

Iran's ongoing uranium enrichment program

The Latest IAEA Report and Iranian Nuclear Weapons Development

By INSS: Ephraim Asculai Saturday, March 1, 2008

The newest and much-anticipated International Atomic Energy Agency report on safeguards activities in Iran was sent to the IAEA Member States on February 22, 2008 and almost immediately leaked to the press. As usual, no one was completely satisfied by it but everyone could find in it something that upholds his or her particular point of view.

And as usual, the most important part of the report - that dealing with Iran's ongoing uranium enrichment program, with the potential to provide the material for a nuclear explosive device-was relegated to the end of the report. However, this is a much more serious report than its predecessors and it includes much new information, especially about Iran's development of a nuclear explosive device and preparations for testing and mounting a warhead on a ballistic missile. It is not a simple report and it demands more than basic knowledge of the technical issues.

According to the report, Iran has been continuously enriching uranium, albeit at a slow pace, but it is also preparing to install many more enrichment machines and is testing a new type of machine which would allow for a much faster rate of enrichment. Thus, if the IAEA report is correct and if there are no concealed enrichment facilities or activities, the possibility that Iran would have the potential for producing its first nuclear explosive device around the turn of the decade does not seem far-fetched.

As before, the major part of the report deals with the IAEA's search into the past for answers to the "remaining outstanding issues," and it leaves the discussion of the all-important question of ongoing enrichment activities to the latter part of the report.

What are these issues? The present report enumerates five: the source of highly enriched uranium particles found at a university; a document detailing the method for transforming uranium-hexafluoride gas into metal and machining it into hemispheres "which are components of nuclear weapons;" Polonium-210, whose main use is in neutron sources suitable for use in nuclear weapons; the Gchine uranium mine; and the "alleged studies" of subjects "which could have a military nuclear dimension...", including the conversion of some uranium compounds, the testing of high explosives, and the design of a missile reentry vehicle. The report discloses, for the first time, information about the procurement and attempted procurement of many critical components for the development of nuclear explosives, studies into nuclear explosives-related areas, and the development of specialized detonators and detonation systems. Iran cannot come up with a reasonable explanation for this information and has stated that "the data have been fabricated."

It is not quite clear why the Gchine mine comes under scrutiny, since the document governing safeguards, INFCIRC-153, states: "(35) The Agreement should provide that safeguards shall not apply thereunder to material in mining or ore

INSS : Ephraim
Asculai [Bio](#)

[Email Article](#)

[Email Us](#)

 [Print
friendly](#)


 [Freep This](#)


 [RealClearPolitics](#)

 [Post to Digg](#)

 [Post to Newsvine](#)

 [Post to Reddit](#)

 [Post to de.licio.us](#)

 [Post to iTalk](#)

processing activities." The other four issues are all connected to nuclear weapons. Some of these are quite old, such as the Polonium issue and the contamination issue, but it took Iran several years to come up with answers, some of which strike many observers as oddly imaginative. For example, the reason for producing Polonium-210 (perhaps the most radiotoxic substance known to man) was given as "fundamental research" for a simple process that "was not aimed at a specific application". Iran also produced documents claiming that Polonium has potential use in radioisotope batteries. Still, the IAEA gives Iran the benefit of a doubt and the report states that some Iranian explanations are either "consistent with its findings" (e.g., concerning the Polonium experiments) or "are not inconsistent with its findings" (e.g., concerning contamination). The uranium metal issue has been (inexplicably) assigned minor importance and remains unresolved. The "not inconsistent" assessment means that the Iranians have finally come up with a cover story that the IAEA cannot find fault with but with which it is apparently not very comfortable. Technically speaking, the contamination story leaves many ancillary unanswered questions that the IAEA chose not to delve into. However, the IAEA also gives qualified hope to the Iranians in that most issues could be resolved provided they Iranians comply with Additional Protocol inspections.

The report states that "The one major remaining issue relevant to the nature of Iran's nuclear programme is the alleged studies on the green salt project, high explosives testing and the missile re-entry vehicle. This is a matter of serious concern and critical to an assessment of a possible military dimension to Iran's nuclear programme... Iran has maintained that these allegations are baseless and that the data have been fabricated." This means that once the issues of the development of the nuclear explosive device and the development of the missile warhead are resolved, the IAEA thinks that it can declare that Iran has come clean and is absolved of all accusations of prior infractions. Can these issues be resolved by the IAEA? Can they be "resolved" at all, when all indications, both technical and political, point at the existence of an Iranian nuclear weapons program?

The IAEA alone cannot be the judge of this since nuclear explosive mechanisms' development and missile warhead design and testing, including the apparent preparations for underground testing of nuclear explosives, are not within its purview and are outside its areas of competence. These issues must be dealt with elsewhere, by knowledgeable experts (coming from Nuclear Weapons States), and preferably outside the aegis of the IAEA.

There is another surprise emanating from the report. The IAEA Secretariat (the staff that runs the technical work of the IAEA) completely adopts the agreement written by Iran and attached to its report of August 30, 2007. However, Iran's text limits the scope of the Agency's search into the past and sets the scenario for exonerating Iran from all past misdeeds. Admittedly, the IAEA leaves open the option for looking into other matters, but Iran could raise objections that such a search would contradict its agreement with the IAEA. That is a possible trap that greater foresight could have avoided.

To conclude, this is a very serious report, and though it does not explicitly condemn Iran, it implicitly warns that concerns about Iranian nuclear ambitions are far from being dispelled.

All quotes are taken from the relevant IAEA reports.

Posted 03/1 at 09:44 AM [Email](#) ([Permalink](#))

Printed from: <http://canadafreepress.com/index.php/article/2094>