

# **Central Region Instability Dynamics**

Interagency and Military Activities Best Suited for Competition Against U.S. Great Power Rivals in the Middle East (Q.B9)

and

Interagency and Military Capabilities to Mitigate Negative Repercussions from a U.S. Military Drawdown (Q.B11)

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### **Central Region Instability Dynamics**

#### Project Report for Strategic Multilayer Assessment (SMA): Strategic Implications of Population Dynamics in the Central Region

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### Abstract

With support from GTRI, GMU worked with Strategic Multilayer Assessment (SMA) Subject Matter Experts (SMEs) to assess strategic risk to U.S. and partner interests in the Middle East caused by great power competition in the region. Strategic risk was decomposed into key risk influence factors which were then aligned with potential causal activities of China, Russia, Middle East countries, and the United States and its partners. These were used to construct a Timed Influence Net (TIN) model which provided a means to identify opportunities for the U.S. military and its inter-organizational partners to integrate military efforts and align military and non-military activities to avoid unacceptable strategic outcomes in the Middle East while pursuing U.S. national interests. Analysis using the TIN model suggests that economic (and to a lesser extent, political) shaping activities would appear to provide the greatest benefit to reduce U.S. strategic risk from great power competition, particularly actions that demonstrate long-term U.S. commitment to the region. From a military perspective, multinational, multi-agency response preparation exercises offer opportunities to improve regional security, promote western values and institutions, counter China and Russia influence, and demonstrate U.S. and western commitment to Middle East security. Potential Middle East cooperation opportunities (which could include China and Russia) include maritime security, counter-terrorism, counter-radicalism, anti-piracy, and counterproliferation.

### Key Observations and Conclusions

#### **Great Power Competition in the Central Region Observations**

- Military activities can do little to counter Chinese and Russian short-term competition courses of action in the Middle East because both countries primarily conduct political, economic, and social activities, and avoid actions that could lead to U.S. military involvement
- Economic (and to a lesser extent, political) shaping activities would appear to provide the greatest benefit to reduce U.S. strategic risk from great power competition, particularly actions that demonstrate long-term U.S. commitment to the region

#### USG Actions to Compete with Other Great Powers in the Near-term

- Activities that demonstrate long-term U.S. commitment to the region such as forward basing, disaster response exercises, Foreign Military Sales (FMS), U.S. foreign aid and investment
- Military Information in Support of Operations (MISO) and Public Diplomacy to highlight the transactional nature of China and Russian activities in the Middle East while avoiding the appearance that U.S. activities itself are transactional

#### USG Actions to Compete with Other Great Powers in the Long term

- Senior mil-to-mil contacts, military education & training, train and equip activities associated with Foreign Military Financing (FMF) and FMS, National Guard international partnerships, and Special Operation Forces (SOF) programs
- Revise USG incentives models to advance government reforms and human rights so they do not undermine perceptions regarding U.S. commitment to the Central Region

#### Actions to Mitigate Potential Repercussions from a U.S. Military Drawdown

- Military activities: Senior mil-to-mil contacts, military education and training, train and equip activities associated with FMF and FMS, National Guard international partnerships, and SOF nation support programs
- Multinational, multi-agency response preparation exercises offer opportunities to improve regional security, promote western values and institutions, counter China and Russia influence, and demonstrate U.S. and western commitment to Middle East security
- Demonstrate commitment to region through maritime security, counter-terrorism, counterradicalism, anti-piracy, and counter-proliferation cooperation programs

### 1. Introduction

United States Central Command (USCENTCOM) requested that the Joint Staff J-39 Strategic Multilayer Assessment (SMA) office initiate a nine-month study to understand the strategic implications of destabilizing population dynamics within the Central Region. SMA was specifically asked to consider drivers of instability in the region to include long-term internally displaced persons and refugees, spread of radical ideologies and extremism, great power competition, disruptive non-state actors, and the potential for black swan scenarios.

SMA convened its network of subject matter experts and affiliated research teams to address questions designed to provide greater context and rich contextual understanding of current and future instability dynamics present in the Central Region. This report addresses two specific questions: (1) *Which interagency and military activities are best suited for competition against our great power rivals in the Middle East?* Consider as a minimum Security Cooperation, Key Leader Engagements (KLE), Foreign Military Financing (FMF), Foreign Military Sales (FMS) and use of Special Operations Forces (SOF). (2) *What balance of interagency capabilities and military forces is most likely to mitigate negative repercussions from a military draw down?* 

Subject matter experts conducted a deep dive into the geopolitics of China and Russia in the Middle East, with a focus on how they view the parameters of cooperation, competition, and conflict, as well as the points at which information and deterrence activities may become escalatory. This included an examination of how the strategic communities in China, Russia, and key regional actors view U.S. motivations and decision-making.

SMA participants explored means to defend U.S. security, economic, and influence interests in ways that are effective at an individual, state, and regional level, and that are complementary to U.S. global goals and objectives, including inhibiting Chinese-Russian cooperation harmful to U.S. interests.

In addition to the interagency and military activities, CENTCOM identified the following activities as possibly suited for competition against U.S. great power rivals in the Middle East: Security Cooperation, Key Leader Engagement, Foreign Military Financing, Foreign Military Sales, and Special Operations. Other activities were also considered, recognizing that today's operating environment presents the Department of Defense (DoD) with a difficult military challenge: The Joint Force must collaborate and synchronize with a wide variety of inter-organizational partners to conduct regional activities that can have far-reaching, global impacts. Planning must account for the complexity of the environment; interactions with adaptive adversaries; the persistence of enduring competitions; trans-regional challenges; emerging patterns of competition below the threshold of armed combat; and the challenge of integrating military activities within the DoD and the alignment of those activities with inter-organizational partners. (United States Joint Staff, 2018)

In decomposing the problem, it became clear that CENTCOM first needed to determine the objectives of the U.S. strategy in the Middle East, as well as those of China and Russia. These are outlined in Section 3 (United States) and Section 4 (Great Powers). The Assessment also examined Middle East strategies to leverage Great Power interest in the region in Section 5.

Guiding this assessment were seven capability development goals the Joint Staff identified for Globally Integrated Operations (Stephenson, 2018):

- 1. Identify potential crises before they develop and manage escalation favorable to the U.S.
- 2. Identify and counter competitor shaping activities that limit U.S. freedom of action
- 3. Coordinate, synchronize, and de-conflict activities and messages across COCOMs and with DoD partners (U.S. and coalition)
- 4. Counter competitor influence messaging when adverse to U.S. objectives
- 5. Assess intent of adversary activities (and messaging) and respond where appropriate
- 6. Assess adversary assessment of U.S. and partner global activities and messages
- 7. Assess risk of potential U.S. and partner mitigation options

The next section addresses the elements of U.S. strategic risk that result from great power competition in the Middle East, which form the foundation for the TIN model.

### 2. Great Powers: Strategic Goals and Regional Objectives.....

Using SME inputs for China and Russia (cited in the References section), and the National Defense Strategy, the following actor goals and objectives were used as the foundation for conducting the risk analysis:

China Strategic Goal: Most powerful country in the world with China-led international order

- Global economic and trade leader
- Promote ideology across globe
- International socio-political leader (Chinese system)
- Regional security and economic hegemony
- Counter U.S. influence in Pacific and other Chinese areas of interest

Russia Strategic Goal: Restore the Russian Empire with Russia-led international order

- Central and Eastern Europe security hegemon
- Recognized global military power with favorable nuclear balance with respect to U.S.
- Expand Eurasia Economic Union
- International socio-political leader (balance of power politics)
- Counter U.S. freedom of action in Europe

U.S. Strategic Goal: Leader of free world - democracy, freedoms, equality, justice, capitalism

- Favorable U.S. balance of power in all regions security, economic, trade
- Atlantic and Pacific security Power
- Promote democratic and capitalism ideology
- US-led international order
- Pre-eminent global military power
- Counter Chinese socialist ideology across globe
- Counter Chinese influence in Northeast Asia
- Counter Russian influence in Europe

A critical first step is to examine the actor's objectives relative to the potential adverse behavior (Fig. 1). If alternative actor actions (behaviors) can be identified that support the actor's objectives but are more favorable to U.S. interests, one of these alternatives may offer a potential avenue to successfully influence the actor's decision calculus toward a more favorable behavior.

A complicating factor is that perception is often different from the reality which the USG and partner planners intended. On the other hand, identifying the discrepancies between the competitor's perceptions and facts provides a useful foundation for designing the USG plan to favorably influence the competitor's decision calculus. It can also highlight areas for collaboration with partners whose actions may be causing undesirable on the competitor's perceived need for action.

The next step is challenging: It is important to analyze the actor's perception of the need to act based on the actor's perception of the USG's decision calculus. Does the actor see a need for preemptive action to counter a perceived threat from the U.S. or a U.S. partner based on normal shaping activities? How does the competitor perceive the USG's likelihood to exercise restraint

in the face of domestic pressure for action that the competitor would find unfavorable following a U.S. response to a competitor's shaping actions?

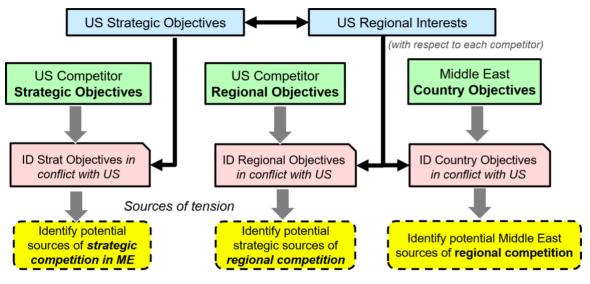


Figure 1: Global and Regional Sources of Competition

To address these questions, planners and analysts must assess the competitor's perceptions of the costs and benefits of executing an action or behavior adverse to U.S. interests or not performing the adverse action. If alternative actions have been identified, planners and analysts conduct the same cost-benefit analyses for each of these alternatives.

Examples of possible costs and benefits of conducting actions adverse to U.S. interests include the cost of a potential U.S. and allied response to the actions, an assessment of the actions' ability to achieve its desired effects (benefits), and the ability of the U.S. and partners to take actions that would deny the competitor from achieving the desired benefits from its action.

Examples of the cost analysis for the competitor to exercise restraint (not execute the adverse behavior) include factors such as a potentially unfavorable response to the lack of action from the competitor's population or governing structures (particularly opposition leaders), and the potential degradation in relationships (diplomatic, economic, trade, military) with friends. A potential benefit of restraint is favorable recognition from the international community, particularly if the competitor believes that international opinion could be leveraged against the U.S. in other areas of competition.

Recalling that the planners started with effects of competitor actions that the USG considers to be adverse or a source of potential risk to U.S. interests, and working back to identify sources of influence that could lead to this effect, the planners now identify potential USG activities that could influence the decision favorably, both steady-state shaping and engagement, as well as potential response actions to regional stability disturbances.

# 3. U.S Strategic Risk in the Middle East

For purposes of this assessment, strategic risk is defined as the inability for the United States to achieve its strategic objectives in the Middle East. The CENTCOM question: "Which interagency and military activities are best suited for competition against U.S. great power rivals in the Middle East?" is restructured as: Which U.S. activities are best suited to minimize the risk to U.S. strategic objectives resulting from the activities of U.S. Great Power rivals in the Middle East?

In the past, operational planning has focused primarily on developing concepts to defeat a potential adversary militarily. However, such an approach does not always satisfy political requirements. In situations where competitors are purposely engaging at levels of competition below armed conflict, different approaches are required.

Joint military operations and activities traditionally contribute to the U.S. objectives by affecting a targeted actor's decision calculus; however, military capabilities can also enable other U.S. and partner instruments of power to be more effective. Collectively, the Department of Defense groups these capabilities together as "Unified Action" of which "Whole of Government" operations are a subset. Direct military means include force projection, active and passive defenses, global strike (nuclear, conventional, and non-kinetic), and strategic communication, i.e., the alignment of actions with intended message. Enabling means include global situational awareness (ISR), command and control (C2), forward presence, security cooperation and military integration and interoperability, and assessment, metrics, and experimentation. Additionally, military planners can be of great assistance to other parts of government by helping them analyze the mission, develop and assess courses of action, and model effects of actions.

While the Deterrence Operations Joint Operating Concept (DO-JOC) is written from a strategic deterrence perspective, elements of the concept were adapted for use as a framework to understand strategic risk from great power competition at levels below armed conflict. For purposes of this study, strategic risk results from actor behaviors that could undermine U.S. strategic geopolitical interests in the Middle East.

The basic analysis framework is depicted in Figure 2. The key elements of strategic risk are identified as the inability to: protect Western ideology in the Middle East, maintain a U.S.-led international order in the Middle East, maintain robust U.S. and Middle East trade, maintain Middle East regional security, avoid escalation to conflict, contain Russian influence in the Middle East, and contain Chinese influence in the Middle East.

Influencing these key elements of U.S. strategic risk are China great power competition activities in the Middle East, Russia great power competition activities in the Middle East, great power cooperative activities in the Middle East, activities of Middle East countries designed to exploit great power competition, and U.S./Partner activities in the Middle East.

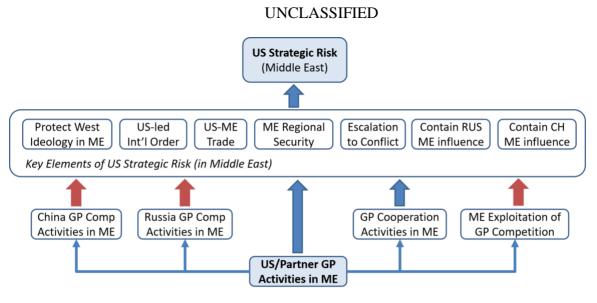


Figure 2. TIN Model Framework for U.S. Strategic Risk in Middle East

Influence factors were mapped (as applicable) to key elements of risk outlined in the TIN Model framework. Additionally, the influence factors were separately mapped to provide a framework to investigate the impact of the risk influence activities on the effectiveness of China's objective to increase influence in the Middle East.

Although the TIN model was designed to minimize overall U.S. strategic risk, for assessment purposes, the model decomposed U.S. strategic risk into two elements: Strategic Risk from U.S.-China great power competition and Strategic Risk from U.S.-Russia great power competition.

Although a TIN Modeling tool was employed to visualize and conduct computational experiments, operational planners can gain value from exercising the framework even when personnel familiar with using a TIN modeling tool are not available.

## 4. China, Russia, and Middle East Competitive Courses of Action

Based on an understanding of great power competitor goals and objectives from Section 2, the following activities were determined to comprise courses of action that China and Russia can be expected to employ in their competition with the United States and the West in the Middle East, and the courses of action that Middle East countries can be expected to utilize to leverage great power competition affecting their region. (See Appendix B for one page version of this list)

#### **China Great Power Competition Activities in the Middle East**

- Middle East (ME) Political Coordination
- Establishment of Non-interference Partnerships
- Developmental Peace Approach to Stability (vice western approach through democracy)
- Coordinated actions to challenge U.S. dominance in Middle East (ME)
- Actions to project image in Middle East (ME) of China as a global power
- Actions to promote that China as a source of predictable Great Power relations
- Offers to serve as unbiased Middle East (ME) Regional Mediator
- Actions to gain respect in Middle East (ME) as a Global Power
- Principled Support for Middle East (ME) State Sovereignty
- Actions to leverage Iran's Middle East (ME) Outsider position
- Leverage Iran relationships to split U.S. from Middle East (ME) Allies
- Expand Middle East (ME) Trade
- Establishment of Chinese connectivity with Middle East (ME) Facilities
- Promote Middle East (ME) Financial Integration
- Middle East (ME) Infrastructure Construction
- Middle East (ME) Investment
- Promote non-US-led economic system
- Develop Middle East as element of Chinese "Global Industrial Park"
- Protect Chinese Interests in Middle East (hedge against U.S. departure)
- Middle East (ME) Arms Sales
- Middle East (ME) Peacekeeping
- Leverage western concerns over Iran to reduce U.S. Pacific Forces
- Conduct China-Middle East "people bonding" activities

#### **Russia Great Power Competition Activities in the Middle East**

- Balance of Power politics in Middle East (to promote Regional Stability)
- Actions to be seen as a reliable partner in Middle East (Syria, Egypt)
- Activities to improve Russia relationship with Israel
- Activities to prove Russia not just a regional power
- Actions to disrupt U.S. dominance in Middle East (ME)
- Build Middle East Alliances (Iran, Egypt, Turkey)
- Ensure Putin's political legitimacy
- Improve short-term political, military, economic (PME) advantages in Middle East (ME)
- Reduce competitor political, military, economic (PME) advantages in Middle East (ME)
- Rebuild Russia's image as a great power
- Exploit perceived western policy confusion in the Middle East
- Exploit U.S. disengagement from Middle East (ME)
- Influence global energy markets
- Protect oil and gas prices
- Obtain foreign investment from Middle East (ME)
- Maintain a military presence in Middle East (ME)
- Sales of Arms and Nuclear Technology

#### Middle East Activities to Exploit Great Power Competition

- Actions to diversify international political support
- Protection of Middle East (ME) Authoritarian Regimes
- Resist Western Government Reforms
- Resist Human Rights Accountability
- Solicit Political Support Leverage China's UN Security Council Permanent Seat
- Use China as bargaining chip vs West
- Leverage China investment capacity
- Solicit China infrastructure development
- Attract China Belt-Road Initiative (BRI) business
- Diversify international economic relations
- Obtain alternative security guarantor(s)

- Solicit political support Leverage Russia's UNSC Permanent Seat
- Obtain External Support to Control and/or Contain Iran

#### **Potential Great Power Sources of Cooperation**

- Protect Middle East (ME) territorial Integrity
- Protect Middle East (ME) Oil and Gas Imports (to China)
- Maintain Straits Freedom of Navigation
- Conduct Maritime Security & Anti-piracy activities
- Prevent ME Islam destabilizing regime stability in China and Russia
- Prevent ME-based Terrorism in China
- Protect Turkey Oil imports (from Russia)
- Prevent ME-based Terrorism in Russia
- Protect Russia oil and gas lines

## 5. Current and Potential US/Partner Courses of Action

Based on U.S. joint doctrine and a review of other relevant literature, the following activities were identified as potential military and interagency elements of U.S. and partner courses of action for competition with China and Russia. A list of potential USG actions that could be conducted in response to Middle East stability disturbances are also listed but they were only used in the TIN model if preparation for conducting such activities would influence great power competition or lead to possible cooperation.

#### **United States Military Activities**

- Military-to-Military Contacts
- Personnel Exchanges
- Combined Exercises and Training
- Leverage Train-and-Equip Provisions of Foreign Military Financing (FMF), Foreign Military Sales (FMS) and Peacekeeping Operations (PKO)
- Defense Institution Building
- Operational Support to Middle East Partners
- Military Education and Training
- International Armaments Cooperation
- Humanitarian Assistance & Disaster Relief
- Key Leader Engagements (KLE), particularly at senior levels
- Foreign Military Financing and Sales (FMF & FMS)
- Allied and International Partner Programs
- Special Operations Forces (SOF) Programs
- National Guard Partnerships

#### **United States Interagency Activities (Shaping)**

- Promote U.S. Citizen involvement abroad
- Strengthen regional relations
- Enhance Mutual Understanding of each actor's policies and actions
- Strengthen Democratic Systems
- Enhance U.S. regional Influence Politically, Economically, Socially
- Inform Regional Public Opinion
- Strengthen security institutions of ME partners

- Strengthen Terrorism Prevention & Response capabilities
- Ensure access required to bring U.S. capabilities to bear in the region
- Support regional economic growth and development
- Encourage policies favoring open markets and free trade
- Assist international disaster relief operations
- Improve the quality and availability of formal education
- Demonstrate security commitment through military presence
- Economic Inducements
- Foreign Aid

#### USG Potential Response (and Preparation to Respond) Activities

- Diplomatic Response Actions
- Armed Group Demobilization and Transformation Activities
- WMD Deterrence and Control Activities
- Internal Political Transition & Democratization Activities
- Humanitarian Assistance Activities
- Refugee Activities
- Counter-Terrorism Activities
- Demining and Unexploded Ordinance Removal Activities
- Contagious Disease Prevention Activities
- Infrastructure Restoration Activities
- Consequence Management Activities
- Public Security and Civil Order Activities
- Border Control Activities
- Public Diplomacy and Education Activities
- Rule of Law Activities
- Counter-Corruption Activities
- Economic Rehabilitation Activities
- Human Rights Abuses
- Economic Sanctions

## 6. Timed Influence Net Model Results

The strategic risk framework described in Section 3 was used to construct a Timed Influence Net model (depicted in Figure 3) which enables the planners to graphically represent their analysis, assign conditional probabilities to the cause-effect relationships depicted throughout the model, and where appropriate, factor in the time required for a given cause to achieve its desired effect. The Timed Influence Net (TIN) model was developed using the GMU/SAL Timed Influence Net tool "Pythia," which has been used in academic research for many years. Information on TIN model development and Pythia can be found in Appendix A.

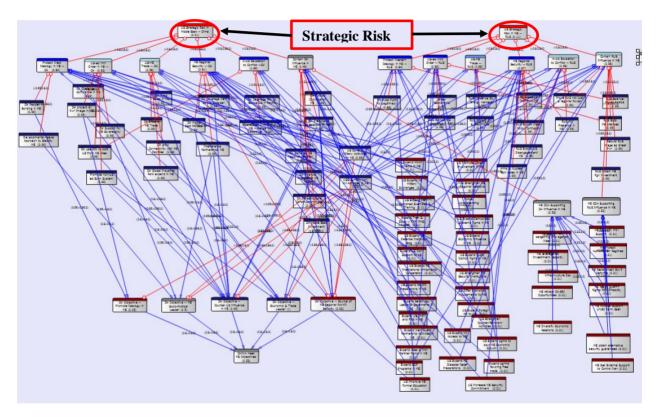


Figure 3. Timed Influence Net Model of Great Power Competition in the Middle East

The TIN model is designed to examine U.S. strategic risk resulting from great power competition with U.S. and China. To provide greater fidelity, the model examines strategic risk in two parts: Great power competition between the U.S. (and its partners) and China, and great power competition between the U.S. (and its partners) and Russia. The following charts reflect the influence (positive and negative) on U.S. strategic risk from the great power competition activities of China, Russia, Middle East countries, and the United States. The influence factors in the charts reflect the absolute value of each listed action's influence on U.S. strategic risk from great power competition with China and Russia, respectively.

ChinaU.S. Competition Activities Impact on Strate	egic Risk

Actions Name	Influence
USG Current non-mil Activities in Middle East	0.808
U.S. Current Military Activities in Middle East	0.807
China use Iran to split U.S. from Middle East Allies	0.121
Protect China Middle East interests (Hedge U.S. Departure)	0.114
China serve as Middle East Regional Mediator	0.101
China Financial Integration Middle East	0.101
China Infrastructure Construction in Middle East	0.101
China Middle East Investment	0.101
China grow Connectivity with Middle East Facilities	0.091
China Expand Middle East Trade	0.088
China Global Industrial Park expand in Middle East	0.088
China Arms Sales in Middle East	0.088
China Challenge U.S. dominance in Middle East	0.081
China project Great Power Image in Middle East	0.078
China Support for Middle East Sovereignty	0.078
Promote non-U.S. led Economic System	0.078
U.S. Expand Economic Influence in Middle East	0.070
Middle East Use China as bargaining chip against West	0.067
U.S. Increase Middle East Security Commitment	0.062
China Non-Interference Partnerships Middle East	0.061
China Leverage Iran as Middle East Outsider	0.061
U.S. Offer Economic Inducements to Middle East	0.059
Expand programs favoring free trade	0.059
China Middle East Peacekeeping Ops (PKO)	0.053
U.S. Strengthen Middle East Regional Relations	0.053
Middle East Diversify Int'l Support	0.049
Middle East leverage China Investment Capacity	0.049
Middle East Obtain China Infrastructure Dev	0.049
Middle East Attract China-BRI Opportunities	0.049
China Leverage IRN to reduce U.S. in Pacific	0.048
Expand Train & Equip FMF, FMS, PKO	0.045
U.S. Expand HA/DR Preparations in Middle East	0.045
U.S. Enhance Middle East Mutual Understanding	0.045
U.S. Strengthen Middle East Security Institutions	0.045
U.S. Strengthen Counter-Terrorism Activities	0.045
U.S. Expand Middle East Disaster Relief Preparations	0.045
Developmental Peace Approach to Stability Middle East	0.040
China Political Coordination Middle East	0.035
China Predictable Relations in Middle East	0.035
China People Bonding in Middle East	0.035
U.S. Expand Mil Access to Middle East	0.033
U.S. Expand Middle East Defense Institution Building	0.026

Middle East Protect Authoritarian Regimes	0.024
Middle East Resist West Gov't Reforms	0.024
Middle East Resist Human Rights Accountability	0.024
Middle East Political Support UNSC Perm Seat	0.024
Middle East Diversify Economic Relations	0.024
Middle East obtain alternative security guarantees	0.024
U.S. Expand Middle East Combined Exercises & Training	0.023
Expand U.S. Operational Support to Middle East	0.023
U.S. Expand Middle East International Arms Cooperation	0.023
Expand U.S. FMF and FMS in Middle East	0.023
Expand SOF Programs in Middle East	0.023
U.S. Promote Citizen Involvement in Middle East	0.023
U.S. Expand Democratic Systems Programs in Middle East	0.023
U.S. Expand Foreign Aid to Middle East	0.023
U.S. Expand programs to spur Middle East Economic	
Growth	0.023
Expand Allies & Int'l Partner Pgms in Middle East	0.016
U.S. Expand Mil-Mil Contacts in Middle East	0.012
U.S. Expand Middle East Military Exchanges	0.012
U.S. Expand Public Opinion Pgms in Middle East	0.012
U.S. Improve Middle East Formal Education	0.012
Expand Senior Key Leader Engagements in Middle East	0.008
Expand Nat'l Guard Partnership Activities in Middle East	0.008

### Russia-U.S. Competition Activities Impact on Strategic Risk

Actions Name	Influence
USG Current non-mil Activities in Middle East	0.894
U.S. Current Military Activities in Middle East	0.892
Prove Russia not just a regional Power	0.099
Russia Build Middle East Alliances	0.089
Russia Exploit U.S. Disengagement Middle East	0.079
Russia Balance-Power Politics	0.077
Russia Mil Presence in Middle East	0.074
Rebuild Russia image as Great Power	0.063
U.S. Expand Mil Access to Middle East	0.060
Russia Influence GL Energy Markets	0.058
Russia Protect Oil & Gas Prices	0.058
Expand Train & Equip FMF, FMS, PKO	0.056
Russia Obtain Middle East Foreign Investment	0.055
Middle East Get External Support to Control Iran	0.051
U.S. Enhance Middle East Mutual Understanding	0.044
U.S. Expand Middle East Disaster Relief Preparations	0.044
U.S. Expand Economic Influence in Middle East	0.039
Expand programs favoring free trade	0.039
-	

Middle East Resist Human Rights Accountability	0.037
U.S. Expand Mil-Mil Contacts in Middle East	0.031
Expand SOF Programs in Middle East	0.031
U.S. Offer Economic Inducements to Middle East	0.031
Promote Putin Political Legitimacy	0.029
Russia Reliable Partner in Middle East	0.028
Russia Exploit West Policy Confusion	0.028
Arms & Nuclear Tech Sales in Middle East	0.026
Russia Improve Israel Relationship	0.023
Russia Disrupt U.S. Dominance in Middle East	0.023
U.S. Increase Middle East Security Commitment	0.023
U.S. Promote Citizen Involvement in Middle East	0.021
U.S. Expand Democratic Systems Programs in Middle East	0.021
Middle East Diversify Int'l Support	0.018
Middle East Protect Authoritarian Regimes	0.018
Middle East Resist West Gov't Reforms	0.018
Middle East Political Support UNSC Perm Seat	0.018
Middle East obtain alternative security guarantees	0.018
U.S. Expand Middle East Combined Exercises & Training	0.017
Expand U.S. Operational Support to Middle East	0.017
Expand Allies & Int'l Partner Programs in Middle East	0.017
U.S. Strengthen Middle East Regional Relations	0.017
U.S. Strengthen Middle East Security Institutions	0.017
U.S. Expand Foreign Aid to Middle East	0.017
U.S. Strengthen Counter-Terrorism Activities	0.017
U.S. Expand Public Opinion Programs in Middle East	0.010
U.S. Improve Middle East Formal Education	0.010
U.S. Expand Middle East Military Exchanges	0.009
U.S. Expand Middle East Defense Institution Building	0.009
Expand National Guard Partnership Activities in Middle East	0.009
U.S. Expand programs to spur Middle East Economic Growth	0.009

Analysis of these influence factors were used to develop the insights and conclusions outlined in Section 7 which follows. Note that current U.S. military and non-military activities already significantly influence strategic risk in the Middle East; the analysis did not assess reductions in specific current activities, but collectively, the model suggests that reductions in U.S. activities would have significant influence on U.S. strategic risk in the Middle East from great power competition.

# 7. Insights and Conclusions

# Military Activities to Counter Great Power Competition in the Middle East and Mitigate Negative Repercussions from a U.S. Military Draw Down

U.S. strategic risk benefits significantly from military activities that contribute to Middle East regional security and conflict avoidance (escalation control), and to a lesser extent to protection of U.S. trade with the Middle East and preservation of a US-led international order.

Military activities contribute little to preservation of western ideology (democracy and capitalism) in the Middle East, containment of Chinese political and economic influence in the Middle East, or containment of Russian political influence in the Middle East.

Military activities also can do little to counter Chinese and Russian short-term competition courses of action in the Middle East, largely because both countries primarily conduct political, economic, and social activities, and avoid actions that could lead to U.S. military involvement.

There are areas where military activities can be influential: Humanitarian and Disaster Relief preparation activities, and counter-terrorism activities. The first demonstrates U.S. commitment to the Middle East, and the latter provides an area of cooperation beneficial to Middle East interests.

Although U.S. partner military activities were not modeled separately from U.S. military actions in the TIN model, one observation is that some Middle East countries are concerned that U.S. military support requires acceptance of USG policies regarding governance and human rights. Actions conducted by U.S. partner militaries might not be "tainted" by perceived U.S. interference in state affairs.

Several military activities could be effective in the long term: Senior mil-to-mil contacts, military education and training, train and equip activities associated with FMF and FMS, National Guard international partnerships, and SOF nation support programs.

#### Inter-Agency Activities to Counter Great Power Competition in the Middle East and Mitigate Negative Repercussions from a U.S. Military Draw Down

Economic (and to a lesser extent political) shaping activities would appear to provide the greatest benefit to reduce U.S. strategic risk from great power competition, particularly actions that demonstrate long-term U.S. commitment to the region.

Highlighting the transactional nature of China and Russian activities in the Middle East, while avoiding the appearance that U.S. activities are transactional, may provide a near-term counter to China and Russian influence in the Middle East and ensure U.S. dominance in the long-term,

Tying U.S. support to specific Middle East government policies is consistent with long-standing U.S. policy, but enhances the effectiveness of China and Russia influence activities; a different

incentives model to encourage government reforms and human rights accountability may be needed.

Potential cooperation opportunities with Middle East, (China, and Russia) include: Maritime security, counter-terrorism, counter-radicalism, anti-piracy, and counter-proliferation.

Multinational, multi-agency response preparation exercises offer opportunities to improve regional security, promote western values and institutions, counter China and Russia influence, and demonstrate U.S. and western commitment to Middle East security.

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### Appendix A: Timed Influence Net Model Development

The strategic risk framework described in Section 3 was used to construct a Timed Influence Net model which enables the planners to graphically represent their analysis, assign conditional probabilities to the cause-effect relationships depicted throughout the model, and where appropriate, factor in the time required for a given cause to achieve its desired effect. The Timed Influence Net (TIN) model was developed using the GMU/SAL Timed Influence Net tool "Pythia," which has been used in academic research for many years.

Several modeling techniques are used to relate actions to effects. With respect to effects on physical systems, engineering or physics based models have been developed that can predict the impact of various actions on systems and assess their vulnerabilities. When it comes to the cognitive belief and reasoning domain, engineering models are much less appropriate. The purpose of affecting the physical systems is to convince the leadership of an adversary to change its behavior, that is, to make decisions that it would not otherwise make. However, when an adversary in imbedded within a culture and depends upon elements of that culture for support, the effects of physical actions may influence not only the adversary, but the individuals and organizations within the culture that can choose to support, be neutral, or oppose the adversary and the cultural environment in which the adversary operates. Because of the subjective nature of belief and reasoning, probabilistic modeling techniques such as Bayesian Nets and their influence net cousin have been applied to these types of problems. Models created using these techniques can relate actions to effects through probabilistic cause and effect relationships. Such probabilistic modeling techniques can be used to analyze how the actions affect the decision calculus of the adversary.

Influence Nets (IN) and their Timed Influence Nets (TIN) extension are abstractions of Probabilistic Belief Nets also called Bayesian Networks (BN) (Wagenhals et al., 2000, Wagenhals and Levis, 2001). BNs and TINs use a graph theoretic representation that shows the relationships between random variables. Influence Nets are directed acyclic Graphs where nodes in the graph represent random variables, while the edges between pairs of variables represent causal relationships. A key differences between Bayesian Networks and INs and TINs is that the latter two use CAST Logic (Wagenhals et al., 2001, Haider and Levis, 2005) a variant of Noisy-OR (Haider et al., 2006, Wagenhals and Levis, 2007), as a knowledge acquisition interface for eliciting conditional probability tables. The modeling of the causal relationships in TINs is accomplished by creating a series of cause and effect relationships between some desired effects and the set of actions that might impact their occurrence in the form of an acyclic graph. The actionable events in a TIN are drawn as root nodes (nodes without incoming edges). Generally, desired effects, or objectives the decision maker is interested in, are modeled as leaf nodes (nodes without outgoing edges). In some cases, internal nodes are also effects of interest. Typically, the root nodes are drawn as rectangles while the non-root nodes are drawn as rounded rectangles. Figure 5 shows a partially specified TIN. Nodes B and E represent the actionable events (root nodes) while node C represents the objective node (leaf node). The directed edge with an arrowhead between two nodes shows the parent node promoting the chances of a child node being true, while the roundhead edge shows the parent node inhibiting the chances of a child node being true. In Figure 5, there is a triplet associated with each link. The triplet is defined a (**h**, **g**, t). Parameter **h** is the influence that

a parent node will have on the child node, if the parent node is TRUE. Parameter  $\mathbf{g}$  is the influence the parent node will have on the child node if the parent node is FALSE. The third parameter, t, indicates the time delay associated with this link. For instance, event B, in Fig. 5, influences the occurrence of event A after 5 time units.

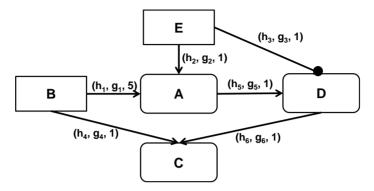


Fig A-1: An Example Timed Influence Net (TIN).

The purpose of building a TIN is to evaluate and compare the performance of alternative courses of actions. The impact of a selected course of action on the desired effects is analyzed with the help of a probability profile. Consider the TIN shown in Fig. A-1. Suppose the following input scenario is decided: actions B and E are taken at times 1 and 7, respectively. Because of the propagation delay associated with each arc, the influences of these actions impact event C over a period of time. As a result, the probability of C changes at different time instants. A probability profile draws these probabilities against the corresponding time line. The probability profile of event C is shown in Fig. A-2.

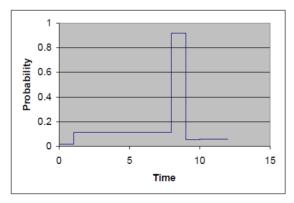


Fig A-2: Probability Profile for Node C

To construct and use a TIN to support the determination of courses of action to deter competition activities by an adversary, analysts and planners can employ the following process:

- 1. Determine the set of desired and undesired effects expressing each as declarative statement that can be either true or false. For each effect, define one or more observable indicators that the effect has or has not occurred.
- 2. Build an IN that links, through cause and effect relationships, potential actions to the desired and undesired effects. Note that this may require defining additional intermediate effects and their indicators.

- 3. Use the IN to compare different sets of actions in terms of the probability of achieving the desired effects and not causing the undesired effects.
- 4. Transform the IN to a TIN by incorporating temporal information about the time the potential actions will occur and the delays associated with each of the arcs and nodes.
- 5. Use the TIN to experiment with different timings for the actions to identify the "best" COA based on the probability profiles that each candidate generates. Determine the time windows when observation assets may be able to observe key indicators so that assessment of progress can be made during COA execution.
- 6. Create a detailed execution plan to use the resources needed to carry out the COA and collect the information on the indicators.
- 7. Use the indicator data to assess progress toward achieving the desired effects.
- 8. Repeat steps 2 (or in some cases 1) through 7 as new understanding of the situation is obtained.

To analyze the TIN (Step 5), the analyst selects the nodes that represent the effects of interest and generates probability profiles for these nodes, and then compares the probability profiles for the different courses of action under consideration. Alternatively, the model can be used to conduct analyses of the effects of influence factors on the outcomes of interest. This was the primary approach used in this assessment.

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#### APPENDIX B: China, Russia, and Middle East Competitive Courses of Action

#### **China Great Power Competition Activities in the Middle East**

- Middle East (ME) Political Coordination
- Establishment of Non-interference Partnerships
- Developmental Peace Approach to Stability (vice western approach through democracy)
- Coordinated actions to challenge U.S. dominance in Middle East (ME)
- Actions to project image in Middle East (ME) of China as a global power
- Actions to promote that China as a source of predictable Great Power relations
- Offers to serve as unbiased Middle East (ME) Regional Mediator
- Actions to gain respect in Middle East (ME) as a Global Power
- Principled Support for Middle East (ME) State Sovereignty
- Actions to leverage Iran's Middle East (ME) Outsider position
- Leverage Iran relationships to split U.S. from Middle East (ME) Allies
- Expand Middle East (ME) Trade
- Establishment of Chinese connectivity with Middle East (ME) Facilities
- Promote Middle East (ME) Financial Integration
- Middle East (ME) Infrastructure Construction
- Middle East (ME) Investment
- Promote non-US-led economic system
- Develop Middle East as element of Chinese "Global Industrial Park"
- Protect Chinese Interests in Middle East (hedge against U.S. departure)
- Middle East (ME) Arms Sales
- Middle East (ME) Peacekeeping
- Leverage western concerns over Iran to reduce U.S. Pacific Forces
- Conduct China-Middle East "people bonding" activities

#### **Potential Great Power Sources of Cooperation**

- Protect Middle East (ME) territorial Integrity
- Protect Middle East (ME) Oil and Gas Imports (to China)
- Maintain Straits Freedom of Navigation
- Conduct Maritime Security & Anti-piracy activities
- Prevent ME Islam destabilizing regime stability in China and Russia
- Prevent ME-based Terrorism in China
- Protect Turkey Oil imports (from Russia)
- Prevent ME-based Terrorism in Russia
- Protect Russia oil and gas lines

#### Russia Great Power Competition Activities in the Middle East

- Balance of Power politics in Middle East (to promote Regional Stability)
- Actions to be seen as a reliable partner in Middle East (Syria, Egypt)
- Activities to improve Russia relationship with Israel
- Activities to prove Russia not just a regional power
- Actions to disrupt U.S. dominance in Middle East (ME)
- Build Middle East Alliances (Iran, Egypt, Turkey)
- Ensure Putin's political legitimacy
- Improve short-term political, military, economic (PME) advantages in Middle East (ME)
- Reduce competitor political, military, economic (PME) advantages in Middle East (ME)
- Rebuild Russia's image as a great power
- Exploit perceived western policy confusion in the Middle East
- Exploit U.S. disengagement from Middle East (ME)
- Influence global energy markets
- Protect oil and gas prices
- Obtain foreign investment from Middle East (ME)
- Maintain a military presence in Middle East (ME)
- Sales of Arms and Nuclear Technology

#### Middle East Activities to Exploit Great Power Competition

- Actions to diversify international political support
- Protection of Middle East (ME) Authoritarian Regimes
- Resist Western Government Reforms
- Resist Human Rights Accountability
- Solicit Political Support Leverage China's UN Security Council Permanent Seat
- Use China as bargaining chip vs West
- Leverage China investment capacity
- Solicit China infrastructure development
- Attract China Belt-Road Initiative (BRI) business
- Diversify international economic relations
- Obtain alternative security guarantor(s)
- Solicit political support Leverage Russia's UNSC Permanent Seat
- Obtain External Support to Control and/or Contain Iran