

**IRAN: IS THERE A WAY OUT
OF THE NUCLEAR IMPASSE?**

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IRAN: IS THERE A WAY OUT OF THE NUCLEAR IMPASSE?

EXECUTIVE SUMMARY AND RECOMMENDATIONS

There is no easy way out of the Iranian nuclear dilemma. Iran, emboldened by the situation in Iraq and soaring oil prices, and animated by a combination of insecurity and assertive nationalism, insists on its right to develop full nuclear fuel cycle capability, including the ability to enrich uranium. Most other countries, while acknowledging to varying extents Iran's right under the Nuclear Non-Proliferation Treaty (NPT) to acquire that capability for peaceful energy purposes, have a concern – reinforced by Iran's lack of transparency in the past, continuing support for militant Middle East groups and incendiary presidential rhetoric – that once able to highly enrich uranium, it will be both able and tempted to build nuclear weapons.

But EU-led diplomacy so far has failed to persuade Iran to forego its fuel cycle ambitions; the UN Security Council seems unlikely to agree on sanctions strong enough to force it to do so; and preventive military force is both a dangerous and unproductive option.

Two possible scenarios remain, however, for a negotiated compromise. The first, and unquestionably more attractive for the international community, is a “zero enrichment” option: for Iran to agree to indefinitely relinquish its right to enrich uranium in return for guaranteed supply from an offshore source, along the lines proposed by Russia. Tehran, while not wholly rejecting offshore supply, has made clear its reluctance to embrace such a limitation as a long-term solution: for it to have any chance of acceptance, more incentives from the U.S. need to be on the table than at present.

If this option proves unachievable – as seems, regrettably, more likely than not – the only realistic remaining diplomatic option appears to be the “delayed limited enrichment” plan spelt out in this report. The wider international community, and the West in particular, would explicitly accept that Iran can not only produce peaceful nuclear energy but has the “right to enrich” domestically; in return, Iran would agree to a several-year delay in the commencement of its enrichment program, major limitations on its initial size and scope, and a highly intrusive inspections regime.

Both sides inevitably will protest that this plan goes too far – the West because it permits Tehran to eventually achieve full nuclear fuel cycle capability, with the risk in turn of breakout from the NPT and weapons acquisition, and Iran because it significantly delays and limits the development of that fuel cycle capability. But with significant carrots (particularly from the U.S.) and sticks (particularly from the EU) on the table – involving the appropriate application of sequenced incentives, backed by the prospect of strong and intelligently targeted sanctions – it is not impossible to envisage such a negotiation succeeding.

This proposed compromise should be compared neither to the fragile and unsustainable status quo, nor to some idealised end-state with which all sides might be totally comfortable. The more likely scenarios, if diplomacy fails, are for a rapid descent into an extremely unhealthy North Korea-like situation, with a wholly unsupervised nuclear program leading to the production of nuclear weapons and all the dangerously unpredictable regional consequences that might flow from that; or a perilous move to an Iraq-like preventive military strike, with even more far-reaching and alarming consequences both regionally and world-wide.

RECOMMENDATIONS

In Relation to the Preferred “Zero Enrichment” Option

1. Iran, the EU and Russia, with U.S. support, to agree on a proposal under which Iran would indefinitely suspend domestic enrichment activity, verified by a highly intrusive inspections regime, in exchange for an internationally guaranteed fuel supply, access to advanced nuclear technology, U.S.-backed security assurances, and a gradual lifting of sanctions by and resumption of normal diplomatic relations with the U.S.
2. The U.S., in the context of Iran's agreement to this proposal and subject to its compliance, to:

- (a) commit not to threaten or use force against Iran;
 - (b) refrain from interfering with Iran's importation of nuclear technologies and materials for civilian purposes, as permitted under the NPT;
 - (c) support, where needed, EU economic incentives, in particular by backing Iran's WTO accession; and
 - (d) recognising Iran's regional role, engage in discussions with Tehran on Iraq's reconstruction and political future.
3. The U.S., if Iran agrees to take parallel steps on issues of concern to Washington (including support for militant groups), to:
- (a) unfreeze Iran's assets in the United States;
 - (b) lift sanctions; and
 - (c) resume normal diplomatic relations.

In Relation to the Fallback "Delayed Limited Enrichment" Option

4. The EU to inform Iran about its readiness to recognise Iran's right to acquire full fuel cycle capability under Article IV of the NPT if it suspends all enrichment activities, resumes application of the Additional Protocol and negotiates the phased implementation of enrichment capability on a basis acceptable to the wider international community.
5. Iran and the EU, with the support of the U.S., Russia and China, to agree on a three-phase "delayed limited enrichment" plan with the following elements:
- (a) Phase 1 (2-3 years):
 - i. the IAEA continues its assessment under the Comprehensive Safeguards Agreement and Additional Protocol until it can conclude that all declared nuclear activity is for peaceful purposes;
 - ii. Iran suspends all enrichment activities on its territory; freezes the manufacture and testing of all centrifuges, which are to be mothballed and placed under IAEA seal; allows continuous and intrusive IAEA inspections; ratifies the Additional Protocol; and also suspends construction of heavy water facilities and plutonium-separation activities; and
 - iii. the EU recognises Iran's right to enrich uranium, begins cooperation on a range of non-military commercial issues, concludes a trade and cooperation agreement, encourages investment in Iran's natural gas sector, and allows European suppliers to participate in the construction and/or procurement of Iranian nuclear power plants.
- (b) Phase 2 (3-4 years):
- i. the IAEA continues its work under the Safeguards Agreement and Additional Protocol until it concludes that there are no undeclared materials and activities;
 - ii. Iran carries out limited, closely monitored, low-enrichment activities on its soil with at most several hundred first generation centrifuges, enriching at no more than 5 per cent, sufficient for research and development; enriched uranium is either stored outside the country or immediately converted into fuel rods; and all unused centrifuges to be mothballed and sealed by the IAEA; and
 - iii. the EU expands its economic cooperation.
- (c) Phase 3 (indefinitely thereafter):
- i. the IAEA inspection regime reverts to that specified by the Safeguards Agreement and the Additional Protocol, and there is overall normalisation of the relationship between the parties;
 - ii. fuel cycle facilities on an industrial scale, in particular for uranium enrichment, are desirably undertaken on the basis of multilateral co-ownership; and
 - iii. Iran foregoes indefinitely spent fuel reprocessing (the chemical separation of plutonium) and the establishment of heavy water infrastructure.
6. The U.S., in the context of Iran's agreement to this proposal and subject to its compliance, to agree on the implementation, on a phased basis and in a sequence to be negotiated, of the incentives listed in Recommendations 2 and 3 above.

7. Russia to agree, in the context of Iran's agreement to this proposal, to:
 - (a) ensure expeditious return by Iran of all spent Russian-supplied fuel from Bushehr;
 - (b) during Phase 1, store nuclear materials from the Isfahan conversion plant; and
 - (c) during Phase 2, store low-enriched uranium from the pilot centrifuge facilities or convert it into fuel rods.
8. The EU, Russia and China to agree that, in the event of Iranian rejection of or non-compliance with this proposal, they will support action by the UNSC and establishment of an escalating sanctions regime, including:
 - (a) a ban on the sale or transfer of all nuclear and missile technology, dual-use technology, and conventional weapons;
 - (b) a moratorium on new economic agreements and a ban on new investment in Iran's oil and gas industry and infrastructure;
 - (c) restrictions on the importation by Iran of refined oil products and of non-oil or gas products; and
 - (d) imposition of land, air and sea interdiction regimes to prevent Iranian import of nuclear or dual use technologies.

Brussels/Washington/Tehran, 23 February 2006

IRAN: IS THERE A WAY OUT OF THE NUCLEAR IMPASSE?

I. BACKGROUND

Despite long-held suspicions about Tehran's nuclear ambitions, the international community was caught off guard when the scope of its capabilities was first made public in August 2002 by an Iranian opposition group.¹ In February 2003, International Atomic Energy Agency (IAEA) inspectors concluded that the nuclear facilities – plants for uranium enrichment in Natanz and heavy water production in Arak – were larger, more sophisticated and much closer to completion than previously assumed. As a result, and in the absence of U.S.-Iranian contacts, France, Germany, and the UK (the EU3) took the lead in mid-2003 to initiate formal discussions aimed at persuading Tehran to abandon the enrichment component of its nuclear program and sign the Additional Protocol to its Safeguards Agreement.²

An initial accord was reached on 21 October 2003, pursuant to which Tehran agreed to:

- ❑ “engage in full co-operation with the IAEA to address and resolve through full transparency all requirements and outstanding issues of the Agency and clarify and correct any possible failures and deficiencies”;
- ❑ “sign the IAEA Additional Protocol and commence ratification procedures”;

- ❑ “continue to cooperate with the IAEA in accordance with the [Additional] Protocol in advance of its ratification”;
- ❑ “voluntarily...suspend all uranium enrichment and reprocessing activities as defined by the IAEA”.

At Tehran's insistence, the EU3 characterized the suspension as “voluntary” and “temporary”, though they still hoped to persuade Iran to relinquish its demand for an indigenous fuel cycle in exchange for economic and political compensation.³ In return for Iran's commitments, the EU3 stated that “this will open the way to a dialogue on a basis for longer-term cooperation. In particular, once international concerns...are fully resolved Iran could expect easier access to modern technology and supplies in a range of areas”.⁴

A further agreement was reached in Paris on 15 November 2004 pursuant to which Iran reaffirmed it would not seek nuclear weapons, committed to full cooperation and transparency with the IAEA, and agreed to prolong its suspension of all enrichment related and reprocessing activities.⁵ For its part, the EU3 recognized the suspension as “a voluntary confidence building measure and not a legal obligation”, and agreed to provide Iran “firm guarantees on nuclear, technological and economic cooperation and firm commitments on security issues”.⁶

¹ The National Council of Resistance of Iran (a front group for the Mojahedin-e Khalq, MKO or MEK) publicly presented evidence of two nuclear facilities that had not been declared to the IAEA.

² The Safeguards Agreement defines the nature and extent of both the state's and the IAEA rights and obligations. Countries that accept the Additional Protocol agree to grant the IAEA expanded access to information and sites, as well as additional authority to use the most advanced technologies in seeking assurance about both declared and potentially undeclared nuclear activities. See “Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards”, 1997. INFCIRC/540 (Corrected). Iran signed the Additional Protocol in December 2003 and consented to its voluntary implementation prior to formal ratification.

³ Iranian negotiators repeatedly rejected the inclusion of any written reference to the EU3 position in negotiation documents. Crisis Group interview, Iranian official, 2 December 2005.

⁴ “Iran Declaration”, available at http://news.bbc.co.uk/1/hi/world/middle_east/3211036.

⁵ Unlike the October 2003 declaration, the November 2004 agreement described in detail activities covered by Iran's voluntary suspension; these included “the manufacture and import of gas centrifuges and their components, the assembly, installation, testing or operation of gas centrifuges, work to undertake any plutonium separation, or to construct or operate any plutonium separation installation, and all tests or production at any uranium conversion installation”.

⁶ These included, inter alia, resumption of negotiations on a trade and cooperation agreement, “actively supporting” the onset of negotiations regarding Iran's accession to the World Trade Organisation (WTO), cooperating on issues of security, and supporting Iran's acquisition of a light water research reactor.

The Paris Agreement, meant as a precursor to negotiations on a mutually acceptable long-term arrangement, sidestepped the core of the dispute, Iran's asserted right to enrich.⁷ As negotiations continued in Paris, London, and Geneva in mid-2005, Iran consistently rejected any offer that did not address this issue, and its proposal – a four-phased approach which, in its second phase, called for the “assembly, installation, and testing” of 3,000 centrifuges in Natanz⁸ – was turned down by the Europeans. Rather than entertain the prospect of enrichment, the EU3 opted to wait for the June 2005 presidential election, gambling on the victory of former President Hashemi Rafsanjani, whom they considered more flexible and eager to reach a deal.⁹

For the text of the Paris Agreement, see: <http://www.iaea.org/Publications/Documents/Infcircs/2004/infcirc637.pdf>.

⁷ During this time period, European and Iranian diplomats expressed little hope that a long-term resolution could be reached without greater U.S. involvement. “The EU will find it difficult to offer adequate civilian technological assistance – for instance a light water reactor – without U.S. approval. And at the end of the day, it is U.S. economic ties and political and security guarantees that Iran is after. The only true test of Iran's intentions will come if the U.S. is part of the incentive package”. Crisis Group interview, EU official, November 2004. In the words of an Iranian diplomat, “the EU doesn't know what it can offer absent US permission, and absent US assurances we don't know what we can deliver”. Crisis Group interview, January 2005.

⁸ In a meeting in Paris on 23 March 2005, Iran presented an approach entailing parallel confidence building measures and enhanced cooperation. Phase one included a resumption of uranium conversion in Isfahan but a continued freeze on enrichment. Phase two called for the “assembly, installation and testing” of 3,000 centrifuges at Natanz combined with a commitment to convert all enriched uranium to fuel rods and not to produce highly enriched uranium. Phase three called for the completion of an “industrial scale” centrifuge plant at Natanz (involving the use of several thousand centrifuges) combined with continuous on-site presence of IAEA and EU3 inspectors in Isfahan and Natanz. Phase four entailed commencement of the industrial centrifuge plant at Natanz coupled with parliamentary approval of the Additional Protocol. No set time frame was attached to the various phases. The proposal also called for EU security, nuclear, and trade incentives. Iran for its part would accept these limitations, ratify the Additional Protocol and commit not to pursue a military program. For more details see “Iran's Strategic Weapons Program”, International Institute for Strategic Studies (IISS), p. 28.

⁹ Crisis Group interview, EU official, Brussels, 20 September 2005. Shortly before the June 2005 presidential elections, Rafsanjani's close adviser, Mohammed Atrianfar implicitly referred to this: “Rafsanjani will cooperate with Europeans for stopping uranium enrichment, but he will retain the right to the technology and also actually strengthen our know-how by acquiring it from the world, and on the sidelines of this we will also have other achievements; we will restore life to our scientific

The approach backfired. Instead of Rafsanjani, Iranians decisively elected Mahmoud Ahmadi-Nejad, who appealed to voters with a populist socio-economic platform and advocated a firmer stance on the nuclear issue.¹⁰ Seeking to assuage Western worries, Iran's leadership assured European officials that its nuclear policy would “remain unchanged”,¹¹ and, in a private letter, lead negotiator Hassan Rowhani urged EU3 officials to keep the talks moving forward by accepting the first phase of Iran's proposal, resumption of uranium conversion activities¹² under IAEA surveillance at Isfahan.¹³

Negotiations broke down in early August 2005. Expressing frustration at the Europeans' refusal to respond to its initiatives, which it saw as containing far-reaching limitations to its nuclear fuel cycle activities, Iran informed the IAEA of its position by referring to

relations with the USA. I believe that Rafsanjani will resolve the atomic issue. We will stop uranium enrichment but we will keep the right of technology for ourselves, and we will follow this up within the IAEA's laws and regulations”. Crisis Group interview, Tehran, 27 May 2005. Whether Rafsanjani, had he been elected, would have significantly altered Iran's position is another matter; some Iranians who discussed this with him doubt it. Crisis Group interview, Iranian diplomat, August 2005. Atrianfar's statements nonetheless caused evident disquiet. In signalling to the Europeans prior to the election that Rafsanjani would compromise, “Atrianfar made a crucial mistake. We were close to making an interim deal before the elections, but the EU3 dragged their feet because they thought their problems would be solved after the elections”. Ibid.

¹⁰ For more on Ahmadi-Nejad's victory see Crisis Group Middle East Briefing N°18, *Iran: What Does Ahmadi-Nejad's Victory Mean?*, 4 August 2005.

¹¹ In a 18 July 2005 message to EU3/EU ministers two weeks prior to Ahmadi-Nejad's inauguration, Hassan Rowhani, chairman of Iran's Supreme National Council, claimed that: “Iran's policy on the nuclear issue will remain unchanged... and Iran remains resolute on making every effort to come to an agreement with Europe, which incorporates the exercise of all its rights under the treaty with guarantees for the exclusive peaceful nature of its activities”. Document provided to Crisis Group by Iranian official.

¹² Natural uranium and ore concentrates are converted into uranium hexafluoride (UF₆), the chemical compound needed as feed for enrichment purposes.

¹³ In his message to EU3 officials, Rowhani wrote, “there is no pretext for any further delay in the implementation of the first phase of our proposal, which is free from any past alleged failures and nearly proliferation free... I am hoping that we can work together during the remaining time before the end of July to form a solution along the following lines: Commencement of the work of Isfahan plant at low capacity and under full scope monitoring, while arrangements for import of the feed material and export of the product are worked out with you and other potential partners...” Provided to Crisis Group by an Iranian official.

a slightly revised March 2005 proposal¹⁴ in which it offered, among other things, to:

- ❑ forego indefinitely the chemical processing of spent fuel to recover unspent uranium and plutonium. If strictly implemented, and if Iran in addition gave up its plans to build a heavy water reactor, this commitment effectively would cut off the plutonium route to nuclear weapons;¹⁵
- ❑ limit uranium-enrichment activities in the early phase to those required to meet the contingency requirements of its power reactors, should international deliveries not be forthcoming; and
- ❑ submit to “continuous on-site presence of IAEA inspectors at the conversion and enrichment facilities to provide unprecedented added guarantees”.

On 8 August 2005, Iran acted on previous threats to restart its uranium conversion activities at Isfahan. Justifying this decision by their purported inflexibility, Rowhani delivered a statement to the Europeans:

We even suggested entrusting the IAEA with the task of devising a formula of objective guarantees for the resumption of enrichment activities in Iran ... But it is clear that negotiations are not proceeding as called for in the Paris agreement because your side has continued to refrain from responding substantively to our proposals, in whole or even in part, or to present your views on objective guarantees for the exercise of Iran's rights under the Treaty without discrimination.¹⁶

In turn, the Europeans clarified their position in an extensive document distributed on 9 August.¹⁷ The EU3

recognised Iran's right to develop a civilian nuclear power program and expressed willingness to support it. However, it explicitly rejected Iran's pursuit of an indigenous enrichment capability, demanding that it make a “binding commitment not to pursue fuel-cycle activities other than the construction and operation of light-water power and research reactors”. The EU also reiterated the “prospect” of greater economic, political, and security cooperation, including trade and investment incentives and support for Iran's accession to the World Trade Organisation (WTO).

Iran's leadership swiftly turned down the proposal as “an insult on the Iranian nation for which the EU3 must apologize”.¹⁸ In an interview with Crisis Group, an Iranian diplomat angrily dismissed it as “all conditions and no guarantees”, adding “they knew we would reject it; we had already rejected a better offer they made in Vienna” in October 2004.¹⁹ An EU diplomat conceded that the offer was insufficient and presented with the knowledge it would be rejected but said it “was never meant to be our final offer. That was the first offer in what we thought would be a long, drawn-out negotiation. But the Iranians pulled out”.²⁰

Deeming continued negotiations futile, President Ahmadi-Nejad announced shortly after taking office that he would present a new proposal during his visit to the UN. His 17 September 2005 General Assembly speech insisted on Iran's inalienable right to the full fuel cycle and denounced the West's “nuclear apartheid” in seeking to deprive Iran and other developing nations of the rights it enjoys. His key proposal – inviting foreign firms to jointly develop Iran's enrichment capacities – was dismissed out of hand by EU officials.²¹

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¹⁴ The revised March proposal was made public by Tehran in a message to the IAEA on 1 August 2005. According to the communiqué, “On March 23, 2005, Iran offered a collection of solutions for objective guarantees suggested by various independent scientists and observers from the United States and Europe. The package included strong and mutually beneficial relations between Iran and the EU/E3, which would provide the best guarantee for respect for the concerns of each side; and confinement of Iran's enrichment program, in order to preclude through objective technical guarantees any proliferation concern”. <http://www.iaea.org/Publications/Documents/Infcircs/2004/infcirc648.pdf>

¹⁵ In several conversations with Crisis Group, an Iranian official mentioned that the abandonment of the heavy water reactor plans could be part of a future agreement. Crisis Group interviews, December 2005

¹⁶ 2 August 2005. Provided to Crisis Group by Iranian official.

¹⁷ Communication dated 8 August 2005 received from the Resident Representatives of France, Germany and the United

Kingdom, available at www.iaea.org/Publications/Documents/Infcircs/2005/infcirc651.pdf.

¹⁸ Response of the Islamic Republic of Iran to the framework agreement proposed by EU3/EU on 5 August 2005.

¹⁹ Crisis Group interview, 17 August 2005

²⁰ Crisis Group interview, Brussels, 20 September 2005

²¹ “As a further confidence building measure and in order to provide the greatest degree of transparency, the Islamic Republic of Iran is prepared to engage in serious partnership with private and public sectors of other countries in the implementation of [a] uranium enrichment program in Iran. This represents the most far reaching step, outside all requirements of the NPT, being proposed by Iran as a further confidence building measure”. Ahmadi-Nejad address to UN General Assembly, 17 September 2005. For text see: <http://www.globalsecurity.org/wmd/library/news/iran/2005/iran-050918-ima02.htm>.

TECHNICAL ISSUES IN THE IRAN DEBATE:

BASIC NUCLEAR JARGON NON-SPECIALISTS NEED TO KNOW*

A. NUCLEAR MATERIALS

Uranium

Uranium occurs naturally. To be useable, uranium ore (containing as little as 0.1 per cent uranium) has to be *mined*, then *milled* to produce a uranium oxide concentrate ('yellowcake') and refined into uranium dioxide. This can be used as fuel in some reactors (see "heavy water reactors" below), but for most purposes uranium dioxide has to then be *converted* into uranium hexafluoride gas (UF₆) and then *enriched* to either reactor-grade or weapons-grade levels. The final step in the process is the *fabrication* of fuel rods (ceramic uranium oxide pellets encased in metal tubes).

'Enrichment' means increasing the concentration of the isotope uranium 235, and reducing that of uranium 238. Natural uranium consists primarily of these two atomic forms (which have the same number of protons, but differing numbers of neutrons in each nucleus): only U-235 is capable of undergoing *fission*, the process by which a neutron strikes a nucleus, splitting it into fragments and releasing heat and radiation.

Low-enriched uranium, used as the fuel (to heat water to steam to drive turbines) in most power generating reactors, involves increasing the natural concentration of U-235 (0.7 per cent) to between 3 and 5 per cent.

Highly-enriched uranium (HEU) is defined (for safeguards administration purposes) as that in which the percentage of U-235 has been increased to greater than 20 per cent.

Weapons-grade uranium is usually described as that enriched to 93 per cent or higher U-235.

Plutonium

Plutonium occurs naturally only in minute proportions and is essentially a man-made element.

Reactor-grade plutonium is produced by commercial power reactors as a normal by-product when some of the neutrons released during fissioning interact with other uranium atoms: some of this is itself fissioned, but a proportion remains in *spent fuel rods* in different isotopic forms (including Pu-239, Pu-240 and Pu-241), which when extracted is used as a nuclear fuel. In the case of standard *light-water reactors*, the plutonium contained in these is typically about 60-70 per cent Pu-239; *heavy-water reactors*, by contrast, can produce Pu-239 in weapons-grade concentrations (but the brief irradiation required to achieve this is inefficient for power production).

B. NUCLEAR PROCESSES

Enrichment

These are four main types of process:

(1) Gas Centrifuge (Iran's pilot facility at Natanz): UF₆ gas is pumped into a series of rotating cylinders: the centrifugal force draws heavier molecules (containing U-238) toward the outside of the chamber while lighter U-235 molecules remain in the centre. Standard centrifuge enrichment is easily modified to produce HEU, and the modifications can be concealed.

(2) Gaseous Diffusion: A mixture of gases containing U-235 and U-238 are placed in a semi-permeable vessel. Since lighter molecules travel faster than heavier ones, molecules consisting of U-235 will escape from the vessel faster than those of U-238.

(3) Electromagnetic Enrichment: The different paths of the U-235 and U-238 isotopes as they pass through a magnetic field allow them to be separated and collected.

(4) Laser: A laser of a particular wavelength is used to excite U-235 atoms to the point that they can be separated from U-238.

Reactors

These days are of two main types:

(1) Light water reactors (Iran's Bushehr plant, being built with Russian help): The most common reactors in operation today, light water reactors use ordinary water as a coolant and require low-enriched uranium as fuel. From a proliferation standpoint, light water reactors are preferable to heavy water reactors for two reasons: first, extracting the plutonium by-product requires shutting down the reactor (easily noticed); secondly, the plutonium produced as a by-product contains significant impurities, i.e. low concentrations of Pu-239.

(2) Heavy water reactors (Iran has a heavy water producing plant at Arak and has declared its intention to build a heavy water reactor there): These reactors use as a coolant water containing an elevated concentration of "heavy hydrogen" (also known as deuterium) - hydrogen atoms which contain a neutron in their nucleus in addition to the usual proton. This allows the use of natural (non-enriched) uranium as fuel. Heavy water reactors produce – without the need for any uranium enrichment facilities – significant quantities of plutonium, and are capable (though not in commercial use mode) of producing Pu-239 in weapons-grade concentration.

*Initially published in Crisis Group Middle East Report N°18, *Dealing with Iran's Nuclear Program*, 27 October 2003

(continued from page 3)

Instead, his confrontational tone bolstered the U.S. and European position at the 24 September IAEA board meeting.²² Ultimately, 23 of the 35 board-member countries endorsed a resolution expressing "strong concern that Iran's policy of concealment up to October 2003 has resulted in many breaches of Iran's obligations to comply with the NPT safeguards agreement" and expressing broad concern over its behaviour and intentions. While evoking the possibility of Security Council action, it stopped short of setting a concrete timeframe for any;²³ eleven countries abstained, including Russia and China, with only Venezuela opposing. The most surprising "yes" vote came from India, which only recently had signed a multi-billion dollar natural gas pipeline deal with Iran and until then had supported Tehran's position both privately and in public. The unexpected reversal temporarily shook Iranian confidence that traditional non-aligned allies could be counted upon.

²² According to U.S. Under Secretary of State Nicholas Burns, "the effect of that speech will likely be a toughening of the international response to Iran because it was seen by so many countries as overly harsh, negative and uncompromising". See "Iran's president does what US diplomacy could not", *The Washington Post*, 19 September 2005.

²³ Though the resolution did not set a timeframe for Iran's referral to the UN Security Council for possible sanctions, it stated that "absence of confidence that Iran's nuclear program is exclusively for peaceful purposes [has] given rise to questions that are within the competence of the Security Council". The text of the resolution is at <http://www.iaea.org/Publications/Documents/Board/2005/gov2005-77.pdf>.

An EU diplomat told Crisis Group at the time that the Europeans were "picking up information that India's vote has destabilised the leadership and led them to question what they were being told by their negotiators".²⁴

On 18 November 2005, the IAEA Director General submitted a report to the Board citing documents from the late 1970s to late 1980s acquired from foreign intermediaries that referred to drawings of centrifuge components and assemblies, cascade schematic drawings, and information on the casting and machining of enriched, natural and depleted uranium metal into hemispherical forms.²⁵ Though much of this was old, it deepened international concern. Still the Board again resisted Security Council referral and reiterated its call for urgent ratification of the Additional Protocol, further documentation, and more transparency.

The IAEA's patience finally came to an end at its February 2006 Board meeting, in response to Iran's decision on 10 January 2006 to resume research and development activities – including enrichment – at Natanz. Tehran played down its decision, asserting "what we [have resumed] is merely in the field of research....We distinguish between research on nuclear fuel technology and production of nuclear fuel. Production of nuclear fuel

²⁴ Crisis Group interview, 10 October 2005. According to Ali Larijani, the head of Iran's negotiating team, "India was our friend. We did not expect India to [vote against us]", Islamic Republic News Agency (IRNA), 27 September 2005.

²⁵ IAEA document gov/2005/87. When put together in the presence of a neutron detonator, two highly enriched uranium hemispheres become a bomb.

remains suspended”.²⁶ But, by engaging in enrichment-related activities, it had crossed an EU/U.S. red-line, leading them to close ranks, convinced that such defiance could not remain unaddressed, and prompting intensive joint efforts to rally Russia and China to their side.

On 4 February 2006, the Board “request[ed] the Director General to report to the Security Council” that a series of “steps are required of Iran by the Board and to report to the Security Council all IAEA reports and resolutions, as adopted, relating to the issue”.²⁷ The Board expressed “serious concern” over Iran’s nuclear ambitions, citing “Iran’s many failures and breaches of its obligations” as well as the “absence of confidence that Iran’s nuclear program is exclusively for peaceful purposes”. In an effort to gain time for last-minute diplomacy – and in order to ensure Russian and Chinese support – the resolution postponed Security Council consideration for a month, after renewed deliberation by the Board in early March. Nor is there any guarantee that Moscow and Beijing will agree to meaningful action (other than calling on Iran to cease its enrichment activities and allow full-scale inspections) when the UNSC is handed the case.²⁸ But these distinctions appeared to have little immediate effect on Iran. Reacting immediately to the vote, Tehran announced it would resume uranium enrichment and halt application of the Additional Protocol, thus disallowing IAEA surprise inspections as well as inspections of non-declared sites.²⁹ On 14 February, Iran said it had begun small-scale enrichment.³⁰

²⁶ Iran claims that the resumption of enrichment activities in Natanz is limited to research and development and excludes the production of nuclear material. In view of the limited number of centrifuges involved (164), this is a valid argument in the short term. However, the pilot fuel enrichment facility can accommodate a total of six, 164-machine cascades for a total of roughly 1,000 centrifuges. See: D. Albright and C. Hinderstein, “Iran’s Next Steps: Final Tests and the Construction of a Uranium Enrichment Plant”, Institute for Science and International Security, 12 January 2006.

²⁷ Strictly speaking, the Board has not yet referred the case to the UNSC. Rather, the Board has agreed that the Security Council should be informed and address the matter. Had the Board made a determination of non-compliance, it would by contrast have triggered compulsory referral to the UNSC.

²⁸ Russian Foreign Minister Lavrov recently cautioned against sanctions, saying “sanctions have always been an impetus for intensifying disagreements”. IRNA, 15 February 2006.

²⁹ Non-implementation of the Additional Protocol will halt IAEA access to non-nuclear sites, thereby hampering investigation of past nuclear activities. That said, Iran still will be bound by the Safeguards Agreement pursuant to which the IAEA can continue verification work at declared facilities, such as the Natanz enrichment facilities, the Isfahan conversion plant and all other nuclear research centres. This would encompass inspector presence (albeit less frequent than under the Additional Protocol),

II. CURRENT POSITIONS

A. THE VIEW FROM TEHRAN

When Mahmoud Ahmadi-Nejad was elected president in June 2005, it was widely assumed that he would focus on domestic affairs. As foreign ministry spokesperson Hamid Reza Assefi said shortly afterwards, “the nuclear talks are part of our macro policies which we decide on by consensus...It’s natural that changing the president will not change this”.³¹ Less than six months into his tenure, there is reason to question that assessment. Upon his taking office, Rowhani was replaced with the harder-line Ali Larijani as Secretary of the Supreme National Security Council, and the previous nuclear team – whose “frightened” strategy Ahmadi-Nejad criticised – was virtually disbanded.³² According to an EU diplomat, “Rowhani and his team were interested in both achieving the fuel cycle and avoiding a UNSC referral. The new team is made up of people who seem concerned with the fuel cycle alone”.³³ Changes affected other foreign policy

remote camera surveillance and the taking of environmental samples.

³⁰ According to nuclear negotiator Javad Vaeedi, industrial-scale enrichment had not yet been launched because Iran “needs some time to reach that level with all centrifuges because of the 2 1/2 year suspension. However, the preliminary phases have been launched”, Reuters, 14 February 2006. Subsequently, the Bush administration announced its intent to ask Congress for an additional \$75 million for programs – such as a 24-hour Persian-language satellite channel broadcast into Iran – that would “confront the policies of this Iranian regime...and...support the aspirations of the Iranian people for freedom in their own country”. As described by Secretary Rice, the money will be channelled to reformers, political dissidents, human rights and non-governmental organisations, political organisations and labour unions. The bulk of it, some \$50 million, would help establish the 24-hour, U.S.-run, Persian-language television station. *Financial Times*, 15 February 2006. Figures denoted in dollars (\$) in this report refer to U.S. dollars.

³¹ IRNA, 26 June 2005

³² A day after his election Ahmadi-Nejad announced: “Those who are in negotiations are frightened and do not know the people...A popular and fundamentalist government will quickly change the country’s stance in favour of the nation”, Reuters, 26 June 2005. A centrist Iranian newspaper criticised the president: “Unfortunately the first mistake of the new government was changing the nuclear negotiating team. What expedient reasons had forced the government to change negotiators who had gained a lot of experience in negotiating with the West? The danger of hasty decisions and tiring of the continuation of the negotiations will put Iran’s national interests at risk”, *Etemad*, 3 October 2005

³³ Crisis Group interview, London, 27 September 2005. Rowhani himself has expressed concern about Ahmadi-Nejad’s “incoherent” strategy, saying, “under the new government, we live in a harsher international environment, because international

matters. In November 2005, 40 top diplomats – including the ambassadors to the UK, France, Germany, and the UN Geneva and Vienna offices – were relieved of their posts. And, through a string of incendiary pronouncements regarding Israel and the Holocaust, Ahmadi-Nejad further signalled an ideological hardening.³⁴

Explanations vary. In the eyes of some, Ahmadi-Nejad is staking out positions independent, and perhaps even in defiance, of Supreme Leader Khamenei, seeking to advance his agenda and consolidate his position by rallying the faithful. Indeed, there are signs of tension between the two. In what may have been an effort to curb Ahmadi-Nejad, Khamenei issued an edict enhancing the supervisory powers of the Expediency Council,³⁵ which is led by the more pragmatic former President Rafsanjani.³⁶

pressure on our country has increased. ...In the last three months that the new government has been in office, twice there were discussions about referring Iran's nuclear dossier to the UNSC and once...a statement was issued [by the UNSC] against Iran. As regards our nuclear file, by passing a resolution stressing that Iran undermined the IAEA rules and its commitments, they prepared the ground for referring our country's nuclear dossier to the UNSC, and domestically they caused some problems for us, including that of the [Tehran] stock exchange....Enemies depict Iran's international image under the new government as harsh....Domestically, some individuals scare the people and by creating problems in the economic and other sectors, jeopardise peace and security in society", Fars News Agency, 16 November 2005. More recently Rowhani declared that "We should avail ourselves of all national means for not getting isolated; we cannot just reach our aims by shouting slogans and adopting one sole simple strategy." Reuters, 9 February 2006.

³⁴Ahmadi-Nejad has described Israel as a "tumor" that should be "wiped off the map" and the Holocaust as a "myth". See IRNA, 26 October 2005, 14 December 2005, and 11 February 2006. Ayatollah Khamenei sought to downplay Ahmadi-Nejad's threats against Israel, explaining that Iran "will not commit aggression towards any nations. We will not breach any nation's rights anywhere in the world", BBC News, 4 November 2005.

³⁵ While the Expediency Council's main constitutional role had been to advise the Supreme Leader and break potential stalemates between the Guardian Council and Parliament, it was granted authority to supervise the government's macro policies and long term projects. Policies of the three main branches - legislative, judicial, and executive - must now be approved by the Expediency Council prior to implementation. For background on government institutions in Iran, see Crisis Group Middle East Report N°5, *Iran: The Struggle for the Revolution's Soul*, 5 August 2002.

³⁶ Khamenei's decision may also be rooted in concerns about his domestic power base. Immediately after Ahmadi-Nejad's election, his supporters shifted their attention to the 2006 election of the Assembly of Experts [*majles-e khobregan*], an 82-cleric body, chosen every eight years, which has the power both to anoint and dismiss the Supreme Leader. Given traditionally low voter turnout for these elections, concern has

Others see a far more symbiotic relationship, and view Ahmadi-Nejad's positions as part of a broader pattern in which Iranian conservatives are seeking to project power and assert Iran's interests pursuant to what they call "constructive interaction".³⁷ The president, under this view, is essentially subservient to the supreme leader,³⁸ and it is less personalities than context that has changed. U.S. preoccupation with the war in Iraq coupled with rising oil prices have allowed Tehran to promote a more aggressive agenda through use of various tools: its nuclear program, influence in Iraq and strengthened ties with Syria, as well as enhanced support for Lebanese and Palestinian militant groups. On this theory, the president's anti-Israeli statements are a collective rather than individual initiative, intended to curry popular favour in the Muslim world, introduce the question of Israel's arsenal into the nuclear equation and, more broadly, shift the ideological balance of forces in the region.³⁹ In the words of a Middle East analyst, "the nuclear dispute is only the most visible sign of a far broader contest between Iran and the West, with theatres of conflict ranging from Iraq, Afghanistan, Syria, Lebanon, and Israel. We are not on the verge of a confrontation. We are in the middle of it".⁴⁰

Overall, however, and despite the opaque power structure, unclear decision-making process, and apparent internal tensions, Iran's policy of gradual *fait accomplis* – resuming conversion and then enrichment-related activities – signals impatience with the pace of negotiations with Europe and decreased concern over any negative fallout. Iranian officials feel the EU3 has intentionally dragged its feet,

been expressed that should the president's allies mobilise, they could reach a majority in the Assembly of Experts and perhaps seek to replace Khamenei. Crisis Group interview, Iranian official, September 2005.

³⁷ "In this policy, the Islamic Republic is a regional power, and wants to be influential in regional and international affairs. At the same time, we want to move from the position of accused to that of accuser. For years, we have been accused of human rights violations, while no one was paying attention to human rights abuses in the West. From now on, it won't be the same. Western nations don't have the choice. At first, they might be shocked, but if they want to work with the Islamic Republic, they will have to accept this logic. On issues like oil, the regional situation, and Iran's influence, Western countries must take Iran into account". Interview, Iran's Deputy Foreign Minister, Manouchehr Mohamadi, Tehran, 25 December 2005 (transcript provided to Crisis Group).

³⁸ Crisis Group interview, close observer of Iranian scene, November 2005. Saeed Hajjarian, one of the original architects of the reform movement and a former intelligence chief, claimed Ahmadi-Nejad "won't even drink water without the leader's permission", *Financial Times*, 20 July 2005.

³⁹ Crisis Group interview, Iranian analyst, Beirut, December 2005.

⁴⁰ Crisis Group interview, Middle East analyst, London, January 2006.

hoping to prolong negotiations, perhaps until such time as the legal regime governing nuclear proliferation has changed to Tehran's detriment.⁴¹ The international and regional context in this respect is key. With over 100,000 U.S. troops in Iraq and rising oil prices, the ability of Washington and its allies to use coercive means has been significantly reduced, at least in Tehran's eyes. Persuaded of its entitlement to a nuclear program, the West's resolve to deny this right, the U.S.'s inherent hostility to its regime, and its current relative strength, Iran apparently has concluded that now is the time to further its nuclear goals without, if possible, alienating critical actors such as Russia and China.

This does not signify domestic unanimity over how to deal with the nuclear file, and with time disagreements have become more outspoken. Although there is undeniable political mileage to be gained from a tough, uncompromising position,⁴² concern over the current approach appears to be growing as are the number of leaders willing to question its efficacy and wisdom. Broadly speaking, positions can be divided between those who favour pursuit of the fuel cycle at all costs, those who wish to pursue it albeit without jeopardizing diplomatic ties, and those who argue for a temporary suspension intended to rebuild trust, allowing for a resumption of the full fuel cycle at a later date.

The first group is represented by President Ahmadi-Nejad and his supporters, such as the hard-line newspaper *Kayhan*. For over two years, *Kayhan*, edited by Hossein Shariatmadari, has strongly opposed negotiations with Europe,⁴³ maintaining that Iran should withdraw from the NPT, develop its nuclear program, and dare the international community to react.⁴⁴ It has advocated trade

sanctions and a break in diplomatic relations with IAEA members voting in favour of UNSC referral.⁴⁵ These positions, initially considered fringe, have gained prominence in recent months and could well receive further support in the event of UNSC action. As seen, Iran already has taken action in response to the recent IAEA Board decision.⁴⁶

While agreeing that Iran is "bound by national interest" to pursue its "inalienable right to a nuclear fuel cycle", the second group— which includes Ali Larjani, — see some advantage in working within an international framework.⁴⁷ For Larjani, the goal is to neither succumb to Western pressure nor abandon diplomacy:

We have a right to nuclear technology...but the West, both Europe and the U.S., think that if Iran masters nuclear technology, it would enter a new realm of technological prowess and it would be a great leap....[Nevertheless,] a country's survival depends on its political and diplomatic ties. You can't live in isolation...the new government must pursue the national demand for nuclear technology, but must make use of all diplomatic tools as well.⁴⁸

⁴¹ See Section VI below.

⁴² According to *Kayhan*, a hard-line newspaper, "a group of so-called reformist figures believe that...if Iran's case is sent to the UN, it is better to give up nuclear activities. This group should finally make it clear whether they are Iranian and side with Iran or whether they are siding with Iran's enemies?", 14 October 2005.

⁴³ In the words of former Deputy Foreign Minister Abbas Maleki, "Kayhan defends revolutionary values...and characteristically takes a critical view on everything. When asked why, he [Shariatmadari] says criticism makes the decision makers think twice before acting. This forces them to consider more carefully the consequences of their decisions". Crisis Group interview, Tehran, 18 August 2004. *Kayhan* strongly supported Ahmadi-Nejad's candidacy during the presidential elections.

⁴⁴ "If Iran's dossier is sent to the UNSC, the whole path in front of the West to solve this case peacefully will be blocked. No consensus will be reached regarding sanctions on Iran. China has huge economic contracts with Iran in the energy field. Russia considers Iran as its strategic economic partner. If Iran's dossier is sent to the UNSC, it will be no cause for fear. There is no news there. In that case we can resume our postponed

activities", *Keyhan*, 19 June 2005. More recently, it noted that "the West cannot tolerate a rise in the oil price in the current situation. The threat to refer Iran's dossier to the UNSC is an empty drum that only makes noise". 24 January 2006.

⁴⁵ Echoing these views, Iran's Deputy Foreign Minister, Mohamadi, remarked: "Obviously, the Islamic Republic will modify its economic relations with those countries that are antagonistic to its interests, according to their political stance". Interview, op. cit.

⁴⁶ On 20 November 2005, Iran's parliament overwhelmingly approved the outline of a bill requiring the government to block international inspections of its atomic facilities and resume enrichment activities in the event of UNSC referral. The bill would compel the government to "stop voluntary and non-legally binding measures and implement its scientific, research and executive programs" if Iran were referred to the UNSC. IRNA, 20 November 2005.

⁴⁷ Speech by Ali Larjani to a group of Iranian-Americans on the occasion of Ahmadi-Nejad's visit to the United Nations. 17 September 2005.

⁴⁸ Larjani interview with *Jam-e Jam* television, 16 July 2005. Larjani reportedly spoke with UN Secretary-General Kofi Annan for 40 minutes shortly after Iran resumed activities in Natanz, expressing his hope for "serious and constructive" negotiations with the EU but within the context of a fixed timeframe. Associated Press, 13 January 2006. More recently Larjani told Western journalists that he "still believes such controversial issues can be resolved within the context of negotiations...[but] everything depends on the way we are treated. If the negotiating route is open, we prefer to reach a conclusion through talks. But if this route is closed, we are obliged to follow up our other scenario", *Financial Times*, 22 January 2006.

According to advocates of the third, more conciliatory but currently least influential outlook, the cost of pursuing a fuel cycle currently outweighs its benefits. Rather than insist on immediately resuming enrichment activities, they argue, more time should be allowed for confidence-building measures to remove international concerns, in exchange for extensive political and economic dividends and security guarantees.⁴⁹ Many among this group also back direct talks with the U.S., convinced that Europe has few incentives to offer and China and Russia are neither sufficient nor dependable allies.⁵⁰ According to some sources, former president Rafsanjani quietly supports this approach (or, at a minimum, wanted the West to believe so), though there is no evidence he opposed the decision to resume activities at Natanz. His close advisor, former Tehran city council member Mohammed Atrianfar, has asserted that, “not all countries should expect to enrich uranium”.⁵¹

Ultimately responsible for the nuclear file, Supreme Leader Khamenei has over the past sixteen years favoured the status-quo, seeking to avoid both confrontation and accommodation with the West. But his decisions reflect consensus rather than individual preference, and of late confrontationist voices have been emboldened by the

perception that Washington is bent on changing the regime and the conviction that to compromise on the nuclear issue would be to display weakness and invite further U.S. pressure. Moreover, persuaded that a confrontation with the U.S. ultimately is inevitable, some hardliners believe it better for it to occur while oil prices are high and U.S. troops are bogged down in Iraq.⁵²

On the other hand, recent unconfirmed reports suggest that Iran’s growing isolation and the threat of sanctions may be leading Khamenei to side with the more pragmatic camp, seeking at a minimum to string out the diplomatic path.⁵³ There is some tentative evidence, including some of the latest official pronouncements. As stated by Ali Larijani and subsequently by Iran’s mission to the UN:

[Should] the EU change its discourse and stand ready to clearly recognise Iran’s rights in the framework of [the] NPT...there will be a complete readiness on Iran’s side to cooperate with Europe....The best guarantee for peacefulness of the nuclear program...could include the following measures: Accepting the current IAEA monitoring and verification systems; use of modern centrifuges, proposed by some American and British scientists, which permit only limited enrichment; participation of interested countries in Iran’s peaceful nuclear activities in form of a consortium. Accordingly there are various ways to ensure that Iran is not pursuing military nuclear programs. Should these guarantees be acceptable, the Islamic Republic of Iran would accept to send the Additional Protocol to the Parliament for ratification....Should a credible international system for providing nuclear fuel be in place, the Islamic Republic of Iran would be ready to procure its nuclear fuel from that system. However, such a system does not exist at present”.⁵⁴

B. THE VIEW FROM WASHINGTON

Over the last two and a half years, Washington’s approach toward Iran’s nuclear program has shown signs of evolution. In a reversal of past policy and a nod to EU efforts, the U.S. lifted its opposition to Iran’s WTO accession and acquisition of airplane spare parts in March

⁴⁹ According to Rafsanjani, “though suspension of enrichment by Iran was a confidence-building measure, unfortunately no positive reaction was displayed by the EU negotiators”. He added that continued negotiations should provide an opportunity for building confidence and reaching an understanding. IRNA, 8 November 2005.

⁵⁰ According to the daily *Etemad*, which espouses a more conciliatory line, “in the nuclear case we were made to start our negotiations with the three European countries, middlemen that after two years of negotiations not only couldn’t solve any problem between us and America, but created more problems. Unfortunately we are repeating the same mistake and in order not to face our real rival, America, we are trying to find some other middlemen in Eastern and third world countries. It is not late yet and the first condition is making a brave decision to talk to our real rival the U.S. We have to remember that we must not and cannot be like North Korea”, 27 September 2005. Prominent reformist economist Saeed Leilaz urged Iranian leaders not to be too reliant on Beijing, saying, “We shouldn’t forget that China’s economic relations with America is ten times more than Iran. Although it is painful for China to cut its relations with Iran, it is impossible for China to end its relations with America. So it is essential to warn Iranian nuclear officials that while China may defend Iran’s rights at the UN Security Council against US pressure more than the other four members, at the end of the day if it faces a firm decision of the West, China would select the bigger economic partner over Iran”. *Sharq*, 20 February 2006.

⁵¹ Gareth Smyth, *Financial Times*, 5 October 2005. Prominent reformist politician Mostafa Tajzadeh also agreed with this perspective: “We have much greater concerns facing our country than uranium enrichment”, Crisis Group interview, Tehran, June 2005.

⁵² Crisis Group interview, Iranian analyst close to government officials, 16 February 2006.

⁵³ Crisis Group interviews, February 2006.

⁵⁴ Press Release of Iran’s Permanent Mission to the UN of February 17, referring to Ali Larijani’s radio interview the day before. According to an Iranian official, this position enjoys the Supreme Leader’s full backing. Crisis Group interview, 18 February 2006. The last sentence is the most intriguing, as it may suggest willingness to contemplate offshore enrichment.

2005.⁵⁵ More recently, it acknowledged Iran's right to a "peaceful" nuclear energy program⁵⁶ and endorsed Moscow's proposal to enrich Iranian uranium in Russia. In the words of an EU3 diplomat, "Americans are now displaying more flexibility on Iran than at any time in the last five years. They have never been more willing to consider our recommendations".⁵⁷

These steps do not represent a fundamental shift and will not break the deadlock. Indeed, they may well be dictated by tactical considerations (backing the EU proposal enough not to be accused of obstructionism, but not enough to meet minimal Iranian demands) and by tactical constraints (an unwillingness or inability to confront Iran while U.S. troops are bogged down in Iraq and highly vulnerable to Iranian-inspired reprisals). Indeed, European officials have been struck by the apparent lack of U.S. urgency, even as they redouble their own efforts.⁵⁸

Moreover, on both process and substance issues – direct negotiations and the prospect of an indigenous enrichment program – Washington's stance remains unmoved. Unlike the North Korean case, the U.S. has staunchly resisted calls to participate in bilateral or multilateral nuclear talks. "We have no plans to engage Iran. Little would come out of it; Iran is uninterested and lacks credibility, continues to sponsor terrorism and is engaged in dirty business in

Iraq".⁵⁹ Engagement under such circumstances is seen as merely legitimising the regime. More recently, the U.S. ambassador to Iraq, Zalmay Khalilzad, was authorised to open a channel to Tehran, but there is no indication this has yet happened or would extend beyond discussions on Iraq.⁶⁰ In the terms of Secretary of State Condoleezza Rice, the nuclear talks are in European hands and better left there.⁶¹ Without U.S. involvement, however, EU diplomats remain sceptical that any deal is possible, even under the assumption that Iran is interested.⁶²

As for allowing Iran to enrich uranium, "there is no flexibility. It's an absolute red-line".⁶³

⁵⁹ Crisis Group interview, Washington DC, 19 October 2005.

⁶⁰ "We have no plans to talk to Iran. Our ambassador in Iraq can talk to the Iranians when necessary, but beyond that nothing is being considered", Crisis Group interview, U.S. official, Washington, 26 October 2005. Expressing pessimism about prospects for a bilateral dialogue on Iraq, an Iranian official explained: "When the Secretary of State [Rice] says that the U.S. won't talk to Iran regarding issues beyond Iraq so as not to legitimise the regime, how should Iran be expected to react?", Crisis Group interview, 5 January 2006. Comparing Iran to North Korea, a respected non-proliferation expert explained: "North Korea is increasingly viewed as a pathetic basket-case, a tyrannical regime no doubt, but one that does not present a threat to the United States or U.S. interests. Iran, on the other hand, is viewed as a dangerous, hostile regime which is up to no good in Iraq and a serious threat to U.S. interests worldwide. The Iranians themselves don't seem to want to talk to Washington. What incentive is there to reach out if you don't have a willing interlocutor at the other end?" Crisis Group interview, Washington, 14 October 2005. Some nuclear experts have questioned this approach, arguing that the North Korean case is far more serious. Whereas Iran has produced only milligram quantities of plutonium and enriched uranium, North Korea has separated several kilograms of plutonium, claims (and is believed) to possess nuclear weapons, withdrew from the NPT and does not allow IAEA inspectors. Crisis Group interview, former IAEA official, January 2006.

⁶¹ According to Rice, the U.S. has "limited contacts with the Iranians when it is necessary", usually in Iraq and Afghanistan. *USA Today*, 17 October 2005.

⁶² Noting that Iran's economic and especially security concerns only could be met by the U.S., an EU diplomat explained: "It doesn't necessarily have to be a U.S. presence in the talks, but U.S. incentives have to be on the table. For example, the prospect of a regional security framework could be discussed. There is no guarantee that Tehran would be willing to sit down and agree to talk, let alone sign a deal. But a U.S. offer to Tehran is the only way to test their true intentions, and a rejection from Tehran of a U.S. offer would only strengthen our case internationally", Crisis Group interview, 11 November 2005.

⁶³ Crisis Group interview, U.S. official, Washington, 19 October 2005. "Iran is like a person who has fallen into bankruptcy. He may believe he has a right to a bank loan, but the bank manager has no obligation to give him one until he earns back the bank's trust"; address by Under Secretary of State Nicholas Burns, 30

⁵⁵ "Washington recognised that a show of support for EU3 efforts would help insure that a failure of the talks would be blamed on Tehran, rather than Washington". See "Iran's Strategic Weapons Program", IISS, pp. 37. For former Assistant Secretary of State for Non-Proliferation Bob Einhorn, "the WTO and spare plane parts should be interpreted as a show of support for the Europeans, not an act of goodwill toward the Iranians", Crisis Group interview, 14 October 2005. Despite this apparent shift, however, the head of Iran's national airline has asserted that Boeing and General Electric rejected Tehran's requests for spare parts. *Agence France-Presse*, 15 November 2005. Similarly, despite the WTO's May 2005 decision to begin accession talks, Iran is believed to be more than a decade away from enacting several of the economic reforms required to join the organization. Crisis Group interview, Siamak Namazi, Managing Director of Tehran-based Atieh Bahar Consulting, Washington, 24 January 2006.

⁵⁶ President Bush explained, "they have insisted that they have a civilian nuclear program, and I thought a rational approach to that would be to allow them to receive enriched uranium from a third party under the guise of international inspections that will enable them to have civilian nuclear power without learning how to make a bomb....Some of us are wondering why they need civilian nuclear power anyway. They're awash with hydrocarbons. Nevertheless, it's a right of a government to want to have a civilian nuclear program", Reuters, 13 September 2005

⁵⁷ Crisis Group interview, 17 November 2005.

⁵⁸ Crisis Group interviews, Paris, Brussels and Washington, November-December 2005.

There is near unanimity between administration officials, congressional leaders, and non-proliferation experts that any type of enrichment scheme would allow Tehran to acquire the know-how to enrich high-grade uranium and pursue a clandestine nuclear weapons effort under the guise of a civilian energy program.⁶⁴ Whatever concerns Iran prompted in the past – and these include, most prominently, its support for violent, militant groups and opposition to the Arab-Israeli peace process – have been magnified by Ahmadi-Nejad's statements concerning Israel. Indeed, and in this respect, some leaders of the Democratic Party have sounded as adamant as Republican counterparts, explicitly referring to the option of military action should Iran pursue its nuclear program.

At the same time, Washington appears in little hurry to bring the issue to a head. Aware of its own limited options – it already imposes sanctions, and its military is stretched in Iraq – it has preferred to rely on the EU3 and seek to marshal broad international support for its position. The intense cultivation of Russia and China in particular – in sharp contrast to its approach in the run-up to the Iraq war – reflects the belief that only broad pressure from traditional backers has a chance of altering Iran's position. As a result, and for quite some time, the U.S. did not rush to bring the matter before the Security Council, waiting first for assurances of Russian and Chinese support.

C. THE VIEW FROM EUROPE

Over two years of unfruitful negotiations have left the EU3 deeply frustrated and puzzled. Initially, their anger was directed virtually in equal part at Washington, whose hands-off and at times hostile attitude toward the talks condemned them to irrelevancy.⁶⁵ The desire of French and German leaders to mend the Iraq-related rift with the U.S. and Washington's more receptive stance to EU3 efforts, together with Iran's hardening and President Ahmadi-Nejad's provocative statements, contributed to changing the atmosphere and significantly narrowing the transatlantic gap. In particular, Iran's resumption of conversion activity in August 2005 was greeted with dismay and anger. High-level EU officials told Crisis Group at the time that negotiations would be frozen until Tehran corrected what, in their view, was a clear breach of the Paris understanding.⁶⁶ That position was softened

in December 2005 when the Europeans indicated they would resume negotiations and engage in "talks about talks" so long as enrichment did not take place⁶⁷ but Iran's activities in Natanz and Ahmadi-Nejad's statements further eroded faith in a negotiated outcome⁶⁸ and hardened Europe's overall stance.⁶⁹

As European officials increasingly see it, Tehran is set on developing a nuclear military capacity, albeit not necessarily a military program. "For Iran, this is a matter of national right and of national pride. They see themselves as the region's France and Japan combined: with the former's strong aspiration to regional status and the latter's ability in very short time to develop a nuclear weapon. Added to this is the strong ideological impetus of a regime that believes it is the victim of a Western-imposed double standard".⁷⁰

How long this newfound harmony with the U.S. – and within the EU – will last is another matter. Pressed, some European officials acknowledge that further concessions on Iran's right to uranium enrichment may be required at some point, given Tehran's determination and the lack of practical means to thwart it; they also agree that Russia's proposal as is (i.e. without further incentives) probably is

November 2005, available at www.state.gov/p/us/rm/2005/57473.htm.

⁶⁴ Crisis Group interviews, George Perkovich and Bob Einhorn, Washington, October 2005.

⁶⁵ See Crisis Group Middle East Briefing N°15, *Iran: Where next on the nuclear standoff?*, 24 November 2004.

⁶⁶ Crisis Group interviews, Brussels, Paris, October 2005.

⁶⁷ Crisis Group interview, November 2005. The formal EU3 position is that Iran forfeited its right to the full fuel cycle as a result of past transgressions. Robert Cooper, Director-General for External Relations and Political-Military Affairs in the European Council Secretariat wrote: "the Nuclear Non-Proliferation Treaty gives its adherents the right to benefit from the peaceful uses of nuclear energy. The question at issue was and is whether Iran's program was peaceful ... Iran's right to the peaceful use of power is distinct from 'the right to enrich', which does not exist." Letter to the editor, *Financial Times*, 7 September 2005. But compare text at footnote 117 below.

⁶⁸ According to a British foreign office spokesperson, "Iranian professions of continued interest in negotiations are ... not credible. The Iranians knew full well that resuming enrichment-related activity would trigger" a halt to talks. Associated Press, 19 January 2006.

⁶⁹ Crisis Group interviews with European officials, London, Paris, September-October 2005. According to a French foreign ministry official, "we consider that the only 'objective guarantee' of the exclusively peaceful nature of Iran's nuclear program is the effective cessation of all activities leading to the production of nuclear materials (i.e. enrichment, reprocessing and heavy water technologies). If there were other measures that are as effective -- and objective -- as cessation, we would be ready to consider them, but we, for our part, cannot conceive of any such measures". Philippe Errera, "The EU3/EU-Iran negotiation and prospects for resolving the Iranian nuclear issue: a European perspective", 5 March 2005, at <http://www.globalsecurity.org/wmd/library/report/2005/errera.htm>.

⁷⁰ Crisis Group interview, EU official, January 2006.

a non-starter.⁷¹ The priority for now is to stand firm, signal strong international rejection of its behaviour by enlisting Russian and Chinese support, and ensure that Iran reverts to the status quo ante. Should this occur, however, European diplomats do not exclude an arrangement under which Iran would be able – at some future point – to enrich uranium on its soil:

This was implicit in our August 2005 proposal. Once confidence is fully restored, and assuming close international monitoring and strict limits on the scope of enrichment, this is something we can discuss. But we are not prepared to give them a timetable or even to put this on the table now. Iran must first understand its actions have consequences.⁷²

Not all agree. Within the EU, some called the notion of an indigenous enrichment scheme a “non-starter”,⁷³ while implicit in the U.S. position is that this Iranian regime could never be trusted with it.

D. THE VIEW FROM VIENNA (IAEA)

Of all actors involved in this crisis, the IAEA arguably has been the most balanced throughout. While censuring Iran for past violations, the IAEA has not hesitated to commend it for more recent cooperation; its head, Mohamed ElBaradei, labelled the nuclear activities “suspicious” and expressed concern about intentions⁷⁴, but nevertheless consistently insisted on the absence of conclusive evidence of a concealed weapons program and

on the necessity of sustained diplomacy and negotiations.⁷⁵ More broadly, he has balanced recognition of Iran’s right to uranium enrichment with acknowledgment that its behaviour has, at the very least, put off its ability to exercise that right.⁷⁶

IAEA Board of Governors resolutions typically have reflected this ambivalence. They have tempered “strong concern that Iran’s policy of concealment up to October 2003 has resulted in many breaches of Iran’s obligations to comply with the NPT safeguards agreement”⁷⁷ with recognition that “Iran has continued to facilitate access under its Safeguards Agreement as requested by the Agency, and to act as if the Additional Protocol is in force, including by providing in a timely manner the requisite declarations and access to locations”.⁷⁸ In its 4 February resolution, the Board went further, expressing “serious concern that the Agency is not yet in a position to clarify some important issues relating to Iran’s nuclear program, including the fact that Iran has in its possession a document on the production of uranium metal hemispheres, since, as reported by the Secretariat, this process is related to the fabrication of nuclear weapons components”.⁷⁹

Still, even as the crisis has escalated, the IAEA continued its work and maintained a presence on the ground, seeking to verify the correctness and completeness of Iran’s declarations. Although in previous reports, the Director General indicated that such verification had occurred,⁸⁰

⁷¹ A European diplomat went so far as to describe it as “insulting” as it made Tehran wholly dependent on Russian goodwill. Crisis Group interview, February 2006.

⁷² Crisis Group interview, EU official, January 2006. Another EU3 diplomat explained that Iran was being asked to “suspend” uranium enrichment for “however long it takes for it to inspire confidence in its intentions”; Crisis Group interview, Washington, DC, 17 October 2005. “In the end, we are going to have to move further and put more creative ideas on the table, and a supervised, strictly limited enrichment scheme on Iranian soil may be one of them”; Crisis Group interview, October 2005. The notion of allowing Iran a closely monitored, strictly limited enrichment facility after a period of constructive behaviour was advocated by some European officials, but ultimately rejected. Crisis Group interviews, Brussels, September 2005; Paris, January 2006.

⁷³ Crisis Group interview, 27 September 2005.

⁷⁴ According to ElBaradei, “For the last three years we have been doing intensive verification in Iran, and even after three years I am not yet in a position to make a judgment on the peaceful nature of the [nuclear] program”; *Newsweek*, 23 January 2006.

⁷⁵ In ElBaradei’s words, “We are not in the business of judging intentions. What we look for are facts and proof, and so far we have no proof of a nuclear-weapons program. The jury is still out... Unless you are ready to bomb your way through every country you suspect of developing weapons of mass destruction, I see no alternative to international inspectors”; *Time Europe*, 24 November 2005.

⁷⁶ “Because of Iran’s policy of concealment over a number of years, Iran has created a confidence deficit. Of course they say, ‘we were forced into that situation because of the sanctions, so we had to go underground’. But ... Iran needs to go out of its way not just to play by the book, but to be fully transparent, fully proactive, to build that confidence The concerns of Europe and the U.S. are now clear, starting with the nuclear issue, followed by regional security, followed by human-rights issues”; ElBaradei, *Newsweek*, 11 July 2004.

⁷⁷ IAEA November 2004 resolution. For full text see: http://www.iaea.org/Publications/Documents/Board/2004/gov2004-90_derestrict.pdf.

⁷⁸ See 4 February IAEA report: <http://www.iaea.org/Publications/Documents/Board/2006/gov2006-14.pdf>.

⁷⁹ *Ibid*.

⁸⁰ “All the declared nuclear material in Iran has been accounted for, and therefore such material is not diverted to prohibited activities. The Agency is, however, not yet in a position to conclude that there are no undeclared nuclear materials or activities in Iran. The process of drawing such a conclusion, after

that process has to be reconfirmed, since Tehran's December 2003 decision to abide by the Additional Protocol led to a number of additional questions. The agency is trying to piece together what occurred prior to that year, a period that saw the emergence of a substantial fuel cycle capability, particularly in relation to the Natanz enrichment facility. The agency's specific concerns relate to the sources of the P1 and P2 centrifuge designs, and what Iran may have done with them. As a result, the IAEA must reconfirm earlier evaluations in order to reach the requisite conclusion under the Comprehensive Safeguards Agreement, namely that "all declared nuclear material has remained in peaceful nuclear activities or has been otherwise adequately accounted for".⁸¹

As for the way forward, ElBaradei has been characteristically cautious, while displaying increased signs of frustration with Tehran.⁸² Publicly, he has been consistent in saying there are no good alternatives to negotiations, asserting that incentives are more likely than sanctions to result in progress.⁸³ "The argument Iran makes is that they have been isolated so they have to be self-sufficient. That's why the European dialogue is important. If a country felt its needs were going to be satisfied, they might not have to go for an independent fuel cycle".⁸⁴ Echoing private EU sentiments, he also has made clear that the prospect of reaching such a resolution was practically non-existent without U.S. involvement,⁸⁵ and, while describing the situation as having entered a "critical phase" in which the "credibility of the verification process

an Additional Protocol is in force, is normally a time consuming process." IAEA Board Document Gov 2004/83. See also Crisis Group interview, former senior IAEA official, January 2006.

⁸¹ Crisis Group interview, former senior IAEA official, January 2006.

⁸² "It is very frustrating because everybody invested a lot of time and effort in building this confidence. It's a very slow process. You can have a crash overnight. I hope the Iranian authorities will understand, again, that if they lose this nascent confidence building it will become even more complicated in the future to [restore]. It is very frustrating." *Newsweek*, 12 January 2006.

⁸³ More recently, however, ElBaradei has stated that, "diplomacy is not just talking. Diplomacy has to be backed by pressure and, in extreme cases, by force. We have rules. We have to do everything possible to uphold the rules through conviction. If not, then you impose them. Of course, this has to be the last resort, but sometimes you have to do it", *Newsweek*, op. cit.

⁸⁴ *The Washington Post*, 30 January 2005.

⁸⁵ As ElBaradei put it, "I'd like to see the Americans join a dialogue either with the Europeans or directly with the Iranians. I don't think you will get a permanent solution of the Iranian issue without full U.S. engagement. The U.S. can't afford to sit on the fence. There's a lot at stake having to do with security of the [Persian] Gulf and the Middle East. The U.S. engages with North Korea so I don't see why they can't engage with Iran", *The Washington Post*, 30 January 2005.

is at stake",⁸⁶ he has been careful to add "it is not a crisis situation. It's about confidence-building and it is not about an imminent threat".⁸⁷

Privately, however, he too is said to be far less sanguine, persuaded (like his EU counterparts) that Iran is determined to master the full fuel cycle for a combination of security, economic and national pride reasons. As a result, he reportedly believes that the optimal way forward is to engage Iran politically and economically, entwine it in the world economy, flood it with inspectors, and all in all raise the cost of reckless activity.⁸⁸ Alarmed in particular by the prospect that a nuclear Iran could trigger a dangerous regional nuclear race, principally involving Saudi Arabia and Egypt, he is not yet prepared to give in.⁸⁹ Most recently, he reportedly has suggested that a compromise may lie in accepting small-scale enrichment on Iranian soil in exchange for guarantees of no full nuclear fuel production that could be diverted for military purposes.⁹⁰

E. THE VIEW FROM MOSCOW AND BEIJING

Russia and China have adopted broadly similar positions. Their approach reflects delicate balancing between their most important political relationship – with the U.S. – and growing economic ties to Iran, to which, in China's case, must be added residual solidarity with a third world country and discomfort at siding with Washington against a demand for equal treatment. Having been Iran's most important nuclear supplier in the early 1990s, China subsequently reduced its cooperation as a result of U.S. pressure; still, it recently signed several multi-billion dollar energy deals with Tehran and, by the end of 2004 had emerged as its top oil export market.⁹¹ Moscow has even

⁸⁶ According to ElBaradei, "I am running out of patience, the international community is running out of patience, the credibility of the verification process is at stake and I'd like come March, which is my next report, to be able to clarify these issues". Interview with Sky News, 9 January 2006.

⁸⁷ See: <http://www.eupolitix.com/EN/News/200602/d786bfd3-522e-4e55-9b28-4f20144e5f80.htm>.

⁸⁸ Ibid.

⁸⁹ Crisis Group interview, EU diplomat, 11 October 2005. "If every country continues to exercise the right to enrich uranium, we are going in the next ten or twenty years to have 30 or 40 countries, in my estimation, who are virtual nuclear weapon states, because if you have the fissile material, you are a few months away from the ability to develop a nuclear weapon, should you decide to do that. And that margin of security is very, very close for comfort", CNN interview with ElBaradei, 8 May 2005.

⁹⁰ *New York Times*, 19 February 2006.

⁹¹ In March 2004 a Chinese state-owned oil trading company, Zuhai Zhenrong Corporation, signed a 25-year deal to import

greater involvement and leverage, including in the nuclear field through an \$800 million contract to build the Bushehr nuclear power station. Bushehr's completion has been delayed,⁹² but is expected to begin electricity production in the second half of 2006.

Russia and China's stances on the current crisis reflect their disparate interests. Moscow has backed Iran's legal right to enrichment while cautioning that it would be best not to exercise it and simultaneously reassuring the West that it too is opposed to a nuclear-armed Iran. Chinese officials have been cautious in public, avoiding a position on the issue of enrichment and expected to follow Moscow's lead closely.⁹³

While Russia and China expressed their "concern" and "disappointment" regarding Tehran's resumption of enrichment-related activities and urged it to "return to the moratorium", both also expressed early misgivings at a UNSC referral and the imposition of sanctions, maintaining that diplomacy should be pursued.⁹⁴ In agreeing that the IAEA Board should inform the UNSC, they insisted that nothing occur before a month, thereby buying time and another chance to avoid more punitive action.

Until recently, Russia had avoided direct involvement in negotiations, having little faith in their success, particularly without U.S. participation, and preferring to maintain good relations with both sides. In the words of a Russian foreign policy adviser, "Russia has no incentive to formally join this process. It's a dead end".⁹⁵ So far, the approach

110 mm tons of liquefied natural gas (LNG) from Iran. In October 2004 another state-owned oil company, Sinopec, signed a \$100 billion deal allowing China to import a further 250 mm tons of LNG from Iran's Yadavaran oilfield over a 25-year period. In addition to LNG, the Yadavaran deal provides China with 150,000 bpd of crude oil over the same period, and provides for further Chinese investment in Iranian energy exploration and infrastructure projects.

⁹² Bushehr's delay can be attributed to several factors: U.S. pressure on Germany and Russia, but also Moscow's difficulties in managing the large Bushehr construction site ... Iranian officials have been unimpressed with Russia's performance and have expressed a preference for Western suppliers for future plants. Crisis Group interviews, Tehran, March-July 2005.

⁹³ Crisis Group interviews, Washington, January 2006, Brussels, 2006.

⁹⁴ Agence France-Presse, 17 January 2006. In the words of Russian Foreign Minister Sergei Lavrov, sanctions are "not the best and by no means the only way to resolve international problems".

⁹⁵ Crisis Group interview, 23 September 2005. A senior EU diplomat concurred, saying, "the Russians don't want to join us. They benefit from sitting on the fence", Crisis Group Interview, Brussels, 21 September 2005.

has borne fruit: relations with Iran remain strong, and Moscow's role is deemed pivotal by the U.S. and EU.⁹⁶

With its offer to house an offshore enrichment site, however, Russia has entered the fray. Its broad outlines are known: Iran would not enrich uranium on its soil; instead, it would be allowed a large financial stake in a Russia-based enrichment facility from which it would import enriched fuel. But the offer remains vague on some key issues, such as whether Iran would have to forsake domestic enrichment permanently or whether the offshore project is designed merely as a temporary arrangement lasting until confidence is restored.

Despite, or probably because of its ambiguity, the proposal has received some favourable reactions from all sides. The EU and U.S. promptly endorsed it, albeit on the understanding that Iran would indefinitely suspend its right to domestic enrichment.⁹⁷ Iran initially displayed ambivalence, alternately denouncing and qualifiedly welcoming the ideas.⁹⁸ Officials suggested that while the proposal was "interesting as a provisional measure", it was "unacceptable" as a permanent or long-term substitute for a national enrichment scheme inside Iran.⁹⁹

Negotiations between Russia and Iran on the proposal, first scheduled to begin in mid-February, were delayed by Iran. They ultimately began unpromisingly on 20 February, with agreement after five hours of discussion

⁹⁶ In private, some U.S. officials were less charitable. "I don't know what Russia has in mind. They seem to enjoy playing one side off the other", Crisis Group interview, Washington DC, 20 October 2005.

⁹⁷ Crisis Group interview, U.S. official, Washington DC, 3 January 2005. Likewise, an EU diplomat explained that, in its view, the offer was for long-term rather than provisional arrangements", Crisis Group interview, 23 November 2005.

⁹⁸ A week after having described any offer that did not include enrichment on Iranian soil as "unacceptable" and "insulting", Iranian negotiator Javad Vaeedi explained that Tehran would "seriously and enthusiastically" study the Russian offer; *The New York Times*, 28 December 2005. More recently, Ali Larijani asserted that the Russian offer "should be considered along with other proposed schemes ... and cannot be dismissed as negative. [But] we believe that the proposal should be revised to become more complete. One round of talks have been held and the second one is expected to take place in the future"; IRNA, 27 January 2006. After the IAEA's decision to refer Iran's case to the UNSC, Iranian officials depicted the Russian proposal as effectively dead. Reuters, 3 February 2006.

⁹⁹ Crisis Group interview, December 2005. On the eve of the Iran/Russia talks, Iran's Foreign Minister stated: "The partners in the plan, the duration of the project, location of enrichment and consensus of all related parties would be significant to Iran". Associated Press, 19 February 2006.

only to meet again at an unspecified time and place.¹⁰⁰ While openly supportive, U.S. and EU officials privately worry Tehran will use them to dangle the possibility of compromise in order to avoid or postpone action at the UNSC.¹⁰¹ That sets up the possibility of growing tension among the Council's permanent members, and of the U.S. and its European allies forming a coalition of the willing to impose sanctions.

III. ALTERNATIVES TO DIPLOMACY: SANCTIONS OR MILITARY ACTION?

A. SANCTIONS

Throughout the nuclear crisis, the U.S. and some of its EU partners have periodically invoked the threat of UN Security Council-mandated sanctions in the hope this might spur a concession – in particular, adoption of the Russian proposal to enrich offshore – or, if imposed, slow down Iran's program.¹⁰² Iran's decision to resume activities at Natanz increased prospects that some form of penalty would be imposed. Nonetheless, the option continues to face two major hurdles: whether an international consensus can be reached, and whether in any event sanctions would have the desired effect at an acceptable cost.

Mustering Security Council support so far has proved elusive, with both Russia and China continuing to publicly oppose sanctions.¹⁰³ Others too, particularly in the developing world, chafe at the double standard that is being applied to deprive Iran of a right industrialised

¹⁰² According to British Prime Minister Tony Blair, military action "is not on the agenda", but rather "a mix of diplomatic persuasion and the threat of sanctions"; Bloomberg, 7 February 2006. "An IAEA finding of non-compliance (as opposed to an anomaly or a breach) that is not corrected results in mandatory referral to the Security Council. An abnormal situation that is rapidly addressed is considered an "anomaly". If further investigation reveals that the activities violate the Safeguards Agreement, they are considered breaches. For instance, Iran's import of nuclear materials from China, which was not reported in a timely manner, was deemed a breach of the agreement. Finally, if further investigation and information provided do not resolve the suspicion, the IAEA Board of Governors may make a determination of non-compliance, which triggers UNSC referral. In the past, Iran has been in breach of the Safeguards Agreement and, had corrective measures not been taken, could have been found in non-compliance. The resumption of activities at Natanz does not violate the Safeguards Agreement but is inconsistent with the IAEA Board of Governors' decision requesting a suspension of all enrichment activities. IAEA, gov/2005/77; "to re-establish full and sustained suspension of all enrichment related activity, as in gov/2005/64, and reprocessing activity".

¹⁰³ According to Russian Foreign Minister Lavrov, "in modern history, sanctions do not help resolve conflicts... Many countries do not want sanctions on Iran. A number of European countries, Russia and China do not support this". See *Financial Times*, 16 February 2006. Iran and China reportedly are on the verge of concluding a \$100 billion deal for China to develop Iran's Yadavaran oil field. Under the deal, China's state-owned Sinopec Group would acquire a 51 per cent stake in Yadavaran. *Wall Street Journal*, 17 February 2006.

¹⁰⁰ Steven Lee Myers, "Russian Talks with Iran on Nuclear Program Stall", *The New York Times*, 20 February 2006.

¹⁰¹ Crisis Group interview, Brussels, January 2006. Russian president Vladimir Putin held out hope that Iran might accept the proposal, saying, "we have heard various opinions from our Iranian partners on that issue. One of them has come from the foreign ministry – our partners told us they did not exclude the implementation of our proposal", Associated Press, 16 January 2006.

countries enjoy. Even the risk that Iran might move beyond fuel cycle capability to weapons production has generated a less than forthcoming response at a time when the nuclear powers have been seen as resisting cuts in their arsenals, not implementing earlier NPT Review Conference commitments, and, in the case of the U.S. and France, openly considering the tactical use of nuclear weapons.¹⁰⁴ The oil price rise also has checked whatever interest exists in economic sanctions.

Iran's eventual rebuff of Moscow's initiative, further evidence of its interest in weapons capability, or interference with IAEA inspections might well overcome remaining Russian and Chinese resistance. However, the UNSC – or, equally, an ad hoc multilateral coalition led by the U.S. and EU – would then face the difficult question of selecting appropriate, effective sanctions. The most punishing penalty – a ban on oil and gas sales – would be as likely to harm the international community as Iran.¹⁰⁵ Bowing to this reality, EU officials made clear that such sanctions were “not an option currently being considered”.¹⁰⁶ Moreover, and partly as an insurance policy, Iran has diversified its ties in recent years, signing multi-billion dollar oil and natural gas contracts with China and India, whose opposition to energy sanctions, therefore, is rooted in clear self-interest.

More frequently discussed than measures against oil exports is the prospect of other graduated sanctions – either through the UNSC or, again, an ad hoc coalition – such as denying travel visas to senior officials; freezing foreign bank accounts and assets of senior leaders; banning exports to Iran of all nuclear and missile technology, dual-use technologies and conventional weapons; a moratorium on all new economic agreements with Iran; a ban on all new investment, particularly by the EU¹⁰⁷ and focused on

its oil and gas infrastructure,¹⁰⁸ a ban on the export to Iran of refined oil products,¹⁰⁹ and imposition of land, air and sea interdiction regimes to prevent Iranian import of nuclear or dual use technologies.¹¹⁰

Alternative forms of pressure also have been mentioned, including barring participation in international sporting competitions, particularly the soccer World Cup.¹¹¹ While undoubtedly such a measure would cause considerable anger in Iran, history suggests that it would be directed less toward the regime than the West.

The likelihood of sanctions is one issue, their effectiveness another. Few observers believe that a sanctions regime, however tight, would persuade Iran's leaders to relinquish their fuel cycle program. Likewise, many non-proliferation experts emphasise that its scientists already have much of the needed know-how and that, should Iran choose to make it a priority, it would be able to acquire the required

developed a self-sufficiency reflex”. Crisis Group phone interview, 20 February 2006.

¹⁰⁸ According to an EU3 diplomat, “withholding investment [in Iran's energy infrastructure] would be powerful, though it would take time before the harm was felt”. Crisis Group interview, Washington, 2 February 2006. Iran has planned to invest approximately \$70 billion in its oil and natural gas sector over the next five years to modernise its infrastructure and keep up with its current oil production pace. At least half of that sum was expected to come from foreign investment. IRNA, 5 December 2004.

¹⁰⁹ Due to growing internal consumption and a shortage of refinery capacity, and despite its massive energy reserves, Iran has become one of the world's largest importers of gasoline. Some 40 per cent of all domestic demand is satisfied through imports, mainly from neighbouring Persian Gulf countries, such as the United Arab Emirates, Kuwait, and Saudi Arabia. Iran expends approximately \$4 billion annually on the importation of refined oil products.

¹¹⁰ For more on this, see Crisis Group Middle East Briefing, *Iran: Where Next on the Nuclear Standoff*, 24 November 2004, and Kenneth Pollack, *The Persian Puzzle*, (New York, 2004), p. 401. Several prominent U.S. politicians have called for multilateral sanctions: “We should ask allies who trade with Iran to join a sanctions campaign against Tehran Aside from those covering food and medicine, we shouldn't rule out any type of sanction A multinational sanctions regime might begin with an embargo on technologies that Iran can use in its nuclear program. If these initial sanctions prove ineffective, the program might escalate in stages to include a ban on arms sales and penalties for suppliers Further sanctions could include limits on the export of civilian technologies, such as machine tools, that have military applications, and, eventually, the full spectrum of measures the U.S. has in place to isolate Iran and persuade its rulers to give up their nuclear ambitions”; Senate Majority Leader Bill Frist, *Los Angeles Times*, 26 December 2005.

¹¹¹ See, e.g., Patrick Clawson, *New Republic*, 16 August 2005.

¹⁰⁴ A 2001 U.S. Nuclear Posture Review evoked potential development of a low-yield, “bunker-busting” nuclear design (the Robust Nuclear Earth Penetrator). The current status of the project is unclear. See <http://www.carnegieendowment.org/static/npp/npr.cfm>. See also Speech by President Jacques Chirac, during his visit to the French Strategic Forces at L'Ile Longue, 19 January 2006.

¹⁰⁵ For Ali Larijani, “Iran is a hard target. If [the West] thinks they can limit us by oil sanctions or other sanctions, they are wrong. Oil sanctions will only increase the price of oil”; Agence France-Presse, 1 November 2005. An EU official agreed that oil sanctions would “probably hurt the EU more than Iran”; Crisis Group interview, Brussels, 20 September 2005.

¹⁰⁶ Crisis Group interview, Washington, DC, 17 November 2005.

¹⁰⁷ In the words of an EU commission official, “Up until now, Iran has been very dependent on EU investment . . . despite recent increases in investments from China and India”. He added, however, that “the impact of EU investment sanctions should be nuanced. As a result of U.S. sanctions, Iran has

technology and infrastructure.¹¹² “Given the state of the international black market, we have little doubt that Iran would be able to develop a program regardless of sanctions. But perhaps we can at least slow it down somewhat”.¹¹³

That said, sanctions clearly would hurt Iran and the threat of their imposition may well have an impact in moderating its leaders’ behaviour. As analysts have pointed out, the country is “a net importer of refined oil products, including gasoline”; a ban on exports “could bring its economy to a grinding halt” and hurt the regime’s most loyal constituency;¹¹⁴ and energy sector investment sanctions have the potential to cause some pain.¹¹⁵ In other words, though they are by no means a solution, sanctions cannot be left entirely off the table either. The threat of possible sanctions does not appear to have had much influence to date in persuading Iran to relinquish its ambition to achieve full fuel cycle capability, and may not be much help in achieving the preferred “zero enrichment” option discussed below because the capacity to enrich domestically is considered vital by Iran.

But the credible threat of sanctions, combined with appropriate incentives, may well be what is needed to persuade Iran to accept the “delayed limited enrichment” compromise proposal presented below.

B. MILITARY ACTION

As the nuclear crisis has deepened and concerns over Ahmadi-Nejad worsened, hints of a possible military strike have increased,¹¹⁶ with President Bush pointedly refusing to take that option off the table,¹¹⁷ and the Israelis being more explicit: leading officials and politicians have warned that all means would be used to prevent Iran from

acquiring a nuclear military potential. Defence Minister Shaul Mofaz, himself of Iranian origin, asserted: “Under no circumstances would Israel be able to tolerate nuclear weapons in Iranian possession”.¹¹⁸ But these seem more an indication of despair over diplomacy than born of any real confidence in military action. The downsides are many and serious: attacks would need to be on a large scale and very destructive; they would generate a frightening response; and their ultimate efficacy cannot be assumed.

Western intelligence services lack basic information regarding the location of nuclear facilities. They purposefully have been spread around the country in order to avoid a repeat of Israel’s 1981 attack on Iraq, and the ability to identify small and modular centrifuge cascades scattered across the countryside is extremely limited.¹¹⁹ A successful attack would require the destruction of a large number of targets through a protracted air campaign, and could not be assumed to be successful in finding and destroying them all. It would inevitably involve much collateral damage: it must be assumed that many of those targets which have been, or could be, identified would be in heavily civilian-populated areas, or alongside or within highly sensitive sites like hospitals. And any substantial air campaign would certainly require the taking out of Iran’s significant air defences. In short, military action against Iran would be full-scale war, not surgery.

Should it be attacked, Iran possesses a wide range of potentially lethal responses, most obviously in Iraq, where, through its abundance of allies, it could further destabilise the situation and target U.S. forces, particularly by mobilising some members of the Shiite constituency. Terrorist attacks orchestrated by Iran could wreak havoc throughout the Middle East, and extend to the West itself. In discussions with European officials, Iran has said it could be “helpful” on a wide variety of Middle Eastern

¹¹² According to Henry Sokolski, a non-proliferation expert, “for several years, Iran has probably had what it needs to eventually build nuclear weapons. It has people with the knowledge needed to build these weapons as well as, probably, the necessary material”, Washington Institute for Near East Policy, Policy Watch #1056.

¹¹³ Crisis Group interview, EU official, Paris, January 2006.

¹¹⁴ Levine, Turkeltaub and Gorbanski, “Three Myths About the Iran Conflict”, *Washington Post*, 7 February 2006.

¹¹⁵ See footnote 107 above.

¹¹⁶ According to Republican Senator John McCain, “We cannot take the military option off the table . . . There’s only one thing worse than the United States exercising the military option, and that is Iran having nuclear weapons.” Fox News Sunday, 22 January 2006. Joseph Lieberman, a Democratic Senator, echoed this view: “I want the people that lead Iran to understand that [the military option] is on the table”. “Face the Nation”, 22 January 2006.

¹¹⁷ Crisis Group interviews, Washington, November 2005.

¹¹⁸ *Christian Science Monitor*, 28 November 2003. According to former Prime Minister Benjamin Netanyahu, who is again running for the premiership, “I will continue the tradition established by Menachem Begin, who did not allow Iraq to develop such a nuclear threat against Israel, and by a daring and courageous act gave us two decades of tranquillity . . . if it is not done by the present government, I intend to lead the next government and to stop this threat. I will take every step required to avoid a situation in which Iran can threaten us with nuclear weapons”; Associated Press, 5 December 2005.

¹¹⁹ Although Iran’s air defence system was largely in tatters by the end of its war with Iraq, it has rebuilt its capabilities with an eye towards defending its nuclear facilities, in particular from strikes by manned aircraft using gravity bombs as well as stand-off precision-guided munitions. The requirement of heavy, sustained strikes would appear to rule out a strike by Israel, which lacks the requisite airpower. Crisis Group interviews, Jerusalem, January 2006.

issues if an understanding on the nuclear issue were reached, but the inference is clear that the opposite could also be true.¹²⁰ There are other consequential risks. A military strike could send the price of oil skyrocketing, particularly if, as threatened, Iran attempted to close the Strait of Hormuz, the world's principal passageway for oil exports.¹²¹ It also likely would provoke a considerable domestic backlash, with even opponents closing ranks behind the regime, at least in the short-run.¹²²

Finally, while a raid likely would delay nuclear advances, it risks having only a temporary effect, probably delaying the development of Iran's nuclear capability by no more than a very few years. Iraq was unable to reconstruct Osirak, destroyed in 1981 by the Israeli air force, but its nuclear program on the eve of the 1991 Gulf War was significantly more advanced than before that attack. Iran would not confront a similar shortage of resources, has done a far better job of diversifying its sites and in all likelihood would redouble its efforts after a strike.¹²³

Meanwhile, the threat of military action only strengthens those in Iran who argue the country needs a nuclear deterrent. All in all, a so-called preventive military option would entail very high costs, for very dubious benefits. That, of course, is different from the threat or use of military retaliation in the event Iran acquires a military nuclear capacity. In those circumstances, the U.S. would be entitled to rely on a version of the nuclear deterrence strategy, including massive retaliation, that helped avoid nuclear confrontation during the Cold War.¹²⁴

¹²⁰ Crisis Group interview, January 2006.

¹²¹ According to Mohammad Saeedi, a spokesman for Iran's Centre for Nuclear Energy, "we have told the Europeans very clearly that if any country wants to deal with Iran in an illogical and arrogant way ... we will block the Strait of Hormuz", *Wall Street Journal*, 18 August 2005. Approximately 25 per cent of the world's daily oil supply travels via the Strait. That said, Iran would find it very difficult to maintain closure in the face of U.S. naval counter-measures. The Strait was mined at times during the 1980-1988 Iran-Iraq war but was kept open by international naval patrols.

¹²² As opposed to the period immediately following the defeat of the Taliban in Afghanistan, when some Iranians privately looked forward to the possibility of a U.S. military intervention in their country, such talk is virtually non-existent today. Indeed, the U.S. has lost considerable political capital in Iran as a result of the Iraq war. "The U.S. is not concerned about the well-being of our people. It is looking out for its own interests. Look at the situation in Iraq; they don't care about democracy, they're after oil. I am not defending my government; nobody is happy here. These 'death to America' slogans are useless. I would like to have relations with the U.S. But no one wants U.S. soldiers or missiles in this country"; Crisis Group interview, Tehran resident, 9 April 2005.

¹²³ See Crisis Group Middle East Report N°18, *Dealing with Iran's Nuclear Program*, 31 October 2003. According to Kenneth Pollack, while military strikes should not be ruled out, "at present, this policy has little to recommend it since Western intelligence agencies do not believe they know enough about the Iranian nuclear program to know all of the sites to be hit; there is reason to believe that even strikes that successfully destroyed the entire program as it currently exists would not set Iran's efforts back for very long since Iran is probably far enough along in its efforts to be able to reconstitute quickly; and Iran can do considerable damage to Western interests, with terrorist attacks, subversion, and clandestine operations against Coalition forces in Iraq". Prepared testimony, House Armed Services Committee, 29 September 2005.

¹²⁴ Iran's leaders, while radical in many of their concepts of government and expressed goals, have shown themselves to be pragmatic when calculating the interests of their country. There is no reason, therefore, to believe that they would not be sensitive to the same logic of nuclear deterrence as other countries in possession of nuclear military capacities have shown themselves to be.

IV. THE PREFERRED DIPLOMATIC SOLUTION: ZERO ENRICHMENT

Sceptics who claim that there is no possible diplomatic outcome may well be right. The parties' apparently deeply entrenched positions, together with growing evidence of Iran's determination to achieve a nuclear military capacity, give reason for pause. At a minimum, Tehran appears to have little inducement to compromise at this time: it feels emboldened, virtually unconcerned about either international sanctions, or, with the U.S. embroiled in Iraq, American coercive action. From the regime's perspective, it follows that this probably is not the time to concede but rather to press ahead, strengthening its position for the day genuine negotiations or confrontation with the U.S. might begin. The U.S., wholly absorbed by Iraq, has yet to show great urgency, engagement or creativity. As a result, while all know that time will not resolve this conflict, its principal protagonists appear in no hurry to find a way out.

Iran's resumption of conversion and enrichment-related activities undoubtedly elevated the crisis to a new height. But, these processes are difficult to master, and most experts agree that it would take Tehran several years at least to produce the large quantities of weapons-grade materials to develop a military program.¹²⁵ The period ahead should be used to pursue a diplomatic approach, in the first instance a "zero enrichment" outcome, built upon a proposal already on the table from Russia, involving credible international assurances of fuel supply.

From the international community's perspective, the unquestionably optimal outcome is one in which Iran would indefinitely suspend its domestic enrichment, thereby both defusing the crisis and avoiding any potential harm to the non-proliferation regime. As the U.S. and EU see it, even a low-level enrichment capacity potentially could provide Tehran with the necessary know-how clandestinely to develop a military potential under the guise of a civilian program.¹²⁶ Notwithstanding increased U.S. and EU flexibility – for example, on conversion

and off-shore enrichment – their position on domestic enrichment in Iran has remained firm.

Conversely, the right to enrich uranium on its soil has been Tehran's consistent bottom line, from one president and from one negotiating team to the next.¹²⁷ In the words of former lead negotiator Hassan Rowhani, "we want Iran to be recognised as a member of the nuclear club, that means Iran be recognized as a country having the nuclear fuel cycle, and enriching uranium".¹²⁸ Ali Larijani echoed these words: "Absolutely, [Natanz] is part of our program. We are not stopping short of enrichment".¹²⁹

Hardliners and pragmatists alike are intent on ensuring nuclear autonomy, for reasons both old and new. The old reasons are national aspirations to regional power status, and Iran's painful experience during its war with Iraq, when the international community turned a blind eye to chemical weapons attacks against its people. The new ones are the nuclear status of India and Pakistan, encirclement by U.S. troops and pro-American neighbours, and renewed tensions with the West.¹³⁰ In the words of an Iranian diplomat, "the issue of enrichment is symbolic. If we were to relinquish our legal rights on this issue, the U.S. would only continue to try to hinder our national rights

¹²⁷ In the words of a senior EU diplomat, "Iran's position at least has the merit of being clear." Crisis Group interview, Tehran, March 2005

¹²⁸ *Asia Times*, 9 March 2004.

¹²⁹ BBC interview with Ali Larijani, 8 November 2005. President Ahmadi-Nejad said in his 17 September 2005 address to the UN General Assembly: "The peaceful use of nuclear energy without possession of [the] nuclear fuel cycle is an empty proposition. Nuclear power plants can indeed lead to total dependence of countries and peoples if they need to rely for their fuel on coercive powers, who do not refrain from any measure in furtherance of their interests. No popularly elected and responsible government can consider such a situation in the interest of its people. The history of dependence on oil in oil-rich countries under domination is an experiment that no independent country is willing to repeat", op cit.

¹³⁰ Scientific and technological advancement are pillars of the Islamic Republic's twenty-year plan and are frequently invoked by Supreme Leader Khamenei as a way to maintain independence from the West. In his words, "the West is opposed to the progress and development of the Iranian nation. They do not want an Islamic and independent country to achieve scientific progress and possess advanced technology in the Middle East region, a region which possesses most of the world's oil and which is one of the most sensitive regions in the world. The fact of the matter is that Western powers would like the nations in the Middle East region, including the Iranian nation, to be always dependent on them. This is why they say that it does not matter if we have nuclear power plants, but they insist that we should buy nuclear fuel for our power plants from them!" Khamenei speech in Mashad, 21 March 2005.

¹²⁵ Most experts believe Iran is at least several years from being able to acquire its first nuclear weapon. According to a U.S. National Intelligence Estimate, Iran may be as far as a decade away from manufacturing the key ingredient for a nuclear weapon. See *Washington Post*, 2 August 2005. Others have spoken of anywhere between 3 to 5 years. For a discussion, see Albright and Hinderstein, "Iran's Next Steps: Final Tests and the Construction of a Uranium Enrichment Plant," Institute for Science and International Security, 12 January 2006.

¹²⁶ Crisis Group interviews with George Perkovich and Bob Einhorn, October 2005. Crisis Group interview, Paris, January 2006.

and access to other forms of technological progress”.¹³¹ Iran also has unpleasant memories of relying on outsiders for nuclear fuel.¹³²

How susceptible this position is to outside incentives and pressures is unclear. But one thing is not: without far more tangible and significant incentives, Iran will not compromise on its position. In this respect, the Russian proposal is a first step, but one that likely falls short. Iran’s position that it has the right to enrich on its soil is backed by the NPT,¹³³ and even EU officials concede privately that their contrary stance – that there may be a legal right to produce peaceful nuclear energy but no “right to enrich” – is a political rather than legal position.¹³⁴ For now, contemplation of the Russian proposal appears to reflect tactical rather than genuine interest from all sides. Iran wants to gain time and avoid consolidation of a U.S./EU/Russian consensus; Russia is vying for a return to international diplomacy on a critical issue; the EU is

¹³¹ Crisis Group interview, 5 October 2005.

¹³² “Before the revolution Iran had a contract with the USA for the supply of fuel for a reactor. They gave the reactor but refused to give the fuel ... Siemens, the German Company, was to construct a power plant but they cancelled the contract. We have a share in Eurodif of France, 10 % but they didn’t give us one gram of fuel. . . I think if a country has just a little brain it would not depend on the fuel from another country”; interview with Ali Larijani, *USA Today*, 6 February 2006. This historical background – and in particular the unsuccessful arrangement with France – is often invoked by Iran to explain its reservations regarding the analogous off-shore Russian proposal.

¹³³ Article II of the NPT states that: “Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices”. Article IV provides that: “1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of this Treaty. 2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organisations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world”.

¹³⁴ Crisis Group interview with senior EU official, Brussels, January 2006. Of course, if a country is found in violation of Article II, it forfeits its rights under Article IV.

desperate for a way out; and the U.S. is in no hurry for the crisis to come to a head. Substantively, Iran already has indicated that the offer cannot be an alternative to domestic enrichment and, given its disappointing experience both with Bushehr and, earlier, with French nuclear cooperation in the 1970s, is extremely wary of dependence on any third party. It also has indicated it would want to share not only a financial, but also a technological stake in any offshore venture – in other words, it would want its scientists to have access to the facility, thereby acquiring the necessary nuclear know-how, a position adamantly rejected by the West.

The more relevant question is whether, strengthened with accompanying substantial incentives, the Russian offer could be turned into a broader bargain that addresses Iran’s core needs. Here, given the concession Iran would be required to make (relinquishing any indigenous enrichment program), the key would be what the U.S. offered: security guarantees; de facto recognition of Iran’s regional power status, and the prospect of lifting sanctions and normalising bilateral relations.¹³⁵ For these latter steps to be taken, of course, Iran also would need to be responsive on other issues of concern to the U.S., chiefly its support for militant, violent groups and opposition to the Arab-Israeli peace process.

Reaching such a bargain clearly would be the best possible outcome, creating the conditions for a much more normal relationship between Iran and the West.¹³⁶ As a result, there is every reason to pursue the Russian proposal and to exhaust its potential. But, unhappily, there also is reason to be sceptical. Neither side of late has evinced any interest in meaningful bilateral discussions, let alone a deal on this scale. The U.S. has no desire to legitimate a regime it finds abhorrent – and retains the at least theoretical desire to remove – and President Ahmadinejad appears to be taking his country in an ever more confrontational direction. Nor, as already discussed, are sanctions likely to prove effective, in the context of the step presently being asked of Iran. At bottom, the political and psychological contexts for such a deal do not seem to exist.

¹³⁵ See for example Sadegh Zibakalam, “with assurances, Iran might accept a nuclear deal”, *Bitterlemons-international.org*, 5 January 2006. According to a senior Iranian official close to Ayatollah Khamenei, Iran’s ultimate goal is to win security guarantees from the U.S. at a time when its troops are on Iran’s borders. “How can the world expect us to sit back and not defend ourselves?”, quoted in *Newsweek*, 23 January 2006.

¹³⁶ A grand bargain “would allow both sides to secure what they need and possibly pave the way to a normal relationship. It would allow the United States and Iran to sort out their differences in a cooperative framework, rather than a confrontational contest”. Kenneth Pollack, *The Persian Puzzle*, op. cit., p. 395.

V. THE FALLBACK DIPLOMATIC SOLUTION: DELAYED LIMITED ENRICHMENT

If the preferred “zero enrichment” option, building on the Russian proposal to guarantee Iran’s uranium supply from offshore proves unachievable, the EU and Iran, supported by the U.S., Russia and China, should explore new diplomatic avenues for addressing the crisis. That exploration should rest on these core principles: first, reassuring the international community of Iran’s intentions; secondly, providing Iran with assurances that, once such confidence has been restored through satisfaction of clear benchmarks and pursuant to a predictable timetable, it can gradually engage in domestic enrichment, albeit initially under strict limitations and always with robust international verification.

This “delayed limited enrichment” option described below requires flexibility on all sides: from the EU, recognition

that Iran has the right to domestic enrichment coupled with a sequence of defined steps at the end of which that right can be exercised; from Iran, acceptance that domestic enrichment must be delayed and then limited; from the U.S., agreement to support the proposal with incentives of its own; and from the EU, Russia and China a commitment to meaningful sanctions should Iran reject or violate the deal. The proposal is designed to provide the international community with sufficient confidence that Iran’s program will not be diverted into military channels and Tehran with the assurance that its rights will not be infringed.

The scheme covers three phases: an IAEA assessment phase with enrichment suspension; a limited and monitored enrichment phase; and a long-term phase. However, if Iran in the context of the following proposal refuses to suspend enrichment activities and does not reverse its recent steps, action by the UNSC and gradual imposition of sanctions would become necessary.

Phase 1 (2-3 years): Suspension Pending Full IAEA Assessment

1. The IAEA conducts, for as long as is necessary, the detailed assessments required to satisfy itself that all declared nuclear material (including what has been brought to light post-2003) “has remained in peaceful nuclear activities or has been otherwise adequately accounted for” in accordance with Iran’s Safeguards Agreement,¹³⁷ and to build international confidence in Iran’s peaceful nuclear intentions.
2. Iran’s parliament ratifies the NPT’s Additional Protocol.
3. Iran suspends all enrichment activity on its territory, including the manufacture and testing of centrifuges. Nuclear material from the Isfahan uranium conversion plant and the Bushehr nuclear power station is sent to Russia for temporary storage, further processing or further enrichment, pursuant to agreed bilateral arrangements. All centrifuges in Iran are disconnected, centrally stored, and placed under IAEA seal. The construction of heavy water facilities and plutonium-separation activities also are suspended.
4. The IAEA continues and intensifies its verification activities in Iran. This entails a continuous inspector presence as well as remote surveillance at centrifuge facilities together with intensive safeguarding at the Isfahan uranium conversion plant.
5. The EU provides economic incentives on non-strategic matters – with U.S. support as required – such as spare parts for commercial airplanes, resumption and conclusion of negotiations on a trade and cooperation agreement (suspended last August), and supports Iran’s accession to the WTO.¹³⁸ The EU also allows its equipment suppliers

¹³⁷ The language within quotation marks is a standard IAEA formulation. Such assessments and declarations have been undertaken under the framework of conventional safeguards agreements for countries with earlier full or burgeoning weapon programs, such as South Africa, Brazil and Argentina. In his November 2005 report to the Board of Governors, the IAEA Director General clarified what remained to be done to verify that all declared nuclear materials have been fully accounted for. Specifically: (1) supply by Iran of additional information regarding previous activities at all relevant sites, including military ones; (2) accounting for the presence of enriched uranium at several locations; (3) understanding the scope and chronology of Iran’s P-1 and P-2 centrifuge programs; (4) obtaining additional assurance that no P-2 program was conducted between 1995 and 2002; (5) provision by Iran of information and documentation related to the procurement of dual use equipment; (6) visits to relevant military owned workshops and R&D locations associated with the Physics Research Centre and the Lavisian-Shian site; (7) undertaking additional visits to the Parchin military site; and (8) taking environmental samples from additional locations.

¹³⁸ The European proposal should build on the technological, economic, political, and security framework for long-term cooperation between the EU and Iran presented by the Europeans in August 2005. See full text at www.iaea.org/Publications/Documents/Infcircs/

to participate in the construction and/or procurement of Iranian nuclear power plants, as set forth in its August 2005 proposal.

6. Should the IAEA Director General conclude at any time during this phase that Iran has not cooperated in good faith with the IAEA, its Board of Governors will report the matter to the UNSC for further action.

Phase 2 (3-4 years): Limited Enrichment

7. Designed to allow, over a reasonable period of time, further international confidence to build in Iran's peaceful nuclear intentions, if the evidence so allows it, this phase would last until the IAEA concludes that it has "found no indication of undeclared nuclear materials and activities for the State as a whole".¹³⁹ Approximately three to four years will be required to achieve this confidence level.
8. During this phase, Iran may carry out a limited, monitored, low-enrichment scheme at a pre-agreed level sufficient for research and development as well as pre-industrial development (at most several hundred first-generation centrifuges at an enrichment level below 5 per cent). Unused centrifuges are to be disconnected, centrally stored, and placed under IAEA seal, and the IAEA is to verify that the manufacture of centrifuges is suspended.
9. The low-enriched uranium produced from the pilot centrifuge facilities is either stored outside the country, similar to the converted uranium in Phase 1, or immediately converted into fuel rods and loaded into domestic nuclear power plants.
10. The IAEA maintains an intrusive inspection and monitoring regime, consistent with and exceeding provisions of the Safeguards Agreement and Additional Protocol. In particular, IAEA inspectors are to have access to additional relevant sites and be granted the right to continuous presence, remote surveillance and wide-area monitoring.
11. The EU provides greater economic cooperation, building on the previously agreed Europe-Iran Trade and Cooperation Agreement. This would include normalising Iran's status under G-8 export control regulations.

Phase 3 (indefinitely thereafter): Long-term Arrangements

12. The IAEA inspection regime would revert to that specified by the Safeguards Agreement and the Additional Protocol.
13. Iran and the EU would desirably agree on multilateral co-ownership of Iranian fuel cycle facilities of an industrial scale, in particular for uranium enrichment.¹⁴⁰
14. Iran permanently foregoes spent fuel reprocessing (the chemical separation of plutonium) and the establishment of a heavy water infrastructure.
15. This phase reflects overall normalisation of the relationship between the parties, with arrangements and disputes settled according to normal international commercial practice, such as those of the International Chamber of Commerce in Paris.

2005/infirc651.pdf. The Europeans also should guarantee Iran's access to EU markets and investment and recognise Iran as a major source of energy supply.

¹³⁹ Again, the language within quotation marks is a standard IAEA formulation.

¹⁴⁰ The notion of a multilateral nuclear arrangement in Iran designed to minimise Western concerns while satisfying Tehran's core demand was suggested by Crisis Group in a report issued on 27 October 2003, *Dealing with Iran's Nuclear Program*. A variant recently has been advocated by Geoff Forden and John Thomson. See "A Shared Solution to the Iran Nuclear Stand-Off", *Financial Times*, 20 February 2006: "We suggest operations owned and controlled by a holding company with governments as shareholders. Initially, these might be Iran and Britain, Germany and France (the EU3), with Russia as one possible addition. The shareholders would jointly meet costs and share profits. The holding company would lease all Iranian facilities connected with enrichment, including their existing centrifuges."

In order to facilitate such an agreement, other actors will have to be indirectly involved. The U.S. in particular would play a critical role by offering de facto security guarantees, committing neither to threaten nor use force against Iran and taking steps to build a regional security forum.¹⁴¹ Subject to Iran's compliance with the agreement, Washington also should take the necessary steps to support EU economic incentives (described above) and refrain from interfering with Iran's import of nuclear technologies and materials for civilian purposes, in accordance with Article IV of the NPT.

It is conceivable that even such a U.S. stance would not be sufficient to persuade Iran to accept this compromise and that it may seek additional commitments from Washington on such matters as the unfreezing of assets in the U.S., lifting of sanctions, resumption of diplomatic relations and discussions of mutual security interests in the region. Washington in turn would insist that some of those measures could be considered only in the context of Tehran's preparedness to implement parallel steps on matters of strong U.S. concern, including Iranian support for militant groups. In other words, it is conceivable, though not inevitable, that the sides would need to reach a package solution to many of the other sensitive issues that have troubled Iran's relationship with the U.S. in order to agree a mutually acceptable compromise on the nuclear issue. Given the difficulties inherent in treating so many issues at this time, however, it would be preferable to concentrate, at least in the first instance, on defining a package of U.S. incentives that would match Iranian concessions on the nuclear issue.

Russia would have both a direct and an indirect role. As laid out above, it will need to reach agreements with Iran with regard to Phase 1 (on the storage and further processing and enrichment of material from the Isfahan uranium conversion plant) and Phase 2 (on the possible storage of low-enriched uranium produced from the pilot centrifuge facilities). In addition, it will be expected to take back all spent fuel produced during operation of the Bushehr nuclear power station.

Finally, and in tandem with China – and the EU, whose role in this context is at least as much about threatening sticks (particularly investment sanctions) as it is offering additional carrots – Moscow will have to make clear in advance that it will support UNSC action and gradual

imposition of sanctions should Iran reject or violate the agreement. These sanctions should include, over time and in the event of continued Iranian refusal or non-compliance:

- ❑ A ban on the sale or transfer of all nuclear and missile technology, dual-use technology, and conventional weapons;
- ❑ A moratorium on new economic agreements and a ban on new investment in Iran's oil and gas industry and infrastructure;
- ❑ Restrictions on export of non-oil or gas products and of refined oil products to Iran;
- ❑ A ban on new contracts for the import of Iranian gas; and
- ❑ Imposition of land, air and sea interdiction regimes to prevent Iranian import of nuclear or dual use technologies.

¹⁴¹ According to Dr. Javad Zarif, Iran's ambassador to the UN, "it is time to finally establish an indigenous and internationally guaranteed security arrangement under UN auspices. . . As the region's largest and most populous country, Iran has a great stake in discouraging a renewed arms race, especially one involving unconventional weapons". *New York Times*, 10 May 2003.

VI. DELAYED LIMITED ENRICHMENT: OBJECTIONS AND ANSWERS

The delayed enrichment proposal set forth in this report will provoke objections from the U.S. and EU, which will argue that it both unwisely rewards Iran for misbehaviour and enables it to acquire the necessary nuclear know-how for a weapons program; and from Iran, which will complain of unprecedented and unjustified delay in the exercise of its rights. However, the proposal should not only be judged on its merits but also compared to the alternatives.

At the moment, the issue is heading at best toward an unstable standstill, more likely crisis. The current U.S./EU approach depends on a wall-to-wall international consensus which remains elusive as neither Russia nor China favours confrontation. Events are moving closer to UNSC action, but key countries will be hard pressed to agree on how hard to push Iran. Neither sanctions nor, should it come to that, military action are at all certain, or even likely, to succeed: in many respects, both could prove counterproductive. Meanwhile, Iran could consider various steps, including NPT withdrawal, barring IAEA inspectors and expanding its enrichment activities while leaving the international community with scant monitoring means.

There is no guarantee that a last-ditch effort at compromise would succeed. Certainly, regional dynamics all point in the opposite direction. Both Iran and the U.S. are convinced of the other's hostile intent and appear to be taking steps in anticipation of an inevitable confrontation: in this context, Tehran sees every reason to accelerate its nuclear program, and Washington every motivation to thwart it.

Still, neither side appears eager to bring the situation to the brink. Given that it will be several years before Iran could develop a nuclear weapon and the serious risks of escalation, the benefit of testing a genuine compromise far outweighs the costs. As argued, a solution under which Iran would indefinitely forego its right to enrich uranium on its soil would be preferable, but, at this point, probably unattainable. The alternative should be a creative and sustainable compromise along the lines of the delayed enrichment scheme.

There are answers that can be made to all the various objections likely to be raised to this proposal, both in the West and in Iran:

Objection 1. Phase 2's pilot enrichment program would allow Iran to acquire the know-how required to build a nuclear weapons program.

Answer: U.S. and EU officials argue that once equipped with the requisite knowledge, Iran would gain self-sufficiency, and it would subsequently be virtually impossible to thwart its nuclear ambitions. While this is a legitimate concern, there is evidence that Tehran already possesses the necessary enrichment know-how.¹⁴² According to the IAEA, it began centrifuge testing in 1988 and at a minimum already has spun hundreds of centrifuges.¹⁴³ There also is mounting evidence that the A.Q. Khan network and other illicit suppliers have provided instructional material.¹⁴⁴ In and of itself, the low number of centrifuges allowed under this proposal would not put Iran significantly closer to a nuclear weapon given the time it would take to produce sufficient quantities of enriched uranium: in the event of a breakout scenario (abrupt withdrawal from the NPT), Iran would need at least five to six years, assuming an enrichment cascade of some 500 first-generation centrifuges of the design available in-country.¹⁴⁵

More significantly, a limited enrichment scheme must be measured against the most likely alternative in case of a breakout: no safeguards agreement, meaning no inspection or direct surveillance other than unreliable satellite

¹⁴² Crisis Group interview with Iranian official, September 2005; Crisis Group interview with former IAEA senior official, Zurich, 25 September 2005.

¹⁴³ Crisis Group interview, Iranian official, September 2005. See also IAEA, "Report to the Board", gov/2004/83.

¹⁴⁴ Iran's involvement with the A.Q. Khan network allegedly went back as far as the late 1980s, when there were rumours of secret Pakistani-Iranian nuclear cooperation. Khan allegedly provided assistance on centrifuge technology throughout the 1990s, funnelling components through a sophisticated global network of European and other front companies, while Russians and Chinese supplied the rest. See William Langewiesche, "The Point of No Return", *The Atlantic Monthly*, January 2006.

¹⁴⁵ Several European analysts have advocated a similar limited enrichment option. See, e.g., Tim Guldemann and Bruno Pellaud, "A Plan to Bring about Nuclear Restraint in Iran", *Financial Times*, 27 June 2005; François Nicoullaud, former French ambassador in Iran, wrote in *Le Monde*, 18 September 2005, "is it really dangerous to allow Iran to operate an enrichment research and development facility...when it takes 500 centrifuges of the design available in Iran and four to five years to produce the required amount?"; François Heisbourg, "The EU-3 may find that they are compelled to give in to Iranian demands concerning uranium conversion...or a pilot enrichment facility....A pilot enrichment facility, if it were of a scale not exceeding current Iranian capabilities (i.e. less than 200 centrifuges) would presumably not be a significant direct threat in terms of acquiring nuclear weapons", Centre For European Policy Studies, ESF working paper no. 20, June 2005; Bruno Tertrais, Senior Research Fellow, "Crescent of Crises: U.S.-European Strategy for the Greater Middle East", Fondation pour la Recherche Stratégique, Washington, DC, The Brookings Institution Press, 2005.

monitoring, as currently is the case with North Korea. Despite the inevitable risks, it is preferable to have in place a closely monitored, limited-capacity facility with continuous surveillance. The effort, in other words, should focus on establishing as effective IAEA inspection procedures as possible, so as to be in a position to verify Iran's intentions and actions.

Objection 2. Phase 2's pilot enrichment facility could help mask a clandestine weapons program facility by creating "legitimate" environmental traces of enriched uranium.

Answer. Various officials and experts have expressed concern that a limited enrichment program would complicate verification by making it harder to detect clandestine activity.¹⁴⁶ However, any trace of enrichment higher than 5 per cent would stand out and be deemed indicative of clandestine activity. Depending upon how extensive and precise a measurement network it is able to establish, the IAEA might even be in a position to locate the geographic source of contamination at a lower enrichment level, again forcing Iran to justify the presence of enriched uranium at any non-declared facility.

Objection 3. Iran fears that a delayed enrichment scheme would be used to eliminate the right to enrichment.

Answer. Deeply suspicious of Western intentions, Iranian officials worry that negotiations are being drawn out to gain time for modifying the non-proliferation regime and so deprive Iran of its current rights.¹⁴⁷ This allegedly is a central reason why it resists any commitment to suspend enrichment and a reason why it might reject a delayed enrichment option.¹⁴⁸

Statements by various officials have fuelled this apprehension. On 11 February 2004, President Bush called on members of the 40-country Nuclear Suppliers Group (NSG) to "refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants", arguing that "we need to set a new global norm, which says regardless of Article IV of the NPT, it is not OK that weapons-usable nuclear material,

and access to that, spreads to new States".¹⁴⁹ Agreeing in part, ElBaradei argued that NPT needs ought to be "re-evaluated". Concerned at the prospect of many countries mastering the enrichment process, he advocated a system in which enrichment would be undertaken by an international consortium of countries, with "companies under appropriate control providing the fuel and then taking back the spent fuel under international supervision so you get electricity without the risk associated with the technology".¹⁵⁰

Expressing dissatisfaction with the existing regime, UN Secretary-General Kofi Annan commented: "While the access of non-nuclear weapon States to the benefits of nuclear technology should not be curtailed, we should focus on creating incentives for States to voluntarily forego the development of domestic uranium enrichment and plutonium separation capacities, while guaranteeing their supply of the fuel necessary to develop peaceful uses".¹⁵¹ All these statements feed Iran's eagerness to beat the clock by establishing its enrichment rights under the existing regime before any modification.

Assuming it is genuine, the concern appears at the very least exaggerated. The next NPT Review Conference is not scheduled to take place before April 2010, and Iran is far from alone among the 184 non-nuclear weapons states in opposing new restrictions. This opposition likely will persist as long as nuclear weapon states make little progress on their own commitments to disarm.

Objection 4. Iran fears that the intrusive inspections regime of Phases 1 and 2 could be used to monitor other facilities and activities.

Answer. Iranian officials worry that extensive surveillance procedures that go beyond those required by the Additional Protocol could be diverted for broader intelligence purposes; this concern applies in particular to sensitive government office buildings, official residences, and military facilities. They point to the Iraqi precedent, where inspections were used to gather sensitive information for hostile use. An Iranian diplomat alleged that his country's intelligence service had recovered

¹⁴⁶ Crisis Group interview, Israeli nuclear official, 24 September 2005.

¹⁴⁷ As Ahmadi-Nejad said in his 17 September 2005 address to the UN General Assembly, "we are concerned that once certain powerful states completely control nuclear energy resources and technology, they will deny access to and thus deepen the divide between powerful countries and the rest of the international community. When that happens, we will be divided into light and dark countries", op. cit.

¹⁴⁸ Crisis Group interview, 23 September 2005.

¹⁴⁹ "U.S. pressing to close nuclear proliferation treaty 'loophole'", *Inside Missile Defence*, 7 July 2004, vol. 10, no. 14. NSG membership is contingent on a promise to export items like nuclear reactors and equipment only to countries that accept IAEA full-scope safeguards.

¹⁵⁰ See: <http://www.iaea.org/NewsCenter/Transcripts/2005/cnn17032005.html>. See also "Multilateral approaches to the nuclear fuel cycle"; Expert Group Report submitted to the Director General of the International Atomic Energy Agency, February 2005; infcirc 640, at <http://www.iaea.org/Publications/Documents/Infcircs/2005/infirc640.pdf>.

¹⁵¹ See <http://www.un.org/largerfreedom/chap3.htm>.

compact disks containing non-WMD related material that had been left behind in Iraq by a UN team.¹⁵² Given the legacy of distrust from Iran's track record of concealment, however, Tehran may simply not have a choice: if it wants an agreement, particularly one that would allow it to conduct enrichment activities on its soil, it will need to demonstrate its peaceful intentions and disprove persistent, indeed growing, doubts. That will require the kind of regime outlined here.

Brussels/Washington/Tehran, 23 February 2006

¹⁵² Crisis Group interview, 23 November 2005.

APPENDIX A MAP OF IRAN

