

Introduction to Commercialization at U.S. Department of Homeland Security



EASC
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Thomas A. Cellucci, Ph.D., MBA

Chief Commercialization Officer

Department of Homeland Security

Email: Thomas.Cellucci@dhs.gov

Website: <http://bit.ly/commercializationresources>

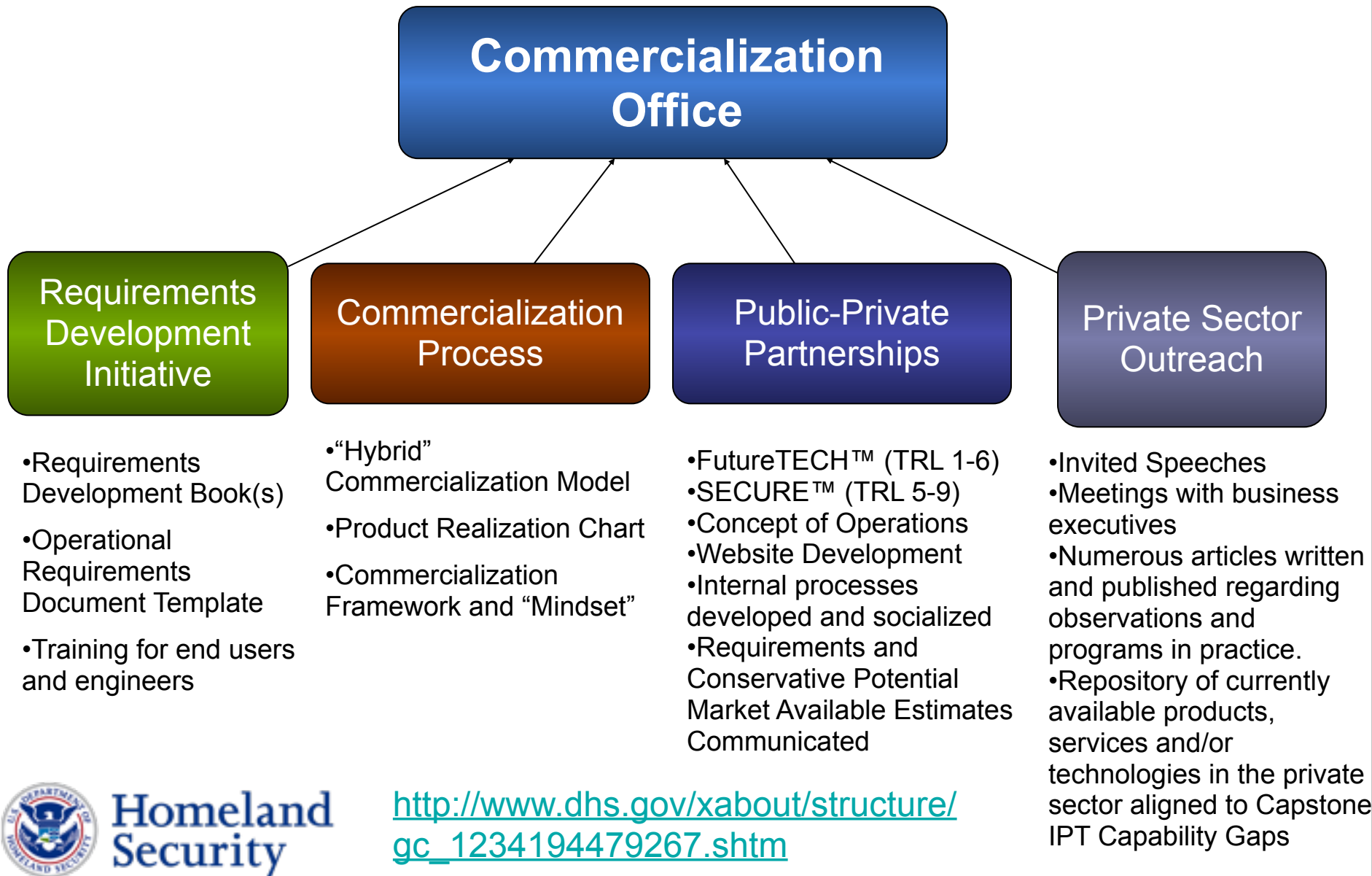
Discussion Guide

- Commercialization Office Overview
- Commercialization Activities at DHS
- SECURE™ and FutureTECH™ Public-Private Partnerships
- Highlights
- Summary



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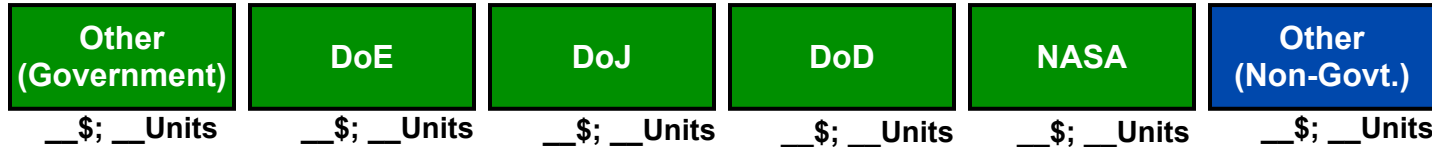
Commercialization Office: Major Activities



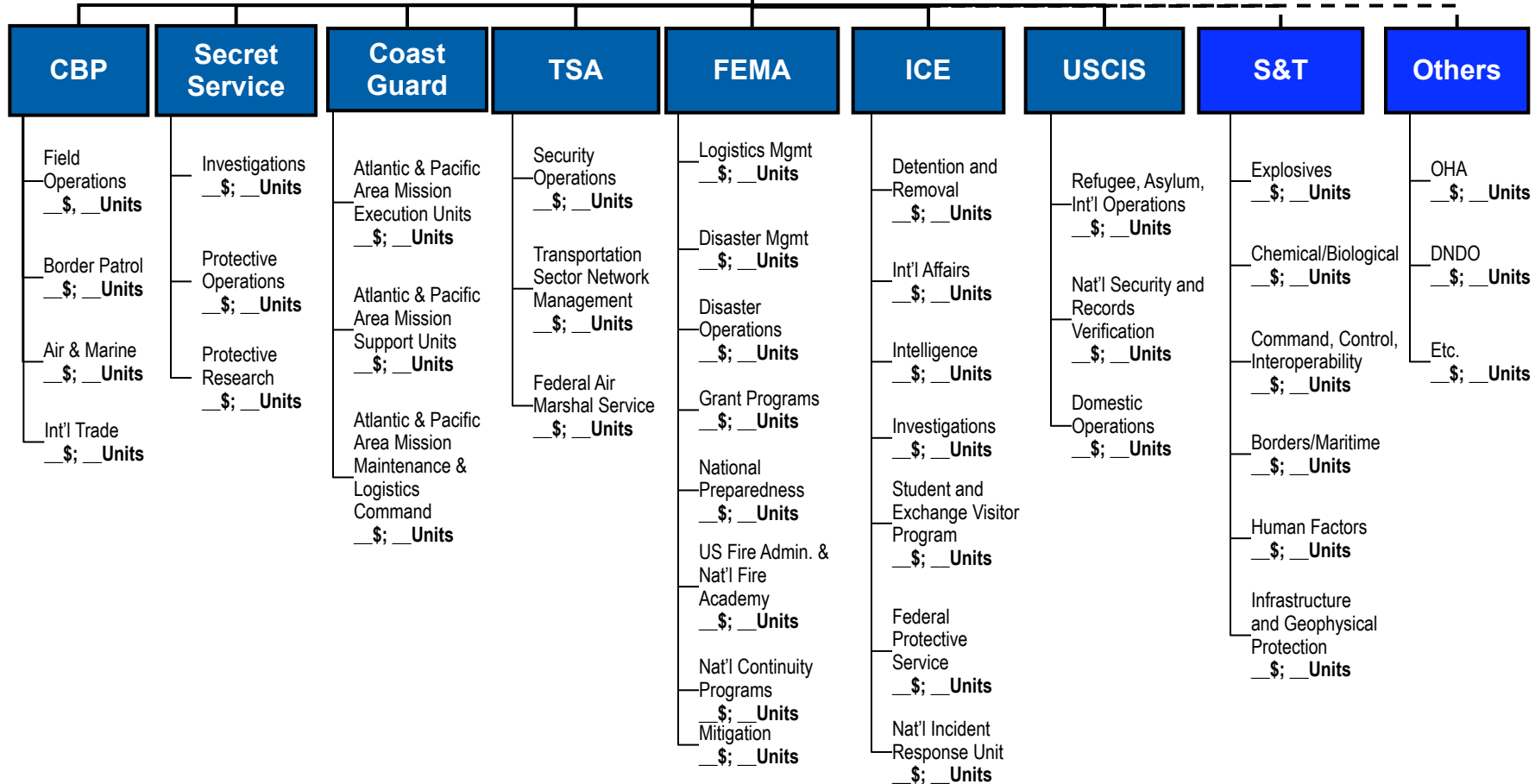
Commercialization Office Highlights:

- White House Office of Science and Technology Policy briefings (Chief Technology Officer Aneesh Chopra)
- Homeland Security Council: Recommended priority for FY11-15 for transportation security: SECURE Program
- Homeland Security Advisory Council, Essential Technology Task Force Report, June 2008
- Council on Competitiveness, Chief Commercialization Officer is first Federal Government Representative
- “Big Bang Economics”: CNN Feature Video with Jeanne Meserve
- Two Federal Certification Programs developed and implemented—SECURE™ and FutureTECH™: Innovative public-private partnerships
- Published Five books (and more than 20 articles) on requirements development and public-private partnerships
- Commercialization Office websites have highest number of page visits and longest dwell time (over 17 minutes) of all S&T Directorate websites

Market Potential Template



Ancillary Markets



First Responders

EMS	Fire Fighting	Police	Bomb Disposal	Port Security	Public Health	Medical	Transportation	Emergency Management	Search & Rescue	Venue Security	Public works/ Utilities	School Security	Response Volunteers
<ul style="list-style-type: none"> Ambulance Corps _ \$; _ Units Basic life support providers (i.e., EMTs) _ \$; _ Units Advanced life support (i.e. Paramedics) _ \$; _ Units Aero medical evacuation _ \$; _ Units Ambulance Corps _ \$; _ Units 	<ul style="list-style-type: none"> Retained fire departments _ \$; _ Units Volunteer firefighters _ \$; _ Units Military fire suppression crews _ \$; _ Units Incident investigation teams _ \$; _ Units Special technical fire teams (forest, chemical, etc.) _ \$; _ Units Fire Department HAZMAT teams _ \$; _ Units Wildland Firefighting _ \$; _ Units University Fire Fighters _ \$; _ Units 	<ul style="list-style-type: none"> Local police departments _ \$; _ Units Military police units _ \$; _ Units Federal law enforcement agencies _ \$; _ Units State police departments _ \$; _ Units Riot control teams _ \$; _ Units SWAT teams _ \$; _ Units K9 teams _ \$; _ Units Diplomatic protection teams _ \$; _ Units 	<ul style="list-style-type: none"> Police bomb squads _ \$; _ Units Federal bomb disposal teams _ \$; _ Units Military explosive ordnance disposal teams _ \$; _ Units 	<ul style="list-style-type: none"> Port police _ \$; _ Units US Coast Guard _ \$; _ Units 	<ul style="list-style-type: none"> Toxic/ corrosive agents _ \$; _ Units Biohazards _ \$; _ Units Pathogens _ \$; _ Units Asphyxiates _ \$; _ Units Radioactive agents _ \$; _ Units 	<ul style="list-style-type: none"> Public/ University hospitals _ \$; _ Units Private/ For Profit hospitals _ \$; _ Units Walk-In clinics _ \$; _ Units Private medical practices _ \$; _ Units 	<ul style="list-style-type: none"> Transit police _ \$; _ Units 	<ul style="list-style-type: none"> Emergency Operations Centers _ \$; _ Units 911 Call Centers _ \$; _ Units 	<ul style="list-style-type: none"> Urban Search & Rescue _ \$; _ Units Rural Search & Rescue _ \$; _ Units Dive Teams _ \$; _ Units 	<ul style="list-style-type: none"> US Park Police _ \$; _ Units Private Security _ \$; _ Units 	<ul style="list-style-type: none"> Public utility protection services _ \$; _ Units 	<ul style="list-style-type: none"> University public safety teams _ \$; _ Units 	

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 Energy	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 Dpmts _ \$; _ 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 industries _ \$; _ Units	Shopping centers _ \$; _ Units	Law enforcement _ \$; _ 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 _ \$; _ 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	Commercial airline _ \$; _ Units	Electronics manufacture _ \$; _ Units	IT services _ \$; _ Units
Dairy Processing _ \$; _ Units	National laboratories _ \$; _ Units	Dam operations _ \$; _ Units	Medical laboratories _ \$; _ Units	People moving services _ \$; _ Units	Building societies _ \$; _ Units	Pipe and water control device manufacturers _ \$; _ Units	Agrochemicals _ \$; _ Units	Commercial office buildings _ \$; _ Units	Wildlife services _ \$; _ Units	Nuclear safety systems _ \$; _ Units	Radio equipment manufacturing _ \$; _ Units	Marine shipping _ \$; _ Units	Private air services _ \$; _ Units	Server and network hardware _ \$; _ Units	IT services _ \$; _ Units
Dairy Farms _ \$; _ Units		Wind power _ \$; _ Units	Pharmaceuticals _ \$; _ Units	Queuing equipment makers _ \$; _ Units	Private banks _ \$; _ Units		Polymers _ \$; _ Units	Museums _ \$; _ Units	Technical rescue teams _ \$; _ Units	Waste disposal services _ \$; _ Units	Internet equipment manufacturing _ \$; _ Units	Trucking industry _ \$; _ Units	Cruise lines _ \$; _ Units	Server and network hardware _ \$; _ Units	Server and network hardware _ \$; _ Units
Ranching _ \$; _ Units		Solar power _ \$; _ Units	Health insurance _ \$; _ Units	Private security _ \$; _ Units	Merchant banks _ \$; _ Units		Elastomer production _ \$; _ Units	Zoos and Aquariums _ \$; _ Units	Bomb disposal units _ \$; _ Units	Uranium processors _ \$; _ Units	High speed data transmission _ \$; _ Units	Airborne shipping _ \$; _ Units	Subway systems _ \$; _ Units	Display/digital TV _ \$; _ Units	Display/digital TV _ \$; _ Units
Organic Farming/Sustainable Agriculture _ \$; _ Units		Public utilities companies _ \$; _ Units	Medical material providers _ \$; _ Units	Community development institutions _ \$; _ Units	Global financial services firms _ \$; _ Units		Oleochemicals _ \$; _ Units	Public Libraries _ \$; _ Units	Blood/Organ transplant supply _ \$; _ Units	Protective garment manufacturers _ \$; _ Units	Internet service providers _ \$; _ Units	Motor Vehicle manufacturing _ \$; _ Units	Long-haul maritime shipping _ \$; _ Units	Software production _ \$; _ Units	Software production _ \$; _ Units
Traditional Planting _ \$; _ Units		Oil companies _ \$; _ Units	Medical equipment manufacturers _ \$; _ Units	Community banks _ \$; _ Units	Community development institutions _ \$; _ Units		Explosives _ \$; _ Units	Amusement parks _ \$; _ Units	Amateur radio emergency comms _ \$; _ Units	Emergency _ \$; _ Units	Print media _ \$; _ Units	Aerospace product & parts manufacturing _ \$; _ Units	Trucking _ \$; _ Units	Gaming _ \$; _ Units	Gaming _ \$; _ Units
Commercial fishing _ \$; _ Units			Medical technology manufacturers _ \$; _ Units	Savings and Loans _ \$; _ Units	Community banks _ \$; _ Units		Fragrance production _ \$; _ Units		Public utility protection providers _ \$; _ Units	Road services _ \$; _ Units	Internet technology providers _ \$; _ Units	Railroad rolling stock _ \$; _ Units	Bus services _ \$; _ Units	Information security _ \$; _ Units	Information security _ \$; _ Units
			Biotechnology _ \$; _ Units	Credit unions _ \$; _ Units	Insurance companies _ \$; _ Units		Chemical wholesale _ \$; _ Units		Road services _ \$; _ Units	Emergency _ \$; _ Units		Other Transportation equipment _ \$; _ Units	Freight rail service _ \$; _ Units	Semiconductor equipment _ \$; _ Units	Semiconductor equipment _ \$; _ Units
				Insurance companies _ \$; _ Units	Insurance companies _ \$; _ Units		Exotic chemicals _ \$; _ Units		Emergency _ \$; _ Units	Social services _ \$; _ Units			Automobile travel _ \$; _ Units	Roads, Highways, bridges and tunnels _ \$; _ Units	Roads, Highways, bridges and tunnels _ \$; _ Units
				Reinsurance companies _ \$; _ Units	Reinsurance companies _ \$; _ Units				Disaster relief _ \$; _ Units	Community emergency response teams _ \$; _ Units					
				Stock brokerages _ \$; _ Units	Stock brokerages _ \$; _ Units				Famine relief teams _ \$; _ Units	Poison Control units _ \$; _ Units					
				Capital market banks _ \$; _ Units	Capital market banks _ \$; _ Units				Animal control teams _ \$; _ Units						
				Custody services _ \$; _ Units	Custody services _ \$; _ Units										
				Angel investment _ \$; _ Units	Angel investment _ \$; _ Units										
				Venture capital _ \$; _ Units	Venture capital _ \$; _ Units										

SECURE™ Program

Developing Solutions in Partnership with the Private Sector

- ‘Win-Win-Win’ Public-Private Partnership program benefits DHS’s stakeholders, private sector and –most importantly- the American Taxpayer
- Saves time and money on product development costs leveraging the free-market system and encouraging the development of widely distributed products for DHS’s stakeholders
- Detailed articulation of requirements (using MD 102-01 ORD template) and T&E review provides assurance to DHS, First Responders and private sector users (like CIKR) that products/services perform as prescribed



[http://www.dhs.gov/xres/
programs/
gc_1211996620526.shtm](http://www.dhs.gov/xres/programs/gc_1211996620526.shtm)

FutureTECH™ Program

Addressing the Future Needs of DHS

- ‘Win-Win-Win’ Public-Private Partnership program benefits DHS stakeholders, private sector and –most importantly- the American Taxpayer
- 5W template provides detailed overview of Critical Research/Innovation Focus Areas
- Critical Research/Innovation Focus Areas provide universities, national labs and private sector R&D organizations insight into the future needs of DHS stakeholders
- Partnership program encourages R&D organizations to work on development of technology solutions up to TRL-6 to address long-term DHS needs.



[http://www.dhs.gov/xres/
programs/
gc_1242058794349.shtm](http://www.dhs.gov/xres/programs/gc_1242058794349.shtm)

Public-Private Partnerships

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



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