

Resolving the IAEA's PMD Concerns Concretely Prior to the Lifting of Key Sanctions¹

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The International Atomic Energy Agency (IAEA) will play a key role in verifying any long term nuclear agreement with Iran. This effort is complicated enormously by Iran's long-standing noncooperation with the IAEA. This lack of cooperation today centers on the IAEA efforts to create arrangements with Iran that can address its concerns about Iran's past and possibly ongoing work on nuclear weapons. An agreement must provide a clear, timely pathway whereby the IAEA's concerns are addressed about these possible military dimensions (PMD) of Iran's nuclear programs. Ambiguity over Iran's nuclear weaponization accomplishments and residual capabilities risks rendering an agreement unverifiable by the IAEA. During the implementation phase of an agreement, this pathway cannot simply involve Iran checking boxes and the IAEA or the United States accepting Iranian explanations. Prior to the lifting of economic and financial sanctions, Iran must demonstrate, and the IAEA certify, Iranian cooperation with the IAEA investigation. This concrete demonstration needs to include Iran providing access to sites, people, and documents related to its past or possibly ongoing efforts, and the IAEA demonstrating progress on its PMD investigation.

A prerequisite for a comprehensive agreement is for the International Atomic Energy Agency to know when Iran sought nuclear weapons, how far it got, what types it sought to develop, and how and where it did this work. Was this weapons capability just put on the shelf, waiting to be quickly restarted? The IAEA needs a good baseline of Iran's military nuclear activities, including the manufacturing of equipment for the program and any weaponization related studies, equipment, and locations. The IAEA needs this information to design a verification regime and to determine if Iran's nuclear program is peaceful today. The P5+1 needs concrete progress on the PMD concerns prior to the lifting of key sanctions to demonstrate that Iran has indeed turned its back on nuclear weapons and to ensure the IAEA's credibility is not undermined by Iranian noncooperation. Full resolution of the IAEA's PMD concerns could take years. However, an agreement that does guarantee significant progress on these issues in its initial

¹ This report is a modified version of sections in *Evaluating Key Components of a Joint Comprehensive Plan of Action (JCPOA)*, Testimony of David Albright, President of the Institute for Science and International Security (ISIS) before the Senate Foreign Relations Committee, June 25, 2015.

phase will likely stagnate permanently on this issue and have dire ramifications for future Middle East regional security.

Addressing the IAEA concerns about Iran's military nuclear activities is referred to in diplomatic terms as the "possible military dimensions" (PMD) of Iran's nuclear program. This convention of use will be followed in this report, which seeks to summarize the issues and provide insight and guidance on the possible provisions in a long term agreement aimed at Iran concretely addressing the IAEA's PMD concerns prior to the lifting of key sanctions. Few governments, however, assess Iran's nuclear weapons work so diplomatically. They typically state with high confidence that Iran had a well-structured nuclear weapons program prior to 2004. Several governments state some of these activities continued afterwards.

Access to Sites, Individuals, and Related Information

One important aspect of this issue has been the IAEA gaining access to a site at the Parchin military complex. This site is the alleged location of high-explosive testing linked to nuclear weapons development prior to 2004. Since the IAEA asked to visit this site in early 2012, Iran has reconstructed much of it, making IAEA verification efforts all but impossible. Tehran has undertaken at this site what looks to most observers as a blatant effort to defeat IAEA verification. Because of such extensive modifications, the IAEA, once allowed access, may not be able to resolve all its concerns. Thus, access to Parchin alone is no longer sufficient to resolve the issues underlying the IAEA's original request to access this site. The IAEA will need to visit related sites. One needs to now think of IAEA access to Parchin as including a list of actions that would involve the need for access to additional sites and individuals tied to activities at this Parchin site.

More broadly, Iran will need to allow access to a range of sites as part of addressing the IAEA's PMD concerns, both during the implementation phase prior to the lifting of sanctions and afterwards as the IAEA seeks to determine that Iran's nuclear program is entirely peaceful.

For a deal to be verifiable, Iran will also need to agree to IAEA requests to interview key individuals, such as Mohsen Fakhrizadeh, a reputed leader of Iran's nuclear weapons efforts, and Sayyed Abbas Shahmoradi-Zavareh, former head of the Physics Research Center, alleged to be the central location in the 1990s of Iran's militarized nuclear research. The IAEA interviewed Shahmoradi years ago about a limited number of his suspicious procurement activities conducted through Sharif University of Technology. The IAEA was not fully satisfied with his answers and its dissatisfaction increased once he refused to discuss his activities for the Physics Research Center. Since the initial interviews, the IAEA has obtained far more information, some supplied by my institute, about Shahmoradi and the Physics Research Center's procurement efforts.² The need to interview both individuals, as well as several others, remains.

² See for example, Albright, Paul Brannan, and Andrea Stricker, "The Physics Research Center and Iran's Parallel Military Nuclear Program," ISIS Report, February 23, 2012. http://isis-online.org/uploads/isis-reports/documents/PHRC_report_23February2012.pdf

As in the case of sites, Iran will need to provide access to a certain number of key individuals prior to the lifting of sanctions. That access will need to continue afterwards, as well.

Likewise, the IAEA will need access to records, including a range of documents, about past activities. These records are critical to the IAEA's development of an adequate understanding and its preliminary and final determination about Iran's nuclear program.

Olli Heinonen, former chief of IAEA safeguards and now at Harvard University's Belfer Center, has pointed out that the IAEA investigation into PMD should be iterative. That means that new persons, sites, and documents may arise during the discussions. Access to those persons, sites, and documents should also be provided. One also has to keep in mind that some activities could have been moved or will be moved to other military sites. If any new suspicions arise, the IAEA will need access to those sites as well.

Risk Too High to Allow Continued Iranian Noncooperation on PMD

There had been an expectation, or at least a hope, that Iran would address the IAEA's PMD concerns prior to the June 30, 2015 deadline. Instead, Iran became more intransigent on this issue during the last half year, eliminating any such hope. Because this issue is fundamental to resolving the nuclear issue, Iran's increased noncooperation necessitates extra assurance in the implementation phase of any deal that it will comply with its safeguards obligations and provide assurance that its noncooperation is not on-going.

The administration has reportedly proposed to Iran that it allow access to a list of many sites and persons that are relevant to the IAEA's PMD concerns, prior to the lifting of financial and economic sanctions. This condition would be one of several Iran would need to satisfy prior to removing sanctions.

As of today, Iran had not accepted this list. But even if it does, it could mechanistically allow the IAEA access to these sites and persons while showing no real cooperation. The risk is too high that Iran would treat the exercise as simply checking a box, leaving the IAEA no further along in its effort to address its PMD concerns. If Iran can do this before the removal of sanctions, one can have little confidence that it will address the IAEA's concerns afterwards.

If Iran successfully stonewalls the IAEA prior to the lifting of sanctions, the IAEA's credibility will be undermined. Further, Iran may be able to maintain all of the knowledge and capabilities related to nuclear weapons that it has acquired and developed for a future date when it may want to break out of its non-proliferation obligations. Leaving Iran's past accomplishments in the shadows would solve nothing if in the future it can muster nuclear weapons capabilities unknown to the IAEA and the international community to make nuclear weapons.

Conditions in the Implementation Phase

Prior to the lifting of sanctions, Iran should resolve in a significant and concrete manner the IAEA's concerns about its past and possibly ongoing work on nuclear weapons. Although Iran

addressing all of the IAEA's PMD concerns would be ideal, that process will likely take years. The following aims to identify a sufficient set of conditions that are straightforward and realistic to achieve in the initial implementation period of an agreement, e.g. prior to lifting key sanctions. These conditions, or equivalent ones, should be included in a set of requirements that Iran must meet before key financial and economic sanctions are lifted. This set of conditions to be fulfilled in the implementation phase is then followed by one recommendation on enforcement:

- Iran accepting a robust list for visits to sites where nuclear weapons-related activities are alleged to have taken place (such as Parchin but involving at least a half a dozen sites); and access to key equipment, companies, and individuals identified by the IAEA as associated with past military nuclear related activities. Congress should on a classified basis compare this list to earlier proposed ones by the administration and its allies and require the administration to provide an explanation for which specific items were removed and why. (The list should not in any way be considered a final list; as discussed above, the IAEA will need to reserve the right to go to other sites, interview the same or different people, and obtain other documents as it seeks to finalize its PMD investigation, some of which will likely have to occur after the lifting of sanctions).³
- The IAEA receiving full cooperation from Iran in its efforts to conduct its investigation of PMD issues during this implementation phase and afterwards.
- Prior to the lifting of any key sanctions, the IAEA having time to assess the results of these visits and access and make a preliminary determination over whether it has made concrete progress. Such a positive IAEA determination would be necessary to lift these sanctions.
- If appropriate, the IAEA issuing a provisional determination prior to lifting key sanctions, and Iran not disagreeing, that it had a nuclear weapons program prior to 2004, parts of which may have continued after 2004.
- During the implementation phase, the U.S. intelligence community issuing a detailed unclassified dossier describing to the best of its knowledge, albeit incomplete, Iran's past nuclear weapons program and more recent activities that are useful for the development of nuclear weapons or that are associated with research in fields of nuclear weapons development, such as those conducted by the Organization of Defensive Innovation and Research (SPND), headed by Mohsen Fakhrizadeh.⁴

³ Such a list could be useful for the IAEA to establish "choke points," according to Heinonen. These sites can be monitored in the future as part of ascertaining that a nuclear weapons program is not restored. This would require on-going, periodic access to these sites and individuals.

⁴U.S. State Department, "Additional Sanctions Imposed by the Department of State Targeting Iranian Proliferators." Media Note, Office of the Spokesperson, Washington, DC, August 29, 2014.

<http://www.state.gov/r/pa/prs/ps/2014/231159.htm> The State Department note states:

"SPND was established in February 2011 by the UN-sanctioned individual Mohsen Fakhrizadeh, who for many years has managed activities useful in the development of a nuclear explosive device. Fakhrizadeh led such efforts in the late 1990s or early 2000s, under the auspices of the AMAD Plan, the MODAFL subsidiary Section for Advanced Development Applications and Technologies (SADAT) and Malek Ashtar University of Technology (MUT). In February 2011, Fakhrizadeh left MUT to establish SPND. Fakhrizadeh was designated in UNSCR 1747 (2007) and by the United States in July 2008 for his involvement in Iran's proscribed WMD activities. SPND took over some of the activities related to Iran's undeclared nuclear

Regarding enforcement:

- After the lifting of sanctions and the implementation of the deal, a lack of Iranian cooperation with the IAEA on the remaining PMD issues would be considered a material breach of the long term deal. It should be noted again that the IAEA investigation of the PMD issues could last well past the date when key sanctions are lifted. This on-going IAEA investigation will require access to additional sites, individuals, and documents.

Conclusion

All of these conditions, or their equivalent, are attainable in a long term deal. Prior to the lifting of key sanctions, Iran needs to allow access to sites, individuals, and records and cooperate with the IAEA so that it can make progress on addressing its PMD concerns. To do otherwise, is to undermine the IAEA's credibility and the verifiability of an agreement.

program that had previously been carried out by Iran's Physics Research Center, the AMAD Plan, MUT, and SADAT."
