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2010: The Nuclear Spider Comes of Age

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When states and organizations crave good news in the area of nuclear proliferation prevention, they may be wont to ignore the bare facts or misinterpret them in an optimistic vein. This in turn creates a sense that there is still time in which to effectively stop the production of fissile materials for the production of nuclear weapons.

Take the case of Iran. Even prior to the November 23 distribution by the IAEA to its member states of its periodic report on Iran, much was heard heralding the fact that the Iranians were grappling with complications in operating their gas centrifuge uranium enrichment plant at Natanz. Some blamed the delays on the potent Stuxnet computer virus that was apparently very effective in disrupting electrical inverters, a vital component in the centrifuge operations. Others, however, attributed the difficulty to the inherent challenges in operating the almost obsolete P-1 model machines. This opinion was bolstered by a statement in the report (in a footnote) that feeding the centrifuge cascades with its input uranium hexafluoride was stopped on November 16. Yet the next statement in the footnote was far less reassuring when it noted that the feed was resumed six days later.

On the same day the report was published, the Institute for Science and Security (ISIS) published an analysis of the IAEA report, showing that in the reporting period Iran increased its operational efficiency in almost every parameter. The number of centrifuges enriching uranium is almost at its peak; the flow of the feed material into the enrichment cascades is at its peak, and so is the rate of production of the 3.5% enriched uranium. The rate of the enrichment process from 3.5% to 20% is quite steady, in spite of the old centrifuge model. Although this is a small scale operation, the Iranians could turn it into a large scale one in a very short time. Since this is a stone's throw away from weapons-grade uranium, this situation cannot be a source of optimism.

The IAEA report on Syria's nuclear activities appeared on the same day as the report on Iran; here too there is no way that the contents can be interpreted as positive. In addition to the stalled re-inspection of the bombed al-Kibar site, the IAEA has unanswered questions concerning its nuclear operations. The IAEA also seeks information about the Syrian operations at Homs, where Syria has a pilot plant operation for the production of uranium compounds that can then be transformed into feed materials for several nuclear

operations, including reactor fuel production and feed materials for uranium enrichment processes. In reply, Syria noted that the activities at Homs were not covered by its Safeguards Agreement with the IAEA. There are voices calling for the IAEA to request a Special Inspection in Syria; an inspection of this sort might help resolve the outstanding issues. However, it is doubtful whether Syria would acquiesce to such a request, and it is also doubtful that the Security Council would do anything about the matter if it were directed there.

Another leg of the nuclear spider (or hydra, perhaps) that recently came to light is the fact that North Korea was found to have a viable operating uranium enrichment plant at Yongbyon using an advanced model of centrifuges. In addition, there are reports that North Korea is constructing a light water reactor. The fuel for such a reactor must be based on enriched uranium, which could be another reason for this country's enrichment program. Was the full extent of this program revealed? Not necessarily. Some estimates postulate that the speed at which the present plant was constructed could not have been achieved without an existing full scale operation elsewhere. Another question concerns the origins of the advanced model centrifuges. Most probably these came from Pakistan, since at present it is the only country using advanced centrifuge models that would be ready to export them to North Korea. In addition to this program being worrisome in its own right, the potential for proliferation is cause for grave concern, especially given the previous assistance to Syria. It must not be assumed that Syria abandoned its nuclear ambitions when its nuclear reactor was destroyed in 2007.

Another country that came recently into the news is Myanmar (Burma). While no firm evidence confirming its nuclear weapons ambitions was discovered, it must be watched. This concern joins the impending ironic development that on January 1, 2011 Pakistan will assume the chairmanship of the IAEA Board of Governors. The greatest proliferator, which helped Iran, Libya, and most probably North Korea (in its enrichment program), will then be in charge of globally safeguarding the nuclear operations.

Meanwhile, what is being done about the Iran situation? Evidently, very little. The sanctions are probably having a serious effect on Iran, although China is alleviating this pressure, and much of Iran's trade with the world continues. In spite of growing international pressure, Iran has not evinced any willingness to concede on the nuclear issue. The US attitude is most puzzling, as the president is apparently still courting the ideas of "engagement" at a time when public and administration support for this idea is steadily diminishing. The Iranians are mocking the West, wrangling over the venue and the date of talks and hinting that its nuclear program will not be discussed. The lack of US activities concerning North Korea's nuclear development is no less troubling.

Thus, current prospects for stopping the proliferation activities of some of the most dangerous states are slim at best. A reasonable plan of action is visibly missing. Playing for time is an activity employed by all, proliferators on the one hand, and the West, led (or not) by the US, on the other hand. Leaders' statements have come to be vacuous, devoid of any meaningful contents, creating a worrisome state of affairs.