

U.S. DEPARTMENT OF ENERGY
ENERGY
 Global Threat Reduction Initiative



Implementing Advances in Transport Security Technologies
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 ORNL

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 Transport Security Technologies Update

- GTRI Domestic mission
- Previous technology evaluation results
- Current proposed configuration for technology deployment
- Where we are going

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 GTRI's Domestic Mission

- GTRI provides voluntary security assistance which include:
 - Removal of disused or unwanted radioactive sources;
 - Voluntary security upgrades;
 - Specialized training for local law enforcement;
 - Transportation security;
 - No-fault table top exercises
- GTRI voluntary security enhancements are:
 - **Complementary to and do not replace** the licensee requirements to meet NRC and Agreement State regulatory requirements;
 - **Sound, cost-effective, and prudent best practices** which further improve security above regulatory requirements.



See NRC RIS 2010-02 "The Global Threat Reduction Initiative (GTRI) Federally Funded Voluntary Security Enhancements For High-Risk Radiological Material"

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 Prior Results

Company	Technology	Overall	Availability	Remote Tracking	RF Monitoring	Redundant Communications	Shielding	Other Commercially Available	Over-Tolerance/Unstable Tracking	Performance/Reliability	Comprehensiveness of Solution
GlobalTrak	GT 5000	⊕	⊕								
	GT 5000	⊕	⊕								
	GT 5000	⊕	⊕								
	GT 5000	⊕	⊕								
	GT 5000	⊕	⊕								
Qualcomm	IMC	⊕	⊕								
Transcom	TRAC	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Hi-90-Tek	HT-90	⊕	⊕								
Emigra	EMIGRA	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Comtech	COMTECH	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Traktek	TRAKTEK	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Traktek	TRAKTEK	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Spot	SPOT	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
GlobalStar	GS	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
GlobalStar	GS	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
GlobalStar	GS	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
GlobalStar	GS	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
GlobalStar	GS	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	

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 Transport Security Technologies

INSTALLED ON THE RAW TRANSPORT VEHICLES



Evaluate commercially available technologies for application for transportation security

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 Planned Accomplishments

- Develop a fully integrated transport security monitoring and detection system
- Develop a "smart" delay package that provide location of package and detection of attack
- Apply these technologies to the entire logistics chain



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