Units	Container shipping services _\$_; _ Units	Intracity rail services _\$_; _ Units	Semiconductor production _\$_; _ Units
Food Processing _\$_; _ Units	University partnership programs _\$_; _ Units	Hydroelectric _\$_; _ Units	Private medical practices _\$_; _ Units	Guest services/tourist hospitality _\$_; _ Units	Consumer banking _\$_; _ Units	Equipment manufacturers _\$_; _ Units	Petrochemicals _\$_; _ Units	Schools _\$_; _ Units	Ambulance companies _\$_; _ Units	Control systems _\$_; _ Units	Broadcast equipment manufacturing _\$_; _ Units	Engine, Turbine and Power transmission _\$_; _ Units	Marine shipping _\$_; _ Units	Commercial airline _\$_; _ Units	Electronics manufacture _\$_; _ Units
Dairy Processing _\$_; _ Units	National laboratories _\$_; _ Units	Dam operations _\$_; _ Units	Medical laboratories _\$_; _ Units	People moving services _\$_; _ Units	Building societies/ Private banks _\$_; _ Units	Pipe and water control device manufacturers _\$_; _ Units	Agrochemicals _\$_; _ Units	Commercial office buildings _\$_; _ Units	Mine rescue teams _\$_; _ Units	Nuclear safety systems _\$_; _ Units	Radio equipment manufacturing _\$_; _ Units	Electrical Equipment manufacturing _\$_; _ Units	Trucking industry _\$_; _ Units	Private air services _\$_; _ Units	IT services _\$_; _ Units
Dairy Farms _\$_; _ Units		Wind power _\$_; _ Units	Pharmaceutical _\$_; _ Units	Queueing equipment makers _\$_; _ Units	Merchant banks _\$_; _ Units		Polymers _\$_; _ Units	Museums _\$_; _ Units	Other technical rescue teams _\$_; _ Units	Waste disposal services _\$_; _ Units	Internet equipment manufacturing _\$_; _ Units	Motor Vehicle manufacturing _\$_; _ Units	Airborne shipping _\$_; _ Units	Cruise lines _\$_; _ Units	Server and network hardware _\$_; _ Units
Ranching _\$_; _ Units		Solar power _\$_; _ Units	Health insurance _\$_; _ Units	Private security _\$_; _ Units	Global financial services firms _\$_; _ Units		Elastomer production _\$_; _ Units	Zoos and Aquariums _\$_; _ Units	Bomb disposal units _\$_; _ Units	Uranium processors _\$_; _ Units	High speed data transmission _\$_; _ Units	Aerospace product & parts manufacturing _\$_; _ Units	Trucking _\$_; _ Units	Subway systems _\$_; _ Units	Display/digital TV _\$_; _ Units
Organic Farming/Sustainable Agriculture _\$_; _ Units		Public utilities companies _\$_; _ Units	Medical material providers _\$_; _ Units	Community development institutions _\$_; _ Units	Community banks _\$_; _ Units		Oleochemicals _\$_; _ Units	Public Libraries _\$_; _ Units	Blood/Organ supply _\$_; _ Units	Protective garment manufacturers _\$_; _ Units	Internet service providers _\$_; _ Units	Railroad rolling stock _\$_; _ Units	Distribution services _\$_; _ Units	Long-haul maritime shipping _\$_; _ Units	Software production _\$_; _ Units
Traditional Planting _\$_; _ Units		Oil companies _\$_; _ Units	Medical equipment manufacturers _\$_; _ Units	Amusement parks _\$_; _ Units	Savings and Loans _\$_; _ Units		Explosives _\$_; _ Units	Amusement parks _\$_; _ Units	Amateur radio emergency comms _\$_; _ Units		Print media _\$_; _ Units	Other Transportation equipment _\$_; _ Units	Trucking _\$_; _ Units	Software production _\$_; _ Units	Gaming _\$_; _ Units
Commercial fishing _\$_; _ Units			Medical technology manufacturers _\$_; _ Units		Credit unions _\$_; _ Units		Fragrance production _\$_; _ Units		Public utility protection providers _\$_; _ Units		Internet technology providers _\$_; _ Units		Bus services _\$_; _ Units	Freight rail service _\$_; _ Units	Information security _\$_; _ Units
			Biotechnology _\$_; _ Units		Insurance companies _\$_; _ Units		Chemical wholesale _\$_; _ Units		Road services _\$_; _ Units				Automobile travel _\$_; _ Units	Roads, Highways, bridges and tunnels _\$_; _ Units	Semiconductor equipment _\$_; _ Units
					Insurance brokerages _\$_; _ Units		Exotic chemicals _\$_; _ Units		Emergency Social services _\$_; _ Units						
					Reinsurance companies _\$_; _ Units				Community emergency response teams _\$_; _ Units						
					Stock brokerages _\$_; _ Units				Disaster relief _\$_; _ Units						
					Capital market banks _\$_; _ Units				Famine relief teams _\$_; _ Units						
					Custody services _\$_; _ Units				Poison Control units _\$_; _ Units						
					Angel investment _\$_; _ Units				Animal control teams _\$_; _ Units						
					Venture capital _\$_; _ Units				Wildlife services _\$_; _ Units						

Call to Action: Mutual Benefits

Create “Win-Win-Win” Relationships

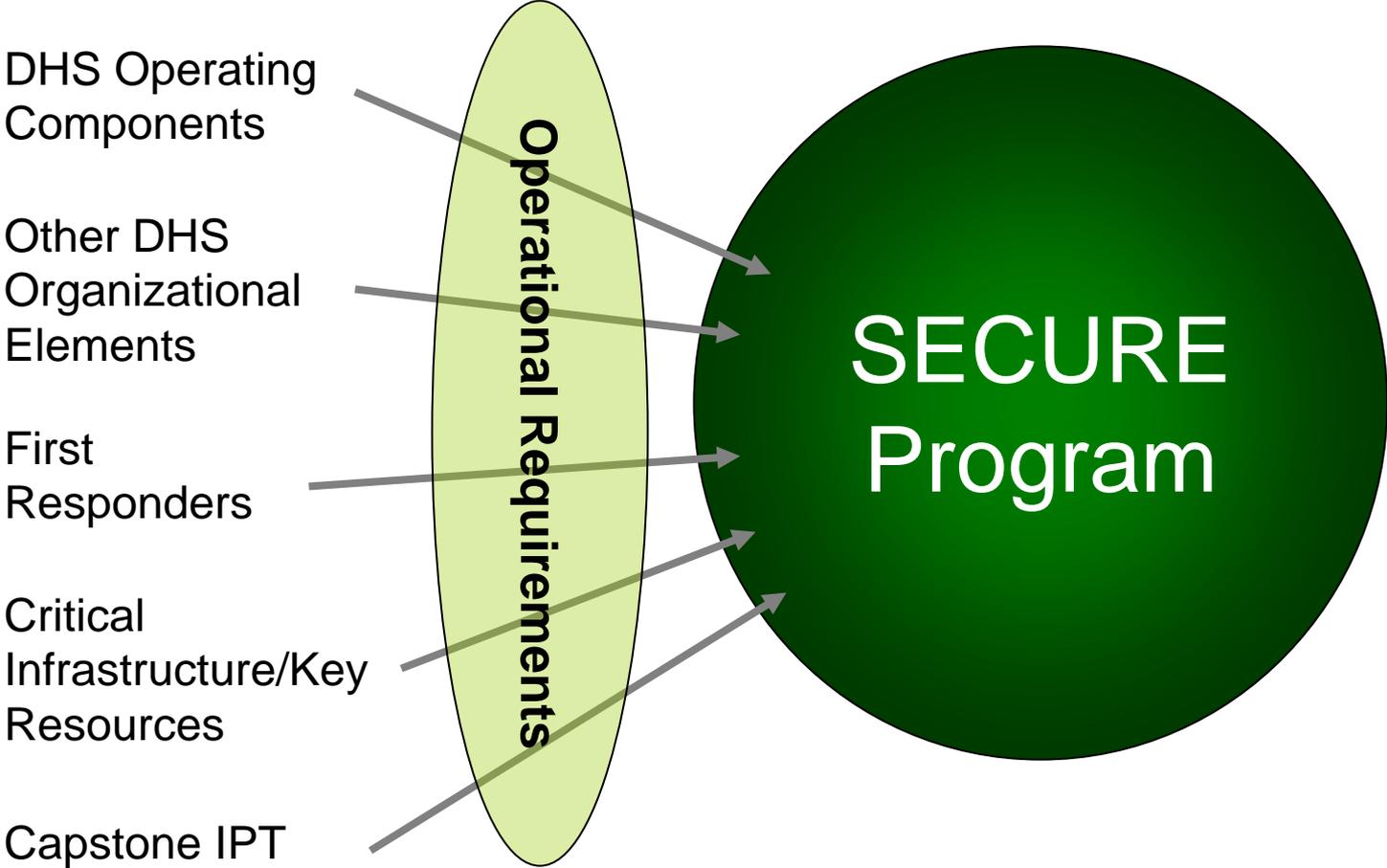


SECURE Program

“Mutually-Beneficial Goals Achieved Through Rigorous Process”

Goals	Process
S ystem E fficacy through	Alignment to DHS Detailed Requirements
C ommercialization	Private Sector Product Development
U tilization	Product Launch, Sales and Marketing
R elevance	Customer-Focused Capstone IPT Process
E valuation	Third-party Test & Evaluation with DHS Validation

Input Function for SECURE



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.

Why SECURE Program

•Multi-Use

- Provides private sector, in an open and transparent way, with what they need most - - Business Opportunities
- Provides assurance to DHS, First Responders and private sector users (like CI/KR) that products/services perform as prescribed (and provides vehicle for First Responders, CI/KR owners and operators to voice their requirements)
- Augments the value of the SAFETY Act

•Saves Money

- Private Sector uses its own resources to develop products and services to the benefit of the taxpayer and the Federal Government

•Creates Jobs

- Detailed articulation of requirements coupled with funded large, potential available markets yield OPPORTUNITY that yields Job Creation (it's better to teach a person to fish than to give them a fish)
- Enables small firms with innovative technologies to partner with larger firms, VCs and angel investors because of the credibility of having government show detailed requirements with associated market potential (instead of just their own business plans).

•Efficient Use of Government Funds

- Articulating detailed requirements saves time and money. It is better for Government to spend funds to procure products or services that are available for sale and rigorously tested compared to spending money and time to develop new solutions for ill-defined problems.

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 the nation and provides "risk management" protections for sellers of qualified technologies 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

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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
- <https://baa.st.dhs.gov/>
- <https://www.sbir.dhs.gov/>
- www.Grants.gov

take advantage of...

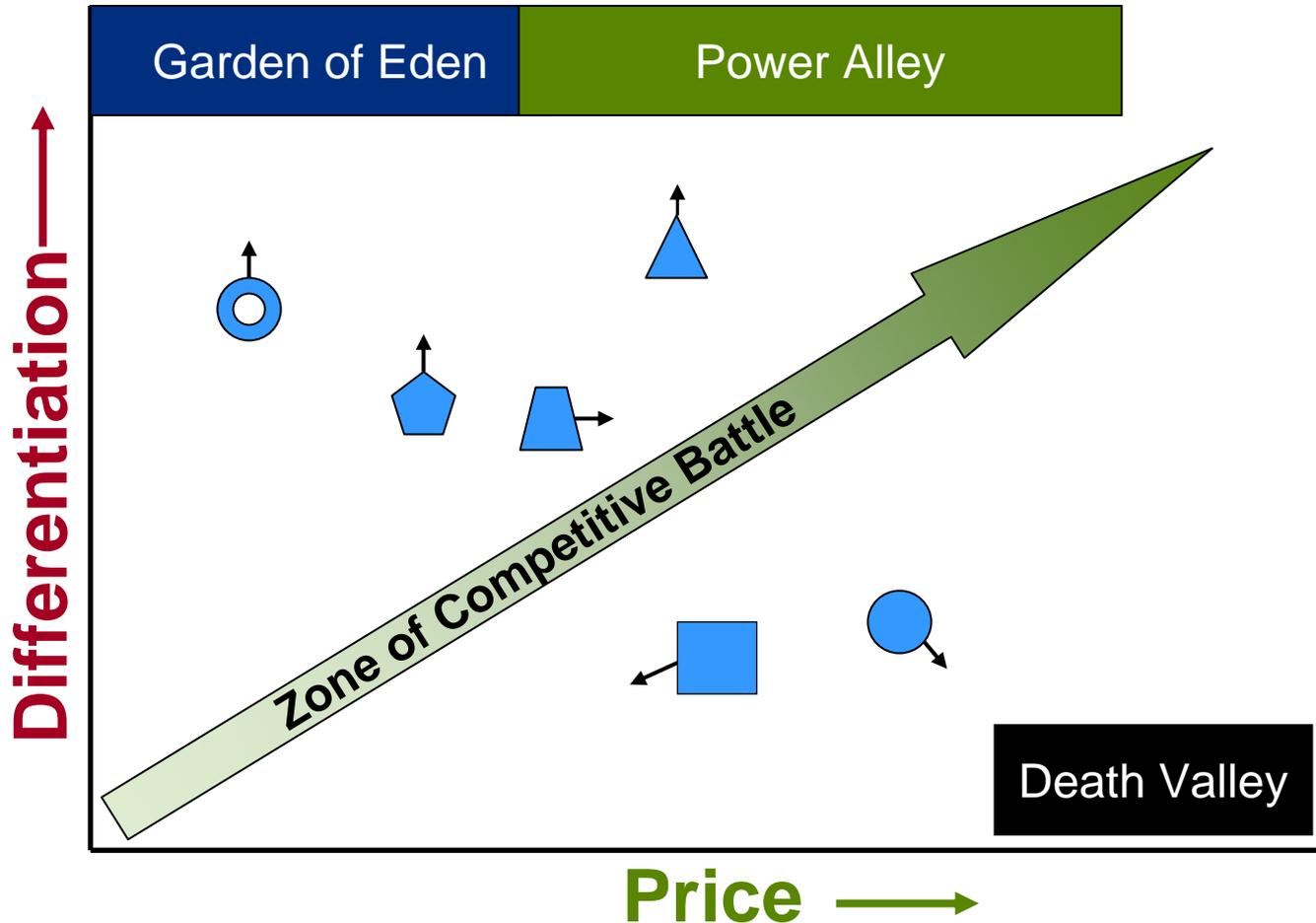
- **Vendor Notification Service:** Sign up to receive procurement announcements and solicitations/BAA amendment releases, and general procurement announcements.
<http://www.fedbizopps.gov>
- **S&T's Solicitation Portal:** The Department of Homeland Security Science and Technology Directorate currently has several active Solicitations on a broad range of topics. Relevant information is posted and access to the teaming portal, conference registration and white paper/proposal registration and submission is provided, as applicable. In addition, historical information about past Solicitations and Workshops is maintained.
<https://baa.st.dhs.gov>
- **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 Diane Osterhus.
http://www.acquisition.gov/far/current/html/Subpart%2015_6.html

Contact Information:

Diane Osterhus
Department of Homeland Security
Office of the Chief Procurement Officer
245 Murray Dr., Bldg. 410
Washington, DC 20528
unsolicited.proposal@dhs.gov
202-447-5576

Show Us the Difference...

Hall's Competitive Model



As a function of:

- Market
- Application
- Technology

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



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 Email: helpdesk@safetyact.gov

Toll-Free: 1-866-788-9318

Award Criteria

	Developmental Testing and Evaluation (DT&E)	Designation	Certification
Effectiveness Evaluation Conclusion	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)
Protection	Liability cap <ul style="list-style-type: none"> • only for identified test event(s) and for limited duration (=3yrs) 	Liability cap <ul style="list-style-type: none"> • for any and all deployments in 5-8 year term 	Government Contractor Defense (GCD) <ul style="list-style-type: none"> • for any and all deployments in 5-8 years term
Examples	<ul style="list-style-type: none"> • EDS not yet TSL Certified • Novel incident pattern matching service 	<ul style="list-style-type: none"> • Radiological detector with <u>laboratory</u> success Opt-out screeners, only similar projects completed 	<ul style="list-style-type: none"> • EDS TSL Certified • Well-documented infrastructure protection service with history of excellent performance and meeting DoE standards

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

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- Proposal Submission
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- Awards
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Homeland Security | **SBIR Program**


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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****

Safety Act

Other Funding Opportunities

Topic Recommendations



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)
- 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

Getting Involved: S&T Contacts

Division	Email
Jim Tuttle	SandT.Explosives@dhs.gov
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David Boyd	SandT.CCI@dhs.gov
Anh Duong	SandT.BordersMaritime@dhs.gov
Sharla Rausch	SandT.HFD@dhs.gov
Chris Doyle	SandT.IGD@dhs.gov
Rich Kikla	SandT.Transition@dhs.gov
Starnes Walker	SandT.Research@dhs.gov
Roger McGinnis	SandT.Innovation@dhs.gov

Summary

Detailed Requirements

Sizeable Market Potential

Delivered Products – PERIOD!

How Can You Afford NOT to Partner with DHS?

Questions/Comments:

Thomas A. Cellucci, Ph.D., MBA

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