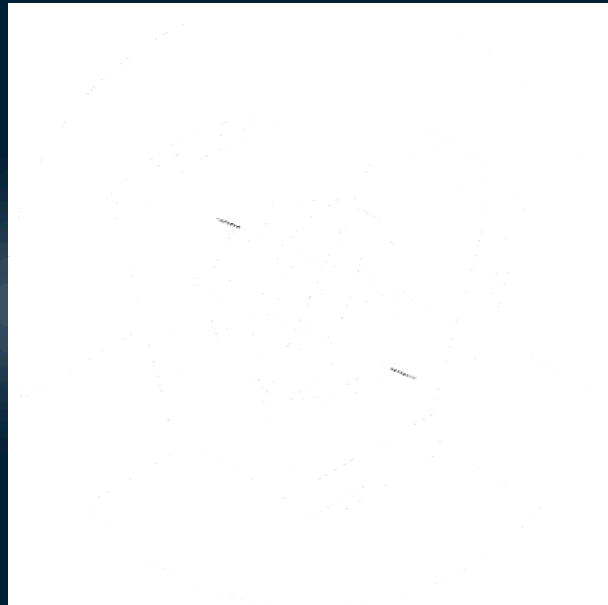


# On the Impact of Scientists and Engineers on Global Nuclear Security



**Rodney K. Wilson**

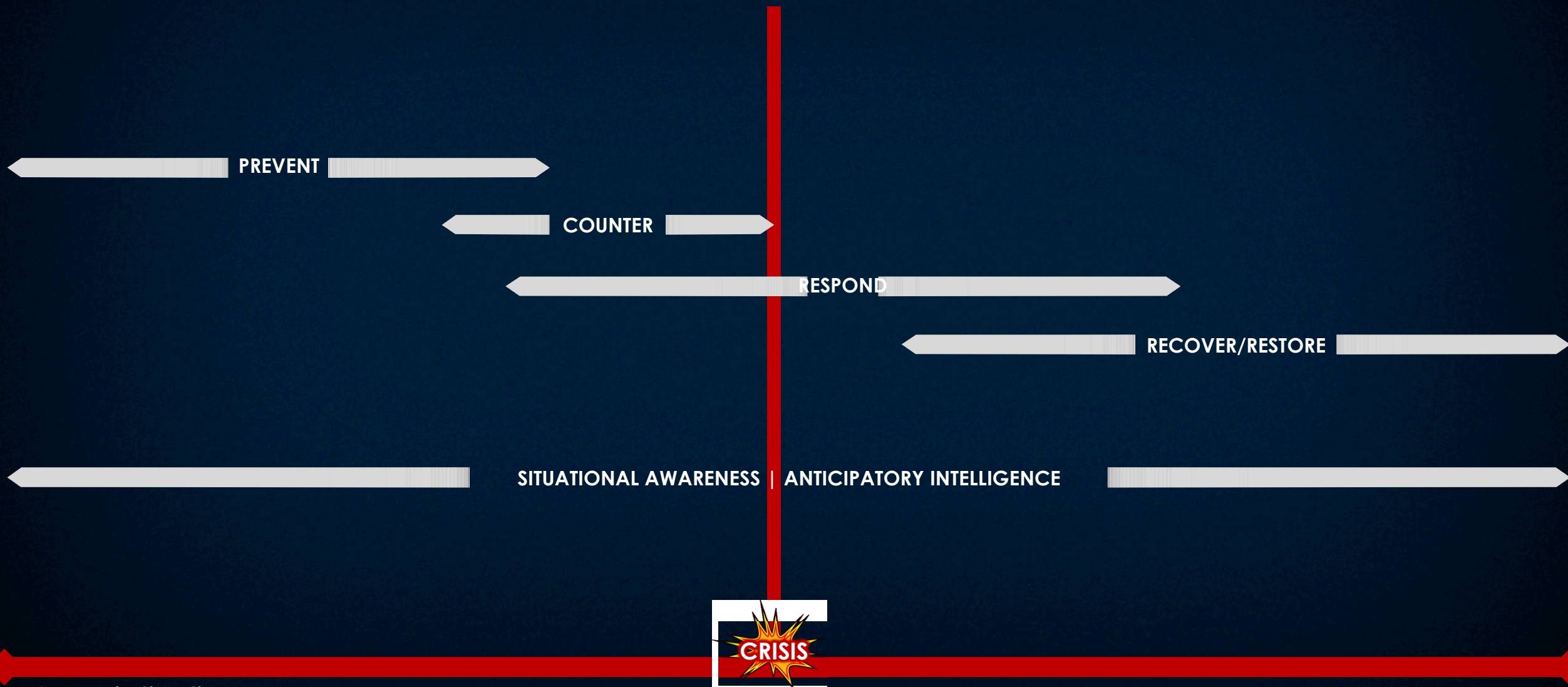
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# Our view of Global Nuclear Security looks across time...



...and the degree of cooperation and transparency...



Cooperative / Transparent

Non-cooperative / Opaque



Scenario timeline

...to create a space for exploring scenarios and solutions.



Cooperative / Transparent

PREVENT

COUNTER

RESPOND

RECOVER/RESTORE

SITUATIONAL AWARENESS | ANTICIPATORY INTELLIGENCE

CRISIS

Non-cooperative / Opaque

Scenario timeline

ENDURING PARTNERSHIPS  
POLICY ENGAGEMENT  
SYSTEM SOLUTIONS



ENGINEERED SYSTEMS SOLUTIONS  
SYSTEMS MODELING, ANALYSIS, and EVALUATION  
RESEARCH and DEVELOPMENT

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# ... resulting in a range of systems and solutions.



## Studies...

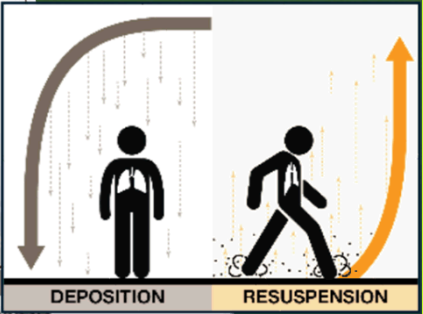
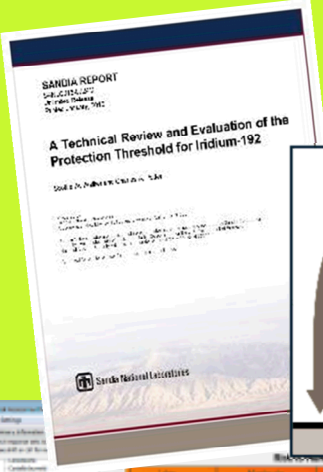
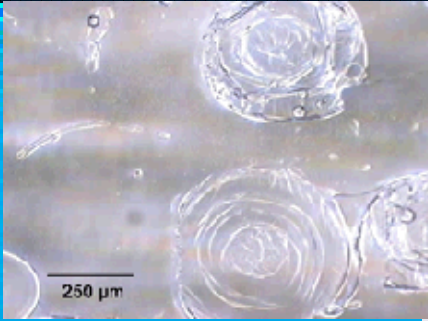
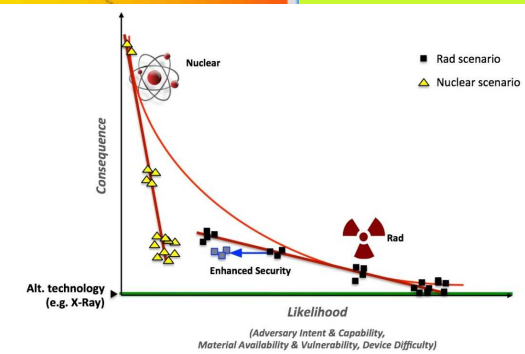
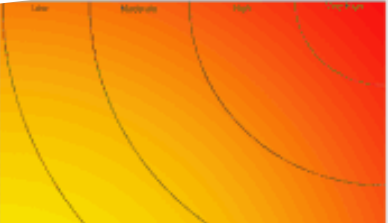


Table with multiple columns and rows of data, likely a technical report or spreadsheet.



## ...Tech

## ...Capacity Building



# But the future remains dynamic and our planning focuses on a number of factors ...



## Domestic

- Changes in Administration and Congressional Priorities
- Degree of private sector participation / buy-in"
- Ability to integrate across USG agencies with similar missions

## Global

- Strength / weakness of international Institutions
- Global and regional stability
- Cooperation between states
- Proliferation, terrorism, accidents

## Technical

- Emerging threat capabilities (e.g., cyber, UAS)
- Tech surprise (e.g., advanced manufacturing)
- Open source information
- Long-term sustainability

***... So we must remain flexible and strengthen our capabilities and partnerships to be able to respond ...***

## ... which requires science and technology to ...



- improve the Physical Security of our materials, facilities, transportation systems, and border crossings
- integrate Cyber Security into our security system architectures
- improve safeguards to Detect Diversion
- improve Data Analytics to improve situational awareness and anticipate future events
- support Cooperative Threat/Risk Reduction Activities and Confidence Building Measures
- improve our National Technical Means

**Thank you**