



The Sandia Center for Global Security and Cooperation (CGSC)

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Exceptional service in the national interest



GLOBAL SECURITY CHALLENGES



Weapons of Mass Destruction | Nonproliferation | Arms Control

NUCLEAR



CHEMICAL



BIOLOGICAL

The Sandia Center for Global Security and Cooperation

We seek a SAFE, SECURE
WORLD through Global
Technical Engagement.



RESEARCH, DEVELOP, AND
APPLY innovative SCIENCE
AND ENGINEERING
SOLUTIONS to strengthen
nonproliferation and reduce
global threats.

Sandia's engagement in global security challenges spans over 50 years



The Cold War

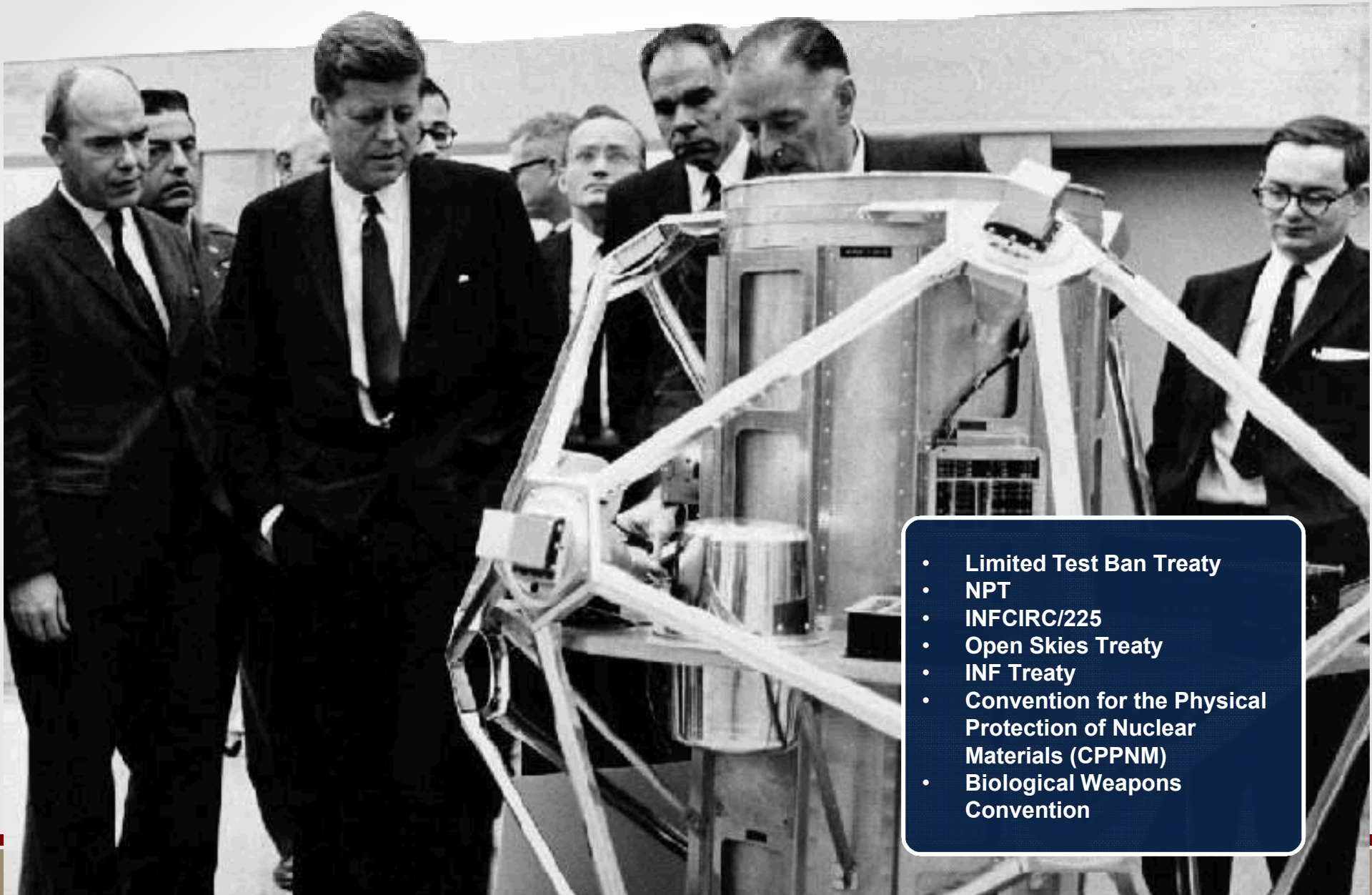


Post-Cold War



Post-9/11

The Cold War Era



- Limited Test Ban Treaty
- NPT
- INFCIRC/225
- Open Skies Treaty
- INF Treaty
- Convention for the Physical Protection of Nuclear Materials (CPPNM)
- Biological Weapons Convention

The Post-Cold War Era



- START I/II
- CTR
- CTBT
- International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT)
- Chemical Weapons Convention

The Post-9/11 Era



- New START
- Proliferation Security Initiative
- UNSCR 1540
- CPPNM Amendment

ENDURING PARTNERSHIPS

POLICY ENGAGEMENT

SYSTEM SOLUTIONS



RESEARCH and DEVELOPMENT

SYSTEMS ANALYSIS

SOLUTIONS ENGINEERING

- **ENDURING PARTNERSHIPS**

- **POLICY ENGAGEMENT**

- **SYSTEM SOLUTIONS**



- **RESEARCH and DEVELOPMENT**

- **SYSTEMS ANALYSIS**

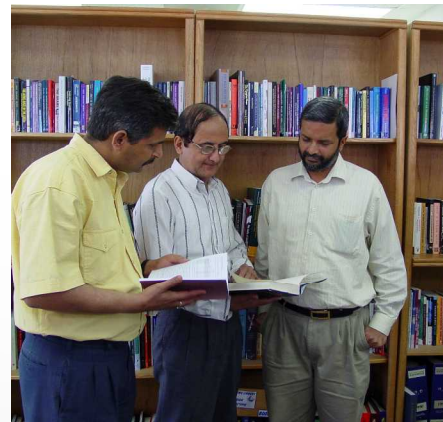
- **SOLUTIONS ENGINEERING**



**International Training
Course for the Physical
Protection of Nuclear
Facilities and Materials**



**Gulf Nuclear Energy
Infrastructure Institute**



Visiting Research Scholars

- ENDURING PARTNERSHIPS
- POLICY ENGAGEMENT
- SYSTEM SOLUTIONS



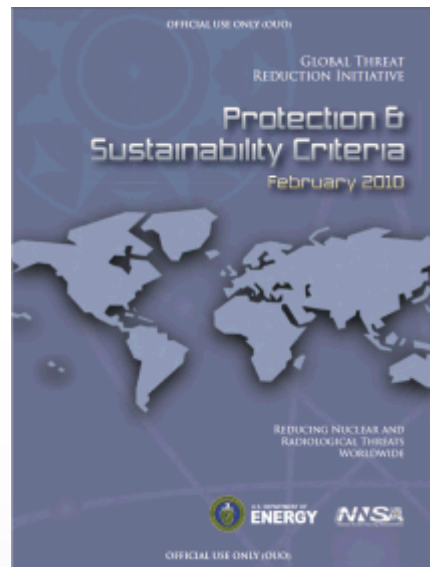
- RESEARCH and DEVELOPMENT
- SYSTEMS ANALYSIS
- SOLUTIONS ENGINEERING



**Global Veterinary Capacity
Building**



**Supporting NewSTART
negotiations**



GTRI Protection Plan

- ENDURING PARTNERSHIPS
- POLICY ENGAGEMENT
- SYSTEM SOLUTIONS

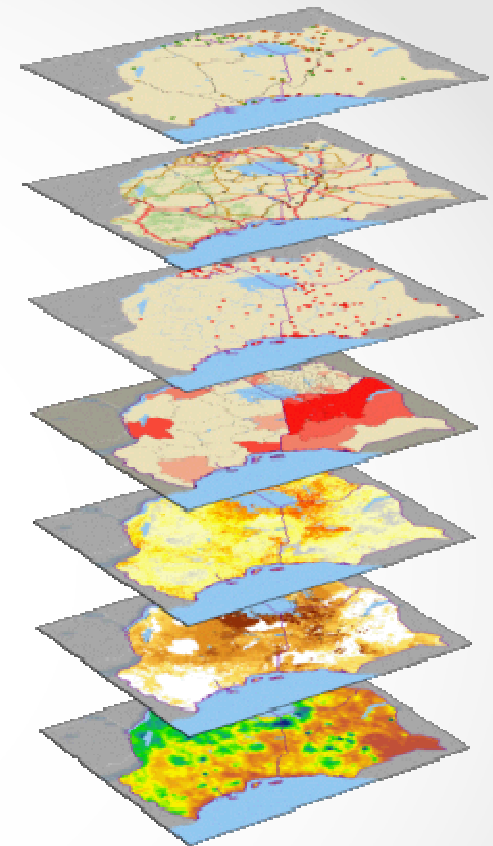


- RESEARCH and DEVELOPMENT
- SYSTEMS ANALYSIS
- SOLUTIONS ENGINEERING

Lab Biosafety and Biosecurity implementation in Kenya and Uganda



SLD Wireless



Chain of Custody/End to End Program



- ENDURING PARTNERSHIPS
- POLICY ENGAGEMENT
- SYSTEM SOLUTIONS



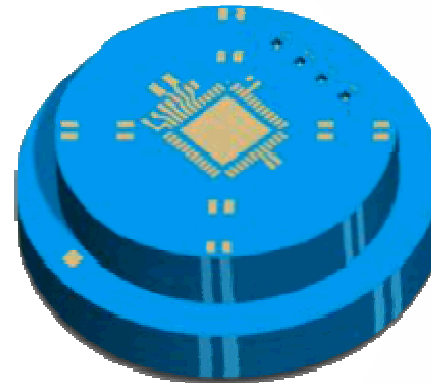
- RESEARCH and DEVELOPMENT
- SYSTEMS ANALYSIS
- SOLUTIONS ENGINEERING



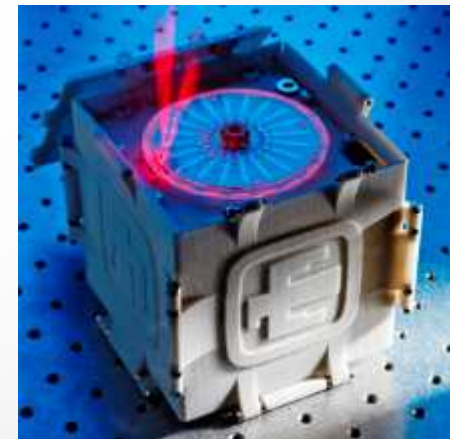
**Mobile Radiation
Detection and
Identification System
(MRDIS)**



**Tamper
Indicating
Ceramic Seal**



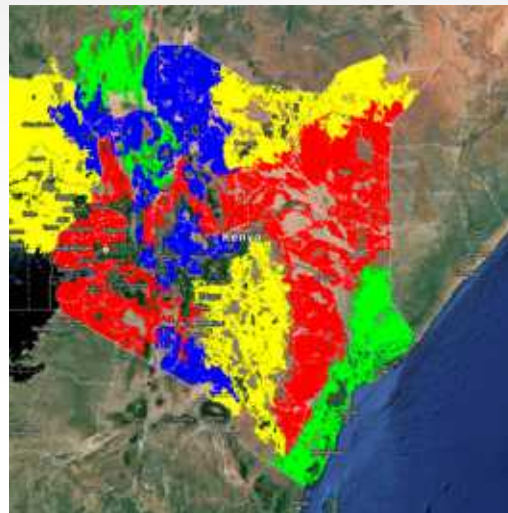
**Developing disease
surveillance
applications for
SpinDX**



- ENDURING PARTNERSHIPS
- POLICY ENGAGEMENT
- SYSTEM SOLUTIONS



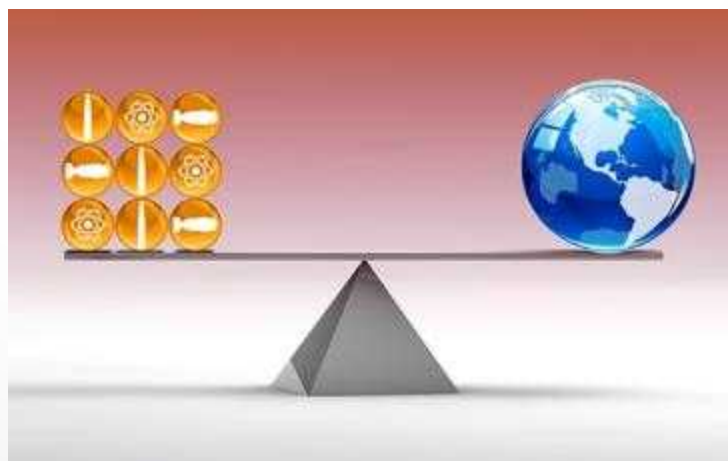
- RESEARCH and DEVELOPMENT
- SYSTEMS ANALYSIS
- SOLUTIONS ENGINEERING



Country Vulnerability Prioritization Modeling



Reports composed to develop and support the Global Threat Reduction Initiative



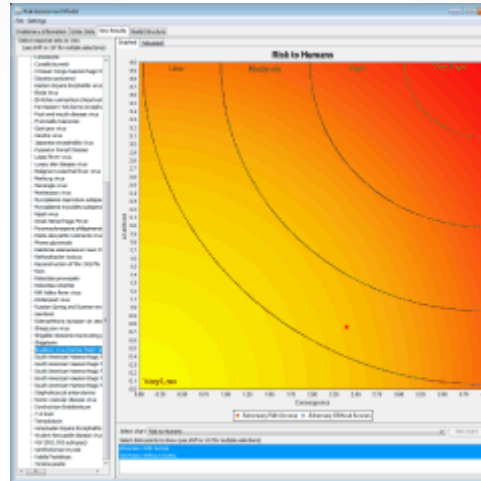
Nuclear Zero and Global Stability

- ENDURING PARTNERSHIPS
- POLICY ENGAGEMENT
- SYSTEM SOLUTIONS



- RESEARCH and DEVELOPMENT
- SYSTEMS ANALYSIS
- SOLUTIONS ENGINEERING

Biorisk Assessment Models (BioRAMs)



Material Protection, Control, and Accounting (MPC&A) program in China

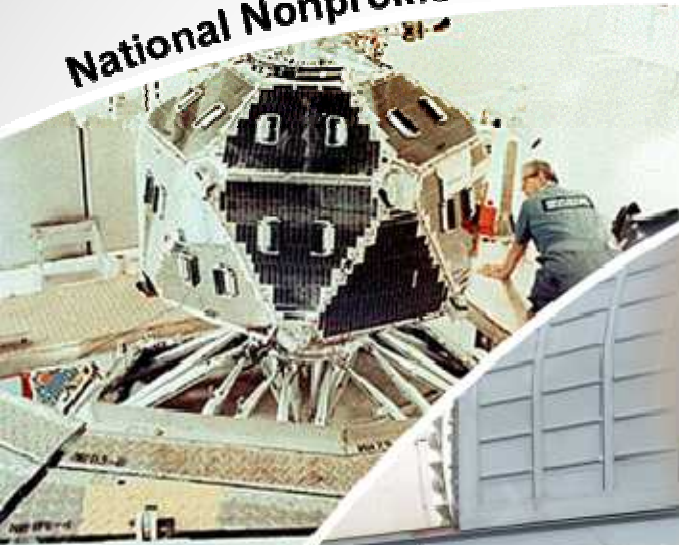


Radiation Detection Equipment for Warhead Treaty Verification



What emerges is a systems approach where S&T intersects to both inform and implement policy...

National Nonproliferation Systems



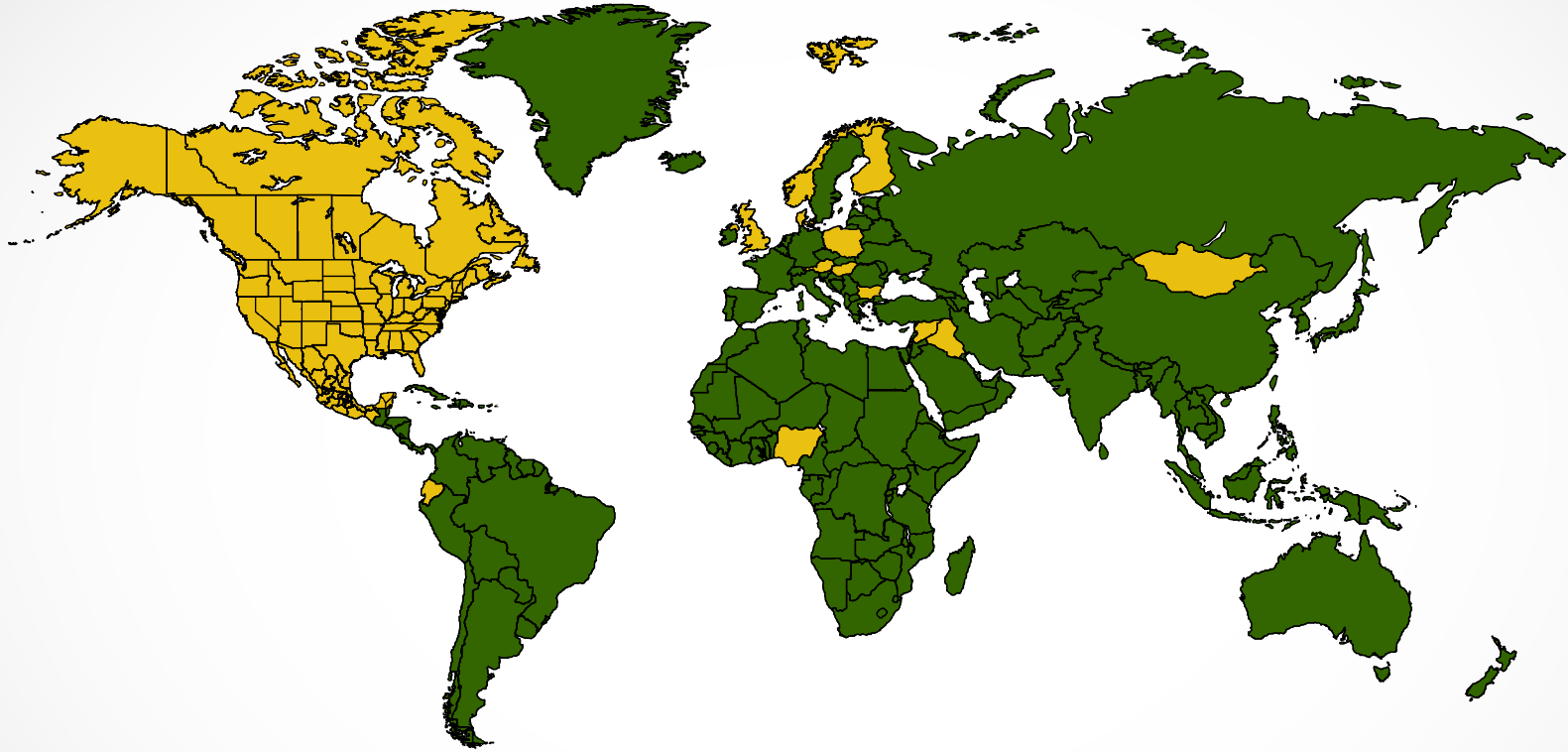
**International
Treaties and
Negotiated
Agreements**




Global Cooperative Threat Reduction

... and focuses on risk reduction

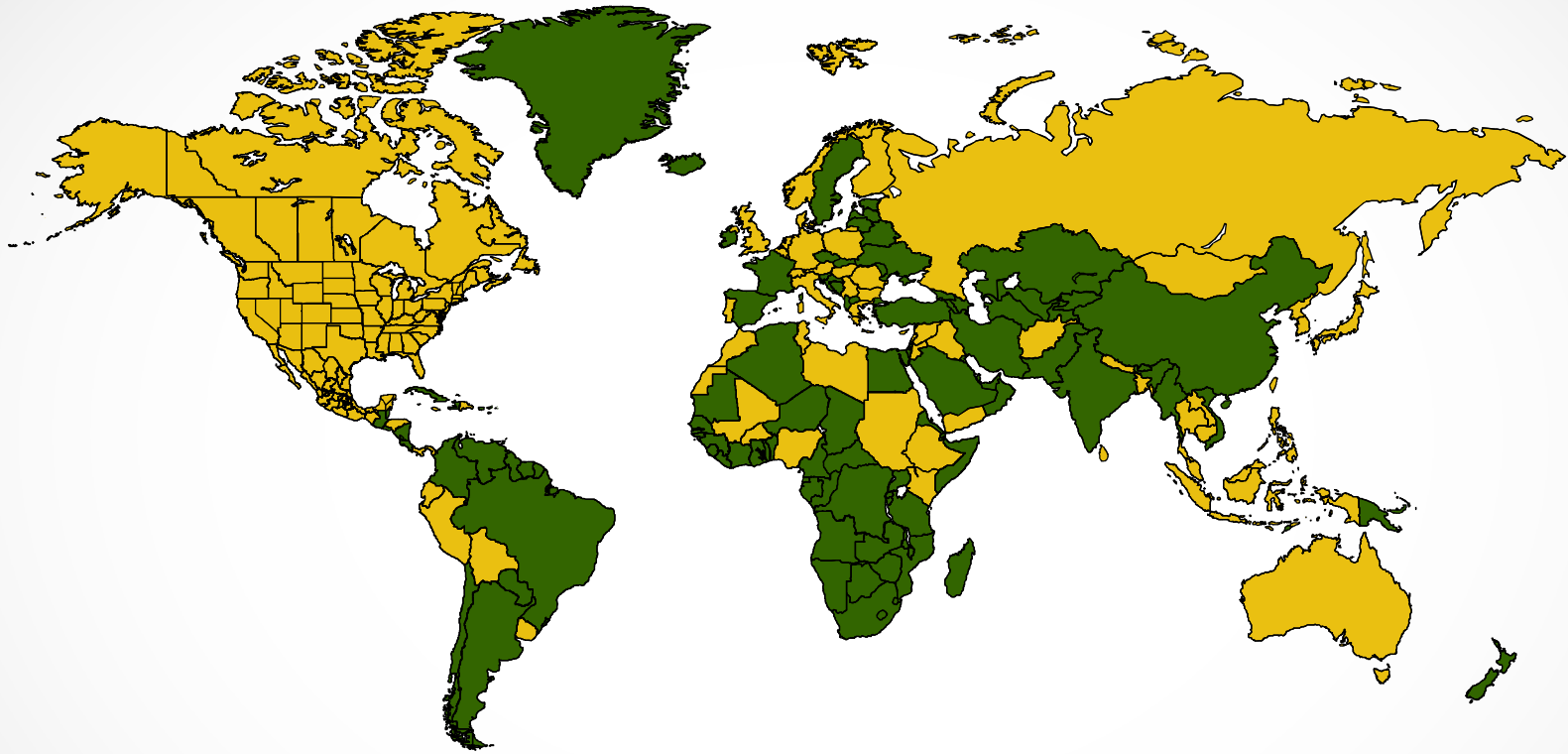
This work has expanded to include efforts in over 120 countries



1960s


 Active Engagement

This work has expanded to include efforts in over 120 countries

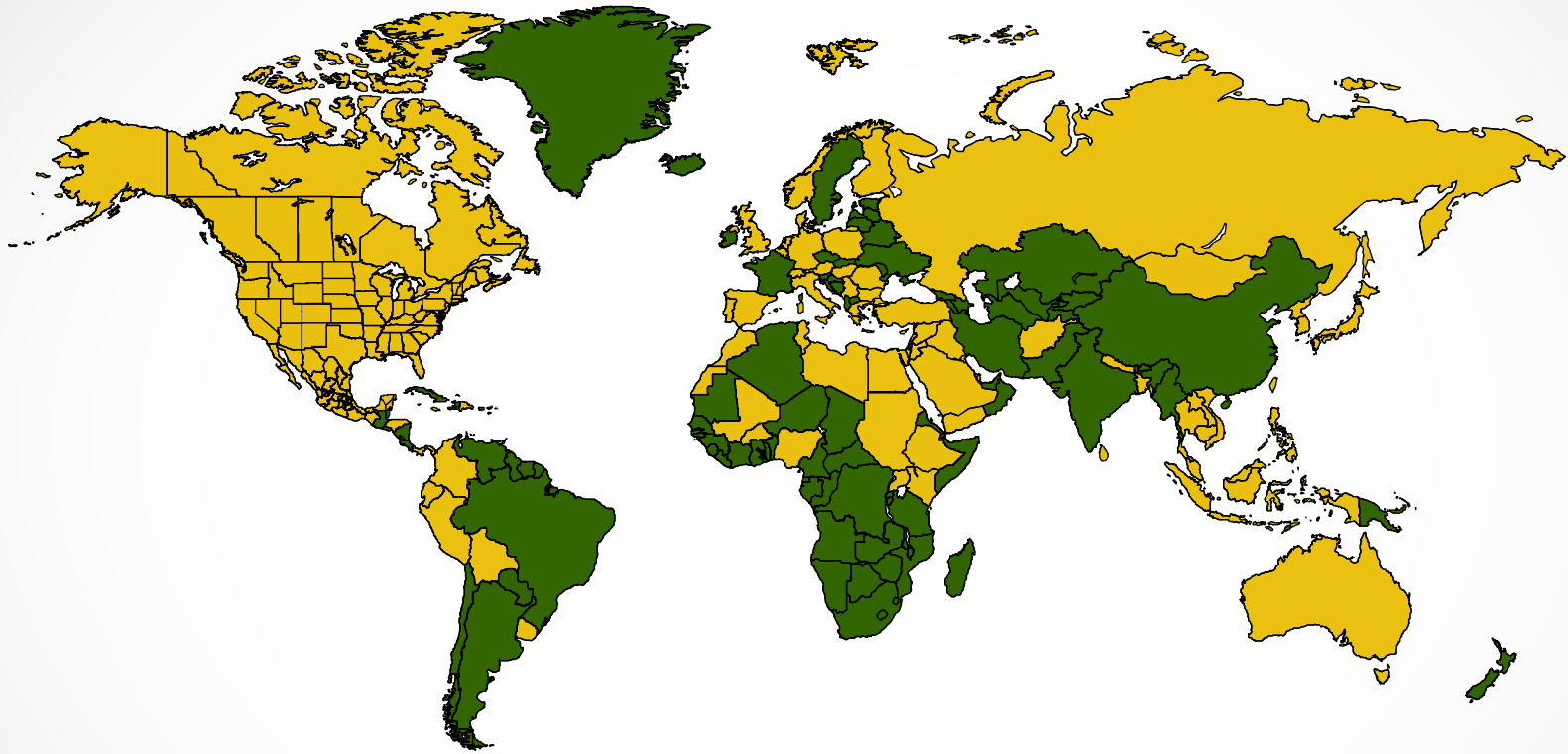


1960s

1970s

 Active Engagement


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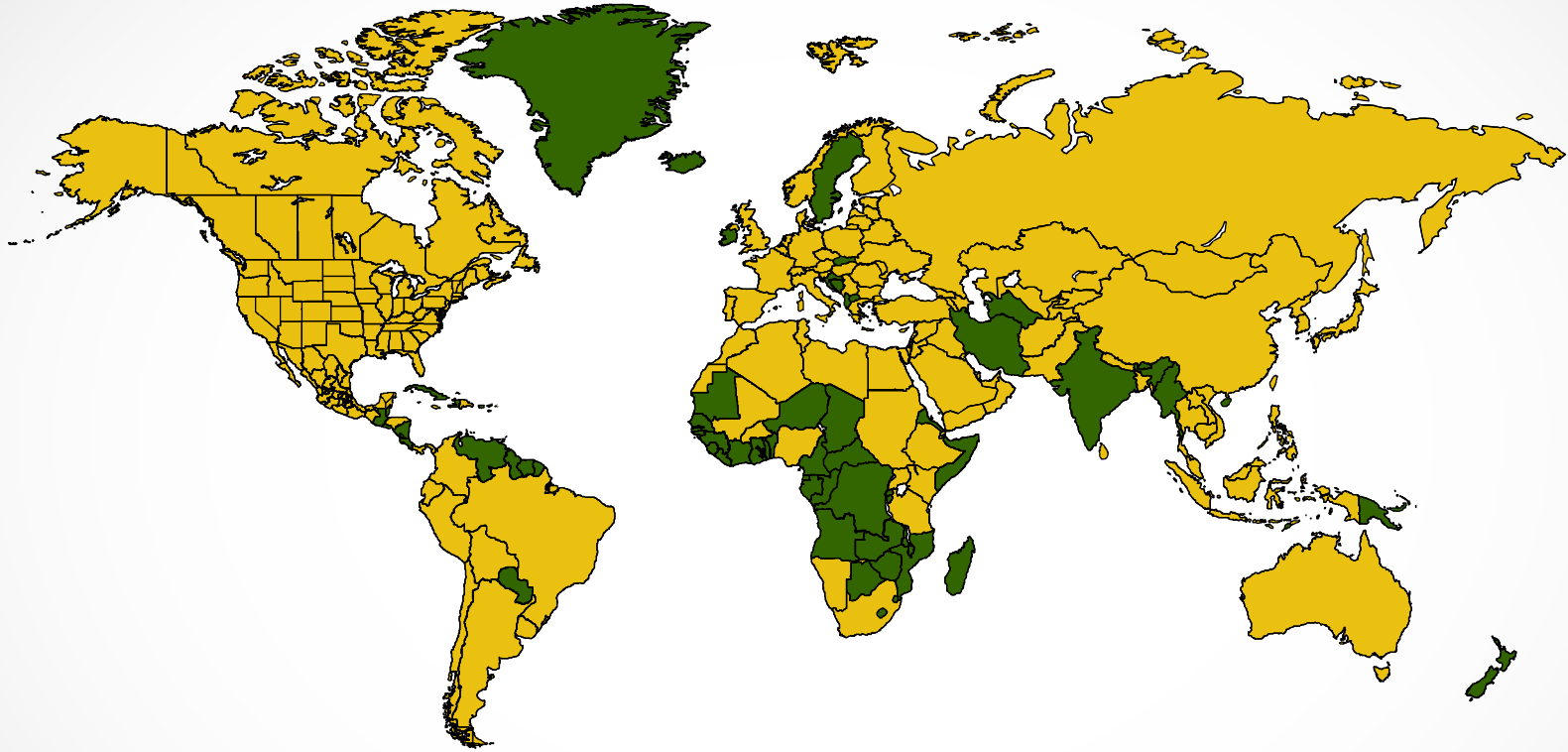
1960s

1970s

1980s

 Active Engagement

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1960s

1970s

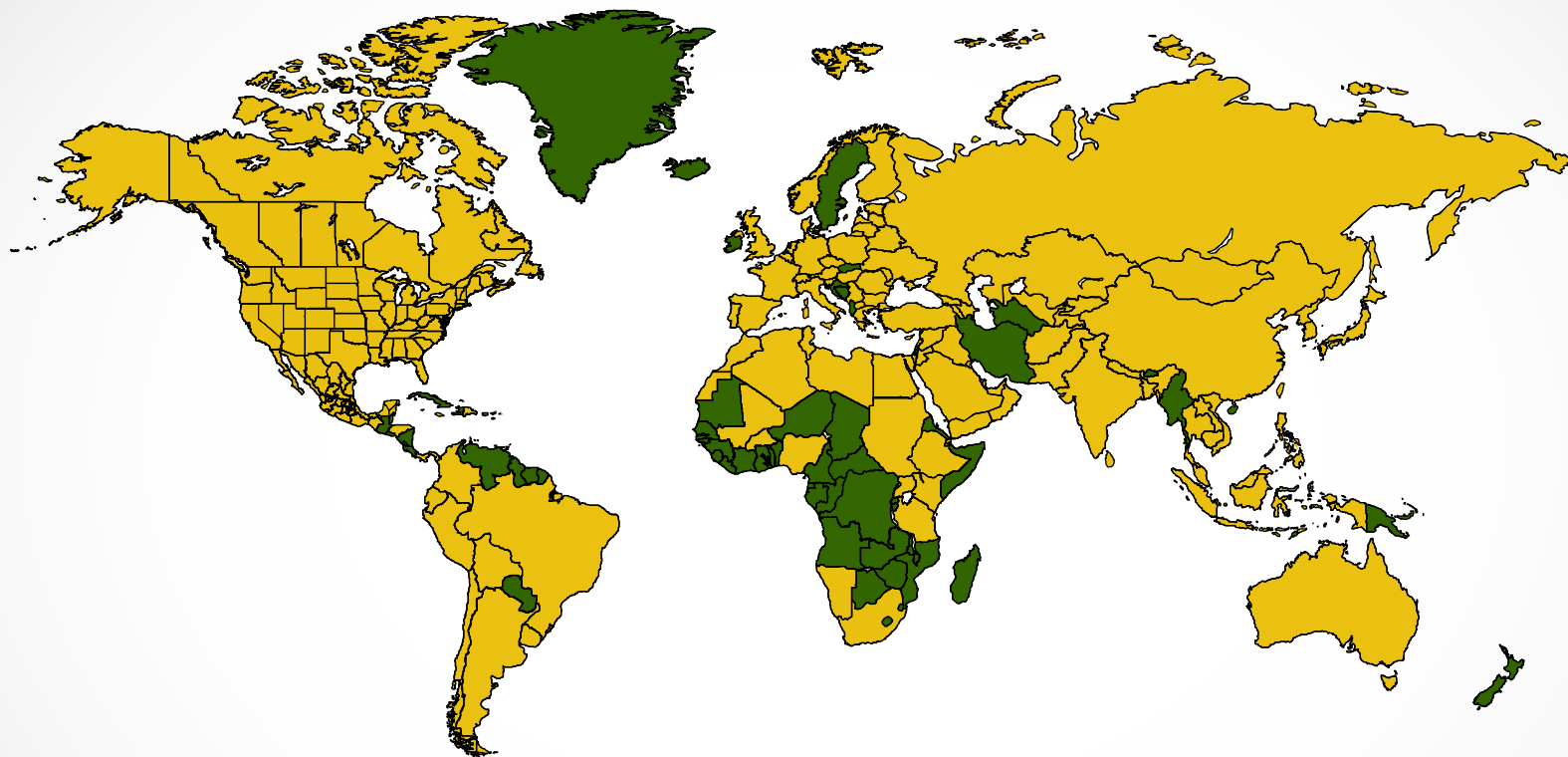
1980s

1990s



Active Engagement

This work has expanded to include efforts in over 120 countries




1960s

1970s

1980s

1990s

2000s

 Active Engagement

Looking Ahead

New Technologies | New Partnerships

