

Homeland Security MASINT: A Rich Stew of Signatures and Challenges

Facing The WMD Challenge

Dr. Maureen McCarthy

Senior Advisor for WMD Intelligence

Department of Homeland Security

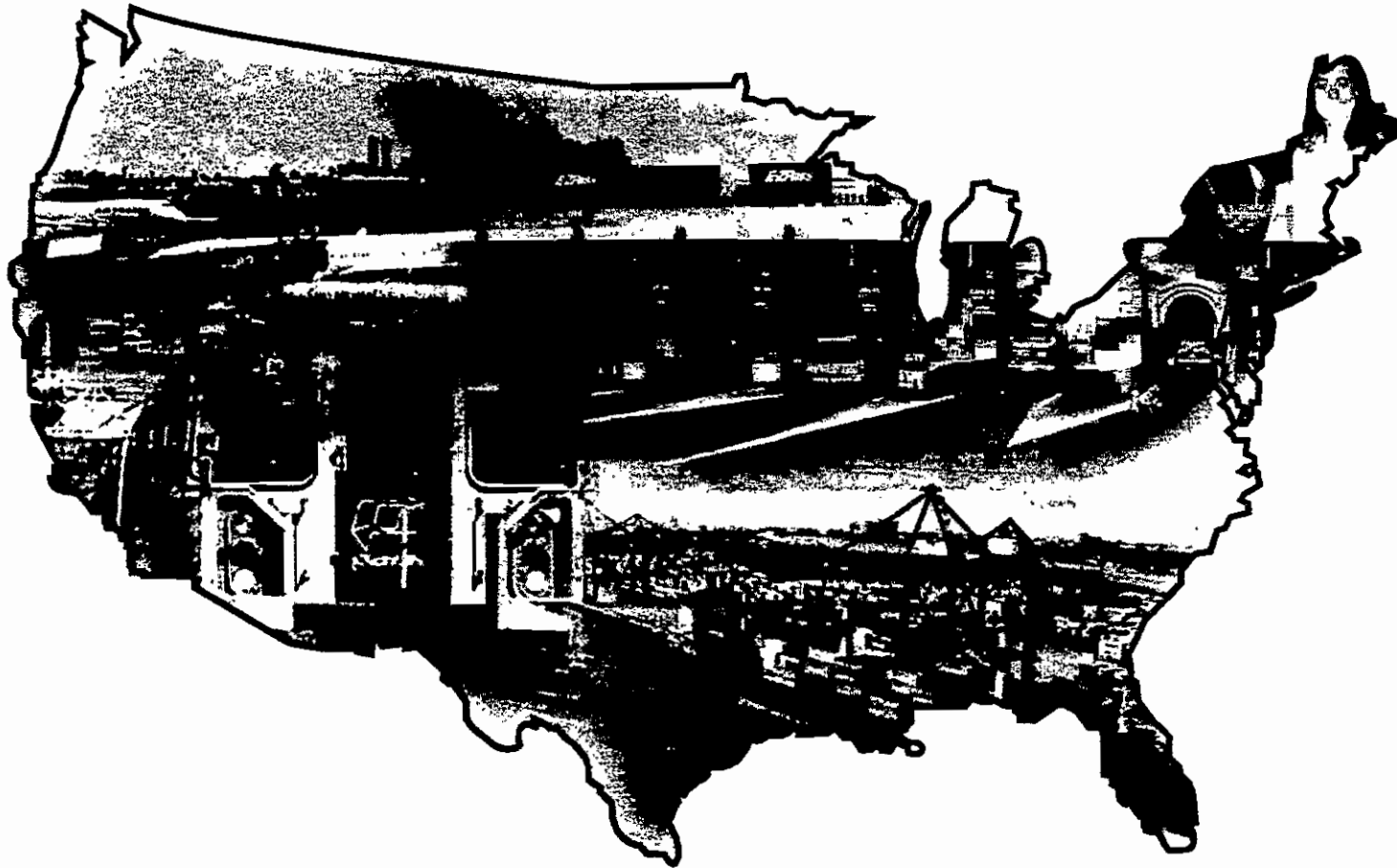
13 December 2006



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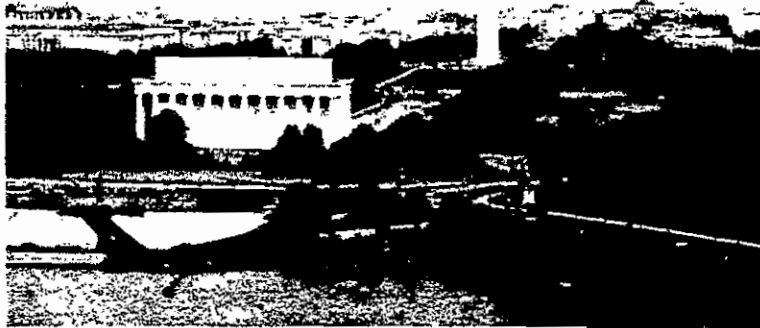
Welcome to Homeland Security



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Know Thy Customer



U.S. DEPARTMENT OF
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What Makes Homeland Security Intelligence Really Challenging?

Everything we do must be tailored, timely and actionable

Collection (“harvesting”) from all-sources

Analysis unique, complex and daunting

· Dissemination is to everyone who cares

Tradecraft is new – experts are few!

· YOU don’t really know who we are or what we do...yet!



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Homeland Security Operations are Diverse, Complex, and High-Profile

Screening & Enforcement

- **Visas and immigration**
- **Transportation Security**
- **Border Security**
- **Customs and Trade Enforcement**

Prevention & Protection

- **VIP & special events**
- **COOP planning exercises**
- **Support to military operations**
- **Cargo Security**
- **Critical infrastructure**

Investigation & Prosecution

- **Currency fraud**
- **Counter narcotics**
- **Cyber attack and intrusion**

Response & Recovery

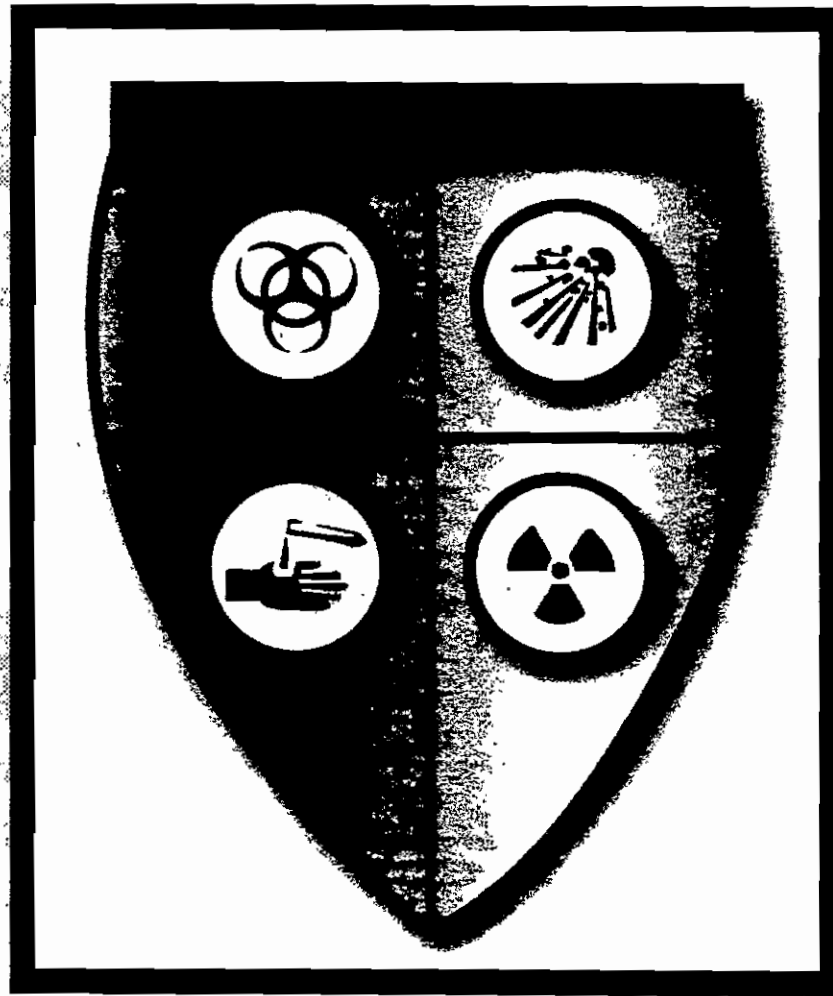
- **National disasters**
- **Search and rescue**



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Creating a Shield of Protection from WMD Attacks is Really Challenging



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What makes WMD Threats Unique?

WMD or CBRN attacks are:

- Technically complex
- Politically unique
- High consequence
- Low probability events



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WMD Pose Unique Challenges to the Intelligence Community

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Majority of information available is from non-traditional sources and must be distinguished from benign reporting

Sorting the technically feasible from the likely to occur is very difficult




Reporting on transfer of knowledge, materials, and people from state actors to terrorists groups is very limited

If it is so easy to do why hasn't it happened yet?



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WMD Threats Are Not All Created Equal

	 Deaths and Casualties	 Economic Impact	 Societal/Political Impact
Catastrophic (national-scale)			
Limited (regional/ local-scale)			



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CBRNAg(E) Threats can be Differentiated Based on Consequences

WMD Catastrophic (national-scale)

- Nuclear (all)
- Biological (high-risk agents defined by 2006 Biothreat Risk Assessment)
- Agricultural (Foot and Mouth Disease)



WMD Limited (regional/local-scale)

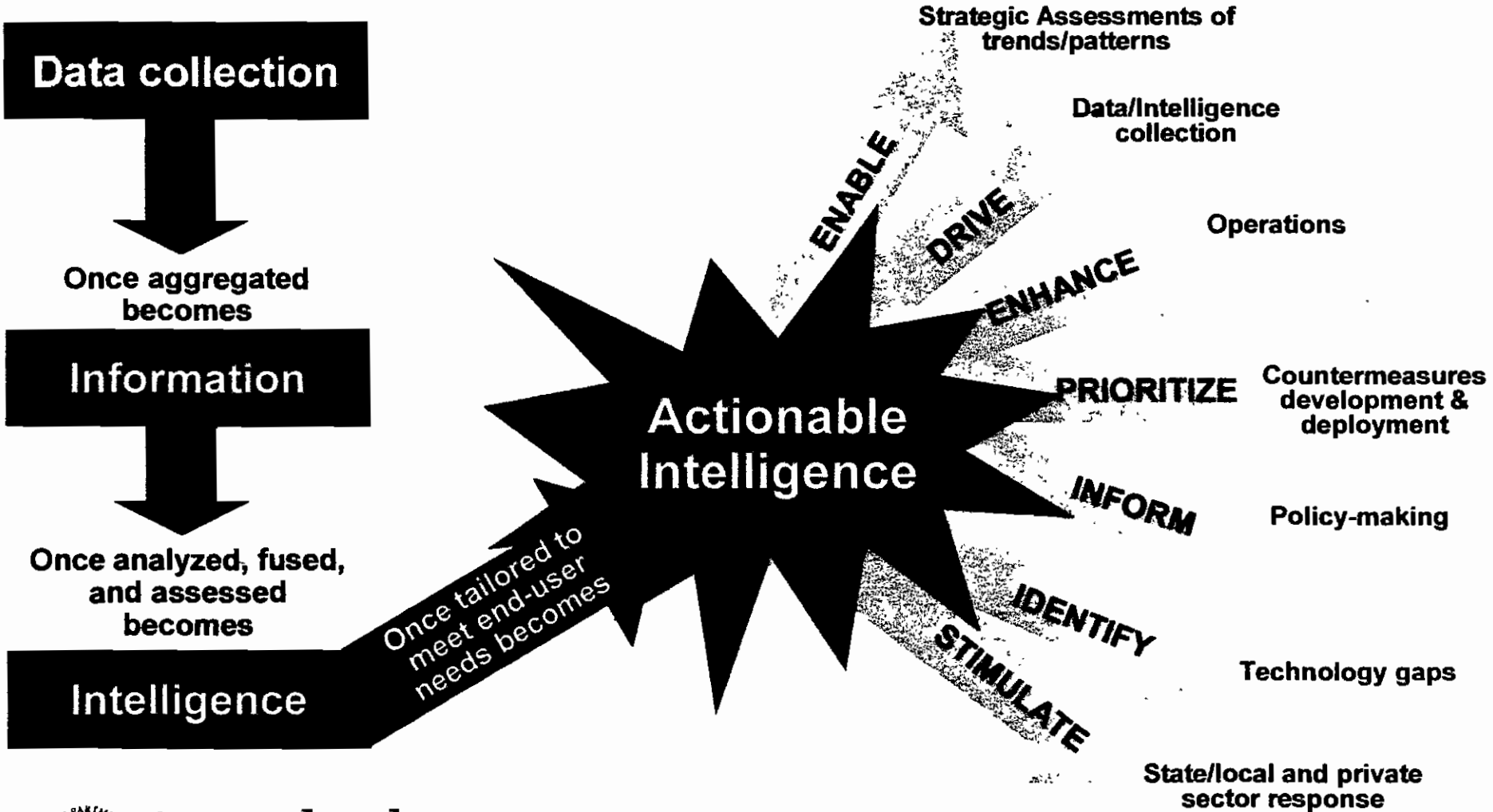
- Biological (medium-low risk from 2006 RA)
- Chemical (all)
- Radiological (all)
- Agricultural (other foreign animal diseases and crop attacks)



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Data is NOT Actionable Intelligence



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What? To Whom? Why? Impact?

Assess adversaries interest, motivation and capability to execute an attack in the U.S. using WMD

Detect and deter the transport of WMD weapons and materials into the U.S.

Screen and prevent extremists with or seeking WMD knowledge and experience from entering the U.S.

Prevent access to WMD materials within the U.S.

Dissuade extremists groups in the U.S. from developing, acquiring and using WMD

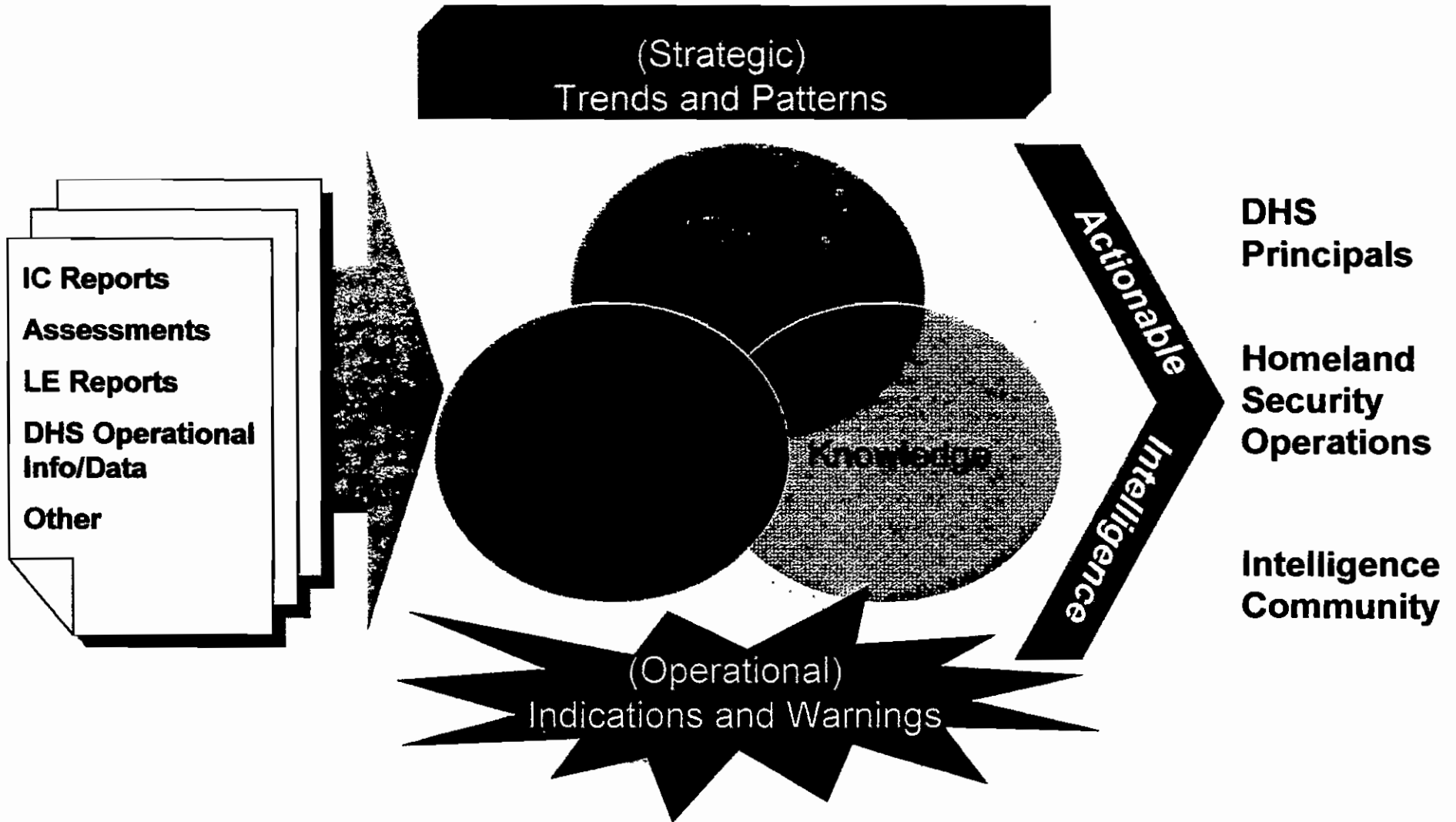
Inform and educate DHS operators, state/local entities, and the private sector to recognize, interdict, and respond to WMD events or attacks



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Analysis and Assessments Framework



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Collection and Analysis of WMD Threats is Three-fold

Materials

Raw materials and devices of concern

Their location (US and OCONUS)

Their accessibility/protection (US and OCONUS)

Our ability to find/detect them

People

Weapons experts (who they are?, where are they?)

Terrorist/Extremists groups (who? where?)

State/non-state exchanges

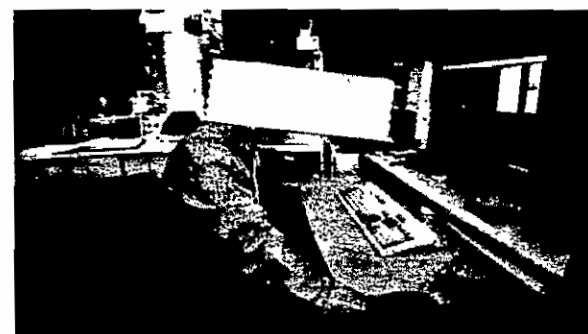
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Knowledge

What is available via open source?

What is technically feasible?

What education and training is needed?



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Actionable Intelligence: Key Components

Social-Behavioral – motivation & intent

Technical – attack scenarios

Capability – adversary ability

Scientific – knowledge & experience

Operational Advisories - Indications/Warnings

- Groups/individuals of concern
- Transport modes, smuggling routes
- Materials, components, equipment
- Investigation tips



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What can MASINT do to make HS WMD Intelligence More Effective?

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- **Develop** operational indicators not just more data
- **Collect** material samples and signatures

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- **Pioneer** predictive knowledge tools & approaches



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Protecting the Homeland is Our Commitment

**“How do we avoid becoming beguiled by
the risk we have already experienced and
distracted from those that our enemy
might be planning in the future?”**

- Secretary Chertoff, March 2005

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