

# Stanton Nuclear Security Fellows Seminar

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## Panel 3: Iran, North Korea and Other Emerging Nuclear Powers

1. **Robert Reardon**, RAND: *Can We Stop the Iranian Bomb?*

### *Introduction*

The study's research objective is to evaluate US policy on the Iranian nuclear question. It summarizes both the history of the Iranian nuclear program to date and the course of US and international nonproliferation efforts with Iran since the country's uranium enrichment program was publicly revealed in 2002. Based on this history, the histories of other nonproliferation cases, and theoretical findings from the academic literature, it then identifies a set of possible future states for the Iranian nuclear effort, ranging from total nuclear reversal, to a 'breakout' capability, to the acquisition of a nuclear weapons arsenal and effective delivery capabilities. The different outcomes depend at least as much on Iranian political decisions as on the country's technical capabilities.

The study then assesses the ways in which US policy choices are likely to affect these future outcomes. Specifically, it considers how the full spectrum of US strategic choices – preventive force, sanctions, persuasion, positive inducements, and containment – may affect Iran's decision-making process, and shape outcomes with the nuclear weapons program. In doing so, it acknowledges both that there are many possible outcomes rather than a simple nuclear/non-nuclear dichotomy, and that these outcomes are determined through complex domestic political policies shaped not only by Iran's external strategic environment, but by the particular beliefs, assumptions, and interests of influential elites within the regime. Moreover, the influence these elites have over policy may change over time, as the result of both dynamic processes internal to the state itself, as well as changes in the external environment. The key to analyzing the effects of US policy choices is to understand *how those choices interact with these domestic dynamics*, and in turn influence policy outcomes. As a result, special attention is paid to the domestic political dynamics within the Iranian state. The project's findings are then used to evaluate the current course of US policy toward Iran.

### *Research Question(s)*

*Can we stop Iran from acquiring nuclear weapons? What is the most effective way to achieve this goal? What are the likely effects of different US policy options?* The project seeks to provide answers to these questions through a rigorous consideration of Iran's nuclear decision-making process, the overall strategic context, and US policy options.

### *Methodology / Approach*

This study seeks to bring together a detailed understanding of Iran's domestic political processes – particularly those relevant to its nuclear policies – and state-of-the-science international relations theories on economic sanctions, coercive diplomacy, and positive inducements, in order to develop an analysis of US policies on the Iranian nuclear question. The study draws on the expertise of academics and policy analysts who have studied Iran and nuclear weapons proliferation, the relevant scholarly literature, and global news sources.

### *Preliminary Findings*

The existing domestic political balance in Tehran makes any measure short of war unlikely to bring Iran's uranium enrichment program to an end or forestall the development of a 'breakout' capability. This, along with the US's limited sources of leverage with Iran, and the constraints on US policy presented by both international and domestic opposition, likely precludes any possibility of total nuclear reversal.

Invasion and occupation would almost certainly guarantee an end of the program, but would impose enormous costs on the United States, and do substantial damage to the US's position in the world and its ability to achieve other foreign policy objectives. Limited air strikes may effectively delay Iran's ability to build a bomb over the short term, but could make such an outcome more likely over the longer term. The study suggests that the effectiveness of economic sanctions and threats are limited, and in fact, are likely to be counterproductive over the long term.

There is little evidence to support official claims that sanctions have either greatly hindered the Iranian nuclear program or generated positive political change in Tehran. At the same time, the most conservative elements of the regime, and the factions most opposed to US interests, stand to benefit in important ways from sanctions, either because they confer rents or generate political cover for crackdowns on domestic political opponents. While it is possible that stricter sanctions – such as an international oil embargo – could convince Tehran to change course, this is unlikely. It is unlikely that the United States would be able to win broad international support for much stricter sanctions under existing conditions. It is also likely that such sanctions, even if they were possible, would only serve to reinforce Iran's commitment to develop a nuclear weapons capability.

An engagement strategy built around negotiation and offers of positive inducements in return for explicit nuclear-related concessions is also unlikely to significantly influence Iran's behavior in the short term. However, such a strategy has few costs or risks and is worth pursuing. More importantly, such a strategy could positively influence Iran's domestic politics, and lay the groundwork for future agreements. At a minimum, by demonstrating a willingness to negotiate, the United States can improve its ability to win international support for its policies. In the absence of any clear alternative path, the Iranians cannot use negotiations as a means of stalling for time needed to push forward with its nuclear effort.

Iran has committed itself to development of the full nuclear fuel cycle. However, the available evidence suggests that the regime has not yet decided to produce weapons, and may be satisfied with a limited breakout capability, well short of an operational nuclear weapons arsenal. The United States should focus its efforts on influencing this decision, which requires taking a longer view of the Iranian nuclear issue. Critically, the issue should be viewed as one of Iran's political will rather than technical capacity: if the leadership in Tehran decides to build a nuclear arsenal, unless the United States is willing to commit itself to either regime change or the repeated use of military force, it eventually will do so.

The United States should begin to lay the foundation for an effective containment strategy that anticipates the future possibility of a nuclear-armed Iran, and should explore new military capabilities to achieve this. However, it should be done with careful consideration of the effects a containment strategy may have on Iran's current nuclear decision making. In particular, the commitment of more US forces to the Middle East, or the regional deployment of counterforce capabilities, would likely be counterproductive, and only convince Iran of the need to develop a robust nuclear deterrent as quickly as possible. The commitment of more US troops to the Middle East adds little to the US's already substantial deterrent capabilities, while potentially creating greater instability in the region and offering a tempting target to terrorists.

Similarly, the US should be restrained in its offers of security guarantees to regional allies. While such guarantees, or an extension of the US nuclear umbrella, could allay allies' security concerns, it could also create a risk of chain-ganging: US guarantees could encourage regional partners to be aggressive, or undertake a preventive attack, believing that the United States would defend them should their efforts backfire. This could also risk US involvement in a conflict it otherwise would not choose. Instead, the US should seek to improve the defensive capabilities of regional allies through prudent arms transfers, military aid, and intelligence sharing, while limiting any direct military role in the region to existing commitments. At the same time, the United States must clearly communicate – to Iran and to US regional allies alike – its commitment to use all necessary force to deter Iranian aggression.

## 2. **Mahsa Rouhi**, BCSIA: *Understanding Iran's Nuclear Decision-Making Process*

### *Introduction*

Iran's nuclear contestation is one of the most controversial debates in International Security. Yet, Iran's processes of decision-making and its mixture of religious doctrine and historical imperative remain underresearched and under-theorized, confounding the understanding of how it balances hard security principles, doctrinal requirements, and domestic politics in its decision-making? In other words, what are the main groundings of Iran's nuclear related, decision-making? What are the main actors in decision-making and how does the shift/balance of power within these actors and institutions affects the decision-making?

This paper sets out to fill this gap through a governmental politics framework, combining empirical and analytical research tools to investigate Iran's nuclear related decision/policy making process. First, it explores different institutions and actors involved in nuclear related policymaking and how these institutions and actors cooperate and/or balance each other's roles and effects. It then tries to analyze the perceptions, interests and preferences of these actors, which affects the decision-making process. Having defined and identified the relevant actors and institutions, their degree of autonomy and responsibility in the decision-making process, together with their perceptions and preferences, it analyzes how the political game or the interplay that occurs between different actors and agents influences the process of nuclear related decision-making.

### *Methodology*

My approach to this analysis will be based on primary sources including interviews with high level decision makers and an archival study. I have also used some secondary sources such as reports, articles and other research projects and publications by major security related research institutes in Iran, United Kingdom and United States. Since I have tried to provide an insider view of the nuclear decision-making process in Iran, I have mainly relied on primary sources in Farsi.

For my archival study, I have analyzed the archives of the parliament (Majles), the Ministry of Foreign Affairs and the Expediency Discernment Council. There is no accessibility to the archives of Supreme National Security Council (SNSC), which is considered the most important institution in the nuclear decision-making. However, I have conducted different sets of face-to-face interviews with former members to fill this gap. Considering the cultural and socio-political factors in Iran's political sphere, I have mainly use open-ended questions. This design has given me the option to do a content analysis of the interview materials. I have interviewed 20 high level officials. I have interviewed each interviewee three times on different aspects of security decision-making process, one of which has been mainly focused on the nuclear decision-making.

### *Findings and Conclusion*

The research has adopted a “governmental politics” model in order to explore some ignored aspects of Iran’s nuclear related policy-making complex. The research has explored the main groundings of Iran’s nuclear-related decision-making, the main actors involved in decision-making, and how the shift of power within these actors and institutions affects the process of negotiation.

It is important to understand the concept of “energy independence” and its implications on the consideration of any future proposal. It is also critical to take into account the mistrust created by the past experiences on nuclear cooperation with different countries. Therefore, any future proposal requires a concrete and convincing assurance component to overcome this mistrust. It is also important to realize the limitations that the public opinion and perception imposes on any negotiation process. In the current situation, any proposal that includes suspension of the enrichment is very improbable to be perused.

Although the Supreme leader sits on the top of the hierarchy of nuclear decision-making, he merely defines the guidelines and general framework of the policies. The other players and their bargaining games formally at the SNSC meetings and informally via action channels mainly shape the decisions and policies. In almost all cases, the nuclear negotiation team has the persuasive power to gain the Supreme Leader’s approval. Thus, analyzing the role of bureaucracy and political game in shaping Iran’s position and responses to the negotiations and understanding these players and the action channels is crucial in reaching out for any far-reaching negotiation process.

### 3. **Markus Schiller**, RAND: *Characterizing the North Korean Nuclear Missile Threat*

#### *Introduction*

The goal of this study is to reassess whether North Korea poses a serious nuclear missile threat.

For North Korea, ballistic missiles are generally seen as the only credible means of nuclear weapon delivery against the territory of South Korea or Japan, thus making operational missile systems a prerequisite for a serious North Korean nuclear threat. In open source literature, North Korea is characterized as a key player in the global missile market, with successful indigenous development, operation and export of numerous types of capable guided ballistic missile systems that meet the criteria of strategic significance if combined with a nuclear warhead. Since the North already claims to be in possession of operational nuclear weapons, U.S. and regional policy and strategy toward North Korea always has to take this threat situation into account. However, there are strong indications that North Korean ballistic missiles do not pose such a serious threat.

This study defines alternative hypotheses about the origin and status of the North Korean missile program and systematically tests them against available empirical evidence. This is done using a methodologically rigorous approach: Data points about the North Korean program are coded according to their subject and level of confidence, and used to test the various hypotheses for consistency in order to identify the most plausible. Based on these findings, the study then presents appropriate policy recommendations.

#### *Research Question(s)*

*What is the most plausible hypothesis to explain the origin and nature of the North Korean missile program?*

*What consequences might these findings have for U.S. (and ROK) policy and strategy toward North Korea?*

*What data would be most valuable for refining this assessment?*

#### *Methodology / Approach*

This study assesses the North Korean missile threat with a comprehensive approach that includes political considerations, engineering aspects and economic realities.

Aside from the *main* hypothesis, which is based on the consensus in the open source literature, it defines four alternative hypotheses about the origin and status of the North Korean missile program. These include an *alternative* hypothesis that assumes total dependence on missiles produced by foreign entities and three scenarios in between the two extremes: A *licensed production* hypothesis, reliance on *mixed sources* for the missile program, and a *showcase*

hypothesis that assumes creating the impression of a serious missile threat is the main objective of the North Korean program.

The study then presents and evaluates available data directly or indirectly related to the missile program, and sorts this data into three categories, according to three levels of confidence. Data categories are the *Missile* (directly related to the specific delivery systems and their associated warheads), the *Program* (generally related to missile development, production and deployment), and the *Country* (related to North Korea in a general way). Confidence levels are *High* (predominantly dealing with technical aspects that are derived from imagery, other firsthand observations, and the laws of nature), *Medium* (cannot be verified firsthand, but seems plausible and is, for the most part, commonly accepted in open source literature), and *Low* (predominantly based on a single source and cannot be verified – questionable, but might still be true).

All data points are checked for their consistency with each of the previously defined hypotheses. This is done with an evaluation matrix. Inconsistencies or discrepancies with high-confidence data significantly decrease a hypothesis' plausibility. The hypotheses are then rated accordingly.

Finally, the study presents a set of policy suggestions based on these findings.

#### *Assumptions*

This study assumes that the North Korean missile program is subject to engineering realities and limitations in the same way as any other engineering program in the world: Operational program success depends on a lot more aspects than political will alone. This assumption is based on other well-known missile programs, for example the Iraqi experiences in the 1980s and 1990s, the Iraqi/Argentine/Egyptian Condor joint venture, or Soviet and U.S. programs from the 1950s up to the present. Knowledge about other defense and space programs also contributed to this assumption. Furthermore, it is assumed that North Korea possesses nuclear weapons that can now or soon be mated to ballistic missiles for delivery.

#### *Preliminary Findings*

The common view – that North Korea possesses a sophisticated missile program and is capable of indigenous reverse engineering, production and deployment of numerous missile systems – is the least supported hypothesis.

With high confidence, it can be stated that the North Korean guided missile program was set up in the 1980s and 1990s with significant Russian support. The extent to which this support is still ongoing is unknown, and it is likely that the Russian government was not directly involved in this, at least not since 1990.

The best supported hypothesis assumes that North Korea launches Russian-made missiles in its missile tests to maximize the appearance of performance, and almost never tests missiles from

its own production. North Korea first set up the program as a “strategic showcase.” The North Korean government sought to conceal North Korean re-exports of Soviet missiles to other countries. North Korea also wanted to deter U.S. and ROK action against it, to gain strategic leverage in foreign politics, and possibly also had domestic policy reasons – the impression of a successful missile program is useful to create the appearance of empowerment inside North Korea. It remains unknown which members of the North Korean elites are actually aware of the North Korean “paper tiger” program.

The following statements about the technical program status are preliminary, but it is likely that the North Korean missile threat is limited to the range of its Nodong missile, which is roughly 1,000 km, and the operational status of this missile is questionable.<sup>1</sup> Beyond that range, only prototypes are available, and they will have a low reliability in wartime operations. Without an actual demonstration, a nuclear missile threat seems unlikely in general, and highly unlikely beyond 1,000 km range.

Strong indicators for these findings are the very low number of test and training launches, the poor quality of missile parts from North Korean production, the suspiciously exact resemblance between North Korean Scud missiles and their Soviet counterparts, the presence of Cyrillic lettering on North Korean Scuds and Nodongs, the fact that the Nodong engine actually is an old Soviet design, and the low failure rate of the few observed North Korean launches.

Increased non-proliferation pressure on Russia and other countries is essential to keep the North Korean missile threat low. Converting the Missile Technology Control Regime (MTCR) from being an agreement to a binding treaty might be a first step in this direction.

If the findings about the program’s status are strengthened, further steps are suggested. A lower North Korean missile threat should be incorporated into the defense planning of the U.S. and the ROK. The policy of launch moratoriums should be reconsidered, since a launch moratorium plays into the hands of the North Korean regime. The number of their Russian-made missiles is very limited, and every launch depletes their arsenals, but is not helpful in refining their program, since there is no real development program.

Several bits of information could refine the findings, among them:

- Detailed information about the trajectories of all observed North Korean missile launches could verify the number and quality of the launches and the seriousness of the program.

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<sup>1</sup> There likely is only a small number of Nodongs available. The observed tests are insufficient for operational deployment, in numbers as well as in character.

- If telemetry data was transmitted at these launches, this data could give valuable insights. If not – as appears to be the case –, then there cannot be a serious operational development program in North Korea, and the missiles must have been imported.
- Details of North Korean missiles that were transferred to Libya and the UAE can give insights on their origin.
- The troop training of the North Korean missile corps should be closely observed. If there are no intensive drills analogue to those of Warsaw Pact countries who had Scud missiles deployed, then the North Korean army is not as capable to use their missiles effectively under wartime conditions.
- Details about old Soviet missile prototypes should be retrieved and compared to the North Korean missile systems. The whereabouts of these prototypes and of other decommissioned Soviet missile systems should be sought, as well as the status of the old Soviet Scud and SSN-6 production lines.
- Defectors at key positions might hold valuable information, and a lack of certain knowledge of these defectors might also verify the findings of this study.

The extensive foreign support for North Korea also suggests the necessity of strong external support for other countries' missile programs: If North Korea had to rely on Russian help and still has no reliable indigenous missile program, it is highly unlikely that the status of other countries' programs is better.

The study's approach is universal and can be applied to other countries of interest. There are indications, for example, that common hypotheses about the Pakistani and Iranian missile programs might not be the most plausible ones. The approach can also be extended beyond missiles to other defense related areas.