

Sandia Global Engagement Middle East and North Africa



Amir Mohagheghi

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- **National Security Drivers**
- **Regional Security Challenges**
- **Examples of Current Programs**
- **Criteria for Project Development**

National Security Drivers

Reduce the WMD Threat

Presidential Initiatives:

- **Speech on nuclear security, Prague**
 - Four year plan to secure nuclear materials
 - Secure borders and interdict illicit trafficking
 - WMD proliferation and Zero nukes
 - Iran Nuclear Proliferation
- **Cairo speech, Egypt**
 - S&T Engagement with the Developing World

USG National Strategic Plans:

- **Nuclear Posture Review 2010**
 - Preventing nuclear proliferation and terrorism
 - Enhance regional security architectures
 - Lead international efforts to bolster the NP regime
- **National Security Strategy 2010**
 - Reverse the Spread of Nuclear and Biological Weapons and Secure Nuclear Materials
 - Advance Peace, Security, and Opportunity in the Greater Middle East
 - Invest in the Capacity of Strong and Capable Partners
 - Secure Cyberspace
- **NNSA Strategic Plan 2011**
 - Secure Vulnerable Nuclear Materials
 - Centers of Nuclear Security Excellence



- **Arab Spring – Major impact on strategic calculations**

- Tunisia, Egypt, Libya – Major Changes
- Morocco, Jordan – Incremental
- Syria, Yemen, Lebanon – Civil War
- GCC States – Stable?
- Iran – Sanctions Working?
- Iraq – Democracy or Dictatorship?
- Israel – Less Secure?
- Turkey – A positive example?

- **Stabilization of Afghanistan**

- **Israeli Arab Conflict**

- **Terrorism and Failed/Failing States**

- **Resource Management**

- Energy
- Water
- Critical Infrastructure



Examples of MENA Projects

- **Middle East Scientific Institute for Security (MESIS)**
 - Borders, Energy, Environmental Security
- **S&T Engagement**
 - Iraq S&T Engagement
 - Radiation Measurements Cross Calibration (RMCC) Project
 - Middle East Radiological Early Warning System
 - Egypt – Rad Waste Management COE
- **Infrastructure Development for Safe, Secure, and Safeguarded Nuclear Energy**
 - Gulf Nuclear Energy Infrastructure Institute (GNEII)
 - Bilateral Capacity Building Cooperation
- **Policy Dialogue and Studies**
 - WMD Free Zone in the Middle East



GNEII Graduates, October 2012



ERDS Technical Visitors



RMCC Workshops

Examples of MENA Projects

- **Technical Capacity Building**

- Biological and Chemical Threat Reduction Engagement (DOS and DOD)
- Radiological Detection Systems at Border Crossings and Ports (NNSA)
- Border Security and Consequence Management (DOD)

- **Nuclear Security Engagement (CTR/PNS)**

- Focus is on expertise
- Integrate scientists/engineers into the international community

- **Visiting Scholars**

- A Middle East WMD Free Zone Analytical Model

- **Technical Studies and Analysis**

- Integrated Framework for Nuclear Safety, Security, and Safeguards

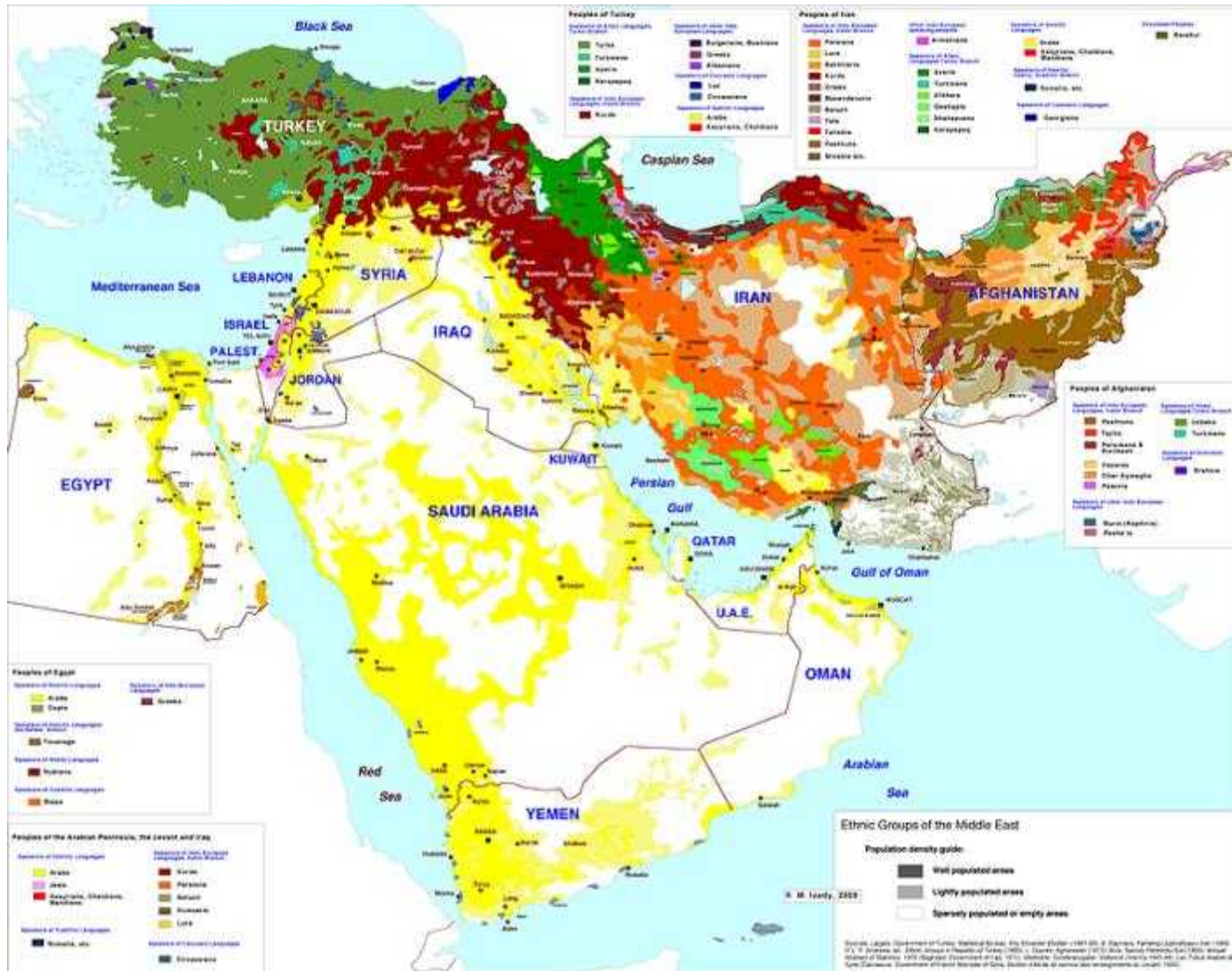


A Strategy for Regional Approaches

- Understand context
- Focus on topics of common interest
- Build on ongoing activities and relationships
- Pursue practical projects that leverage Sandia strengths
- Criteria to guide project selection:
 - USG sponsor
 - Relevance of country or region to resolving U.S. national security challenges
 - Technical capabilities (existing or potential) of the country
 - What is Sandia's value added role?



Middle East: Ethnic Groups





Understanding context: A Middle East Example

U.S. Concerns

Arab World

- WMD proliferation
- Support for terrorism
- Potential to cut off oil
- Non-democratic governments
- Non-recognition of Israel

Israel

- Expansion of settlements
- Unilateral military action
- Achieving regional nonproliferation / security

Arab Concerns

U.S.

- Policies favor Israel
- Support for corrupt Arab governments
- Military presence / threat
- Nonproliferation agenda seen as hypocritical

Israel

- Occupation of West Bank, Gaza, Golan Heights
- Israeli/Palestinian conflict
- Military superiority
- Access to water resources
- National boundaries

Israeli Concerns

Arab World

- Support for terrorism
- WMD proliferation
- National boundaries
- Non-recognition of Israel's right to exist
- Access to water resources

U.S.

- Pressure to restrict military operations
- Pressure to restrict settlements

Adding Iran, Iraq, and other countries complicates things further

Topics of common interest

Arab interests

- **Border security / management**
 - Smuggling
 - Counter-terrorism
 - Trade
- **Public health**
- **Environmental security**
 - Water
 - Desertification
- **Nonproliferation**
 - WMDFZ in Middle East: focus on Israel
- **Consequence Management**
 - Nuclear, chemical, biological
- **Maritime security**

U.S. Interests

- **Counter terrorism**
 - Biological
 - Explosives
 - Radiological
- **Nonproliferation**
 - Iran
 - Arab countries

We need effective regional partners.

Israeli interests

- **Counter terrorism**
 - Biological
 - Explosives
 - Radiological
- **Nonproliferation**
 - Iran
 - Arab countries
- **Border management**
 - Security
 - Trade
- **Water security**
 - Quantity
 - Quality
- **Public health**

Practical NNSA Topics for Regional Engagement

Nonproliferation

- Analyze technical requirements of potential regional agreements
- Develop technical tools for implementing agreements
 - Radiation monitoring
 - ❖ Meteorological monitoring
 - ❖ Seismic monitoring
 - ❖ Water monitoring
 - ❖ Disease surveillance
 - Material security
- Training on capabilities for implementing agreements
 - Export control training
 - Physical security – design-basis threat training
 - On-site-inspection training
 - Treaty verification

Counter-Terrorism

- Analyze technical requirements for effective partnerships
- Develop common approaches to border security
 - Explosives detection
 - Nuclear material detection
 - Information sharing / coordination
 - Customs inspections
 - Export control
- Enhance cooperation on consequence management
 - ❖ Meteorological monitoring
 - ❖ Water monitoring
 - ❖ Disease surveillance
 - Radiation monitoring

❖ *Dual-use topics that also address regional “soft security” concerns*

Thank you for your time