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Culture of Command & Control of Nuclear Weapons in the Middle East – Iran

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Executive Summary

Iran will probably be the first country in the Middle East to break out with a military nuclear capability, thus inevitably becoming the catalyst for other countries in the region to follow suit. Therefore, the Iranian attitude towards nuclear command and control is of paramount salience.

Iran has always been viewed by its leadership as deserving of a predominant or even hegemonic regional standing. In its present stage, the Iranian nuclear program began in the latter part of the 1980's in response to Iran's strategic and conventional inferiority vis-à-vis Iraq's weapons of mass destruction (WMD) capabilities and programs in the Saddam Hussein era. Later, the fact that the United States attacked Iraq, in spite of its purported Chemical and Biological Weapons (CBW) arsenal, strengthened the Iranian resolve to achieve a nuclear capability. The positions of senior clerics associated with the regime (and particularly with Ahmadinejad), seem to indicate religious legitimization of acquisition, even use of nuclear weapons in the context of deterrence of the enemy; a more extreme view, for which there is some evidence, goes well beyond deterrence, and could support using nuclear weapons if they were viewed as necessary for achieving divinely guaranteed victory over infidel adversaries, even granted that a nuclear exchange might involve great sacrifice, in itself perceived as a commanded, and thus blessed, indispensable price for victory.

Furthermore, there are indications of a more activist and less deterrence-oriented view of the need for nuclear weapons in Iran: one that enables Iran to create instability in the region to energetically propel forward its agenda to undermine, and then overthrow, the status-quo, both regionally and globally. There are grounds to believe that Iran will see nuclear weapons, once acquired, not only as weapons of deterrence and last resort, but as an umbrella under which it can establish its hegemony at least in the Gulf, with enhanced influence in other parts of the region. This influence will have economic (oil), religious (acceptance of Iran's role in the holy cities and of the legitimacy of Shiite Islam), and political aspects. Once perceived by its neighbors as having a nuclear capability, Iran would have much more leverage over oil production policy. The nuclear capability will enable it to indulge in subversion and terrorism against its neighbors, moderate Arab Sunni regimes that have allegedly "sold out" to the US, and Israel, with impunity, without fear of retaliation. Its regional hegemonic standing will increase its global leverage, as it seeks to induce changes in the international order, especially to reduce US and Western influence in world affairs.

Common wisdom in the past has argued that the final decision regarding the brandishing, activation, or use of nuclear weapons will always lie with the Supreme Leader, who, at least currently, putatively represents a more risk-averse world view than the regime's Praetorian Guard, the Islamic Revolutionary Guard Corps (IRGC), that is the most powerful organization exercising the state's instruments of coercion, as well as the custodian of its strategic assets, thus mitigating the risk of nuclear escalation and confrontation. From information available over the last few years, it appears that this view may now be anachronistic, and that the Supreme Leader is exceedingly receptive to the assessments and recommendations put to him by the President, Ahmadinejad, who is the political arrowhead of the IRGC structure that is Iran today. In light of the ascendancy of the IRGC as the most formidable political power in Iran, especially since the election of President Ahmadinejad in 2005, and as evidenced after his re-election in 2009, we can not assume that the Supreme Leader will

be the final authority for use of nuclear weapons. Moreover, even if the Supreme Leader is formally the ultimate authority, the latitude for manipulation of information that gets to him, thus shaping his choices, and interpretation of his instructions by interested parties, all easily move the focus of crucial decision-making to additional, or other, centers of the exercise of power.

So far, crucial decisions on the pace and directions of the nuclear technological research and development (R&D), towards acquiring a military nuclear potential, have evidently been influenced at least to some degree by the technocrats and scientists dealing in this highly professional area. However, once the nuclear threshold of nuclear weapons is acquired – the input to the leadership will most probably pass on to the military-political strategists, virtually all of which have IRGC links of present or past, and if Ahmadinejad is still President, through him to the Supreme Leader; the Supreme National Security Council, which is staffed by many of these, may play a significant role in preparing contingency options to which reference can be made in an escalating nuclear brinkmanship crisis scenario. Be those as they may, the IRGC high command may be expected to play a crucial role in future nuclear command, control and communication (C3) structures, chain of command, communication and execution of strategic instructions, as the most fiercely loyal and powerful organization that the regime commands.

The IRGC will then probably be the organization in charge of nuclear weapons assets: storing, security, deploying, transporting them from place to place, assembling their diverse components when told to do so if their components are stored separately for any determined reason, preparing them for launch, signaling to adversaries that they may be launched, and actually launching them if so ordered. In the IRGC, it is probably the IRGC Air Force, which is already the force that is in charge of Iran's operational and deployed strategic surface-to-surface missiles (SSM) capabilities, which would be the salient operational force. In addition to the standard delivery systems, primarily SSMs and secondarily possibly combat aircraft¹, the Iranian regime may additionally opt for "primitive" nuclear devices that could be delivered clandestinely by other, unconventional, means, such as by land, truck, commercial or transport aircraft, or sea, such as a freighter docking in the port of a major Western city, or as a launch pad for another delivery means thus extending the reach of the threat or allowing for the involvement of covert operations (such as by putatively "renegade" elements, to deny responsibility later).

The Iranian regime tends to centralism in strategic areas, and an aversion towards delegation of authority in matters relating to strategic weapons and strategic interests. There is no reason not to assume that this feature will apply to nuclear issues as well. The centralist tendency derives, *inter alia*, from a broad factionalism and deep lack of trust which imbues Iranian society. This lack of trust makes Western C3 procedures, which are based on the premise of a reliable military command, difficult to copy. In Iran, the perceived dedication of the IRGC compensates for the inherent laxity of regular established chains of command. In this sense, Iran is similar to many of the significant authoritarian cultures in history, all of which have commanded an unwaveringly committed Praetorian guard to guarantee the security of the regime and carry forward "special" strategic regime agenda priorities that there was a reluctance to entrust to the regular structures because of a suspicion regarding their unambiguous commitment.

Definitions of authority in Iran are ambiguous, and decision-making processes are convoluted. The identity of key figures in the specific command and control structure will most probably be based on criteria for loyalty of individuals, and not primarily bureaucratic affiliation. The fear of betrayal from inside (or more precisely – transfer

¹ In this connection it is noted that, according to the International Atomic Energy Agency (IAEA) reporting, as part of the clandestine deals with the A.Q. Khan network, the blueprints provided by the People's Republic of China (PRC) to Pakistan of the early version Chinese atomic bomb – were transferred to Iran (and Libya), for what it may be worth.

of loyalty) is accentuated in Iran, as it is in other Middle Eastern regional cultures. Hence, Iranian decision-making structures are nebulous networks of influence saturated with "back doors" and "back channels" between the decision-makers and the operational level. In the domain of nuclear weapons, we may expect that the "representatives of the Supreme Leader" in the military units would be one of those back channels, and in the dedicated IRGC units may be the transmitters of the Supreme Leader's orders.

Centralism notwithstanding, a nuclear armed Iran would have to develop a "Plan B" C3 system for enablement of nuclear weapons assets in case the leadership was incapacitated. But it is unclear to what degree authority may be delegated, and what events may trigger such delegation of authority. The Iranian regime will probably take into account that even senior officers of the regular forces may not obey orders to launch weapons if the regime seems as if it is in danger of failing, or that the use of those weapons may be of catastrophic consequences for them and their families, or the nation. An extensive delegation of authority would raise a severe risk of unauthorized use in a crisis situation, on one hand, and a fear of insubordination if launching of the weapons is ordered, on the other hand. Presumably, the legitimate leadership will be acutely aware of this, and is therefore likely to be extremely circumspect and cautious in delegating "Plan B" authority for the launch of nuclear weapons, and may even rule it out entirely. This, however, would also be seen to undermine deterrence, should the leadership's C3 mechanisms be seen to be relatively easily knocked out in a pre-emptive strike by an adversary.

A nuclear armed Iran would probably attempt to institute stringent controls to prevent accidental or unauthorized launch of nuclear weapons, and would undoubtedly copy some of the Western procedures and perhaps technical precautions, while also possibly allowing for some degree of discretion to IRGC command elements. However, there exists a deep suspicion in the Iranian regime towards technological means that can conceivably be manipulated by an enemy with a much higher technological capability (such as the US, or Israel), and there may be a certain reticence regarding use of technologies of Western origin to this end. Some form of codes system for transmitting instructions can be envisaged, though for reasons of redundancy these might include rather primitive systems (because computers and sophisticated communications might be suspect, out of action in a crisis or war situation). Deployed "Plan B" communications could range from low-level physical communication (PTP telephone), through covert trusted civilian chains of communication, clergy channels, coded broadcast messages understood only by the intended receivers, trusted emissaries and runners, and so on.

It is very unlikely though that the Iranian regime would adopt human authentication of the orders of the Head of State – particularly when that individual is ideologically perceived as the "*vali faqih*" and hence virtually infallible. A leader like Khamene'i would probably not accept any restrictions on his authority to launch weapons – even authentication by a "trusted" deputy as restriction of his discretion by a lesser individual would be tantamount to imposing restrictions on the will of Allah. Even the argument that the authentication is not meant for routine situations, but for contingencies during which the leader may become incapacitated for one reason or another, would be difficult to support. This having been stated, it is also believed that the necessity for a robust authentication and C3 system could be explained to the Supreme Leader by a responsible authority to whom he is attentive, such as President Ahmadinejad today, and that he would accept, by and large, any recommendation in this vein put to him.

It is possible that Iran will import C3 technology and expertise from a willing partner, such as the Democratic People's Republic of Korea (DPRK) or Pakistan. Since Pakistan has recently upgraded – with American help – the security of its nuclear assets, it cannot be ruled out that US-based hardware, technology and expertise relating to C3, including PALs, will

reach Iran.

The Iranian deployment mode of nuclear weapons – geographically and in terms of readiness alert levels – will depend on two key considerations: short lines for command and control – particularly to allow physical transfer of commands in case of a breakdown of communications; and a desire to keep the weapons away from centers of population to prevent the latter to become necessary “counter-force” targets for an enemy’s nuclear doctrine. It seems that the former consideration will take precedence. In case of escalation, the regime will be concerned that lines of communication would break down and will want to have direct control over the weapons. Forces controlling the weapons in non-Farsi provinces may be seen as susceptible to local pressures. This having been stated, so far the regime has demonstrated a relatively high degree of confidence regarding the exercise of its authority over, by and large, the larger part of Iran’s territory, and does not appear to be excessively nervous about potential loss of control. As such it has constructed or deployed strategic assets – nuclear production facilities and IRGC SSM forces – over a great geographical range, and whether this would hold true for nuclear weapons assets too remains to be seen.

Iranian nuclear doctrine may include transfer of nuclear weapons to a non-state actor – Lebanese Hezbollah would be the prime candidate, especially given its intimate relationship with the IRGC’s Qods arm. This could be in order to achieve “plausible deniability” regarding Iranian responsibility in case of the use of a nuclear weapon in a plausibly terrorist attack, in order to escape retaliation, or to claim that the whole action was instigated by rogue elements. It could also serve as a means of preparing a ground based second strike capability outside of Iranian territory, and hence not vulnerable to an enemy first strike against Iran. In any case, the weapons would have to be prepared for operation in advance, the non-state actor’s designated operators would have to be trained, C3 procedures would have to be worked out and actual physical deployment of the weapons outside of Iran (e.g. in Lebanon under complete control of Hezbollah, analogous to the US deployment of nuclear weapons in Europe NATO model), or contingency planning for such a deployment would have to be put in place. In any case, the command and control (C2) issues that such a deployment would raise would be manifold and the risks of accidental or unauthorized use, or of loss of the weapons, would be considerably greater.

Overview

Given today’s threat to the breach of nuclear non-proliferation firebreaks, Iran will probably be the first country in the Middle East to break out with a military nuclear capability, thus inevitably becoming the catalyst for other countries in the region to follow suit. Therefore, the Iranian attitude towards nuclear command and control is of paramount salience, insofar as Iran will be of ongoing concern with respect to the danger of regional escalation and the involvement of nuclear brinkmanship, crisis, and the exchange of nuclear blows between parties in the region – a low-probability-high-consequence contingency that requires addressing.

Some analysts have suggested that the probability of nuclear war by miscalculation, if not by design, is actually heightened, in a region where ignorance about Western ways and resolve; mystical beliefs in the supremacy of one way over all others; honor issues; cumbersome channels of mutual communication; rampant disinformation, misinformation and manipulation of information to which authoritarian decision-making leaderships are allowed access; and subjective prisms that severely distort perceptions of reality – are allowed to heavily influence the flow of events, as evident from the historical record. Even if crises and escalation do not come to nuclear blows, the other effects of a regional nuclear arms race between a number of parties, and the fierce competition for regional hegemony and dominance, not to say domination, in a nuclear weapons environment – bodes ill for stability, for the survivability of status-quo regimes, and for future developments

in the region. In the early days of the nuclear era, the perceptions regarding the existence of gaps in the command and control structure that could result in accidental or unauthorized launch of nuclear weapons, drove both the development of safeguards (on both sides of the Cold War), and efforts to implement procedures on the political level so as to preclude such scenarios. The behavior of Iran’s neighbors will be highly influenced by their perception of the probability of use of nuclear weapons by Iran (either by design or by accident or due to escalation or miscalculation). Another issue is the fallout of the status of alert levels that Iran might choose to maintain: if it will give preference to a posture that intimidates frequently or permanently based on a high level of nuclear alert, this will obviously impact other parties’ alert levels and nuclear readiness, thus infusing a great degree of volatility to aspects of deterrence stability.

The Iranian Rationale for Nuclear Weapons

A key question regarding Iran’s nuclear ambitions is: what is the regime’s goal in regards to acquiring nuclear weapons? Is it to make Iran into a threshold state poised a few months from a nuclear arsenal? Or do Iran’s strategic goals lead it into demonstrating a military nuclear capability once it achieves that stage? Under what conditions may the Iranian regime actually be drawn at some point into a nuclear confrontation? How exactly Iran might cross the nuclear weapons threshold, in terms of the degree of publicity this would be given, is the subject of much international speculation. One option would be to follow the North Korean example: first let it be understood that Iran is in possession of weapons grade fissile materials in a quantity sufficient to make several nuclear weapons; then leak by official circles that it has nuclear weapons; and finally conduct a series of nuclear tests. A second option would be to follow the Israeli example of maintaining a disciplined silence regarding what it may or may not have, but with the widely held implicit international perception that it has an operational and deployed nuclear arsenal, with all that this may signal. The third option would be to follow the Indian example, by bursting onto the scene with a nuclear test “for peaceful purposes”, or some such hyperbole, as India did in 1974. And of course it could follow the example of Pakistan by maintaining silence until the conduct of openly declared nuclear weapons, as both India and Pakistan did in 1998.

Iran’s drive to acquire a military nuclear capability precedes the current Iranian administration, or even the Islamic regime. Iran, and before it Persia, has always been viewed by its leadership as deserving of a regional standing of significance, even dominance or hegemony. In the 1970’s, the Shah envisaged an ambitious nuclear program, starting with the construction of a network of nuclear power stations, and it can only be assumed that he was thinking of the nuclear weapons option down the road if and when it would be appropriate. To this end, Iran began construction of the first in a series of planned nuclear power stations, at Bushehr, by the German company KWU (which later withdrew from the project and was replaced by the current Russian auspices). The prestige value of nuclear weapons in a regional, radical Islamic, and global context, is the most persuading explanation for Iran’s current nuclear weapons aspirations, but there are others not less compelling too.

In its present stage, it began in the latter part of the 1980’s in response to Iraq’s WMD capabilities and programs in the Saddam Hussein era, particularly Saddam’s obvious quest for a nuclear weapons capability, twice foiled – by Israel in 1981, and by the US in 1991. Later, the fact that the United States attacked Iraq, in spite of the widespread assumption that it was in possession of a large chemical and biological weapons (CBW) WMD arsenal, would appear to only strengthen the Iranian resolve to achieve a nuclear capability, which presumably is viewed as the only non-conventional WMD capability which can effectively deter the United States from attacking Iran, including to induce “regime change” by force as it did in Afghanistan and Iraq, and threatened to do in Libya and Syria, according to deeply held regional perceptions,

right or wrong (see for example the issue expanded upon in the chapter on Syria). Additionally it may be noted, in Iran's defense, that Iran is surrounded on all sides by nuclear weapons states and powers – to the west by the US presence in Iraq, and by Israel; to the north by the Soviet Union, historically, and today by Russia, as well as by the US-Turkish nuclear weapons presence in Turkey, at Incirlik; to the south by the US naval presence in the Persian Gulf and the Arabian Sea, as well as the extensive US and British military presences in the Gulf States and Saudi Arabia; and to the east by Pakistan and India. In this sense, Iran is, in a way, a non-nuclear island in a nuclear ocean that surrounds it, and were it not for the very disconcerting nature of Iran's radical, extremist, Shiite, perhaps somewhat messianic, revolutionary, anti-status-quo, and ruthless regime that is currently in power, then perhaps the development of Iranian nuclear weapons would be less disconcerting.

These arguments have spilled over into the public domain in Iran, indicating a high level of public support of the nuclear program for peaceful purposes, as is postured, but tacitly at least for defensive and deterrent purposes for nuclear weapons too. The strategic argument taking place in the public domain in favor of nuclear weapons is basically one of deterrence²: Iran lives in a dangerous neighborhood and is surrounded by nuclear or potentially nuclear neighbors.³ Another argument justifies acquisition of nuclear weapons on the basis of national honor and achieving the means to impose Iran's world view on the region.⁴ According to this viewpoint, Iran should formally withdraw from the Non Proliferation Treaty (NPT) in light of the IAEA decision to report it to the Security Council. Such a step would be compatible with the guidelines of the Supreme Leader for the states principles: expediency, honor and wisdom.⁵ Former president Ayatollah Ali Akbar Rafsanjani indicated in the past that “the experience of the (Iran-Iraq) war showed the potential of WMD ... [therefore] ... We should fully equip ourselves in the defensive and offensive use of chemical, bacteriological, and radiological weapons.” Later as Head of the Expediency Council, in late 2001, he stated that one nuclear weapon would suffice to destroy Israel, but that a similar use of a nuclear weapon against “the Muslim world” would not bring about its destruction – as understood, this insinuated that he believed that Iran could use nuclear weapons against Israel, survive retaliation by it or the US, and still win, with all that this implies in terms of escalation dominance, coercion and compellence in Iran's view.⁶

Iranian defense theoreticians rarely comment on the place of nuclear weapons in their country's strategic outlook. A significant departure from this custom were remarks made by former Minister of Defense, Ali Shamkhani, which can be interpreted as legitimization for acquisition of a military nuclear capability. Such a capability, according to Shamkhani, would be the “natural reaction of the Islamic Republic of Iran to achieving its national and regional security...”. Iran, in essence, “ignores parts of its security concerns ... for the sake of broader security goals for all countries... despite the fact that threats to the national security of the Islamic Republic all point to a security imbalance.” This imbalance, according to Shamkhani is epitomized in the list of Iran's potential nuclear threats: Israel, India and Pakistan, Russia, NATO and the U.S. naval fleets deployed in the region that are carrying atomic weapons.⁷

2 For example, reformist politician Mustafa Tajzadeh said, “It's basically a matter of equilibrium. If I don't have them, I don't have security,” and according to conservative Amir Mohebian, “The Americans say, in order to preserve the peace for my children, I should have nuclear weapons and you shouldn't have them.”

3 “Pasokh beh yek soal” (Answer to a question) - *Farda* 101 1377/1999, Quoted in Farida Farhi, 47.

4 See Hossein Shariatmadari, quoted above, note no. 3.

5 *Kayhan*, 9 March 2006.

6 “If a day comes when the world of Islam is duly equipped with the arms Israel has in possession, the strategy of colonialism would face a stalemate because application of an atomic bomb would not leave anything in Israel but the same thing would just produce minor damages in the Muslim world” - http://www.iran-press-service.com/articles_2001/dec_2001/israel_iran_nule_threat_301201.htm

7 *Jaam-e Jam*, 3.638 & 639 2002. See translation in: <http://www.>

Shamkhani has been credited with floating the concept of “nuclear defense” in the Iranian strategic context, but this concept has remained ambiguous.

Along with this essentially defensive and deterrent view of the potential of nuclear weapons, there exists another attitude – particularly popular in IRGC circles and among radical clerics identified with the Haqqani school in Qom – which views such weapons as part of Iran's arsenal for enhancement of its regional status. Thus, Hussein Shariatmadari, the Supreme Leader's representative in the Kayhan Institute, and Chief Editor of the Kayhan Daily wrote, “...Iran's transformation into a nuclear power contains a powerful and wide-ranging message... the Europeans and the Americans made various and diverse excuses ... they expected us to ... accept that they are a master cult and race, and that the rest of the world ... must ... enslave itself... Either we ... throw up our hands, and slaughter at their feet the ‘daring’ and the ‘will’ that are the foundations for building civilization, honor, and progress – or we do not give in to blackmail, and value and preserve the rare pearl for which we have labored greatly... If our country wants to attain glory in the world, it has no choice but to lay out a strategy in this direction, and to prepare the appropriate means for this strategy... **We must make the enemies understand that it is inconceivable that instability, insecurity, and shock will be our lot, while theirs will be stability, security, and tranquility**”.

Along with the argument that nuclear weapons are needed for deterrence, they are also seen as compensation for Iran's humiliation at the hands of the West during the last centuries, and as a “membership card” to an exclusive and respected club of nuclear powers, to which Iran feels it is worthy of belonging. The international acceptance of other nuclear states in Iran's neighborhood (India and Pakistan as declared nuclear powers and Israel as an undeclared power) exacerbates the Iranian sense of discrimination, and infuriating hypocrisy, as far as Iranians are concerned, in the international demand for Iran to give up its own nuclear program.

However, the strategic rationale for Iran's drive for nuclear weapons has a proactive aspect as well. There are grounds to believe that Iran will view such weapons, once acquired, not only as weapons of deterrence and last resort, but as an umbrella under which it can establish its hegemony, at least in the Gulf, with enhanced influence in other parts of the region. This influence will have economic (oil), religious (acceptance of Iran's role in the holy cities and of the legitimacy of Shiite Islam), and political aspects. Once perceived by its neighbors as having a nuclear capability, Iran would have much more leverage over oil production policy. The nuclear capability will enable it to indulge in subversion and terrorism against its neighbors and Israel with impunity, without fear of retaliation, thus advancing its agenda to undermine the status-quo, destabilize moderate regimes in the region alleged to have “sold out” to US interests, and to alter the global status-quo by reducing the influence of the US and the West in world affairs, such as at the UN. This could effectively also undermine any hopes of an Israeli-Arab peace process, especially given that significant Palestinian parties are already deeply associated with Iranian influences (Hamas and Palestinian Islamic Jihad, as well as Lebanese Hizballah which threatens Israel from Lebanon and could destabilize the region at Iran's behest). Whether Iran has thought out all the implications of acquiring nuclear weapons or not, there is no doubt that it will take advantage of them once it is achieved for these strategic goals.

Therefore, once it acquires nuclear weapons, it may be assessed that Iran would most probably tend to brandish them in order to promote its regional agendas and to coerce neighboring states. The Iranian tendency to demonize the West, Israel and its Sunni Arab neighbors

[netiran.com](http://www.netiran.com). See also Ali Akbar Velayati to *Qods Daily*, February, 10-15, 1998: “[Iran's] neighbors have all sorts of weapons, missiles, armored weapons, air, chemical and biological weapons. They have everything. From Israel to Iraq, from Pakistan to India, from Russia to China, and from Turkey to European countries. They have all sorts of weapons or some of the conventional weapons which form a part of the weapons of mass destruction” - <http://www.netiran.com>; *Kayhan*, June, 12, 2004 (trans.: MEMRI, Inquiry and Analysis 181 2004).

will surely exacerbate its already acute threat perception (some would say paranoia). Discovery of extreme threats to the very existence of the regime will encourage its decision-makers to counter-balance the threats with a commensurate nuclear threat. American assurances of “extended deterrence” to the Gulf States will surely exacerbate the Iranian threat perception and create a sense of a clear and imminent threat to the regime, thus creating a dynamic of mutual threat perceptions that will lead inevitably to escalation, including nuclear brinkmanship in response to US extended deterrence and when other parties go nuclear too, to the the great detriment of deterrence stability and the consequent increase for catastrophic miscalculation. If we judge by the responses of the Iranian regime to recent events that were interpreted as threats against it, the stock response is to threaten with disproportionate force, advanced weaponry and devastation. Thus, the brandishing of nuclear weapons would be in form with this behavior. This would, of course, preclude the adoption of a stance of “nuclear ambiguity” along the lines of the Israeli model, or of the Pakistani model prior to its tests of 1998, or of the North Korean model until its test of 2006, that would only imply possession of nuclear weapons assets by insinuation and hearsay. The truth is probably somewhere in the middle – and it may be expected that a nuclear armed Iran will devise its own special definition of its status, one that will allow it to extract all the advantages possible from the international recognition of its nuclear standing, without incurring the costs of becoming a completely isolated pariah like the DPRK.

Nationalistic considerations and Ahmadinejad’s propensity towards challenging the international community may push Iran towards exposing its nuclear capabilities. It appears that Iran has already crossed the Rubicon that precludes adoption of a model of nuclear ambiguity for any length of time. An analysis of the goals of the Iranian nuclear program shows that they are not achievable by a mere “threshold” status. However, an active policy of brandishing nuclear weapons (declaring nuclear alerts, target lists, flying aircraft with nuclear weapons, etc.) will oblige Iran to develop rigid and robust controls over the weapons at an early stage.

The form of command and control that the Iranians would prefer in these four different scenarios is going to be different. In the scenario of Iran only having demonstrated possession of a nuclear device and possessing a limited amount of weapons grade fissile material, perhaps emulating the North Korean model outlined earlier, there is no need for a sophisticated structure of command and control. In any other model, a relatively established C3 structure will be necessary from the level of the decision makers down to issues of custody, safeguards, prevention of unauthorized use, etc’. Demonstration of the capability will call for holding exercises in which the nuclear arsenal is part of the response to a threat scenario. This scenario would make highly sensitive and complex command and control structures indispensable.

Religious Input on Use of Nuclear Weapons

The Islamic legality of nuclear weapons became an issue in Shiite Iran as far back as the early 1980’s. Upon achieving power in 1979, Khomeini ordered the suspension of the Shah’s nuclear program on the basis of his legal opinion regarding the Islamic illegality of nuclear weapons. He has been quoted as having ruled, albeit orally, that “Atom(ic power/ weapons) is a thing of Satan”. There is however no written record or official ruling by Khomeini on the issue of nuclear power or nuclear weapons. Be the historic truth of that statement as it may, Khomeini’s position against acquisition of nuclear weapons was short-lived. As time – and the war with Iraq - went on, his attitude apparently changed, and he is reported to have given the religious justification and policy directive to renew the efforts to acquire a military nuclear potential.⁸

⁸ The Iranian centrifuge uranium enrichment program was begun in 1987, or even earlier, and in 1987 the first of the two A.Q. Khan deals (the second was in the mid-1990s) provided Iran with crucial centrifuge technology derived from the Pakistani program.

The fact that the nuclear program was revived while Khomeini was still alive is of cardinal significance not only for historic reasons. While there is no official record of a ruling by Khomeini on this matter, the power structure of Iran at the time of the renewal of the Iranian program precludes the possibility that the program was initiated without his legal and moral dispensation. If and when Iran achieves a military nuclear potential, Khomeini’s rulings may emerge both as a key element in the internal debate within the regime, and in order to provide Islamic justification of the highest level to whatever decision is made.

Nevertheless, Khomeini’s original position remains in force among many of the traditional “quietist” clerics. For example, Ayatollah Ozma Yusuf Saanei claims that “a consensus exists among the senior ‘*ulama* in Qom” that the prohibition on nuclear weapons (as well as chemical and biological weapons) is “self-evident in Islam” and an “eternal law” that cannot be reversed, since “the basic function” of these weapons is to kill innocent people. According to Saanei, this was the position behind the Iranian decision not to make use of chemical weapons against Iraq during the war. In September 2003 an additional *fatwa* was issued by the scholars of Qom stating that “Nuclear weapons are un-Islamic because they are inhumane.”

On the other hand, there has been increasing support for acquisition of nuclear weapons and even justification of their use by radical ‘*ulama*. The most outspoken of them are:

- In June 2005, before the presidential elections, Ayatollah Taqi Mesbah Yazdi, widely considered as the spiritual mentor of Ahmadinejad and other key IRGC leaders, published a book (distributed in no more than 3,000 copies to the select) called “The Islamic Revolution – Surges in Political Changes in History”. The book deals, obliquely, with justification for Iran to independently produce nuclear weapons for deterrence. According to Mesbah Yazdi: “We cannot know with certainty when the wolf-like elements in many countries which hold power will disappear and be wiped off the face of the earth, or when they will change their murderous ways. Therefore, we should not be indifferent to defensive policy and must strengthen our internal forces... we must always strive to strengthen the country’s military and defense systems. **We have to produce the most advanced weapon inside the country, even if our enemies don’t like it. There is no reason that they have the right to produce a certain special type of weapon, but that other countries not have that right...** In seeking to acquire the [necessary] technology Iran must be patient and not be deterred by economic shortages: Divine, messianic support has been the determining factor in the success of the Iranian regime during the various trying periods which have plagued it since its foundation...We cannot be broken because of temporary difficulties, they will pass, and Muslims must be patient and not be deterred by material or economic shortages, because if they do, it may lead them to be separated from [Islam].”
- One of Mesbah Yazdi’s prominent disciples, Hojjat al-Islam Mohsen Gharavian, a professor at the Imam Khomeini Institute in Qom, was quoted (April 2006) as having ruled that the use of nuclear weapons is legal in Islam as “One must say that when the entire world is armed with nuclear weapons, it is only natural that, as a counter-measure, it is necessary to be able to use these weapons. However, what is important is what goal they may be used for”. Later, he denied having issued such a *fatwa* and claimed that he was misquoted. The incident itself is indicative of the high significance that the regime accords to statements by clerics – even middle ranking ones.
- Ayatollah Javadi Amoli (in a meeting with whom Ahmadinejad told of the “light” that surrounded him when he spoke at the

UN).

- Ayatollah Ahmad Jannati (Head of the Guardians' Council)
- It is reported that this attitude is accepted among other teachers and alumni of the Haqqani School, such as Ayatollah Naser Makarem Shirazi, Ayatollah Mohammad Fazel Lankarani, Ayatollah Lotfollah Safi Golpaygani and Ayatollah Javad Tabrizi.

The balance of power within the clerical world of Qom has undergone changes since the revolution. For example, for most of Khomeini's era, Ayatollah Montazeri, who had issued an unequivocal *fatwa* against the use of nuclear weapons, was at that time recognized as the Supreme Leader's successor, and hence was expected to become the most senior religious authority in the post-Khomeini era. Undoubtedly, the positions of senior Ayatollahs who are viewed by key figures in the other decision-making bodies mentioned above have played a role in the decision-making regarding nuclear weapons. The ascendancy of Ayatollah Taqi al-Din Mesbah Yazdi – widely considered as the spiritual mentor of the President – who has gone on record as supporting acquisition of nuclear weapons, has changed the balance in this sector of the regime as well.

Khamene'i lacks his predecessor's status as an almost infallible religious scholar, and came to power by collegial choice. Nevertheless he remains at the centre of the decision-making process on the issue of nuclear power. During the two decades of Khamene'i as Supreme Leader, there has also been no substantiated official ruling on nuclear weapons by him, or by any other cleric associated with him and perceived as ruling on his direction. On the eve of the crucial discussion in the IAEA on Iran's military nuclear program, the spokesman of the Iranian Foreign Ministry Hamid Reza-Asafi released the "news" (10 August 2005) that the Supreme Leader had issued a *fatwa* declaring the use of nuclear weapons as "*haram*" – forbidden by Islamic law. Khamene'i's purported *fatwa* however was not published by the Office of the Leader, and its exact wording is nowhere to be found in the Iranian media or in official records of the Supreme Leader's religious edicts, which are assiduously updated and published. The closest declaration by Khamene'i that can be interpreted as such a *fatwa* could be a statement he made (22 May 2005) that "We are not after producing the atomic bomb, because Islam does not even allow us to treat our enemy in such a manner". Such a statement does not amount to a *fatwa*. Given the role of the Supreme Leader in the Iranian regime, this raises serious questions regarding its very existence.

A major element in Ahmadinejad's Weltanschauung is his "intimacy" with the "Hidden Imam", and his belief in his imminent reappearance. According to Shiite eschatological thought, advent of the "Hidden Imam" will be preceded by cataclysms and great sacrifice of the Muslims. However, at the end, the Imam will appear, punish the oppressors and reward the believers. To most Shiites the hidden Imam is no more than an eschatological idea with little immediate relevance to the actual life of society. Traditional "quietist" Shiite scholars have usually embraced pragmatic positions towards external forces, based on their understanding that until the Imam appears, the Shiites are in the minority and "the oppressed upon earth" by definition. They must bide their time and maintain their beliefs. A leader who subscribes to such a belief would naturally be less perturbed or deterred by the prospects of a nuclear war or any other wide-scale use of force against

9 The twelfth Imam in the line of the founder of the Shi'a, the Imam Ali, who is believed to have disappeared, remains in the world in "occultation" (Ghaiba) and will eventually reappear to meet out justice, to reward his believers (the Shiites) and to punish the oppressors. He is expected to re-appear at the well of Jamkaran, near Teheran, where he disappeared; during Ahmadinejad's tenure as mayor of Teheran, and since assuming the presidency, the highway between Jamkaran and Teheran has been widened to a freeway, and a rail line has been laid down, presumably to encourage pilgrimage to the site, or to ease the procession of the Imam to Teheran when he returns, which messianic believers like Ahmadinejad expect to happen very soon.

his country. Ahmadinejad – though not a cleric himself – has elevated the eschatological expectation of the reappearance of the Hidden Imam to the level of a central principle of the regime's political, cultural, economic and social life. More significant is the fact that Ahmadinejad has a "timeline" for the reappearance of the Imam ("very soon") and claims to engage in regular "*khalvat*" (audiences) with Him.

The president's supporters have spread the claim that he himself is one of the 36 nails (*owta'd*) which hold the world together pending the return of the Imam. Ahmadinejad attributes his running and winning the presidency to this personal link with the Imam, and hence sees himself as the agent of the Imam, bound to perform his mission, rather than the representative of his constituency. The ideological movement that appears to be behind this worldview of Ahmadinejad and his colleagues is frequently linked to the Hojatiyeh Association. This link is tendentious. The Hojatieh Society was established in 1953 by a preacher from Mashhad, Sheikh Mahmud Halabi, who first supported Prime Minister Mosadeq and then the Shah. The essence of the Hojatieh doctrine is that true Islamic government must await the return of the Hidden Imam. Therefore, the Hojatieh Association opposed Ayatollah Khomeini's theory of Islamic government and *velayat-e faqih*, called for collective leadership of the religious community, and opposed religious involvement in political affairs. While the movement was essentially "quietist" and eschewed political involvement, it believed that only when the situation would be intolerable and absolute chaos will reign, will the Imam feel obliged to reappear to save the believers.

It is difficult to say what impact the eschatological doctrine of part of the Iranian regime may have on the command and control structure. Certainly, parts of the regime which are averse to that doctrine will attempt to deny its proponents access to those weapons which could hasten their apocalyptic vision. **The fact that an increasingly predominant faction in the regime is supportive of that world view may bring about its own efforts to plant its supporters in the chain of command, including as potential back doors to the control systems over the weapons.**

In terms of command, control, communication and intelligence (C3I), the religious support for a more assertive, not to say aggressive, nuclear posture, could induce a higher alert level by the designated IRGC units entrusted with the nuclear weapons than might be otherwise expected. Drawing on the exhortations of the more extreme of the religious authorities, legitimacy might be afforded to active intimidation of adversaries by maintaining a threatening nuclear weapons posture on a frequent, or permanent, basis. This would require an early establishment of relatively sophisticated C3 rules. Until such rules were set in place, the instability, unreliability and questionable security regarding nuclear assets would be quite disconcerting. Such a raised alert level by the Iranians would inevitably be responded to by nuclear armed adversaries, if and when they go nuclear, such as Saudi Arabia, or by the wielding of US extended deterrence, and could therefore spawn escalation and undermine deterrence stability, subsequently creating a severe potential for catastrophic miscalculation.

The Decision Making Level – the Supreme Leader and the President

The core of the Iranian leadership is comprised today of less than a dozen veterans of the Revolution surrounding the Supreme Leader, and of a "second generation" IRGC elite around the President. Definitions of authority in Iran are ambiguous, and decision-making processes are convoluted. On one hand, the regime adheres to Khomeini's doctrine of *velayat-e (motleghi) faqih* ([absolute] Rule of the jurists) that provides for constant scrutiny and overruling of the elected government by the *Rahbar* (Supreme Leader) and self-elected bodies of conservative

clerics. The status and authority of the *Rahbar*, Ayatollah Khamene'i, is evocative of the traditional Iranian Shah. The relatively short period of Supreme Leadership of the founder of the Islamic Republic, Khomeini (1979-1988), was dominated by his personal positions on matters of national security; other institutions of the revolution (such as the IRGC, the National Security Council-NSC and the Office of the Supreme Leader – *daftar-e Rahbar* – itself) evolved gradually to their present positions.

If Iran achieves nuclear weapons under the incumbency of the present Supreme Leader, it is reasonable to assume that formally at least, he would be designated as the highest authority as far as the authorization to deploy or use nuclear weapons. One salient question, therefore, is what is the extent of Khamene'i's acquaintance with nuclear weapons issues, such as command and control, safeguards, deterrence, operational use of the weapons, and the consequences of wielding nuclear threats, or of carrying them out? Will he see the need to develop a doctrine based on international experience regarding these issues, or would he see Islamic doctrines as a sufficient base for operational procedures?

A partial answer to this question may be found in the way the incumbent Supreme Leader filters information and makes strategic decisions in other areas. Khamene'i does not speak foreign languages – except for Arabic, and is not a direct recipient of information from foreign media, though it is said that he listens occasionally to BBC in Persian and Arabic, and to Israeli Persian broadcasts, as well as reading translations of the foreign press in Iranian newspapers.¹⁰

While the Iranian press on its own is informative enough to provide a relatively good picture of domestic public opinion, the clamp-down on the press by the Ahmadinejad administration has reduced its value as a window to the outside world. For assessment of foreign affairs, Khamene'i is almost totally dependent on his "gatekeepers" for both raw information and its interpretation. These sources of information tend to be radical and revolutionary in their worldview – many associated with the IRGC.

The decisions on the pace and directions of the technological R&D towards acquiring a military nuclear potential have evidently been heavily influenced by the technocrats and scientists dealing in this highly professional area. It is believed that in the current context, of the past five years, President Ahmadinejad has exercised considerable influence over the Supreme Leader's decision-making, and that he is profusely receptive to Ahmadinejad's interpretations and recommendations. We assess that reports regarding disagreements between the two, or about Khamene'i's disdain for Ahmadinejad, have been exaggerated, allowing for the fact that they would naturally and inevitably not be in absolute agreement about every nuance all of the time. We believe that reports to the effect that the *rahbar* has placed the blame for Iran's isolation and international decline in its standing on Ahmadinejad's heavy-handed attitude towards the West, and lately towards Russia too – are exaggerations, or possibly groundless, rumours proliferated by interested parties inside and outside the regime. Khamene'i's receptiveness to Ahmadinejad's views, or of equivalent figures after Ahmadinejad, could be of real significance in a nuclear weapons decision-making scenario and environment. It may be assessed that the regular armed forces chain of command are, and will remain, of only secondary relevance to the nuclear decision-making process, except for the Chief of Staff who may be apprised of the operative strategy. Similarly, it may be assumed that the role of the relevant echelons of the Atomic Energy Organization of Iran (AEOI), as well as of the military industrial elements involved in weaponization, will remain circumscribed to professional technical, or technological issues, and involved in strategic or political decisions only insofar as their opinions will be sought regarding the technical viability of contingency options.

The institution of the "Supreme Leader" and the *vali-faqih* is not sacrosanct in the Iranian regime. It was created by, and for, Khomeini, and was adapted after his death to allow for Khamene'i to succeed him. Therefore, the role of the Supreme Leader in the nuclear chain of

command today may not be the same after Khamene'i. Senior Iranians – among them Rafsanjani who sees himself as candidate for the position of Supreme Leader – have floated ideas for separating the position of the Supreme Leader from that of the *vali-faqih*, or of creating a "collective leadership" for religious guidance. It is quite possible that the IRGC will prefer such a demotion of the religious leadership, leaving the authority for use of nuclear weapons directly in its own hands.

The changes in the relative strength of the presidency under different Presidents (since Khomeini's death – Rafsanjani, Khatami and Ahmadinejad), and in the relationships of these presidents with the other bodies, has also determined the weight of those persons in issues of national security, and of nuclear development in particular. As of 2005, the rise to power of Ahmadinejad, and his clique of IRGC veterans, appears to be a new phase in the balance of power within the regime. During the Rafsanjani and Khatami presidencies, conventional wisdom saw the Iranian regime as a "two-headed" entity: an ideological clerical regime headed by the Supreme Leader and supported by the IRGC, which was dominant in the strategic issues and in domestic affairs; and a non-clerical (though not "secular") government which handled the day to day affairs of the Islamic Republic, including its international relations. The ascendancy of Ahmadinejad has changed this equation. The president now is more ideologically outspoken – if not more religiously committed – than many of the representatives of the clerical establishment, many of whom have even criticized him for endangering the vital interests of the regime by his confrontational rhetoric. His link to the IRGC also strengthens him vis-à-vis the Supreme Leader, as does the fact that IRGC veterans now comprise a large portion of the Supreme Leader's office and serve as his information gatekeepers. Ahmadinejad's appointing of many of his IRGC cronies and IRGC-link associates has significantly boosted both their and his position in terms of the ability to exercise power effectively and securely, and to reinforce the ideological foundations of the courses of actions prioritized by his and their agenda – namely to maintain, or reinvigorate, revolutionary fervor, and shake the status-quo (in a way reminiscent of Mao Zedong's revival of revolutionary fervor by launching the "Cultural Revolution" to shake off the stagnation brought about by the abandoning of revolutionary zeal in favor of stabilization).

Conventional wisdom in the past has argued that the final decision will always lie with the Supreme Leader, who represents a more risk-averse world view which would mitigate the risk of nuclear escalation and confrontation. This view may now be anachronistic. Even in the past, during the Iran-Iraq War, there are indications that the IRGC (Iranian Revolutionary Guard Corps) occasionally acted in a way that appears to run against orders devolving from above. Furthermore, historically, members of the IRGC high command have often made pronouncements based on its own interests, without due consideration of those of the Supreme Leader, who has, from time to time, been forced to respond. This situation has exacerbated with a shift of the balance of power between the Supreme Leader and the President since Ahmadinejad assumed power in 2005, including with respect to the nuclear program. Therefore, even if the Supreme Leader is designated as the final authority for use of nuclear weapons, the fact that the entire chain of command is comprised of IRGC loyalists may compromise his absolute control. **In this sense, it may be a commonly held but serious mistake therefore to assume that the office of the Supreme Leader will be the supreme authority for use of nuclear weapons in any regime constellation, when in fact other elements do wield significant power, even in the current context. Moreover, even if the Supreme Leader is formally the supreme authority, the latitude for manipulation of information that gets to him, thus shaping his choices, and interpretation of his instructions by interested parties, all easily move the focus of crucial decision-making to additional, or other, centers of the exercise of power.** It is only basic political science that the crucial issue is the question of who exercises the state's instruments of coercion (currently the IRGC through the position of the President who is a vanguard), and controls the national strategic assets, such as nuclear weapons.

10 According to an informed Iranian religious source.

Below the level of the Supreme Leader, the President's office and the IRGC, Iran has already involved different bodies in oversight of the nuclear program to a certain degree. These may continue to have a say in the future, after a nuclear capability is achieved. The key organizations involved are:

- The Supreme National Security Council (SNSC), which may have important contributions to the evolution of a coherent national nuclear strategy, desirable strategic postures, contingency planning, C2, C3, C3I and deployment modes, including with respect to the security of nuclear assets, authentication issues and prevention of unauthorized use.
- The Iranian Atomic Energy Organization (AEOI), which has a purely technological role, but may be an authority on defining what is doable and what isn't in a future scenario.
- The Iranian Military (including the civilian level – the Minister of Defense – and other senior officers).
- The clerical establishment – the Council of Experts (*Majles-e Khobregan*), the Guardians Council (*Shoura-ye Nagahban*) and the Expediency Discernment Council of the System (*Majma'e Tashkhis-e Maslahat-e Nezam*) under former president Rafsanjani. The clerical establishment includes senior Ayatollahs who have ruled on the issue of the legality of acquisition and use of nuclear weapons.
- The Ministry of Foreign Affairs – which has so far represented the interests of those elements that have been making efforts to mitigate Iran's deteriorating international standing, by attempting to devise solutions to placate opprobrium of Iran, or at least to reduce or delay it. In a nuclear armed Iran scenario, it would presumably be a voice of reason and attempt to clarify anticipated international reaction to Iranian measures, but it may be expected to be by and large drowned out by more shrill exhortations, and by the more extremist and ruthless elements; and so, all things considered, probably, not definitely or entirely, of less relevance.

The ambiguity regarding central control in strategic decision-making will certainly filter down to the more tactical and technical procedures of command and control of nuclear weapons. Iranian decision-making structures are nebulous networks of influence saturated with "back doors" and "back channels" between the decision-makers and the operational level. In such an important domain as the operation of nuclear weapons, we may expect that this feature of the regime will be even more salient.

IRGC Chain of Command

It is widely assumed, and this is very probably a valid assessment, that the IRGC will be the organization in charge of nuclear weapons assets: storing them, security, deploying them, transporting them from place to place, assembling their diverse components when told to do so and if their components are stored separately for any determined reason, preparing them for launch, signaling to adversaries that they may be launched, and actually launching them if so ordered. In the IRGC, it is probably the IRGC Air Force, which is already the force that is in charge of Iran's operational and deployed strategic SSM capabilities, which would be the salient operational force. The IRGC's other arms would be expected to have contributing roles, such as regarding security, transportation or communication aspects. This would largely assume that Iran would opt for an SSM-based operational capability for its nuclear assets.

If an air-delivered, or cruise-missile delivered – Iran is reported to

be in possession of cruise missiles acquired from the former Soviet Union, and is developing indigenous capabilities too, as recently openly demonstrated – then additional preparations would have to be installed. Another option would be to involve the regular Air Force for designated salient missions – but this would entail entrusting to it C2 and C3 aspects that have so far not been typical of the Islamic Revolutionary regime.

Additionally, the Iranian regime may opt for "primitive" nuclear devices that could be delivered clandestinely by other, unconventional, means, such as by land, truck, commercial or transport aircraft, or sea, such as a freighter docking in the port of a major Western city, or as a launch pad for another delivery means thus extending the reach of the threat or allowing for the involvement of covert operations – such as by putatively "renegade" elements, to deny responsibility later. Generally, the regular military has no access to the WMD program and is not trusted by the leadership.

However, the identity of key figures in the specific command and control structure will most probably be based on criteria for loyalty of individuals, rather than primarily bureaucratic affiliation. The fear of betrayal from inside (or more precisely – transfer of loyalty) is accentuated in Iran, as it is in other Middle Eastern regional cultures. This is particularly the case when it seems as if the regime is in danger. The collective memory of the regime holds the images of military officers who crossed the lines when it became evident that the Shah was falling. There is cultural legitimization of pragmatism, hence, the Iranian regime will probably take into account that even senior officers of the regular forces may not obey orders to launch weapons if the regime seems as if it is in danger of failing, or that the use of those weapons may bring a catastrophe on them, their families, or the nation. The fierce loyalty, discipline, and ideological commitment, of the IRGC command and its personnel, among other things due to an unshakable religious fervor – is much less in doubt.

Vetting of the line of command over strategic weapons therefore will first and foremost be based on the loyalty that can be expected from the individual. In Iranian society, people are divided by lineage and social circle into categories of "*khodi*" (insider, "one of us") and "*ghair-khodi*" (outsider). The former status may derive from the following: family affiliation, perceived in Iranian culture as the most basic and fundamental loyalty structure which supersedes all other affiliations; personal past ("old boys clubs" made up of pre-Revolution "comrades in arms", schoolmates from the same madrasa in the *Hawza*); or contemporary membership in the same social-political circle (*dowreh*). These serve as frames of reference for trust and mutual help (a concept similar to the Chinese "*guanxi*"), and indications of an individual's influence (*nofouz*). Another important criterion may be the religious allegiance of an individual to a senior cleric; since a religious Shiite is expected to adhere to the rulings of his "model of emulation" (*marja' taqlid*) in all matters – personal and public – it stands to reason that no officer who does not give his allegiance to the Supreme Leader will be trusted with control over nuclear weapons, as he may have to petition his own *marja'*, and may receive contradictory rulings. Deployment of weapons, and delegation of authority, will rely heavily on these person-dependent factors and not be based on pure military bureaucratic reasoning.

Another possible element in the line of command and control in Iran may be the "representatives of the Supreme Leader" in all military units. These "commissars" oversee the activities and religious orthodoxy of the troops up to the highest level. During the Iran-Iraq War, they were at the front and often gave the military units operational instruction. Their advice was followed because the military feared reprisals from the senior religious echelons. However, there is no indication that these 'representatives' have ever been delegated with executive powers. Their power is a derivative of the status of the Supreme Leader himself. There may conceivably be a situation in which the Supreme Leader is more cautious regarding instructions on deployment or use of nuclear weapons, and orders are given through the line of the IRGC. The IRGC officers would then have to assess the

relative strength of the Supreme Leader in order to decide whether or not to accept advice of their “commissars” which contradict the orders of their IRGC superiors. But, all things considered, there aren’t very likely to be such contradictory orders.

A nuclear armed Iran would institute stringent controls to prevent accidental or unauthorized launch of nuclear weapons, and would undoubtedly copy some of the Western procedures, and perhaps technical precautions, while also possibly allowing for some degree of discretion to IRGC command elements. Some form of codes system can be envisaged, though for reasons of redundancy these might include rather primitive systems – because computers and sophisticated communications might be suspect, corrupted or out of action in a crisis or war situation. Given that the IRGC is not only a military organization, but is also responsible for regime security and “special operations” – as embodied by the Qods force – it might be expected that influential figures from those sections might be involved in transmission of a command too.

Central Control vs. Delegation of Authority

The Iranian regime tends to centralism regarding strategic issues and to an aversion towards delegation of authority in matters relating to strategic weapons and strategic interests. There is no reason not to assume that this feature will apply to nuclear issues as well. The centralist tendency derives not only from a “micro-management” tendency of the leadership, but from a broad factionalism and deep lack of trust which imbues Iranian society. The western system of delegation of authority (including but not only for strategic weapons) is based on an **assumption of loyalty** (based on a vetting system), according to which the individuals in the chain of command will obey orders (except for “illegal” orders). The collective affiliation - ethnic, regional or family - of the officers down the line of command is assumed to be irrelevant in democratic societies to the judgement whether they are suited for sensitive tasks. This is not the case in Iran, where the individual officer’s collective affiliation is far more salient to the assessment of his loyalty than his individual past.

There are few indications of actual delegation of authority to forces in the field to act in absence of orders from above. In the mid-2000’s, the regime gave orders to its military personnel in the Persian Gulf that if, during warfare, they are cut off from the center, they are instructed to use whatever they have to wreak havoc in the Gulf – especially to blockade the Straits of Hormuz. We do not know whether this order has been given to be implemented in other situations. The very issuing of such an order is out of form for the Iranian regime and runs counter to two basic features of Iranian culture:

- The basic stratification of Iranian society to superiors and subordinates, in which the former make decisions and the latter carry them out and;
- The view of authority as deriving from the source of authority actually being in power, so that the very fact that the superiors cannot give orders would be indicative of their no longer being in power and their authority – and hence their standing orders – having lost its validity.

It is in such instances that it may be of value for foreign governments who might be threatened by this regime to devise plans to transmit messages directly to the different echelons who control the nuclear arsenal, in order to deter not only the regime but critical links in the entire chain of command, for the eventuality that the former is perceived as falling. The experience with this practice, as it was done regarding the Iraqi command in both Gulf Wars, is inconclusive. It is not clear whether such warnings contributed to the non-use of WMD by the Iraqis in the two Gulf Wars, or whether such warnings are dismissed with disdain by the intended audience. When the IRGC is involved, it is highly doubtful that the intended audience would be receptive to such messages and warnings.

Taking into account this aversion to delegation of authority, the solution for a breakdown of communications – likely in situations of nuclear warfare or high level electronic warfare (EW) attacks by the enemy – would probably have to be physical. These solutions can range from low-level physical communication (PTP telephone), through covert trusted civilian chains of communication, (clergy channels), coded broadcast messages understood only by the intended receivers, trusted emissaries and runners, and so on.

It can also be assumed that a nuclear armed Iran would develop a C3 system for enablement of nuclear weapons assets in case the leadership was incapacitated. But the degree to which authority may be delegated is an imponderable, and in fact a very serious and disconcerting matter. An extensive delegation of authority for such an eventuality would raise a severe risk of unauthorized use in a crisis situation – such as a regional “Cuban Missile crisis” environment. Presumably, the legitimate leadership will be acutely aware of this, and is therefore likely to be extremely circumspect and cautious in delegating “Plan B” authority for the launch of nuclear weapons, and may even rule it out entirely. This, however, would also be seen to undermine deterrence, should the leadership’s C3 mechanisms be seen by it to be relatively easily knocked out in a pre-emptive strike by an adversary. How the Iranian leadership might consider balancing the tension between the possibilities is unclear, and it may turn to advisory arms – such as the SNSC – to suggest plausible answers and options. On the other hand, while official delegation of authority may not always be implemented, there may be cases of *de facto* delegation of authority. This may occur as a result of multiple channels of command (IRGC vs. the Supreme Leader’s Office). Additionally, the current leadership may chose to base redundant C3 assets in fallback outlying power locations where the political environment might be comfortable even in a crisis or escalation, and especially where IRGC assets and resources could conceivably allow for a measure of continued effective C3 even if Teheran-based assets are liable to be incapacitated.

“Seconding” of Nuclear Weapons to Proxy Organizations

Although assessed as highly unlikely, but not to be ruled out, the rationale for Iranian nuclear doctrine to include transfer of nuclear weapons to a non-state actor – Lebanese Hizballah would be the prime candidate – would be:

- A desire to attain “plausible deniability” regarding Iranian responsibility for a nuclear explosion in another country. Clearly an attack using missiles or any other weapons launched from Iranian territory would preclude this. Hence, Iran may contemplate using a trusted non-state actor proxy as a delivery system.
- Such a scenario would also allow the Iranians to claim, assuming that forensics traced back any weapon used to Iranian sources, that the whole action was instigated by rogue elements without official authorization.
- A means of preparing a ground based second strike capability outside of Iranian territory – and hence not vulnerable to an enemy first strike – based on a non-state actor in another country.

In all three cases, the weapons would have to be prepared for operation in advance, the non-state actor’s designated operators would have to be trained, and command and control procedures would have to be worked out. An Iranian doctrine which includes a “second strike” capability based on a proxy organization would entail either actual physical deployment of the weapons outside of Iran – e.g. in Lebanon under complete control of Hizballah, analogous to the US deployment in Europe – or contingency planning for such a deployment. In any case, the C2 issues that such a deployment would raise would be manifold and the risks of accidental

or unauthorized use, or of loss of the weapons, would be considerably greater. This having been stated, given the very intimate link between the IRGC and Hizballah, and the role of the “Al-Qods” arm of the IRGC in instigating foreign turmoil (including in Iraq), as well as in maintenance of the Hizballah connection, an Iranian directing hand could be involved.

Deployment Considerations

Iranian deployment of nuclear weapons will depend on two key, conflicting, considerations: short lines for command and control – particularly to allow physical transmission of commands in case of a breakdown of communications; and desire to keep the weapons away from centers of population to prevent the latter from becoming targeted as a result, for fear that the disruptions caused by an adversary’s first strike in such a case, would endanger regime survival. It seems that the former consideration will take precedence. In case of escalation, the regime will be concerned that lines of communication would break down and will want to have direct control over the weapons. Forces controlling the weapons in non-Farsi provinces may be seen as susceptible to local pressures. On the other hand, the regime would also fear the reaction of the population (and the clerics) to deployment of nuclear weapons in populated areas such as Tehran, Qom or other main cities. The solution would then be to deploy weapons in outlying areas near the center of the country but outside of the population centers. This having been stated, so far the regime has demonstrated a relatively high degree of confidence regarding the exercise of its authority over, by and large, the larger part of Iran’s territory, and does not appear to be excessively nervous about potential loss of control. As such it has constructed or deployed strategic assets – nuclear production facilities and IRGC SSM forces – over a great geographical range, and whether this would hold true for nuclear weapons assets too remains to be seen.

Thus, a plausible scenario is that the Iranians would prefer to deploy nuclear weapons– components and delivery systems – in diverse outlying sectors, where fall-back leadership centers may provide the necessary C3 wherewithal for retaining a good measure of authority over them, based on IRGC resources, assets and effective deployment. In this manner, a dire scenario of incapacitation of the leadership and its C3 assets in the Teheran area may be augmented to prevent collapse of the strategic posture. Whether the current leadership has thought out the possibilities, examined options with the assistance of its advisory organs, begun physically establishing redundant C3 assets and deploying them geographically – is all unknown at this time.

Authentication Procedures

There exists a deep suspicion in the Iranian regime towards technological means that can conceivably be manipulated by an enemy with a much higher technological capability, and there may be a certain reticence regarding use of US or Western-origin technology. This aversion towards technological means which are culturally identified with the West is compounded by a preference for personal trust and inter-personal interaction.

Human verification may be implemented at operational levels (for example, the need to combine codes held by more than one senior officer in order to override safeguards and arm weapons). However, it is very unlikely that the Iranian regime would adopt human verification of the orders of the Head of State – particularly when that individual is ideologically perceived as the “*vali faqih*” and hence virtually infallible. A leader like Khamene’i would probably not accept any restrictions on his authority to launch weapons – even authentication by a “trusted” deputy, as restriction of his discretion by a lesser individual would be tantamount to imposing restrictions on the will of Allah. Even the argument that the verification is not meant for regular situations but for contingencies during which the leader may be incapacitated, for any reason, would be difficult to support. This having been stated, it is also believed that the necessity for a robust authentication and C3 system

could be explained to the Supreme Leader by a responsible authority to whom he is attentive, such as President Ahmadinejad today, and that he would accept, by and large, any recommendation in this vein put to him.

Elaborate, robust technical systems for coded authentication of the identities of those who give the orders would be more acceptable. It seems that an Iranian C2 system would probably rely mainly on coded authentication as opposed to encryption which – it would be feared – may be broken by the enemy. Even with these means, the natural suspicion of these regimes that the enemy may find a way to override orders by imposture of the leader in order to disable weapon systems would lead them to adopt such systems. However, the same natural suspicion towards any foreign technology (for the same reason) would keep such systems at a relatively primitive level, with a great deal of reliance on physical communication, and verbal codes for communication between the highest level – the Leader, President and other senior figures – and the operational units. Reliance on such means would have an adverse effect on the regime’s ability to maintain flexible time-sensitive response mechanisms, and hence would influence other elements of the nuclear doctrine.

No doubt, these methods will develop over a period of time, as needed and in light of experience of crisis and near confrontations. It should not be expected that these regimes adopt procedures developed throughout the years of the Cold War; they will view many of the technological means for verification and authentication with suspicion, and will prefer to extend conventional procedures of command and control to the nuclear domain. Additionally to be noted is the possibility that Iran will import C3 technology and expertise from a willing partner, such as the DPRK or Pakistan. Since Pakistan has recently upgraded the security of its nuclear assets thanks to a relatively generous US assistance program in this area – a process that is ongoing – it can not be ruled out that US-based hardware, technology and expertise relating to C3, including PALS, will devolve to Iran to this end, which is not necessarily a bad thing, one might add, for a multiplicity of reasons.

However, once the weapons are in place, there is some doubt that Iran would allow itself to use foreign – particularly US – technology that has the capacity to disable its weapons. The fear that any such technology would be vulnerable to foreign manipulation – if not pre-built with Trojan horses that would allow the designer to take control – might preclude their use. Another consideration is the possibility that Iran’s strategic SSM forces –including Shehab-3 and Scuds, as well as the more advanced missiles already in development, production and perhaps subsequently to be deployed – will remain dual-use, capable of essentially launching missiles with either conventional, or WMD, or nuclear warheads. Another plausible scenario is that the IRGC Air Force will designate a limited given units for nuclear force missions; this would reduce complications and be more efficient or effective than an eclectic designation of all SSM forces as potential nuclear weapons designated units. But since this is Iran, one way or another at this point this question remains an imponderable, if not moot. Furthermore, it could be suggested that since the Iranian launch units will not know in advance what the target will be, they may not be able to hardwire this data into PALS.

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