

Q – Documents Relating to Iran (Islamic Republic of)

[Editorial Note: Earlier documents of relevance may be downloaded via <http://www.mcis.soton.ac.uk/>

Implementation of Safeguards in the Islamic Republic of Iran, by the IAEA Director General Mohamed ElBaradei

[Excerpt reproduced from the Introductory Statement to the Board of Governors, Vienna, 11 June 2007]

[...] (eds.)

The Board has before it a report regarding the implementation of safeguards in the Islamic Republic of Iran. As you can see from this report, Iran continues to provide the Agency access to its nuclear material and facilities, including the enrichment facility at Natanz, in accordance with its safeguards agreement. The Agency has been able to verify that no declared nuclear material in Iran has been diverted.

However, as the report also makes clear, Iran has not taken the steps called for by the Board nor responded to the demands of the Security Council. The facts on the ground indicate that Iran continues steadily to perfect its knowledge relevant to enrichment, and to expand the capacity of its enrichment facility. Iran has also continued with the construction of its heavy water reactor at Arak. On the other hand, this is taking place without the Agency being able to make any progress in its efforts to resolve outstanding issues relevant to the nature and scope of Iran's nuclear programme, or being able to implement the additional protocol that would enable the verification of the absence of undeclared nuclear activities. This dichotomy continues to be our key proliferation concern. Iran also continues to put additional restrictions and limitations on the Agency's verification activities - including on our right to re-verify design information at Arak. The lack of progress on our verification mission, coupled with the additional limitations on our verification authority, has resulted in a deterioration of the Agency's level of knowledge regarding certain aspects of Iran's nuclear programme. This is disconcerting and regrettable.

Against the background of many years of undeclared activities, and taking into account the sensitivity of nuclear enrichment technology, it is incumbent on Iran to work urgently with the Agency, under a policy of full transparency and active cooperation, in order for the Agency to be able to provide assurance regarding the exclusively peaceful nature of all of Iran's nuclear activities. These assurances are the ultimate purpose of the verification process. They would certainly help to dispel the concerns of the international community regarding Iran's nuclear programme. Transparency and cooperation by Iran would, therefore, be in the interest of not only the international community but also of Iran.

At this stage, I am increasingly disturbed by the current stalemate and the brewing confrontation - a stalemate that urgently needs to be broken, and a confrontation that must be defused. I continue to believe that dialogue and diplomacy are ultimately the only way to achieve the negotiated solution foreseen in the relevant Security Council resolutions. The earlier that conditions are created to move in this direction, the better.

[...] (eds.)

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran: Nuclear Intentions and Capabilities

[Report by the Director General, GOV/2007/58, 15 November 2007]

[Editorial note: Footnotes not included]

1. On 30 August 2007, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran (Iran) (GOV/2007/48 and Corr.1). This report covers the relevant

developments since that date.

A. Implementation of the Work Plan on Outstanding Issues

2. On 21 August 2007, the Secretariat and Iran reached understandings on a work plan for resolving outstanding safeguards implementation issues (GOV/2007/48, Attachment). Since the previous report, the following progress has been made in the implementation of the work plan.

[Eds...]

F. Summary

39. The Agency has been able to verify the non-diversion of declared nuclear material in Iran. Iran has provided the Agency with access to declared nuclear material, and has provided the required nuclear material accountancy reports in connection with declared nuclear material and activities. Iran concluded a Facility Attachment for FEP. However, it should be noted that, since early 2006, the Agency has not received the type of information that Iran had previously been providing, pursuant to the Additional Protocol and as a transparency measure. As a result, the Agency's knowledge about Iran's current nuclear programme is diminishing.

40. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities, having continued the operation of PFEP and FEP. Iran has also continued the construction of the IR-40 and operation of the Heavy Water Production Plant.

41. There are two remaining major issues relevant to the scope and nature of Iran's nuclear programme: Iran's past and current centrifuge enrichment programme and the alleged studies. The Agency has been able to conclude that answers provided on the declared past P-1 and P-2 centrifuge programmes are consistent with its findings. The Agency will, however, continue to seek corroboration and is continuing to verify the completeness of Iran's declarations. The Agency intends in the next few weeks to focus on the contamination issue as well as the alleged studies and other activities that could have military applications.

42. Iran has provided sufficient access to individuals and has responded in a timely manner to questions and provided clarifications and amplifications on issues raised in the context of the work plan. However, its cooperation has been reactive rather than proactive. As previously stated, Iran's active cooperation and full transparency are indispensable for full and prompt implementation of the work plan.

43. In addition, Iran needs to continue to build confidence about the scope and nature of its present programme. Confidence in the exclusively peaceful nature of Iran's nuclear programme requires that the Agency be able to provide assurances not only regarding declared nuclear material, but, equally importantly, regarding the absence of undeclared nuclear material and activities in Iran. Although the Agency has no concrete information, other than that addressed through the work plan, about possible current undeclared nuclear material and activities in Iran, the Agency is not in a position to provide credible assurances about the absence of undeclared nuclear material and activities in Iran without full implementation of the Additional Protocol. This is especially important in the light of Iran's undeclared activities for almost two decades and the need to restore confidence in the exclusively peaceful nature of its nuclear programme. Therefore, the Director General again urges Iran to implement the Additional Protocol at the earliest possible date. The Director General also urges Iran to implement all the confidence building measures required by the Security Council, including the suspension of all enrichment related activities.

44. The Director General will continue to report as appropriate.

Iran: Nuclear Intentions and Capabilities

[Excerpt reproduced from US National Intelligence Estimate, November 2007]

[Editorial note: Footnote not included]

[Eds...]

National Intelligence Estimates and the NIE Process

National Intelligence Estimates (NIEs) are the Intelligence Community's (IC) most authoritative written judgments on national security issues and designed to help US civilian and military leaders develop policies to protect US national security interests. NIEs usually provide information on the current state of play but are primarily "estimative"—that is, they make judgments about the likely course of future events and identify the implications for US policy.

[Eds...]

This Estimate incorporates intelligence reporting available as of 31 October 2007.

What We Mean When We Say: An Explanation of Estimative Language

We use phrases such as *we judge*, *we assess*, and *we estimate*—and probabilistic terms such as *probably* and *likely*—to convey analytical assessments and judgments. Such statements are not facts, proof, or knowledge. These assessments and judgments generally are based on collected information, which often is incomplete or fragmentary. Some assessments are built on previous judgments. In all cases, assessments and judgments are not intended to imply that we have "proof" that shows something to be a fact or that definitively links two items or issues.

In addition to conveying judgments rather than certainty, our estimative language also often conveys 1) our assessed likelihood or probability of an event; and 2) the level of confidence we ascribe to the judgment.

Estimates of Likelihood. Because analytical judgments are not certain, we use probabilistic language to reflect the Community's estimates of the likelihood of developments or events.

Terms such as *probably*, *likely*, *very likely*, or *almost certainly* indicate a greater than even chance. The terms *unlikely* and *remote* indicate a less than even chance that an event will occur; they do not imply that an event will not occur. Terms such as *might* or *may* reflect situations in which we are unable to assess the likelihood, generally because relevant information is unavailable, sketchy, or fragmented. Terms such as *we cannot dismiss*, *we cannot rule out*, or *we cannot discount* reflect an unlikely, improbable, or remote event whose consequences are such that it warrants mentioning.

[Eds...]

Confidence in Assessments. Our assessments and estimates are supported by information that varies in scope, quality and sourcing. Consequently, we ascribe *high*, *moderate*, or *low* levels of confidence to our assessments, as follows:

- *High confidence* generally indicates that our judgments are based on high-quality information, and/or that the nature of the issue makes it possible to render a solid judgment. A "high confidence" judgment is not a fact or a certainty, however, and such judgments still carry a risk of being wrong.
- *Moderate confidence* generally means that the information is credibly sourced and plausible but not of sufficient quality or corroborated sufficiently to warrant a higher level of confidence.
- *Low confidence* generally means that the information's credibility and/or plausibility is questionable, or that the information is too fragmented or poorly corroborated to make solid analytic inferences, or that we have significant concerns or problems with the sources.

Key Judgments

A. We judge with high confidence that in fall 2003, Tehran halted its nuclear weapons program; we also assess with moderate-to-high confidence that Tehran at a minimum is keeping open the option to

develop nuclear weapons. We judge with high confidence that the halt, and Tehran's announcement of its decision to suspend its declared uranium enrichment program and sign an Additional Protocol to its Nuclear Non-Proliferation Treaty Safeguards Agreement, was directed primarily in response to increasing international scrutiny and pressure resulting from exposure of Iran's previously undeclared nuclear work.

- We assess with high confidence that until fall 2003, Iranian military entities were working under government direction to develop nuclear weapons.
- We judge with high confidence that the halt lasted at least several years. (Because of intelligence gaps discussed elsewhere in this Estimate, however, DOE and the NIC assess with only moderate confidence that the halt to those activities represents a halt to Iran's entire nuclear weapons program.)
- We assess with moderate confidence Tehran had not restarted its nuclear weapons program as of mid-2007, but we do not know whether it currently intends to develop nuclear weapons.
- We continue to assess with moderate-to-high confidence that Iran does not currently have a nuclear weapon.
- Tehran's decision to halt its nuclear weapons program suggests it is less determined to develop nuclear weapons than we have been judging since 2005. Our assessment that the program probably was halted primarily in response to international pressure suggests Iran may be more vulnerable to influence on the issue than we judged previously.

B. We continue to assess with low confidence that Iran probably has imported at least some weapons-usable fissile material, but still judge with moderate-to-high confidence it has not obtained enough for a nuclear weapon. We cannot rule out that Iran has acquired from abroad—or will acquire in the future—a nuclear weapon or enough fissile material for a weapon. Barring such acquisitions, if Iran wants to have nuclear weapons it would need to produce sufficient amounts of fissile material indigenously—which we judge with high confidence it has not yet done.

C. We assess centrifuge enrichment is how Iran probably could first produce enough fissile material for a weapon, if it decides to do so. Iran resumed its declared centrifuge enrichment activities in January 2006, despite the continued halt in the nuclear weapons program. Iran made significant progress in 2007 installing centrifuges at Natanz, but we judge with moderate confidence it still faces significant technical problems operating them.

- We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough HEU for a weapon is late 2009, but that this is very unlikely.
- We judge with moderate confidence Iran probably would be technically capable of producing enough HEU for a weapon sometime during the 2010-2015 time frame. (INR judges Iran is unlikely to achieve this capability before 2013 because of foreseeable technical and programmatic problems.) All agencies recognize the possibility that this capability may not be attained until after 2015.

D. Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so. For example, Iran's civilian uranium enrichment program is continuing. We also assess with high confidence that since fall 2003, Iran has been conducting research and development projects with commercial and conventional military applications—some of which would also be of limited use for nuclear weapons.

E. We do not have sufficient intelligence to judge confidently whether Tehran is willing to maintain the halt of its nuclear weapons program indefinitely while it weighs its options, or whether it will or already has set specific deadlines or criteria that will prompt it to restart the program.

- Our assessment that Iran halted the program in 2003 primarily in response to international pressure indicates Tehran's decisions are guided by a cost-benefit approach rather than a rush to a weapon irrespective of the political, economic, and military costs. This, in turn, suggests that some combination of threats of intensified international scrutiny and pressures, along with opportunities for Iran to achieve its security, prestige, and goals for regional

influence in other ways, might—if perceived by Iran's leaders as credible—prompt Tehran to extend the current halt to its nuclear weapons program. It is difficult to specify what such a combination might be.

- We assess with moderate confidence that convincing the Iranian leadership to forgo the eventual development of nuclear weapons will be difficult given the linkage many within the leadership probably see between nuclear weapons development and Iran's key national security and foreign policy objectives, and given Iran's considerable effort from at least the late 1980s to 2003 to develop such weapons. In our judgment, only an Iranian political decision to abandon a nuclear weapons objective would plausibly keep Iran from eventually producing nuclear weapons—and such a decision is inherently reversible.

F. We assess with moderate confidence that Iran probably would use covert facilities—rather than its declared nuclear sites—for the production of highly enriched uranium for a weapon. A growing amount of intelligence indicates Iran was engaged in covert uranium conversion and uranium enrichment activity, but we judge that these efforts probably were halted in response to the fall 2003 halt, and that these efforts probably had not been restarted through at least mid-2007.

G. We judge with high confidence that Iran will not be technically capable of producing and reprocessing enough plutonium for a weapon before about 2015.

H. We assess with high confidence that Iran has the scientific, technical and industrial capacity eventually to produce nuclear weapons if it decides to do so.

Key Differences Between the Key Judgments of This Estimate on Iran's Nuclear Program and the May 2005 Assessment

2005 IC Estimate: Assess with high confidence that Iran currently is determined to develop nuclear weapons despite its international obligations and international pressure, but we do not assess that Iran is immovable.

2007 National Intelligence Estimate: Judge with high confidence that in fall 2003, Tehran halted its nuclear weapons program. Judge with high confidence that the halt lasted at least several years. (DOE and the NIC have moderate confidence that the halt to those activities represents a halt to Iran's entire nuclear weapons program.) Assess with moderate confidence Tehran had not restarted its nuclear weapons program as of mid-2007, but we do not know whether it currently intends to develop nuclear weapons. Judge with high confidence that the halt was directed primarily in response to increasing international scrutiny and pressure resulting from exposure of Iran's previously undeclared nuclear work. Assess with moderate-to-high confidence that Tehran at a minimum is keeping open the option to develop nuclear weapons.

2005 IC Estimate: We have moderate confidence in projecting when Iran is likely to make a nuclear weapon; we assess that it is unlikely before early-to-mid next decade.

2007 National Intelligence Estimate: We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough highly enriched uranium (HEU) for a weapon is late 2009, but that this is very unlikely. We judge with moderate confidence Iran probably would be technically capable of producing enough HEU for a weapon sometime during the 2010-2015 time frame. (INR judges that Iran is unlikely to achieve this capability before 2013 because of foreseeable technical and programmatic problems.)

2005 IC Estimate: Iran could produce enough fissile material for a weapon by the end of this decade if it were to make more rapid and successful progress than we have seen to date.

2007 National Intelligence Estimate: We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough highly enriched uranium (HEU) for a weapon is late 2009, but that this is very unlikely.

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran

[Report by the Director General, GOV/2008/4,
22 February 2008]

1. On 15 November 2007, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran (Iran) (GOV/2007/58). This report covers the relevant developments since that date.

2. On 11 and 12 January 2008, the Director General met in Tehran with H.E. Ayatollah A. Khamenei, the Supreme Leader of Iran; H.E. Mr. M. Ahmadinejad, President of Iran; H.E. Mr. G. Aghazadeh, Vice President of Iran and President of the Atomic Energy Organization of Iran (AEOI); H.E. Mr. M. Mottaki, Foreign Minister; and H.E. Mr. S. Jalili, Secretary, Supreme National Security Council of Iran. The purpose of the visit was to discuss ways and means of implementing all relevant resolutions of the Board of Governors and the United Nations Security Council as well as accelerating implementation of the work plan agreed between Iran and the Secretariat on 21 August 2007 aimed at the clarification of outstanding safeguards implementation issues (GOV/2007/48, Attachment).

3. During the discussions, the Iranian leadership stated that the country's nuclear programme had always been exclusively for peaceful purposes and that there had never been a nuclear weapons development programme. The Iranian authorities agreed to accelerate implementation of the work plan.

[Eds...]

F. Summary

52. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. Iran has provided the Agency with access to declared nuclear material and has provided the required nuclear material accountancy reports in connection with declared nuclear material and activities. Iran has also responded to questions and provided clarifications and amplifications on the issues raised in the context of the work plan, with the exception of the alleged studies. Iran has provided access to individuals in response to the Agency's requests. Although direct access has not been provided to individuals said to be associated with the alleged studies, responses have been provided in writing to some of the Agency's questions.

53. The Agency has been able to conclude that answers provided by Iran, in accordance with the work plan, are consistent with its findings — in the case of the polonium-210 experiments and the Gchine mine — or are not inconsistent with its findings — in the case of the contamination at the technical university and the procurement activities of the former Head of PHRC. Therefore, the Agency considers those questions no longer outstanding at this stage. However, the Agency continues, in accordance with its procedures and practices, to seek corroboration of its findings and to verify these issues as part of its verification of the completeness of Iran's declarations.

54. The one major remaining issue relevant to the nature of Iran's nuclear programme is the alleged studies on the green salt project, high explosives testing and the missile re-entry vehicle. This is a matter of serious concern and critical to an assessment of a possible military dimension to Iran's nuclear programme. The Agency was able to show some relevant documentation to Iran on 3–5 February 2008 and is still examining the allegations made and the statements provided by Iran in response. Iran has maintained that these allegations are baseless and that the data have been fabricated. The Agency's overall assessment requires, inter alia, an understanding of the role of the uranium metal document, and clarifications concerning the procurement activities of some military related institutions still not provided by Iran. The Agency only received authorization to show some further material to Iran on 15 February 2008. Iran has not yet responded to the Agency's request of that same date for Iran to view this additional documentation on the alleged studies. In light of the above, the Agency is not yet in a

position to determine the full nature of Iran's nuclear programme. However, it should be noted that the Agency has not detected the use of nuclear material in connection with the alleged studies, nor does it have credible information in this regard. The Director General has urged Iran to engage actively with the Agency in a more detailed examination of the documents available about the alleged studies which the Agency has been authorized to show to Iran.

55. The Agency has recently received from Iran additional information similar to that which Iran had previously provided pursuant to the Additional Protocol, as well as updated design information. As a result, the Agency's knowledge about Iran's current declared nuclear programme has become clearer. However, this information has been provided on an ad hoc basis and not in a consistent and complete manner. The Director General has continued to urge Iran to implement the Additional Protocol at the earliest possible date and as an important confidence building measure requested by the Board of Governors and affirmed by the Security Council. The Director General has also urged Iran to implement the modified text of its Subsidiary Arrangements General Part, Code 3.1 on the early provision of design information. Iran has expressed its readiness to implement the provisions of the Additional Protocol and the modified text of its Subsidiary Arrangements General Part, Code 3.1, "if the nuclear file is returned from the Security Council to the IAEA".

56. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities, having continued the operation of PFEP and FEP. In addition, Iran started the development of new generation centrifuges. Iran has also continued construction of the IR-40 reactor and operation of the Heavy Water Production Plant.

57. With regard to its current programme, Iran needs to continue to build confidence about its scope and nature. Confidence in the exclusively peaceful nature of Iran's nuclear programme requires that the Agency be able to provide assurances not only regarding declared nuclear material, but, equally importantly, regarding the absence of undeclared nuclear material and activities in Iran. With the exception of the issue of the alleged studies, which remains outstanding, the Agency has no concrete information about possible current undeclared nuclear material and activities in Iran. Although Iran has provided some additional detailed information about its current activities on an ad hoc basis, the Agency will not be in a position to make progress towards providing credible assurances about the absence of undeclared nuclear material and activities in Iran before reaching some clarity about the nature of the alleged studies, and without implementation of the Additional Protocol. This is especially important in the light of the many years of undeclared activities in Iran and the confidence deficit created as a result. The Director General therefore urges Iran to implement all necessary measures called for by the Board of Governors and the Security Council to build confidence in the peaceful nature of its nuclear programme.

58. The Director General will continue to report as appropriate.

Resolution 1803 (2008) Adopted by the Security Council at its 5848th meeting

[S/RES/1803 (2008), 3 March 2008]

The Security Council,

Recalling the Statement of its President, S/PRST/2006/15, of 29 March 2006, and its resolution 1696 (2006) of 31 July 2006, its resolution 1737 (2006) of 23 December 2006 and its resolution 1747 (2007) of 24 March 2007, and *reaffirming* their provisions,

Reaffirming its commitment to the Treaty on the Non-Proliferation of Nuclear Weapons, the need for all States Party to that Treaty to comply fully with all their obligations, and recalling the right of States Party, in conformity with Articles I and II of that Treaty, to develop research, production and use of nuclear energy for peaceful purposes without discrimination,

Recalling the resolution of the IAEA Board of Governors (GOV/2006/14), which states that a solution to the Iranian nuclear issue would contribute to global non-proliferation efforts and to realizing the objective of a Middle East free of weapons of mass destruction, including their means of delivery,

Noting with serious concern that, as confirmed by the reports of 23 May 2007 (GOV/2007/22), 30 August 2007 (GOV/2007/48), 15 November 2007 (GOV/2007/58) and 22 February 2008 (GOV/2008/4) of the Director General of the International Atomic Energy Agency (IAEA), Iran has not established full and sustained suspension of all enrichment related and reprocessing activities and heavy water-related projects as set out in resolution 1696 (2006), 1737 (2006), and 1747 (2007), nor resumed its cooperation with the IAEA under the Additional Protocol, nor taken the other steps required by the IAEA Board of Governors, nor complied with the provisions of Security Council resolution 1696 (2006), 1737 (2006) and 1747 (2007) and which are essential to build confidence, and *deploring* Iran's refusal to take these steps,

Noting with concern that Iran has taken issue with the IAEA's right to verify design information which had been provided by Iran pursuant to the modified Code 3.1, *emphasizing* that in accordance with Article 39 of Iran's Safeguards Agreement Code 3.1 cannot be modified nor suspended unilaterally and that the Agency's right to verify design information provided to it is a continuing right, which is not dependent on the stage of construction of, or the presence of nuclear material at, a facility,

Reiterating its determination to reinforce the authority of the IAEA, strongly supporting the role of the IAEA Board of Governors, *commending* the IAEA for its efforts to resolve outstanding issues relating to Iran's nuclear programme in the work plan between the Secretariat of the IAEA and Iran (GOV/2007/48, Attachment), *welcoming* the progress in implementation of this work plan as reflected in the IAEA Director General's reports of 15 November 2007 (GOV/2007/58) and 22 February 2008 (GOV/2008/4), *underlining* the importance of Iran producing tangible results rapidly and effectively by completing implementation of this work plan including by providing answers to all the questions the IAEA asks so that the Agency, through the implementation of the required transparency measures, can assess the completeness and correctness of Iran's declaration,

Expressing the conviction that the suspension set out in paragraph 2 of resolution 1737 (2006) as well as full, verified Iranian compliance with the requirements set out by the IAEA Board of Governors would contribute to a diplomatic, negotiated solution, that guarantees Iran's nuclear programme is for exclusively peaceful purposes,

Stressing that China, France, Germany, the Russian Federation, the United Kingdom and the United States are willing to take further concrete measures on exploring an overall strategy of resolving the Iranian nuclear issue through negotiation on the basis of their June 2006 proposals (S/2006/521), and *noting* the confirmation by these countries that once the confidence of the international community in the exclusively peaceful nature of Iran's nuclear programme is restored, it will be treated in the same manner as that of any Non-Nuclear Weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons,

Having regard to States' rights and obligations relating to international trade,

Welcoming the guidance issued by the Financial Actions Task Force (FATF) to assist States in implementing their financial obligations under resolution 1737 (2006),

Determined to give effect to its decisions by adopting appropriate measures to persuade Iran to comply with resolution 1696 (2006), resolution 1737 (2006), resolution 1747 (2007) and with the requirements of the IAEA, and also to constrain Iran's development of sensitive technologies in support of its nuclear and missile programmes, until such time as the Security Council determines that the objectives of these resolutions have been met,

Concerned by the proliferation risks presented by the Iranian nuclear programme and, in this context, by Iran's continuing failure to meet the requirements of the IAEA Board of Governors and to comply with the provisions of Security Council resolutions 1696 (2006), 1737 (2006) and 1747 (2007), *mindful* of its primary responsibility under the Charter of the United Nations for the maintenance of international peace and security,

Acting under Article 41 of Chapter VII of the Charter of the United Nations,

1. *Reaffirms* that Iran shall without further delay take the steps

required by the IAEA Board of Governors in its resolution GOV/2006/14, which are essential to build confidence in the exclusively peaceful purpose of its nuclear programme and to resolve outstanding questions, and, in this context, *affirms* its decision that Iran shall without delay take the steps required in paragraph 2 of resolution 1737 (2006), and *underlines* that the IAEA has sought confirmation that Iran will apply Code 3.1 modified;

2. *Welcomes* the agreement between Iran and the IAEA to resolve all outstanding issues concerning Iran's nuclear programme and progress made in this regard as set out in the Director General's report of 22 February 2008 (GOV/2008/4), *encourages* the IAEA to continue its work to clarify all outstanding issues, *stresses* that this would help to re-establish international confidence in the exclusively peaceful nature of Iran's nuclear programme, and *supports* the IAEA in strengthening its safeguards on Iran's nuclear activities in accordance with the Safeguards Agreement between Iran and the IAEA;

3. *Calls upon* all States to exercise vigilance and restraint regarding the entry into or transit through their territories of individuals who are engaged in, directly associated with or providing support for Iran's proliferation sensitive nuclear activities or for the development of nuclear weapon delivery systems, and *decides* in this regard that all States shall notify the Committee established pursuant to paragraph 18 of resolution 1737 (2006) (herein "the Committee") of the entry into or transit through their territories of the persons designated in the Annex to resolution 1737 (2006), Annex I to resolution 1747 (2007) or Annex I to this resolution, as well as of additional persons designated by the Security Council or the Committee as being engaged in, directly associated with or providing support for Iran's proliferation sensitive nuclear activities or for the development of nuclear weapon delivery systems, including through the involvement in procurement of the prohibited items, goods, equipment, materials and technology specified by and under the measures in paragraphs 3 and 4 of resolution 1737 (2006), except where such entry or transit is for activities directly related to the items in subparagraphs 3 (b) (i) and (ii) of resolution 1737 (2006);

4. *Underlines* that nothing in paragraph 3 above requires a State to refuse its own nationals entry into its territory, and that all States shall, in the implementation of the above paragraph, take into account humanitarian considerations, including religious obligations, as well as the necessity to meet the objectives of this resolution, resolution 1737 (2006) and resolution 1747 (2007), including where Article XV of the IAEA Statute is engaged;

5. *Decides* that all States shall take the necessary measures to prevent the entry into or transit through their territories of individuals designated in Annex II to this resolution as well as of additional persons designated by the Security Council or the Committee as being engaged in, directly associated with or providing support for Iran's proliferation sensitive nuclear activities or for the development of nuclear weapon delivery systems, including through the involvement in procurement of the prohibited items, goods, equipment, materials and technology specified by and under the measures in paragraphs 3 and 4 of resolution 1737 (2006), except where such entry or transit is for activities directly related to the items in subparagraphs 3 (b) (i) and (ii) of resolution 1737 (2006) and provided that nothing in this paragraph shall oblige a State to refuse its own nationals entry into its territory;

6. *Decides* that the measures imposed by paragraph 5 above shall not apply where the Committee determines on a case-by-case basis that such travel is justified on the grounds of humanitarian need, including religious obligations, or where the Committee concludes that an exemption would otherwise further the objectives of the present resolution;

7. *Decides* that the measures specified in paragraphs 12, 13, 14 and 15 of resolution 1737 (2006) shall apply also to the persons and entities listed in Annexes I and III to this resolution, and any persons or entities acting on their behalf or at their direction, and to entities owned or controlled by them and to persons and entities determined by the Council or the Committee to have assisted designated persons or entities in evading sanctions of, or in violating the provisions of, this resolution, resolution 1737 (2006) or resolution 1747 (2007);

8. *Decides* that all States shall take the necessary measures to

prevent the supply, sale or transfer directly or indirectly from their territories or by their nationals or using their flag vessels or aircraft to, or for use in or benefit of, Iran, and whether or not originating in their territories, of:

(a) all items, materials, equipment, goods and technology set out in INFCIRC/254/Rev.7/Part 2 of document S/2006/814, except the supply, sale or transfer, in accordance with the requirements of paragraph 5 of resolution 1737 (2006), of items, materials, equipment, goods and technology set out in sections 1 and 2 of the Annex to that document, and sections 3 to 6 as notified in advance to the Committee, only when for exclusive use in light water reactors, and where such supply, sale or transfer is necessary for technical cooperation provided to Iran by the IAEA or under its auspices as provided for in paragraph 16 of resolution 1737 (2006);

(b) all items, materials, equipment, goods and technology set out in 19.A.3 of Category II of document S/2006/815;

9. *Calls upon* all States to exercise vigilance in entering into new commitments for public provided financial support for trade with Iran, including the granting of export credits, guarantees or insurance, to their nationals or entities involved in such trade, in order to avoid such financial support contributing to the proliferation sensitive nuclear activities, or to the development of nuclear weapon delivery systems, as referred to in resolution 1737 (2006);

10. *Calls upon* all States to exercise vigilance over the activities of financial institutions in their territories with all banks domiciled in Iran, in particular with Bank Melli and Bank Saderat, and their branches and subsidiaries abroad, in order to avoid such activities contributing to the proliferation sensitive nuclear activities, or to the development of nuclear weapon delivery systems, as referred to in resolution 1737 (2006);

11. *Calls upon* all States, in accordance with their national legal authorities and legislation and consistent with international law, in particular the law of the sea and relevant international civil aviation agreements, to inspect the cargoes to and from Iran, of aircraft and vessels, at their airports and seaports, owned or operated by Iran Air Cargo and Islamic Republic of Iran Shipping Line, provided there are reasonable grounds to believe that the aircraft or vessel is transporting goods prohibited under this resolution or resolution 1737 (2006) or resolution 1747 (2007);

12. *Requires* all States, in cases when inspection mentioned in the paragraph above is undertaken, to submit to the Security Council within five working days a written report on the inspection containing, in particular, explanation of the grounds for the inspection, as well as information on its time, place, circumstances, results and other relevant details;

13. *Calls upon* all States to report to the Committee within 60 days of the adoption of this resolution on the steps they have taken with a view to implementing effectively paragraphs 3, 5, 7, 8, 9, 10 and 11 above;

14. *Decides* that the mandate of the Committee as set out in paragraph 18 of resolution 1737 (2006) shall also apply to the measures imposed in resolution 1747 (2007) and this resolution;

15. *Stresses* the willingness of China, France, Germany, the Russian Federation, the United Kingdom and the United States to further enhance diplomatic efforts to promote resumption of dialogue, and consultations on the basis of their offer to Iran, with a view to seeking a comprehensive, long-term and proper solution of this issue which would allow for the development of all-round relations and wider cooperation with Iran based on mutual respect and the establishment of international confidence in the exclusively peaceful nature of Iran's nuclear programme, and inter alia, starting direct talks and negotiation with Iran as long as Iran suspends all enrichment-related and reprocessing activities, including research and development, as verified by the IAEA;

16. *Encourages* the European Union High Representative for the Common Foreign and Security Policy to continue communication with Iran in support of political and diplomatic efforts to find a negotiated solution including relevant proposals by China, France, Germany, the Russian Federation, the United Kingdom and the United States with a view to create necessary conditions for resuming talks;

17. *Emphasizes* the importance of all States, including Iran, taking

the necessary measures to ensure that no claim shall lie at the instance of the Government of Iran, or of any person or entity in Iran, or of persons or entities designated pursuant to resolution 1737 (2006) and related resolutions, or any person claiming through or for the benefit of any such person or entity, in connection with any contract or other transaction where its performance was prevented by reason of the measures imposed by the present resolution, resolution 1737 (2006) or resolution 1747 (2007);

18. *Requests* within 90 days a further report from the Director General of the IAEA on whether Iran has established full and sustained suspension of all activities mentioned in resolution 1737 (2006), as well as on the process of Iranian compliance with all the steps required by the IAEA Board and with the other provisions of resolution 1737 (2006), resolution 1747 (2007) and of this resolution, to the IAEA Board of Governors and in parallel to the Security Council for its consideration;

19. *Reaffirms* that it shall review Iran's actions in light of the report referred to in the paragraph above, and:

(a) that it shall suspend the implementation of measures if and for so long as Iran suspends all enrichment-related and reprocessing activities, including research and development, as verified by the IAEA, to allow for negotiations in good faith in order to reach an early and mutually acceptable outcome;

(b) that it shall terminate the measures specified in paragraphs 3, 4, 5, 6, 7 and 12 of resolution 1737 (2006), as well as in paragraphs 2, 4, 5, 6 and 7 of resolution 1747 (2007), and in paragraphs 3, 5, 7, 8, 9, 10 and 11 above, as soon as it determines, following receipt of the report referred to in the paragraph above, that Iran has fully complied with its obligations under the relevant resolutions of the Security Council and met the requirements of the IAEA Board of Governors, as confirmed by the IAEA Board;

(c) that it shall, in the event that the report shows that Iran has not complied with resolution 1696 (2006), resolution 1737 (2006), resolution 1747 (2007) and this resolution, adopt further appropriate measures under Article 41 of Chapter VII of the Charter of the United Nations to persuade Iran to comply with these resolutions and the requirements of the IAEA, and underlines that further decisions will be required should such additional measures be necessary;

20. *Decides* to remain seized of the matter.

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council resolutions 1737 (2006) and 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran

[Report by the Director General, GOV/2008/15,
26 May 2008]

[*Editorial note:* Footnotes not included]

1. On 22 February 2008, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran (Iran) (GOV/2008/4). This report, which covers relevant developments since that date, is submitted to the Board of Governors and to the Security Council, which, in resolution 1803 (2008) of 3 March 2008, requested the Director General to submit a further report on this matter within 90 days.

A. Current Enrichment Related Activities

2. Since the previous report, Iran has continued to operate the original 3000-machine IR-1 unit at the Fuel Enrichment Plant (FEP). Installation work has continued on four other units as well. On 7 May 2008, two 164-machine (IR-1) cascades of one of the four units were being fed with UF₆, and another cascade of that same unit was in vacuum without UF₆. The installation of the other 15 cascades at that unit is continuing. All nuclear material at FEP, as well as all installed cascades, remain under Agency containment and surveillance. Between the physical inventory taking (PIT) on 12 December 2007 and 6 May 2008, 2300 kg of UF₆ was fed into the operating cascades. This brings the total amount of UF₆ fed into the cascades since the beginning of operations in February 2007 to 3970 kg.

3. On 10 April 2008, Iran informed the Agency about the planned installation of a new generation sub-critical centrifuge (IR-3) at the Pilot Fuel Enrichment Plant (PFEP). On 19 April 2008, the Agency confirmed that two IR-3 centrifuges had been installed at PFEP. In February 2008, Agency inspectors noted that Iran had also brought 20 IR-1 centrifuges into PFEP, which were run in a 20-machine cascade for a short time, after which they were removed.

4. Between 28 January and 16 May 2008, Iran fed a total of approximately 19 kg of UF₆ into the 20-machine IR-1 cascade, the single IR-2 centrifuges, the 10-machine IR-2 cascade and the single IR-3 centrifuges at PFEP. All nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.

5. The results of the environmental samples taken at FEP and PFEP indicate that the plants have been operated as declared. The samples showed low enriched uranium (with up to 4.0% U-235), natural uranium and depleted uranium (down to 0.4% U-235) particles. Iran declared enrichment levels in FEP of up to 4.7% U-235. Since March 2007, fourteen unannounced inspections have been conducted.

B. Reprocessing Activities

6. The Agency has continued monitoring the use and construction of hot cells at the Tehran Research Reactor (TRR), the Molybdenum, Iodine and Xenon Radioisotope Production Facility (the MIX Facility) and the Iran Nuclear Research Reactor (IR-40) through inspections and design information verification (DIV). There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related research and development (R&D) activities in Iran, the Agency can confirm this only with respect to these three facilities as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

7. On 13 May 2008, the Agency carried out design information verification at the Iran Nuclear Research Reactor (IR-40) and noted that construction of the facility was ongoing. The Agency has continued to monitor the status of the Heavy Water Production Plant using satellite imagery.

8. On 10 May 2008, the Agency conducted a DIV at the Fuel Manufacturing Plant (FMP). Although the pellet production process for the heavy water reactor fuel is almost complete and some test pellets have been produced, the fuel rod production and fuel assembling processes are still missing some essential equipment.

D. Other Implementation Issues

D.1. Uranium Conversion

9. As of 12 May 2008, approximately 11 tonnes of uranium in the form of UF₆ had been produced since 3 February 2008. This brings the total amount of uranium in the form of UF₆ produced at the Uranium Conversion Facility (UCF) since March 2004 to 320 tonnes, all of which remains under Agency containment and surveillance. Iran has stated that it is not carrying out uranium conversion related R&D activities other than those at Esfahan.

D.2. Design Information

10. On 30 March 2007, the Agency requested Iran to reconsider its decision to suspend the implementation of the modified text of its Subsidiary Arrangements General Part, Code 3.1 (GOV/2007/22, paras 12–14), but there has been no progress on this issue.

11. In March and April 2008, Iran provided revised design information for FEP and PFEP, indicating that centrifuges in the new 18-cascade unit (A26) would be installed in FEP and that new types of centrifuges, IR-2 and IR-3, would be installed at PFEP. These changes are significant and as such should have been communicated to the Agency, in accordance with Code 3.1 of the Subsidiary Arrangements General Part, sixty days before the modifications were scheduled to be completed. The Agency was, however, able to ensure that all necessary safeguards measures, including containment and surveillance, were in place before UF₆ was fed into the newly installed centrifuges.

D.3. Other Matters

12. Since February 2008, all fuel assemblies imported from the

Russian Federation for use in the Bushehr Nuclear Power Plant have remained under Agency seal.

13. On 2 April 2008, the Agency requested Iran to provide, as a transparency measure, access to additional locations related, inter alia, to the manufacturing of centrifuges, R&D on uranium enrichment, and uranium mining and milling. To date, Iran has not agreed to the Agency's request.

E. Possible Military Dimensions

14. In addition to the implementation of Iran's Additional Protocol, for the Agency to provide assurances regarding the absence of undeclared nuclear material and activities in Iran, Iran needs to, inter alia: resolve questions related to the alleged studies (GOV/2008/4, para. 35); provide more information on the circumstances of the acquisition of the uranium metal document (GOV/2008/4, para. 19); clarify procurement and R&D activities of military related institutes and companies that could be nuclear related (GOV/2008/4, paras 40–41); and clarify the production of nuclear equipment and components by companies belonging to defence industries (GOV/2004/11 para.37, GOV/2004/34 para.22).

15. During a meeting in Tehran on 21–22 April 2008, Iran agreed to address the alleged studies, the procurement and R&D activities of military related institutes and companies, and questions which had been raised in the Agency's letters of 8 February and 12 February 2008 (GOV/2008/4 para. 38) (See Annex, Section B.1). On 9 May 2008, the Agency submitted a request for additional clarifications relevant to the nature of Iran's nuclear programme (see Annex, Section B.2). Iran provided its response to these questions on 23 May 2008, which is being assessed by the Agency.

16. At follow up meetings in Tehran on 28–30 April and 13–14 May 2008, the Agency presented, for review by Iran, information related to the alleged studies on the green salt project, high explosives testing and the missile re-entry vehicle project (See Annex, Section A). This included information which Iran had declined to review in February 2008 (GOV/2008/4, paras 35, 37–39 and 42). This information, which was provided to the Agency by several Member States, appears to have been derived from multiple sources over different periods of time, is detailed in content, and appears to be generally consistent. The Agency received much of this information only in electronic form and was not authorised to provide copies to Iran.

17. One aspect of the alleged studies refers to the conversion of uranium dioxide to UF₄, also known as green salt. A second aspect concerns the development and testing of high voltage detonator firing equipment and exploding bridgewire (EBW) detonators including, inter alia, the simultaneous firing of multiple EBW detonators; an underground testing arrangement (GOV/2008/4, para. 39); and the testing of at least one full scale hemispherical, converging, explosively driven shock system that could be applicable to an implosion-type nuclear device. A third aspect of the studies concerns development work alleged to have been performed to redesign the inner cone of the Shahab-3 missile re-entry vehicle to accommodate a nuclear warhead.

18. On 14 May 2008, Iran provided in writing its overall assessment of the documents presented to it by the Agency. Iran stated that the documents "do not show any indication that the Islamic Republic of Iran has been working on [a] nuclear weapon." Iran also stated that the documents were not authentic, that they were "forged" or "fabricated". Iran did not dispute that some of the information contained in the documents was factually accurate, but said the events and activities concerned involved civil or conventional military applications. Iran said the documents contained numerous inconsistencies and many were based on publicly available information. Iran stated that "the Islamic Republic of Iran has not had and shall not have any nuclear weapon program."

19. Concerning the documents purporting to show that Iran had been working to develop an additional capability to convert uranium dioxide to UF₄ (green salt), Iran said it would not have made sense to launch such a project as it had already acquired the necessary technology for UCF.

20. Concerning the alleged work to design and build an EBW detonator and a suitable detonator firing unit, Iran acknowledged that it had conducted simultaneous testing with two to three EBW

detonators with a time precision of about one microsecond. Iran said, however, that this was intended for civil and conventional military applications. Iran further stated, inter alia, that there was no evidence in the documents presented to it to link them to Iran.

21. Concerning the documents purporting to show administrative interconnections between the alleged green salt project and a project to modify the Shahab-3 missile to carry a nuclear warhead, Iran stated that, since some of the documents were not shown to it by the Agency, it could not make an assessment of them. Although the Agency had been shown the documents that led it to these conclusions, it was not in possession of the documents and was therefore unfortunately unable to make them available to Iran.

22. Concerning six technical reports purportedly related to efforts to engineer a new payload chamber for the Shahab-3 missile re-entry vehicle, Iran stated that the files were in electronic form and could therefore have been easily manipulated. Iran also stated, inter alia, that the documents were not complete and that the report structures varied, which raised serious doubts about their authenticity.

23. The Agency is continuing to assess the information and explanations provided by Iran. However, at this stage, Iran has not provided the Agency with all the information, access to documents and access to individuals necessary to support Iran's statements. In light of the discussion on 14 May 2008, the Agency is of the view that Iran may have additional information, in particular on high explosives testing and missile related activities, which could shed more light on the nature of these alleged studies and which Iran should share with the Agency.

24. It should be noted that the Agency currently has no information – apart from the uranium metal document – on the actual design or manufacture by Iran of nuclear material components of a nuclear weapon or of certain other key components, such as initiators, or on related nuclear physics studies. As regards the uranium metal document found in Iran, Pakistan has confirmed, in response to the Agency's request (GOV/2007/58 para.25), that an identical document exists in Pakistan.

25. Although the Agency did not detect any nuclear activities at Kolehdoz or Parchin (GOV/2003/75 para. 10, GOV/2005/67 para. 41, GOV/2005/87 para. 46, 2006/15 para. 32), the role of military related institutes, such as the Physics Research Center (PHRC), the Institute of Applied Physics (IAP) and the Education Research Institute (ERI) — and their staff — needs to be better understood, also in view of the fact that substantial parts of the centrifuge components were manufactured in the workshops of the Defence Industries Organization (GOV/2004/11 para. 37 and GOV/2004/34, para. 22). The Agency also needs to understand fully the reasons for the involvement of military related institutions in procurement for the nuclear programme.

F. Summary

26. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. Iran has provided the Agency with access to declared nuclear material and has provided the required nuclear material accountability reports in connection with declared nuclear material and activities. However, Iran has not implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1 on the early provision of design information.

27. The alleged studies on the green salt project, high explosives testing and the missile re-entry vehicle project remain a matter of serious concern. Clarification of these is critical to an assessment of the nature of Iran's past and present nuclear programme. Iran has agreed to address the alleged studies. However, it maintains that all the allegations are baseless and that the data have been fabricated.

28. The Agency's overall assessment of the nature of Iran's nuclear programme also requires, inter alia, an understanding of the role of the uranium metal document, and clarifications by Iran concerning some procurement activities of military related institutions, which remain outstanding. Substantive explanations are required from Iran to support its statements on the alleged studies and on other information with a possible military dimension. Iran's responses to the Agency's letter of 9 May 2008 were not received until 23 May 2008 and could not yet be assessed by the

Agency. It is essential that Iran provide all requested information, clarifications and access outlined in this report without further delay. It should be emphasised, however, that the Agency has not detected the actual use of nuclear material in connection with the alleged studies.

29. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities, having continued the operation of PFEP and FEP and the installation of both new cascades and of new generation centrifuges for test purposes. Iran has also continued with the construction of the IR-40 reactor.

30. The Director General urges Iran to implement all measures required to build confidence in the peaceful nature of its nuclear programme, including the Additional Protocol, at the earliest possible date.

31. The Director General will continue to report as appropriate.

A. Documents shown to Iran in connection with the alleged studies

A.1. Green Salt Project

Document 1: A one page undated flowsheet purportedly originating from the Kimia Maadan Company (KM), which shows a process of bench scale conversion of UO₂ to UF₄ with a capacity of 1 tonne per year of UF₄. The document is entitled "Process Flow Diagram – Green Salt Production – Bench Scale", bears the words "Kimia Maadan Group" and "Project 5/13", and includes a detailed legend of equipment and material balance information.

Document 2: A one page annotated letter of May 2003 in Farsi from an engineering company to KM requesting instructions regarding the supply of a programmable logic control (PLC) system.

A.2. High Explosives Testing

Document 1: "Analysis and Review of Exploding Bridgewire (EBW) Detonator Test Results" dated January–February 2004, comprising 11 pages in Farsi reporting on work carried out by "Project 3.12" to design and construct an EBW detonator and a suitable detonator firing unit, including testing of about 500 EBW detonators.

Document 2: One page undated document in Farsi providing text and a schematic diagram for an underground testing arrangement. The diagram depicts a 400m deep shaft located 10km from a firing control point and shows the placement of various electronic systems such as a control unit and a high voltage power generator.

Document 3: Five page document in English describing experimentation undertaken with a complex multipoint initiation system to detonate a substantial amount of high explosive in hemispherical geometry and to monitor the development of the detonation wave in that high explosive using a considerable number of diagnostic probes.

A.3. Missile Re-entry Vehicle

Document 1: One page piece of correspondence in Farsi, dated 3 March 2003, from M. Fakhrizadeh to Shahid Hemat Industrial Group (SHIG) management, referring to the "Amad Plan" and seeking assistance with the prompt transfer of data for "Project 111".

Document 2: One page letter in Farsi, dated 14 March 2004, from a "Project 110" official to Dr Kamran advising him of the views of the project supervisors regarding the report relating to "Group E1" (part of "Project 111").

Document 3: One page undated document in Farsi providing correspondence from the "Project 111 Office" to "Engineer Fakhrizadeh, Chief, Amad Plan," referring to a meeting on 28 August 2002 and the provision of the "Project 111" progress report to a Ministry official.

Document 4: Fourteen page document in Farsi dated February–March 2003 entitled "Documentation Preliminary Training" which outlines, in both text and in copies of a presentation, the methodology to be adopted for the production and management of technical reports and documents.

Document 5: Three page document comprising a cover letter in Farsi, dated 11 June 2002, from M. Fakhrizadeh to "Project

Executive" requesting that monthly reports are to be provided to him by the 25th of each month in a specified format.

Document 6: Undated, five page document in Farsi from "Orchid Office" to "Design Management" summarizing the scientific activities of the "Project 111 Groups E1 – E6" and the "Vice Chair E."

Document 7: Comprised of four presentations in Farsi providing an overview of "Project 111" from some time before December 2002 to January 2004. The documents detail various aspects of an unidentified entity's effort to develop and construct a Shahab-3 re-entry vehicle capable of housing a new payload for the Shahab-3 missile system. The material includes a short film clip on the assembly of a dummy re-entry vehicle payload chamber.

Document 8: "Instructions for Assembling the Chamber Parts, Assembling the Payload Inside the Chamber, and Assembling the Chamber to Shahab-3 Warhead", 18 pages in Farsi, dated December 2003–January 2004, produced by Group E6 of Project 111.

Document 9: "Explosive Control System. Construction and Design Report", 48 pages in Farsi, dated December 2003–January 2004, produced by Project 111.

Document 10: "Assembly and Operating Guidelines for Explosive Control System", 17 pages in Farsi, dated December 2003–January 2004, produced by the Groups E2 and E3 of Project 111.

Document 11: "Design and Construction of Explosive Control System", 29 pages in Farsi, dated December 2003–January 2004, produced by Groups E2 and E3 of Project 111.

Document 12: "Finite Element Simulation and Transient Dynamic Analysis of the Warhead Structure", 39 pages in Farsi, dated February–March 2003, produced by Group E5 of Project 111.

Document 13: "Implementation of Mass Properties Requirements of Shahab-3 Missile Warhead with New Payload, with the Use of Nonlinear Optimization Method", 36 pages in Farsi, dated March–April 2003, produced by Group E4 of Project 111.

B. Other Questions

B.1. Questions addressed in Agency letters of 8 and 12 February 2008

1. The Agency asked about the possible involvement of an Institute of Applied Physics (IAP) staff member in Iran's work on EBW detonators; procurement attempts by this person for borehole HP (Ge) gamma spectrometers (GOV/2008/4, para. 40); and Iran's procurement attempts for spark gaps by another entity (GOV/2008/4, para. 40). Iran stated that the person concerned was not involved in work related to EBWs and that the procurement requests were related to well logging for the oil ministry. Iran denied that attempts were made to procure spark gaps by another entity. The Agency continues to assess the information provided by Iran.

2. Iran was also asked by the Agency to clarify the so-called "Project 4", which could be related to possible uranium enrichment (GOV/2008/4, para. 41). Iran repeated its earlier statements that there had never been a Project 4 and that there had not been any uranium enrichment project in Iran except that carried out by the AEOI. The Agency continues to assess the information provided by Iran.

3. The Agency asked about the following projects: "Project 5/11/1", Southern Plant, Bandar Abbas; "Project 5/11/2", Conversion of yellowcake to UF₆; and "Project 5/11/5", R&D on Mining and Extraction. Iran denied the existence of these projects. The Agency continues to assess the information provided by Iran.

4. The Agency requested Iran to describe the purpose of visits abroad between 1998 and 2001 by Mr. Fakhrizadeh and other people known to be involved in Iran's nuclear programme, and to specify the persons, companies and institutes with which meetings were held. Iran acknowledged that these visits took place, but declared that none of them were related to nuclear activities, including uranium enrichment, and provided no details. On 14 May 2008, the Agency re-iterated its request for a more detailed response.

5. In response to the Agency's requests, Iran denied that procurement attempts were made for neutron sources in 2003.

Iran also denied that it had attempted in 1997 to obtain training courses on neutron calculations, enrichment/isotope separation, shock wave software, neutron sources and ballistic missiles (GOV/2008/4, para. 40). The Agency had also enquired about the reasons for inclusion in the curriculum vitae of an IAP employee of a Taylor-Sedov equation for the evolving radius of a nuclear explosion ball with photos of the 1945 Trinity test. Iran indicated that the IAP scientist had been working on dimensional analysis and had included in his resume references available in open sources. The Agency was not permitted to meet with the individuals relevant to these issues and continues to assess the information provided by Iran.

B.2. Questions addressed in Agency letter of 9 May 2008

6. The Agency asked Iran for additional clarifications regarding Iran's nuclear programme. The questions concerned, inter alia:

- (a) information about a high level meeting in 1984 on reviving Iran's pre-revolution nuclear programme;
- (b) information about a letter published by the Chairman of the Expediency Council in September 2006 which makes reference to possible acquisition of nuclear weapons;
- (c) attempts by a former head of the Physics Research Centre (PHRC) and by the SHIG to procure certain nuclear use and dual use items on behalf of the Technical University and the AEOL (GOV/2008/4/ para. 18);
- (d) the scope of a visit by AEOL officials to a nuclear installation in Pakistan in 1987;
- (e) information on meetings between Iranian officials and members of the supply network in 1993 in Dubai;
- (f) the role of the Central Islamic Revolutionary Committee in procurement transactions with the supply network in 1989;
- (g) whether the following projects have existed or still exist, their purpose, present status and the entities involved: "Project 4/8", "Project 3.14", "Project 8", "Project 13 (Project 44)", "Group 14", "Project 10", "Project 19" and "Project 159";
- (h) supporting documents about the order of aluminum bars and sheets that were presented to the Agency on 27 January 2006 (GOV/2006/15, para. 37);
- (i) the nature, intended purpose and application of the radiation monitoring equipment which a staff member of IAP attempted to acquire in 1998;
- (j) information about the purpose of work done by the Pishgam company around 2000 related to the design of a PUREX based process for the AEOL; and
- (k) an agreement which, according to open source information, was signed on 21 January 1990 by Iran's Minister of Defence and Armed Forces Logistics to build a 27 MW reactor in Esfahan.

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council resolutions 1737 (2006) and 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran

[Report by the Director General, GOV/2008/38,
15 September 2008]

[Editorial note: Footnotes not included]

1. On 26 May 2008, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), and 1803 (2008) in the Islamic Republic of Iran (Iran) (GOV/2008/15). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

2. Since the Director General's previous report, Iran has continued to operate the original 3000-machine IR-1 unit at the Fuel Enrichment Plant (FEP). In addition, installation work has continued on four other units. On 30 August 2008, five 164-machine (IR-1) cascades of Unit A26 were being fed with UF₆ and another cascade of that same unit was in vacuum without UF₆; installation of the remaining 12 cascades at that unit is continuing (GOV/2008/15, para. 2). All nuclear material at FEP, as well as all installed cascades, remain under Agency containment and surveillance. As of 30 August 2008, 5930 kg of UF₆ had been fed into the operating cascades since 12 December 2007, the date of the last physical inventory verification (PIV) carried out by the

Agency at FEP. This brings the total amount of UF₆ fed into the cascades since the beginning of operations in February 2007 to 7600 kg. Based on Iran's daily operating records, as of 30 August 2008, Iran had produced approximately 480 kg of low enriched UF₆.

3. At the Pilot Fuel Enrichment Plant (PFEP), between 16 May and 25 August 2008, Iran fed a total of approximately 30 kg of UF₆ into the 10-machine IR-2 cascade and the single IR-1, IR-2 and IR-3 centrifuges. Another 139 centrifuges in a 162-machine IR-1 cascade are in vacuum, but are not being fed with UF₆. All nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.

4. The results of the environmental samples taken at FEP and PFEP to date, and the operating records for FEP since the Director General's last report, indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since March 2007, seventeen unannounced inspections have been conducted at FEP.

B. Reprocessing Activities

5. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR), the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility and the Iran Nuclear Research Reactor (IR-40) through inspections and design information verification (DIV). There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related research and development (R&D) activities in Iran, the Agency can confirm this only with respect to these three facilities as the measures of the Additional Protocol are not available.

6. On 14 August 2008, Iran provided updated Design Information Questionnaires (DIQ) for the MIX Facility and the Jabr Ibn Hayan Multipurpose Laboratories (JHL), both located at the Tehran Nuclear Research Centre. The updated DIQ for the MIX Facility provided information on Iran's plans to fabricate low enriched uranium targets at JHL for the production of molybdenum for medical purposes through irradiation of the targets at TRR and their separation at the MIX Facility.

C. Heavy Water Reactor Related Projects

7. On 13 August 2008, the Agency conducted a PIV at the Fuel Manufacturing Plant (FMP), the results of which are still pending. No major changes in the construction status of FMP have been noted since the Agency's previous visit in May 2008 (GOV/2008/15, para. 8).

8. On 27 August 2008, the Agency carried out a DIV at the IR-40 and noted that construction of the facility was ongoing. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to be in operational condition.

D. Other Implementation Issues

D.1. Uranium Conversion

9. As of 3 August 2008, approximately 28 tonnes of uranium in the form of UF₆ had been produced at the Uranium Conversion Facility (UCF) since 8 March 2008, the date of the last PIV carried out by the Agency at UCF. This brings the total amount of uranium in the form of UF₆ produced at UCF since March 2004 to 342 tonnes, all of which remains under Agency containment and surveillance. In the revised DIQ for JHL, referred to above in paragraph 6, Iran also indicated that conversion related R&D activities would be carried out at JHL (cf. GOV/2008/15, para. 9).

D.2. Design Information

10. As previously reported to the Board of Governors (GOV/2007/22, paras 12–14), on 30 March 2007, the Agency requested Iran to reconsider its decision to suspend the implementation of the modified text of its Subsidiary Arrangements General Part, Code 3.1. There has been no progress on this issue.

11. The Agency requested in December 2007, but has not yet received, preliminary design information for the nuclear power plant that is to be built in Darkhovin.

D.3. Other Matters

12. On 2 April 2008, the Agency requested Iran to provide, as a transparency measure, access to additional locations related, *inter alia*, to the manufacturing of centrifuges, R&D on uranium enrichment, and uranium mining and milling (GOV/2008/15, para. 13). Iran has not yet agreed to the Agency's request.

13. On 3 September 2008, the Agency conducted an inspection at the Bushehr Nuclear Power Plant. All of the fuel assemblies imported from the Russian Federation for use at the plant have remained under Agency seal.

E. Possible Military Dimensions

14. There remain a number of outstanding issues, identified in the Director General's last report to the Board (GOV/2008/15, para. 14), which give rise to concerns about possible military dimensions to Iran's nuclear programme. As indicated in the Director General's report, for the Agency to be able to address these concerns and provide assurances regarding the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, *inter alia*, provide the information and access necessary to: resolve questions related to the alleged studies; provide more information on the circumstances of the acquisition of the uranium metal document; clarify procurement and R&D activities of military related institutes and companies that could be nuclear related; and clarify the production of nuclear equipment and components by companies belonging to defence industries.

15. As also indicated in GOV/2008/15 (paras 16–25), in a series of meetings in April and May 2008, the Agency held discussions with Iran on these matters, and sought additional clarifications relevant to the nature of Iran's nuclear programme. Iran provided written replies on 14 and 23 May 2008, the former of which included a 117-page presentation responding to the allegations concerning the green salt project, high explosives testing and the missile re-entry vehicle project. While Iran confirmed the veracity of some of the information referred to in the Annex to GOV/2008/15, Iran reiterated its assertion that the allegations were based on "forged" documents and "fabricated" data, focusing on deficiencies in form and format, and reiterated that, although it had been shown electronic versions of the documentation, Iran had not received copies of the documentation to enable it to prove that they were forged and fabricated. Iran also expressed concern that the resolution of some of these issues would require Agency access to sensitive information related to its conventional military and missile related activities.

16. After further assessment of Iran's responses, the Agency, in a series of meetings held in Tehran on 7–8 and 18–20 August 2008, highlighted areas where additional information was necessary. While expressing regret that the Agency was not in a position to provide Iran with copies of the documentation concerning the alleged studies, the Agency emphasized that the documentation was sufficiently comprehensive and detailed that it needed to be taken seriously, particularly in light of the fact that, as acknowledged by Iran, some of the information contained in it was factually accurate. The Agency also recalled the earlier discussions with Iran, as a result of which the Agency had concluded that Iran might have additional information, in particular on high explosives testing and missile related activities, which could shed more light on the nature of the alleged studies. The Agency encouraged Iran, as a matter of transparency, to address the substance of the allegations with a view to dispelling the doubts which naturally arise, in light of all of the outstanding issues, about the exclusively peaceful nature of Iran's nuclear programme. The Agency also expressed its willingness to discuss modalities that could enable Iran to demonstrate credibly that the activities referred to in the documentation are not nuclear related, as Iran asserts, while protecting sensitive information related to its conventional military activities.

17. To that end, over the course of the meetings, the Agency made a number of concrete proposals for addressing the alleged studies. The following are examples of those proposals.

(a) In connection with the alleged studies in general, the Agency requested that Iran identify and clarify those elements of the documentation which it considered to be factually correct, and to specify those aspects considered by Iran to have been fabricated.

(b) In connection with the alleged green salt project, the Agency

requested access to the originals of the letters and contracts involving Kimia Maadan, which Iran has acknowledged exist, and copies of some of which Iran has provided to the Agency, with a view to resolving some inconsistencies identified by the Agency in the supporting document provided by Iran. The Agency has also requested access to individuals named in the documentation.

(c) In connection with the alleged studies in high explosives testing, the Agency has asked Iran to provide additional information and documentation, and access to individuals, in support of its statements about the civil and conventional military applications of its work in the area of EBW detonators (GOV/2008/15, para. 20).

(d) With reference to the document describing experimentation in connection with symmetrical initiation of a hemispherical high explosive charge suitable for an implosion type nuclear device, Iran has stated that there have been no such activities in Iran. Since the Director General's previous report, the Agency has obtained information indicating that the experimentation described in this document may have involved the assistance of foreign expertise. Iran has been informed of the details of this information and has been asked to clarify this matter.

(e) Some important parameters reflected in the documentation relating to the re-design of the payload chamber for the Shahab-3 missile re-entry vehicle are the same as those reflected in the documentation referred to in paragraphs (c) and (d) above (e.g. dimensions). The Agency proposed discussions with Iranian experts on the contents of the engineering reports examining in detail modelling studies related to the effects of various physical parameters on the re-entry body from time of launch of the missile to payload detonation. The discussions would be aimed at ascertaining whether these studies were associated with nuclear related activities or, as Iran has asserted, related only to conventional military activities. In addition, the Agency requested access to three civilian workshops identified in the documentation.

18. The Agency believes that Iran could, as a matter of transparency, assist the Agency in its assessment of the alleged studies by providing it with access to documents, information and personnel to demonstrate, as Iran asserts, that these activities were not nuclear related. Unfortunately, Iran has not yet provided the requested information, or access to the requested documentation, locations or individuals.

19. As indicated in the Director General's report to the Board in February 2008 (GOV/2008/4, para. 19), Iran has said that it is unable to provide any additional clarification of the circumstances related to the acquisition of the uranium metal document, reiterating that the document in question had been received along with the P-1 documentation, and that it had not been requested by Iran.

20. The Agency is still awaiting responses to a number of procurement related questions which may shed light, *inter alia*, on the role of the military related entities and their staff in the procurement of items for Iran's nuclear programme and related technical activities in support of that programme. With regard to the production of nuclear related components by companies related to defence industries, Iran's response of 23 May 2008 did not provide any new information. Iran has thus far declined to address these issues as, in its opinion, such issues should be addressed as a routine safeguards matter, and only after the issue of the alleged studies has been resolved.

21. As indicated in the Director General's previous report, the Agency currently has no information — apart from the uranium metal document — on the actual design or manufacture by Iran of nuclear material components of a nuclear weapon or of certain other key components, such as initiators, or on related nuclear physics studies (GOV/2008/15, para. 24). Nor has the Agency detected the actual use of nuclear material in connection with the alleged studies. However, unless Iran undertakes as a measure of transparency, in accordance with its obligations under Security Council resolution 1803 (2008) and other related resolutions, to resolve substantively the outstanding issues, the Agency will not be in a position to progress in its verification of the absence of undeclared nuclear material and activities in Iran. Only through the expeditious resolution of these outstanding issues can doubts arising therefrom about the exclusively peaceful nature of Iran's nuclear programme be dispelled, particularly in light of the many years of clandestine nuclear activities by Iran.

F. Summary

22. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. Iran has provided the Agency with access to declared nuclear material and has provided the required nuclear material accounting reports in connection with declared nuclear material and activities. However, Iran has not implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1 on the early provision of design information.

23. The Agency, regrettably, has not been able to make any substantive progress on the alleged studies and other associated key remaining issues which remain of serious concern. For the Agency to make progress, an important first step, in connection with the alleged studies, is for Iran to clarify the extent to which information contained in the relevant documentation is factually correct and where, in its view, such information may have been modified or relates to alternative, non-nuclear purposes. Iran needs to provide the Agency with substantive information to support its statements and provide access to relevant documentation and individuals in this regard. Unless Iran provides such transparency, and implements the Additional Protocol, the Agency will not be able to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

24. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities, having continued the operation of PFEP and FEP, and the installation of new cascades and the operation of new generation centrifuges for test purposes. Iran has also continued with the construction of the IR-40.

25. The Director General urges Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date.

26. The Director General will continue to report as appropriate.

Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran

[Statement to the 63rd Regular Session of the General Assembly by the Director General, 28 October 2008]

Six years have elapsed since the Agency began working to clarify Iran's nuclear programme. Substantial progress has been made under a work plan agreed with Iran to clarify outstanding issues, including the nature of Iran's enrichment activities. The Agency has been able to continue to verify the non-diversion of *declared* nuclear material in Iran.

However, I regret that we are still not in a position to achieve full clarity regarding the absence of *undeclared* nuclear material and activities in Iran. This is because the Agency has not been able to make substantive progress on the so-called alleged studies and associated questions relevant to possible military dimensions to Iran's nuclear programme.

I reiterate that the Agency does not in any way seek to "pry" into Iran's conventional or missile-related military activities. Our focus is clearly on nuclear material and activities. I am confident that arrangements can be developed which enable the Agency to clarify the remaining issues while ensuring that Iran's legitimate right to protect the confidentiality of sensitive information and activities is respected. I therefore urge Iran to implement all the transparency measures required to build confidence in the exclusively peaceful nature of its nuclear programme at an early date. This will be good for Iran, good for the Middle East region and good for the world.

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council resolutions 1737 (2006), 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran

[Report by the Director General, GOV/2008/59, 19 November 2008]

[Editorial note: Footnotes not included]

1. On 15 September 2008, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards

Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran (Iran) (GOV/2008/38). On 27 September 2008, the Security Council adopted resolution 1835 (2008) on the same matter. This report covers relevant developments since September 2008.

A. Current Enrichment Related Activities

2. Since the Director General's previous report, Iran has continued to feed UF₆ into the 3000-machine IR-1 unit (Unit A24), and five cascades of Unit A26, at the Fuel Enrichment Plant (FEP). Installation and testing of the 13 remaining cascades of Unit A26 is continuing. Preparatory installation work at Units A25, A27 and A28 continues. As of 7 November 2008, the total amount of UF₆ fed into the cascades since the beginning of operations in February 2007 was 9750 kg, and based on the operator's daily accounting records, Iran had produced approximately 630 kg of low enriched UF₆. All nuclear material at FEP, as well as all installed cascades, remain under Agency containment and surveillance.

3. On 29 September 2008, the Agency conducted a physical inventory verification (PIV) at the Pilot Fuel Enrichment Plant (PFEP), the results of which are still pending. Between 25 August and 28 October 2008, Iran fed a total of approximately 31 kg of UF₆ into the 10-machine IR-2 cascade and the single IR-1, IR-2 and IR-3 centrifuges. All nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.

4. To date, the results of the environmental samples taken at FEP and PFEP, and the operating records for FEP, indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since March 2007, twenty unannounced inspections have been conducted at FEP.

5. On 26 October 2008, Iran provided updated Design Information Questionnaires (DIQs) for FEP and PFEP. Iran informed the Agency that it plans to commence the installation of IR-1 centrifuges at Unit A28 at FEP at the beginning of 2009.

B. Reprocessing Activities

6. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility through inspections and design information verification (DIV). There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related research and development (R&D) activities in Iran, the Agency can confirm this only with respect to these two facilities as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

7. On 13 August 2008, the Agency conducted a PIV at the Fuel Manufacturing Plant (FMP), the results of which are consistent with the declaration made by Iran. On 18 October 2008, the Agency conducted an inspection; no major changes in the construction status of FMP have been noted since the Agency's visit to FMP in May 2008.

8. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to be in operational condition.

9. Invoking its decision in March 2007 to "suspend" the implementation of the modified text of Code 3.1 of the Subsidiary Arrangements General Part concerning the early provision of design information (GOV/2007/22, paras 12–14), Iran continues to object to the Agency's carrying out of DIVs at the Iran Nuclear Research Reactor (IR-40). The Agency has reiterated that Code 3.1 concerns the submission of design information, not the frequency or timing of verification by the Agency of such information, and that the Agency's right to carry out DIV is a continuing right. Notwithstanding, the Agency was not permitted to carry out the DIV scheduled for 26 October 2008. As a result, the Agency's information on the status of the construction of the reactor is also limited to that available through satellite imagery. From a review of such imagery, the Agency can confirm that construction of the reactor is continuing.

D. Other Implementation Issues

D.1. Uranium Conversion

10. As of 3 November 2008, approximately 33 tonnes of uranium in the form of UF₆ had been produced at the Uranium Conversion Facility (UCF) since 8 March 2008, the date of the last PIV carried out by the Agency at UCF. This brings the total amount of uranium in the form of UF₆ produced at UCF since March 2004 to 348 tonnes, all of which remains under Agency containment and surveillance. The UCF was shut down in August 2008 for a routine maintenance and restarted operation in October 2008.

D.2. Design Information

11. As previously reported to the Board of Governors (GOV/2007/22, paras 12–14), on 30 March 2007, the Agency requested Iran to reconsider its decision to suspend the implementation of the modified text of its Subsidiary Arrangements General Part, Code 3.1. There has been no progress on this issue. On 16 October 2008, the Agency reiterated its request that Iran reconsider its decision on the issue.

12. The Agency requested in December 2007, but has not yet received, preliminary design information for the nuclear power plant that is to be built in Darkhovin (GOV/2008/38, para. 11).

D.3. Other Matters

13. On 2 April 2008, the Agency requested Iran to provide, as a transparency measure, access to additional locations related, inter alia, to the manufacturing of centrifuges, R&D on uranium enrichment, and uranium mining and milling (GOV/2008/15, para. 13). Iran has not yet agreed to the Agency's request.

14. The fuel assemblies imported from the Russian Federation for use at the Bushehr Nuclear Power Plant have remained under Agency seal (GOV/2008/38, para. 13). A PIV is planned in December 2008.

E. Possible Military Dimensions

15. There remain a number of outstanding issues, identified in the Director General's last report to the Board (GOV/2008/38, para. 14), which give rise to concerns and need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in the Director General's report, for the Agency to be able to address these concerns and make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, inter alia, provide the information and access necessary to: resolve questions related to the alleged studies; provide more information on the circumstances of the acquisition of the uranium metal document; clarify procurement and R&D activities of military related institutes and companies that could be nuclear related; and clarify the production of nuclear equipment and components by companies belonging to defence industries.

16. Since the Director General's last report, the Agency has continued to assess the information previously provided to it, both by Iran (including INFCIRC/737 and 739) and by Member States, in respect of these issues. The Agency believes that Iran could, as a matter of transparency, assist the Agency in its assessment of these issues by providing it with access to documents, information and personnel to demonstrate, as Iran asserts, that these activities were not nuclear related. Unfortunately, Iran has not offered any cooperation with the Agency since that report and has not yet provided the requested information, or access to the requested documentation, locations or individuals.

17. As indicated in the Director General's previous report, the Agency currently has no information — apart from the uranium metal document — on the actual design or manufacture by Iran of nuclear material components of a nuclear weapon or of certain other key components, such as initiators, or on related nuclear physics studies (GOV/2008/38, para. 21). Nor has the Agency detected the actual use of nuclear material in connection with the alleged studies.

F. Summary

18. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. Iran has provided the Agency with access to declared nuclear material and has provided

the required nuclear material accounting reports in connection with declared nuclear material and activities. However, Iran has not implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1 on the early provision of design information. Nor has Iran implemented the Additional Protocol, which is essential for the Agency to provide credible assurance about the absence of undeclared nuclear material and activities.

19. Regrettably, as a result of the lack of cooperation by Iran in connection with the alleged studies and other associated key remaining issues of serious concern, the Agency has not been able to make substantive progress on these issues. For the Agency to make progress, an important first step, in connection with the alleged studies, is for Iran to clarify the extent to which information contained in the relevant documentation is factually correct and where, in its view, such information may have been modified or relates to non-nuclear purposes. Iran needs to provide the Agency with substantive information to support its statements and provide access to relevant documentation and individuals in this regard. Unless Iran provides such transparency, and implements the Additional Protocol, the Agency will not be able to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

20. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities, having continued the operation of PFEP and FEP and the installation of new cascades and the operation of new generation centrifuges for test purposes. Iran has not provided access to the IR-40, and, therefore, the Agency is not able to verify the current status of its construction.

21. The Director General continues to urge Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date.

22. The Director General will continue to report as appropriate.

Excerpt from Introductory Statement to the Board of Governors by IAEA Director General Dr Mohamed ElBaradei

[27 November 2008]

[Eds...]

Implementation of Safeguards in the Islamic Republic of Iran

You have before you my report on the *Implementation of Safeguards in the Islamic Republic of Iran*. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. However, Iran has not implemented the Additional Protocol, which is essential - as in all countries - for the Agency to provide credible assurance about the absence of undeclared nuclear material and activities.

There remain a number of outstanding issues, relevant to the alleged studies and associated questions identified in my last report to the Board, which give rise to concerns and need to be clarified in order to exclude the existence of possible military dimensions to Iran's nuclear programme. Regrettably, the Agency has not been able to make substantive progress on these issues. Iran needs to clarify as a matter of transparency the extent to which information contained in the relevant documentation is factually correct and where, in its view, such information may have been modified or relates to non nuclear purposes. Iran should also provide the Agency with substantive information to support its statements and provide access to relevant documentation and individuals. Unless Iran provides such transparency, and implements the Additional Protocol, the Agency will not be able to make progress in its efforts to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. I also still regret the fact that the Agency has not been able to share with Iran documentation provided by Member States. I call upon the Member States concerned to authorize the Agency to do so.

As I have stated before, the Agency does not in any way seek to intrude into Iran's conventional or missile-related military activities. Our focus is on nuclear material and activities. We have, however, a responsibility under comprehensive safeguards agreements to clarify the veracity of all available information to be able to confirm that all nuclear material is being used exclusively for peaceful purposes. I remain confident that arrangements can be developed which enable the Agency to do its work while ensuring that Iran's

legitimate right to protect the confidentiality of sensitive information and activities is respected.

I continue, therefore, to urge Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme. Likewise, I still hope that conditions will be created soon for direct negotiations between all concerned parties, which are indispensable for establishing the necessary confidence building measures and developing the trust that is key to a solution to the Iran issue and stability in the Middle East.

[...Eds]

Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran

[Report by the Director General, GOV/2009/8,
19 February 2009]

[Editorial note: Footnotes not included]

1. On 19 November 2008, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran (Iran) (GOV/2008/59). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

2. Since the Director General's previous report, Iran has continued to feed UF₆ into the 3000-machine IR-1 unit (Unit A24), and six cascades of Unit A26, at the Fuel Enrichment Plant (FEP). Nine other cascades of Unit A26 have been installed and are under vacuum. Installation of the three remaining cascades of that Unit is continuing. Installation work at Units A25, A27 and A28, including the installation of pipes and cables, is also continuing.

3. The Agency has finalized its assessment of the results of the physical inventory verification (PIV) carried out at FEP on 24–26 November 2008, and has concluded that the physical inventory as declared by Iran was consistent with the results of the PIV, within the measurement uncertainties normally associated with enrichment plants of a similar throughput. The Agency has verified that, as of 17 November 2008, 9956 kg of UF₆ had been fed into the cascades since February 2007, and a total of 839 kg of low enriched UF₆ had been produced. The results also showed that the enrichment level of this low enriched UF₆ product verified by the Agency was 3.49% U-235. Iran has estimated that, between 18 November 2008 and 31 January 2009, it produced an additional 171 kg of low enriched UF₆. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades, remain under Agency containment and surveillance.

4. On 29 September 2008, the Agency conducted a PIV at the Pilot Fuel Enrichment Plant (PFEP), the results of which confirm the physical inventory as declared by Iran, within the measurement uncertainties normally associated with such a facility. Between 29 October 2008 and 15 January 2009, Iran fed a total of approximately 50 kg of UF₆ into the 20-machine IR-1 cascade, the 10-machine IR-2 cascade and the single IR-1, IR-2 and IR-3 centrifuges. The nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance. Iran has transferred a few kilograms of low enriched UF₆ produced at PFEP to the Jibr Ibn Hayan Multipurpose Laboratories at the Tehran Nuclear Research Centre for research and development purposes.

5. To date, the results of the environmental samples taken at FEP and PFEP indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since March 2007, 21 unannounced inspections have been conducted at FEP.

6. On 12 January 2009, Iran provided updated Design Information Questionnaires (DIQs) for FEP and PFEP. Iran informed the Agency in the DIQ for FEP that it plans to include a room for functional testing of single centrifuge machines. There were no other changes in the capacity of the facilities or of their schedules for operation.

B. Reprocessing Activities

7. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related R&D activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

8. The Agency last visited the Iran Nuclear Research Reactor (IR-40) in August 2008 (GOV/2008/59, para. 9). On 21 January 2009, the Agency again requested access to carry out a DIV at the IR-40. In a letter dated 26 January 2009 referring to previous communications concerning the submission of design information, Iran informed the Agency that it would not permit the Agency to carry out the DIV. In a reply dated 29 January 2009, the Agency reiterated its request for access to carry out the DIV. In its response, dated 7 February 2009, Iran reiterated its view that since IR-40 was not in a situation to receive nuclear material, no DIQ was required, and, hence, the request for access to perform DIV was not justified. Iran requested that, as long as the decision stipulated in Iran's letter of 29 March 2007 was valid, no DIV for IR-40 be scheduled.

9. Iran's refusal to grant the Agency access to IR-40 could adversely impact the Agency's ability to carry out effective safeguards at that facility, and has made it difficult for the Agency to report further on the construction of the reactor, as requested by the Security Council. In addition to the roofing having already been completed for the other buildings on the site, construction of the reactor building's domed containment structure has also been completed, as observed in images taken on 30 December 2008, rendering impossible the continued use of satellite imagery to monitor further construction inside the reactor building or any of the other buildings.

10. On 7 February 2009, the Agency conducted an inspection at the Fuel Manufacturing Plant, at which time it was noted that the process line for the production of natural uranium pellets for the heavy water reactor fuel had been completed and fuel rods were being produced.

11. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to be in operational condition.

D. Other Implementation Issues

D.1. Uranium Conversion

12. As of 9 February 2009, approximately 42 tonnes of uranium in the form of UF₆ had been produced at the Uranium Conversion Facility (UCF) since 8 March 2008, the date of the last PIV carried out by the Agency at UCF. This brings the total amount of uranium in the form of UF₆ produced at UCF since March 2004 to 357 tonnes, some of which was transferred to FEP and PFEP, and all of which remains under Agency containment and surveillance.

D.2. Design Information

13. As previously reported to the Board of Governors, the Agency has still not received preliminary design information, requested by the Agency in December 2007, on the nuclear power plant that is to be built in Darkhovin (GOV/2008/38, para. 11).

D.3. Other Matters

14. A PIV was carried out at the Bushehr Nuclear Power Plant (BNPP) on 13–14 December 2008. The fuel assemblies imported from the Russian Federation for use at BNPP remain under Agency seal. Iran has informed the Agency that the loading of fuel into the reactor is scheduled to take place during the second quarter of 2009.

E. Possible Military Dimensions

15. As detailed in the Director General's previous reports to the Board (most recently in GOV/2008/59, para. 15), there remain a number of outstanding issues which give rise to concerns, and which need to be clarified, to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in

those reports, for the Agency to be able to address these concerns and make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, inter alia, provide the information and access requested by the Agency.

16. In a letter to Iran dated 2 February 2008, the Agency reiterated its request to meet with Iranian authorities, in Tehran, at the earliest possible opportunity, with a view to proceeding with the resolution of the issues that remain outstanding.

17. The Agency has still not received a positive reply from Iran in connection with the Agency's requests and, therefore, has not had access to relevant information, documentation, locations or individuals.

F. Summary

18. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. However, Iran has not implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1, on the early provision of design information and has continued to refuse to permit the Agency to carry out design information verification at IR-40.

19. Contrary to the request of the Board of Governors and the Security Council, Iran has not implemented the Additional Protocol, which is a prerequisite for the Agency to provide credible assurance about the absence of undeclared nuclear material and activities. Nor has it agreed to the Agency's request that Iran provide, as a transparency measure, access to additional locations related, inter alia, to the manufacturing of centrifuges, R&D on uranium enrichment, and uranium mining and milling, as also required by the Security Council.

20. Regrettably, as a result of the continued lack of cooperation by Iran in connection with the remaining issues which give rise to concerns about possible military dimensions of Iran's nuclear programme, the Agency has not made any substantive progress on these issues. As indicated in previous reports of the Director General, for the Agency to make such progress, Iran needs to provide substantive information, and access to relevant documentation, locations and individuals, in connection with all of the outstanding issues. With respect to the alleged studies in particular, an important first step is for Iran to clarify the extent to which information contained in the documentation which Iran was shown, and given the opportunity to study, is factually correct and where, in its view, such information may have been modified or relates to non-nuclear purposes.

21. Unless Iran implements the above transparency measures and the Additional Protocol, as required by the Security Council, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. The Director General continues to urge Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date. The Director General, at the same time, urges Member States which have provided such documentation to the Agency to agree to the Agency's providing copies thereof to Iran.

22. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities or its work on heavy water-related projects, including the construction of the heavy water moderated research reactor, IR-40, and the production of fuel for that reactor.

23. The Director General will continue to report as appropriate.

Extract from Introductory Statement to the Board of Governors by IAEA Director General Dr Mohamed ElBaradei

[2 March 2009, Vienna]

Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran

You have before you my report on *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran.*

The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran, including all declared low enriched uranium. As the Report states, contrary to the request of the Board of Governors and the Security Council, Iran has not suspended its enrichment related activities, or its work on heavy water related projects. Nor has Iran implemented the Additional Protocol, which, as with other countries with comprehensive safeguards agreements, is a prerequisite for the Agency to provide credible assurance about the absence of undeclared nuclear material and activities. Iran has not permitted the Agency to perform the required design information verification at the IR-40 reactor currently under construction, and it has not implemented the modified text of its Subsidiary Arrangements General Part on the early provision of design information.

The Agency regrettably was unable to make any progress on the remaining issues which give rise to concerns about possible military dimensions of Iran's nuclear programme because of lack of cooperation by Iran. For the Agency to be able to make progress, Iran needs to provide substantive information and access to relevant documentation, locations and individuals in connection with all of the outstanding issues.

Unless Iran implements the transparency measures and the Additional Protocol, as required by the Security Council, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. I again urge Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date and to unblock this stalemated situation. At the same time, I urge the Member States which have provided information to the Agency to agree to the Agency's sharing of this information with Iran.

Finally, I am hopeful that the apparent fresh approach by the international community to dialogue with Iran will give new impetus to the efforts to resolve this long-standing issue in a way that provides the required assurances about the peaceful nature of Iran's nuclear programme, while assuring Iran of its right to use nuclear energy for peaceful purposes.

Statement on behalf of China, France, Germany, Russia, the United Kingdom and the United States to the Board of IAEA Governors

[March 2009]

We thank the Director General for his report on the "Implementation of the NPT Safeguards and relevant provisions of UN Security Council Resolutions 1737, 1747, 1803, and 1835 in the Islamic Republic of Iran."

We reaffirm our unity of purpose and strong support for the Agency. We applaud the Secretariat for the professionalism and impartiality with which it has pursued its verification mission and reaffirm that the IAEA plays an essential role in establishing confidence in the exclusively peaceful nature of Iran's nuclear program.

We call upon Iran to meet without delay the requirements of the IAEA Board of Governors and to implement the resolutions of the UN Security Council.

We note the serious concern expressed in the Director General's report and in his introductory statement to this Board about the continued lack of progress in connection with remaining issues which give rise to concerns about possible military dimensions of Iran's nuclear program. In this regard, we call on Iran to cooperate fully with the IAEA by providing the Agency such access and information that it requests to resolve these issues.

We further call upon Iran to implement and ratify promptly the Additional Protocol and to implement all measures required by the Agency in order to build confidence in the exclusively peaceful nature of Iran's nuclear program.

We remain firmly committed to a comprehensive diplomatic solution, including through direct dialogue, and urge Iran to take this opportunity for engagement with us and thereby maximize opportunities for a negotiated way forward.

Statement on behalf of China, France, Germany, Russia, the United Kingdom and the United States

[INFCIRC/749 1 April 2009]

Communication dated 12 March 2009 received from the Permanent Missions of China, France, Germany, Russia, the United Kingdom and the United States of America regarding a joint statement on Iran's nuclear programme

The Secretariat has received a communication dated 12 March 2009 from the Permanent Missions of China, France, Germany, Russia, the United Kingdom and the United States of America, transmitting to the attention of all Member States of the IAEA a joint statement on Iran's nuclear programme, delivered at the March Board of Governors meeting. As requested in that communication, the attached statement is herewith circulated for the information of all Member States.

We thank the Director General for his report on the "Implementation of the NPT Safeguards and relevant provisions of UN Security Council Resolutions 1737, 1747, 1803, and 1835 in the Islamic Republic of Iran"

We reaffirm our unity of purpose and strong support for the Agency. We applaud the Secretariat for the professionalism and impartiality with which it has pursued its verification mission and reaffirm that the IAEA plays an essential role in establishing confidence in the exclusively peaceful nature of Iran's nuclear program.

We call upon Iran to meet without delay the requirements of the IAEA Board of Governors and to implement the resolutions of the UN Security Council.

We note the serious concern expressed in the Director General's report and in his introductory statement to this Board about the continued lack of progress in connection with remaining issues which give rise to concerns about possible military dimensions of Iran's nuclear program. In this regard, we call on Iran to cooperate fully with the IAEA by providing the Agency such access and information that it requests to resolve these issues.

We further call upon Iran to implement and ratify promptly the Additional Protocol and to implement all measures required by the Agency in order to build confidence in the exclusively peaceful nature of Iran's nuclear program.

We remain firmly committed to a comprehensive diplomatic solution, including through direct dialogue, and urge Iran to take this opportunity for engagement with us and thereby maximize opportunities for a negotiated way forward.

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran

[GOV/2009/35 5 June 2009]

[Editorial note Footnotes not included]

Report by the Director General

1. On 19 February 2009, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran (Iran) (GOV/2009/8). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

2. Since the Director General's previous report, Iran has continued to feed UF₆ into Unit A24, and twelve cascades of Unit A26, at the Fuel Enrichment Plant (FEP). The six other cascades of Unit A26 have been installed and are under vacuum. Iran has also started installation of cascades at Unit A28; seven cascades have been installed and are under vacuum, and installation of another cascade is continuing. Installation work at Units A25 and A27 is

also continuing.

3. Iran has estimated that, between 18 November 2008 and 31 May 2009, 5723 kg of UF₆ was fed into the cascades and a total of 500 kg of low enriched UF₆ was produced. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades, remain under Agency containment and surveillance. Since the last physical inventory verification (PIV), the Agency and Iran have continued to discuss improvements in the facility's accountancy system. In addition, the Agency has informed Iran that, given the increasing number of cascades being installed at FEP and the increased rate of production of LEU at the facility, improvements to the containment and surveillance measures at FEP are required in order for the Agency to continue to fully meet its safeguards objectives. The Agency has proposed a solution and initiated discussions with Iran to that end.

4. Between 15 January 2009 and 23 May 2009, a total of approximately 54 kg of UF₆ was fed into the 10-machine IR-3 cascade, the 10-machine IR-2 cascade and single IR-1, IR-2, IR-2 modified, IR-3 and IR-4 centrifuges at the Pilot Fuel Enrichment Plant (PFEP). The nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.

5. To date, the results of the environmental samples taken at FEP and PFEP indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since March 2007, 26 unannounced inspections have been conducted at FEP. Twenty-five of these inspections were successfully implemented. For one inspection, carried out on 19 May 2009, access to the facility was not granted by Iran within the agreed time because of an ongoing security drill being carried out at the facility by Iran which had been notified in advance to the Agency. The Agency has initiated discussions with Iran on arrangements in connection with unannounced inspections that would allow the Agency to meet its safeguards objectives within the required timeframe under similar circumstances.

B. Reprocessing Activities

6. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related R&D activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

7. The Agency last visited the Iran Nuclear Research Reactor (IR-40) in August 2008 (GOV/2008/59, para. 9). On 22 April 2009, the Agency again requested access to carry out design information verification (DIV) at the IR-40. In a letter dated 3 May 2009 referring to previous communications concerning the submission of design information, Iran informed the Agency that it would not permit the Agency to carry out the DIV.

8. Iran's refusal to grant the Agency access to IR-40 could adversely impact the Agency's ability to carry out effective safeguards at that facility, and has made it difficult for the Agency to report further on the construction of the reactor, as requested by the Security Council. The completion of the containment structure over the reactor building, and the roofing for the other buildings on the site, makes it impossible to assess further progress on construction inside the buildings without access to the facility. However, satellite imagery suggests that construction is continuing at the reactor site.

9. On 23 May 2009, the Agency conducted an inspection at the Fuel Manufacturing Plant, at which time it was noted that, with the exception of the final quality control testing area, the process line for the production of fuel assemblies for the heavy water reactor fuel had been completed, and that one fuel assembly had been assembled from previously produced fuel rods.

10. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to have been operating intermittently since the last report.

D. Other Implementation Issues

D.1. Uranium Conversion

11. Between 8 and 12 March 2009, the Agency conducted a PIV at the Uranium Conversion Facility. During the PIV, Iran presented 345 tonnes of uranium in the form of UF₆ for Agency verification. The Agency is evaluating the results of the PIV.

D.2. Design Information

12. As previously reported to the Board of Governors, the Agency has still not received preliminary design information, as requested by it in December 2007, for the nuclear power plant that is to be built in Darkhovin (GOV/2008/38, para. 11).

13. Iran has not yet implemented the revised Code 3.1 of the Subsidiary Arrangements General Part (GOV/2008/59, para. 9; GOV/2007/22, paras 12–14). Iran is the only State with significant nuclear activities which has a comprehensive safeguards agreement in force but is not implementing the provisions of the revised Code 3.1 on the early provision of design information. The absence of such information results in late notification to the Agency of the construction of new facilities and changes to the design of existing facilities.

D.3. Other Matters

14. On 1 November 2008, Iran transferred a few kilograms of low enriched UF₆ from PFEP to the Jabr Ibn Hayan Multipurpose Laboratories at the Tehran Nuclear Research Centre. In a letter dated 1 June 2009, Iran clarified that the material will be used in conversion experiments for the manufacturing of UO₂ targets to be irradiated in the Tehran Research Reactor for the production of radioisotopes for medical applications.

15. Iran has informed the Agency that the loading of fuel into the Bushehr Nuclear Power Plant is now scheduled to take place in September/October 2009.

16. Using satellite imagery, the Agency has observed a continuation of ore recovery activities in the area of the Bandar Abbas Uranium Production Plant (UPP) and at the Saghand uranium mine. New construction and modifications to buildings and process plant have also been observed at UPP, the Saghand uranium mine and the Ardakan Yellow Cake Production Plant, although it is difficult to assess the operational status and degree of utilization of these plants.

E. Possible Military Dimensions

17. As detailed in the Director General's previous reports to the Board (most recently in GOV/2009/8, para. 15), there remain a number of outstanding issues which give rise to concerns, and which need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in those reports, for the Agency to be able to address these concerns and make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, inter alia, implement the Additional Protocol and provide the information and access requested by the Agency. The Agency has still not received a positive reply from Iran in connection with the Agency's requests for access to relevant information, documentation, locations or individuals.

18. In a letter to Iran dated 29 May 2009, the Agency responded to Iran's letters dated

16 September 2008, 28 November 2008 and 2 March 2009, in which Iran had, inter alia, provided its views on a number of issues referred to in the Director General's reports and questioned the correctness of certain statements contained in the reports attributed to Iran in connection with possible military dimensions to Iran's nuclear programme and statements in relation to the resolution of the issues contained in the Work Plan. In its letter, the Agency explained why the statements in the Director General's reports were correct. The Agency also reiterated its request to meet with relevant Iranian authorities at the earliest possible opportunity, with a view to addressing in a substantive and comprehensive manner the issues that remain outstanding.

F. Summary

19. As has been reported in previous reports, the Agency continues to verify the non-diversion of declared nuclear material in

Iran.

20. Iran has not, however, implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1, on the early provision of design information, and has continued to refuse to permit the Agency to carry out design information verification at IR-40.

21. Iran has not suspended its enrichment related activities or its work on heavy water related projects as required by the Security Council.

22. Contrary to the request of the Board of Governors and the requirements of the Security Council, Iran has neither implemented the Additional Protocol nor cooperated with the Agency in connection with the remaining issues which give rise to concerns and which need to be clarified to exclude the possibility of military dimensions to Iran's nuclear programme. Unless Iran implements the Additional Protocol and clarifies the outstanding issues, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

23. The Agency believes that it has provided Iran with sufficient access to documentation in its possession to permit Iran to respond substantively to the questions raised by the Agency. However, the Director General urges Member States which have provided documentation to the Agency to work out new modalities with the Agency so that it could share further information with Iran since the Agency's inability to share additional information with Iran, and to provide copies or, if possible, originals, is making it difficult for the Agency to progress further in its verification.

24. The Director General will continue to report as appropriate.

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008), and 1835 (2008) in the Islamic Republic of Iran

[GOV/2009/55 28 August 2009]

[Editorial note: Footnotes not included]

Report by the Director General

1. On 5 June 2009, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran (Iran) (GOV/2009/35). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

2. On 12 August 2009, Iran was feeding UF₆ into Unit A24, and ten cascades of Unit A26, at the Fuel Enrichment Plant (FEP) at Natanz. On that day, the eight other cascades of Unit A26 were under vacuum. Iran has continued with the installation of cascades at Unit A28; fourteen cascades have been installed and the installation of another cascade is continuing. All machines installed to date are IR-1 centrifuges. Installation work at Units A25 and A27 is also continuing.

3. Iran has estimated that, between 18 November 2008 and 31 July 2009, 7942 kg of UF₆ was fed into the cascades and a total of 669 kg of low enriched UF₆ was produced. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades and the feed and withdrawal stations, are subject to Agency containment and surveillance.

4. As reported earlier, the Agency had informed Iran that, given the increasing number of cascades being installed at FEP and the increased rate of production of low enriched uranium at the facility, improvements to the containment and surveillance measures at FEP were needed for the Agency to continue to fully meet its safeguards objectives for the facility (GOV/2009/35, para. 3). In the course of a series of meetings, Iran and the Agency agreed on the improvements, which were put in place on 12 August 2009. The next physical inventory verification (PIV) at FEP is planned for November 2009. At that time, the Agency will be able to verify the inventory of all nuclear material at the facility and evaluate the nuclear material balance after the cold traps have been cleaned

out.

5. Iran and the Agency have also agreed on improvements regarding the provision of accounting and operating records, and on the requirements for timely access for unannounced inspections (GOV/2009/35, para. 5).

6. Between 24 May 2009 and 13 August 2009, a total of approximately 37 kg of UF₆ was fed into a 10-machine IR-4 cascade, a 10-machine IR-2m cascade and single IR-1, IR-2m and IR-4 centrifuges at the Pilot Fuel Enrichment Plant (PFEP). The nuclear material at PFEP, as well as the cascade area and the feed and withdrawal stations, remain under Agency containment and surveillance.

7. The results of the environmental samples taken at FEP and PFEP indicate that both plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since the last report, the Agency has successfully conducted three unannounced inspections. A total of 29 unannounced inspections have been conducted at FEP since March 2007.

B. Reprocessing Activities

8. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related R&D activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

9. On 19 June 2009, the Agency requested Iran to update the Design Information Questionnaire (DIQ) for the Fuel Manufacturing Plant (FMP) and the Iran Nuclear Research Reactor (IR-40) to reflect the design features of the fuel assembly verified by the Agency during its May 2009 inspection at FMP (GOV/2009/35, para. 9). Under cover of a letter dated 21 August 2009, Iran submitted an updated DIQ for FMP, which the Agency is now reviewing.

10. On 11 August 2009, the Agency conducted both a PIV and design information verification (DIV) at FMP, at which time it was noted that the final quality control equipment had been installed, and the fuel assembly referred to above was undergoing quality control testing. Assessment of the results of the PIV is still pending.

11. On 17 August 2009, Iran, following repeated requests by the Agency, provided the Agency with access to the IR-40 reactor at Arak, at which time the Agency was able to carry out a DIV. The Agency verified that the construction of the facility was ongoing. In particular, the Agency noted that no reactor vessel was yet present. The operator stated that the reactor vessel was still being manufactured, and that it would be installed in 2011. Iran also stated that no hot cell windows or manipulators could be procured from foreign sources and that it was considering producing them domestically. Iran estimated that the civil construction work was about 95% completed and that the plant itself was about 63% completed. The facility at its current stage of construction conforms to the design information provided by Iran as of 24 January 2007. However, Iran still needs to provide updated and more detailed design information, in particular about the nuclear fuel characteristics, fuel handling and transfer equipment and the nuclear material accountancy and control system. The Agency has continued using satellite imagery to monitor the status of the Heavy Water Production Plant, which seems not to have been operating since the last report.

D. Other Implementation Issues

D.1. Uranium Conversion

12. The Agency finalized its assessment of the results of the PIV carried out at the Uranium Conversion Facility (UCF) in March 2009 (GOV/2009/35, para. 11), and has concluded that the inventory of nuclear material at UCF as declared by Iran is consistent with those results, within the measurement uncertainties normally associated with conversion plants of similar throughput. Between 8 March 2009 and 10 August 2009, approximately 11 tonnes of uranium in the form of UF₆ was produced at UCF. This brings the total amount of uranium in the form of UF₆ produced at

UCF since March 2004 to approximately 366 tonnes, some of which was transferred to FEP and PFEP, and all of which remains under Agency containment and surveillance. Between March 2009 and 10 August 2009, 159 samples of ammonium diuranate, containing about 2 kg of uranium, were received at UCF from the Bandar Abbas Uranium Production Plant.

13. On 21 July 2009 and 10 August 2009, the Agency conducted design information verification at UCF. The Agency was able to confirm that the facility conforms to the design information provided by Iran.

D.2. Design Information

14. Iran has not yet resumed the implementation of the revised Code 3.1 of the Subsidiary Arrangements General Part on the early provision of design information (GOV/2008/59, para. 9; GOV/2007/22, paras 12–14). Iran is the only State with significant nuclear activities which has a comprehensive safeguards agreement in force but is not implementing the provisions of the revised Code 3.1. The absence of such information results in late notification to the Agency of the construction of new facilities and changes to the design of existing facilities.

15. The Agency has not yet received the requested preliminary design information for the nuclear power plant that is to be built in Darkhovin (GOV/2008/38, para. 11).

D.3. Other Matters

16. In view of the anticipated loading of fuel into the Bushehr Nuclear Power Plant (GOV/2009/35, para. 15), now expected to take place in October/November 2009, the Agency installed a containment and surveillance system at that facility on 22–25 August 2009.

17. In a letter dated 12 July 2009, Iran informed the Agency that it had transferred all nuclear material out of the Uranium Chemical Laboratory at Esfahan and that it did not plan any other nuclear activities in this location and requested the Agency to consider this facility as a decommissioned facility. The Agency has scheduled an inspection to confirm the decommissioned status of this facility.

E. Possible Military Dimensions

18. As referred to in the Director General's previous reports to the Board (most recently in GOV/2009/35, para. 17), there remain a number of outstanding issues which give rise to concerns, and which need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in those reports, it is essential that Iran re-engage with the Agency to clarify and bring to a closure questions related to the alleged studies, the circumstances of the acquisition of the uranium metal document, and the procurement and R&D activities of military related institutes and companies that could be nuclear related as well as the production of nuclear related equipment and components by companies belonging to defence industries.

19. It should be noted that, although the Agency has limited means to authenticate independently the documentation that forms the basis of the alleged studies, the information is being critically assessed, in accordance with the Agency's practices, by corroborating it, inter alia, with other information available to the Agency from other sources and from its own findings. A description of all of the documentation available to the Agency about the alleged studies which the Agency has been authorized to share with Iran and which has been sufficiently vetted by the Agency was provided in the Director General's report of May 2008 (GOV/2008/15, Annex A). It should be noted, however, that the constraints placed by some Member States on the availability of information to Iran are making it more difficult for the Agency to conduct detailed discussions with Iran on this matter. Notwithstanding, as the Director General has repeatedly emphasized, the information contained in that documentation appears to have been derived from multiple sources over different periods of time, appears to be generally consistent, and is sufficiently comprehensive and detailed that it needs to be addressed by Iran with a view to removing the doubts which naturally arise, in light of all of the outstanding issues, about the exclusively peaceful nature of Iran's nuclear programme.

20. In connection with the outstanding issues, Iran has provided to the Agency: (a) its overall assessment of the documentation

related to the alleged studies (GOV/2008/15, Annex A), and (b) partial replies and a document, in response to specific questions presented by the Agency (GOV/2008/15, Annex B). Iran has indicated further that it has information which could shed more light on the nature of the alleged studies, but has not yet provided it to the Agency (GOV/2008/15, para. 23). In the meantime, the Agency has studied the information provided by Iran thus far, but has not yet been given the opportunity by Iran to discuss its findings in detail owing to Iran's insistence that it had already provided its final responses. In the view of the Agency, however, there are still matters which need to be discussed based on the documents and information provided by Iran itself or which relate to information which the Agency has independently corroborated. Examples of information included in the documentation that Iran has not disputed as being factually accurate⁷ are provided below.

21. Although Iran has challenged the allegation that it has engaged in nuclear related high explosives testing studies, Iran has told the Agency that it has experimented with the civil application of simultaneously functioning multiple detonators (GOV/2008/15, para. 20), and was asked by the Agency to provide it with information which would prove that such work had been for civil and nonnuclear military purposes (GOV/2008/38, para. 17(c)). Iran has not yet shared that information with the Agency. The Agency would also like to discuss with Iran the possible role that a foreign national with explosives expertise (GOV/2008/38, para. 17(d)), whose visit to Iran has been confirmed by the Agency, played in explosives development work.

22. With respect to the letter with handwritten annotations which was part of the documentation related to the alleged green salt project (GOV/2008/15, Annex A.1, Doc. 2), Iran has confirmed the existence of the underlying letter, has shown the original to the Agency and has provided the Agency with a copy of it. The existence of this original demonstrates a direct link between the relevant documentation and Iran. As already requested of Iran, the Agency needs to see further related correspondence and to have access to the individuals named in the letter.

23. In respect to the alleged missile re-entry vehicle studies, the Agency still wishes to visit the civilian workshops which Iran has indicated to the Agency exist and which are identified in the documentation as having been involved in the production of model prototypes of a new payload chamber for a missile (GOV/2008/38, para. 17(e)). In addition, while asserting that the documentation on the alleged missile re-entry vehicle was forged and fabricated, Iran informed the Agency that it was well known that Iran was working on the Shahab-3 missile. In light of that, the Agency has reiterated the need to hold discussions with Iran on the engineering and modelling studies associated with the re-design of the payload chamber referred to in the alleged studies documentation to exclude the possibility that they were for a nuclear payload.

24. In light of the above, the Agency has repeatedly informed Iran that it does not consider that Iran has adequately addressed the substance of the issues, having focused instead on the style and form of presentation of the written documents relevant to the alleged studies and providing limited answers or simple denials in response to other questions. The Agency has therefore requested Iran to provide more substantive responses and to provide the Agency with the opportunity to have detailed discussions with a view to moving forward on these issues, including granting the Agency access to persons, information and locations identified in the documents in order for the Agency to be able to confirm Iran's assertion that these documents are false and fabricated. The Agency has reiterated its willingness to discuss modalities that could enable Iran to demonstrate credibly that the activities referred to in the documentation are not nuclear related, as Iran asserts, while protecting sensitive information related to its conventional military activities.

25. For the Agency to be in a position to progress in its verification of the absence of undeclared nuclear material and activities in Iran, it is essential that Iran take the necessary steps to enable the Agency to clarify and bring to a closure the outstanding issues and implement its Additional Protocol.

F. Summary

26. The Agency continues to verify the non-diversion of declared nuclear material in Iran. Iran has cooperated with the Agency in improving safeguards measures at FEP and in providing the

Agency with access to the IR-40 reactor for purposes of design information verification. Iran has not, however, implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1, on the early provision of design information.

27. Iran has not suspended its enrichment related activities or its work on heavy water related projects as required by the Security Council.

28. Contrary to the requests of the Board of Governors and the Security Council, Iran has neither implemented the Additional Protocol nor cooperated with the Agency in connection with the remaining issues of concern which need to be clarified to exclude the possibility of military dimensions to Iran's nuclear programme. Regrettably, the Agency has not been able to engage Iran in any substantive discussions about these outstanding issues for over a year. The Agency believes that it has provided Iran with sufficient access to documentation in its possession to enable Iran to respond substantively to the questions raised by the Agency. However, the Director General urges Member States which have provided documentation to the Agency to work out new modalities with the Agency so that it could share further documentation with Iran, as appropriate, since the Agency's inability to do so is rendering it difficult for the Agency to progress further in its verification process.

29. It is critical for Iran to implement the Additional Protocol and clarify the outstanding issues in order for the Agency to be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

30. The Director General will continue to report as appropriate.

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran

[GOV/2009/74 16 November 2009]

[Editorial note: Footnotes not included]

Report by the Director General

1. On 28 August 2009, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran (Iran) (GOV/2009/35). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

A.1. Natanz: FEP and PFEP

2. On 2 November 2009, Iran was feeding UF₆ into the 18 cascades of Unit A24, and 6 cascades of Unit A26, at the Fuel Enrichment Plant (FEP) at Natanz. On that day, the other 12 cascades of Unit A26 were under vacuum. Iran has continued with the installation of cascades at Unit A28; as of 2 November 2009, 17 cascades had been installed and the installation of another cascade was continuing. All machines installed to date are IR-1 centrifuges with 164 machines per cascade. Installation work at Units A25 and A27 is also continuing.

3. Iran has estimated that, between 18 November 2008 and 30 October 2009, 10395 kg of UF₆ was fed into the cascades and a total of 924 kg of low enriched UF₆ was produced, which would result in a total production of 1763 kg of low enriched UF₆ since the start-up of FEP. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades and the feed and withdrawal stations, are subject to Agency containment and surveillance.

4. The next physical inventory verification (PIV) at FEP is scheduled for 22 to 30 November 2009. As previously indicated to the Board, at that time, the Agency will verify the inventory of nuclear material at the facility and evaluate the nuclear material balance.

5. Between 14 August and 27 October 2009, a total of approximately 53 kg of UF₆ was fed into a 10-machine IR-2m

cascade and single IR-1, IR-2m and IR-4 centrifuges at the Pilot Fuel Enrichment Plant (PFEP). The nuclear material at the PFEP, as well as the cascade area and the feed and withdrawal stations, remain subject to Agency containment and surveillance. The Agency is currently evaluating the results of the PIV it conducted at PFEP between 14 and 16 September 2009.

6. The results of the environmental samples taken at FEP and PFEP indicate that the declared maximum enrichment level (i.e. less than 5.0% U-235 enrichment) has not been exceeded at either plant. Since the last report, the Agency has conducted two unannounced inspections at FEP, for a total of 31 since March 2007.

A.2. Qom: Fordow Fuel Enrichment Plant

7. In a letter to the Director General dated 21 September 2009, Iran informed the Agency that “Based on [its] sovereign right of safeguarding ... sensitive nuclear facilities through various means such as utilization of passive defense systems ... [Iran] has decided to construct a new pilot fuel enrichment plant (up to 5% enrichment)”. Iran stated that the required infrastructure for the plant had been established and that the plant was under construction. In a letter dated 25 September 2009, the Agency requested Iran to provide further information on the current status of its construction and Iran’s plans for the introduction of nuclear material into the facility. The Agency also requested that Iran submit a detailed Design Information Questionnaire (DIQ) and provide access to the facility as soon as possible.

8. During a meeting with the Director General in Tehran on 4 October 2009, Iran agreed to provide the Agency with access to the Fordow Fuel Enrichment Plant (FFEP). Under cover of a letter to the Agency dated 18 October 2009, Iran also submitted a preliminary DIQ for FFEP.

9. On 26 and 27 October 2009, the Agency carried out design information verification (DIV) at FFEP, which is located about 20 km north of the city of Qom. The Agency also held two meetings in Tehran, on 25 and 28 October 2009, to review the DIQ and to discuss the chronology of the design and construction of FFEP as well as its status and purpose. The Agency verified that FFEP was being built to contain sixteen cascades with a total of approximately 3000 centrifuges. Iran indicated that it currently planned to install only IR-1 centrifuges at FFEP, but that the facility could be reconfigured to contain centrifuges of more advanced types should Iran take a decision to use such centrifuges in the future. Iran stated that some of the equipment located at FFEP had come from the Natanz site, and that the Natanz site would provide functional support to FFEP, such as centrifuge assembly and decontamination of equipment. Iran also stated that no nuclear material had been introduced into FFEP.

10. The DIV included a detailed visual examination of all areas of the plant, the taking of photographs of cascade piping and other process equipment, the taking of environmental samples and a detailed assessment of the design, configuration and capacity of the various plant components and systems. Iran provided access to all areas of the facility. The Agency confirmed that the plant corresponded with the design information provided by Iran and that the facility was at an advanced stage of construction, although no centrifuges had been introduced into the facility. Centrifuge mounting pads, header and sub-header pipes, water piping, electrical cables and cabinets had been put in place but were not yet connected; the passivation tanks, chemical traps, cold traps and cool boxes were also in place but had not been connected. In addition, a utilities building containing electricity transformers and water chillers had also been erected.

11. During the meeting in Tehran on 25 October 2009, the Agency provided comments on the preliminary DIQ submitted by Iran, and requested that a revised preliminary DIQ be submitted with additional information, which Iran did in the course of the later meeting on 28 October. Iran informed the Agency that it would provide further information required in the DIQ as the facility is developed. The Agency informed Iran that, in accordance with its Safeguards Agreement, FFEP will henceforth be subject to regular DIV by the Agency. The next DIV is scheduled for the end of November 2009.

12. Iran explained that the Fordow site had been allocated to the Atomic Energy Organization of Iran (AEOI) in the second half of

2007, and that that was when the construction of FFEP had started. Iran subsequently confirmed that explanation in a letter dated 28 October 2009. In that letter, Iran stated that:

“As a result of the augmentation of the threats of military attacks against Iran, the Islamic Republic of Iran decided to establish contingency centers for various organizations and activities ...

“The Natanz Enrichment Plant was among the targets threatened with military attacks. Therefore, the Atomic Energy Organization requested the Passive Defence Organization to allocate one of those aforementioned centers for the purpose of [a] contingency enrichment plant, so that the enrichment activities shall not be suspended in the case of any military attack. In this respect, the Fordow site, being one of those constructed and prepared centers, [was] allocated to the Atomic Energy Organization of Iran (AEOI) in the second half of 2007. The construction of the Fordow Fuel Enrichment Plant then started. The construction is still ongoing. Thus the plant is not yet ready for operation and it is planned to be operational in 2011.”

13. During the meetings, the Agency informed Iran that it had acquired commercially available satellite imagery of the site indicating that there had been construction at the site between 2002 and 2004, and that construction activities were resumed in 2006 and had continued to date. The Agency also referred to the extensive information given to the Agency by a number of Member States detailing the design of the facility, which was consistent with the design as verified by the Agency during the DIV. The Agency also informed Iran that these Member States alleged that design work on the facility had started in 2006.

14. The Agency further indicated that it still had questions about the purpose for which the facility had been intended and how it fit into Iran’s nuclear programme. The Agency also indicated that Iran’s declaration of the new facility reduces the level of confidence in the absence of other nuclear facilities under construction and gives rise to questions about whether there were any other nuclear facilities in Iran which had not been declared to the Agency.

15. In light of the above, the Agency requested access to the FFEP project manager and those responsible for the design of FFEP, along with access to original design documentation, such as engineering drawings, with a view to confirming Iran’s statements regarding the chronology and purpose of the facility.

16. Iran stated that it did not have any other nuclear facilities that were currently under construction or in operation that had not yet been declared to the Agency. Iran also stated that any such future facilities would “be reported to the Agency according to Iran’s obligations to the Agency”. In a letter dated 6 November 2009, the Agency asked Iran to confirm that it had not taken a decision to construct, or to authorize construction of, any other nuclear facility which had not been declared to the Agency.

17. For reasons set out in previous reports to the Board of Governors, Iran remains bound by the revised Code 3.1 of the Subsidiary Arrangements General Part to which it had agreed in 2003, which requires that the Agency be provided with preliminary design information about a new nuclear facility as soon as the decision to construct or to authorize construction of the facility is taken. The revised Code 3.1 also requires that Iran provide the Agency with further design information as the design is developed early in the project definition, preliminary design, construction and commissioning phases. Even if, as stated by Iran, the decision to construct the new facility at the Fordow site was taken in the second half of 2007, Iran’s failure to notify the Agency of the new facility until September 2009 was inconsistent with its obligations under the Subsidiary Arrangements to its Safeguards Agreement.

B. Reprocessing Activities

18. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. The Agency carried out a DIV at TRR on 19 August 2009 and on 9 November 2009 at the MIX Facility. There were no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no

reprocessing related R&D activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not currently available to it for Iran.

C. Heavy Water Reactor Related Projects

19. The Agency has reviewed the updated DIQ for the Fuel Manufacturing Plant (FMP) at Esfahan provided by Iran on 21 August 2009 (GOV/2009/55, para. 9). Contrary to what was requested in the Agency's letter of 19 June 2009, the updated DIQ did not contain information on the design features of the IR-40 fuel assembly. The Agency provided comments on the DIQ to Iran on 5 November 2009, reiterating its request that Iran include the fuel assembly information.

20. The Agency has finalized its assessment of the results of the physical inventory verification (PIV) carried out at FMP in August 2009 (GOV/2009/55, para. 10), and has concluded that the inventory of nuclear material at FMP as declared by Iran is consistent with those results, within the measurement uncertainties normally associated with fabrication plants of similar throughput. On 24 October 2009, the Agency carried out a DIV at FMP. It confirmed that the status of the facility had remained unchanged and that no further assemblies, rods or pellets have been produced.

21. On 7 November 2009, the Agency carried out a DIV at the IR-40 reactor at Arak. The Agency verified that the construction of the facility was ongoing. The Agency has continued using satellite imagery to monitor the status of the Heavy Water Production Plant, which seems not to have been operating since the last report.

22. On 25 October 2009, during the DIV at the Uranium Conversion Facility (UCF) at Esfahan, the Agency observed 600 50-litre drums said by Iran to contain heavy water. In a letter dated 10 November 2009, the Agency asked Iran to confirm the number of drums and their contents, and to provide information on the origin of the heavy water.

D. Other Implementation Issues

D.1. Uranium Conversion

23. In a letter dated 16 October 2009, the Agency requested Iran to provide information regarding the layout, equipment and installation schedule for an analytical laboratory which, in the updated DIQ for UCF submitted in August 2009, Iran had indicated would be installed in an underground location in one of the UCF storage areas.

24. On 25 October 2009, the Agency carried out a DIV at UCF. At that time, the plant was undergoing maintenance. No UF₆ has been produced since 10 August 2009. The total amount of uranium in the form of UF₆ produced at UCF since March 2004 therefore remains 366 tonnes, some of which was transferred to the FEP and PFEP, and which remains subject to Agency containment and surveillance (GOV/2009/55, para. 12). Between 11 August 2009 and 25 October 2009, 92 samples of ammonium diuranate (ADU) containing about a kilogram of uranium were received at UCF from the Bandar Abbas Uranium Production Plant.

D.2. Design Information

25. Iran has not yet resumed the implementation of the revised Code 3.1 of the Subsidiary Arrangements General Part on the early provision of design information, and remains the only State with significant nuclear activities which has a comprehensive safeguards agreement in force but is not implementing the provisions of the revised Code 3.1. It is important to note that the absence of such early information reduces the time available for the Agency to plan the necessary safeguards arrangements, especially for new facilities, and reduces the level of confidence in the absence of other nuclear facilities under construction, as indicated above.

26. In December 2007, the Agency requested preliminary design information for the nuclear power plant to be built in Darkhovin (GOV/2008/38, para. 11). In a letter dated 22 September 2009, Iran provided the Agency with preliminary design information for the plant, citing, as it had in its letter of 21 September 2009 concerning FFEP, its desire to cooperate rather than a legal obligation. In the preliminary design information, the Darkhovin plant is described as a 360 MWe pressurized water reactor, the construction of which is scheduled to start in 2011, with

commissioning to take place in 2015. The Agency has examined the design information and has requested Iran to provide additional clarifications regarding, inter alia, the design of the fuel assemblies and the facility layout.

27. For reasons set out in previous Board reports, the Agency is of the view that the revised Code 3.1 remains in force for Iran. Thus, as indicated above concerning the late submission of design information for FFEP, Iran's failure to submit design information for the Darkhovin facility until September of this year was inconsistent with its obligations under the Subsidiary Arrangements to its Safeguards Agreement.

D.3. Other Matters

28. A PIV at the Bushehr Nuclear Power Plant is planned for 17 November 2009.

29. On 23 September 2009, the Agency performed a DIV at the Uranium Chemical Laboratory at Esfahan, and was able to confirm the decommissioned status of the facility (GOV/2009/55, para. 17).

30. Based on satellite imagery and supporting documentation relevant to the ADU samples received at UCF (see para. 23 above), the Agency assesses that uranium recovery activities are continuing in the area of the Bandar Abbas Uranium Production Plant.

E. Possible Military Dimensions

31. As detailed in the Director General's previous reports to the Board (most recently in GOV/2009/55, para. 18), there remain a number of outstanding issues which give rise to concerns, and which need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in those reports, for the Agency to be able to address these concerns and make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, inter alia, implement the Additional Protocol and provide the information and access necessary to: resolve questions related to the alleged studies; clarify the circumstances of the acquisition of the uranium metal document; clarify procurement and R&D activities of military related institutes and companies that could be nuclear related; and clarify the production of nuclear related equipment and components by companies belonging to defence industries.

32. The Agency is still awaiting a reply from Iran to its request to meet relevant Iranian authorities in connection with these issues. The Agency is also still awaiting Iran's response to the Agency's repeated requests for access to persons, information and locations identified in the alleged studies documents in order to verify Iran's assertion that these documents are false and fabricated. Further analysis of the information available to the Agency underscores the importance of Iran engaging with the Agency in a substantive and comprehensive manner, and providing the requested access, so that the remaining outstanding issues may be resolved. In this context, it would be helpful if Member States which have provided documentation to the Agency would agree to share more of that documentation with Iran, as appropriate.

F. Summary

33. The Agency continues to verify the non-diversion of declared nuclear material in Iran. While Iran recently submitted preliminary design information on the Darkhovin reactor, it continues to assert that it is not bound by the revised Code 3.1 of the Subsidiary Arrangements General Part to which it agreed in 2003, and which it ceased to implement in March 2007.

34. Iran has informed the Agency about the construction of a new pilot enrichment plant at Qom, FFEP. Iran's failure to inform the Agency, in accordance with the provisions of the revised Code 3.1, of the decision to construct, or to authorize construction of, a new facility as soon as such a decision is taken, and to submit information as the design is developed, is inconsistent with its obligations under the Subsidiary Arrangements to its Safeguards Agreement. Moreover, Iran's delay in submitting such information to the Agency does not contribute to the building of confidence. While the Agency has confirmed that the plant corresponds to the design information provided by Iran, Iran's explanation about the purpose of the facility and the chronology of its design and construction requires further clarification.

35. Iran has not suspended its enrichment related activities or its work on heavy water related projects as required by the Security Council.

36. Contrary to the request of the Board of Governors and the requirements of the Security Council, Iran has neither implemented the Additional Protocol nor cooperated with the Agency in connection with the remaining issues of concern, which need to be clarified to exclude the possibility of military dimensions to Iran's nuclear programme. It is now well over a year since the Agency was last able to engage Iran in discussions about these outstanding issues. Unless Iran implements the Additional Protocol and, through substantive dialogue, clarifies the outstanding issues to the satisfaction of the Agency, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

37. The Director General will continue to report as appropriate.

**Implementation of the NPT safeguards
agreement and relevant provisions of Security
Council resolutions 1737 (2006), 1747 (2007),
1803 (2008) and 1835 (2008) in the Islamic
Republic of Iran**

[Resolution GOV/2009/82 adopted by the Board of
Governors on 27 November 2009]

The Board of Governors.

- (a) Recalling the Resolutions adopted by the Board and the UNSC,
- (b) Commending the Director General for his professional and impartial efforts to implement the Safeguards Agreement in Iran, to resolve outstanding safeguards issues in Iran and to verify the implementation by Iran of the suspension,
- (c) Stressing the important role played by the IAEA in resolving the Iranian nuclear issue and reaffirming the Board's resolve to continue to work for a diplomatic solution to the Iranian nuclear issue,
- (d) Reaffirming the inalienable rights of all the parties to the Non-Proliferation Treaty to develop research, production and use of nuclear energy for peaceful purposes in accordance with Article IV of the NPT,
- (e) Commending the Director General for his proposal of an Agreement between the International Atomic Energy Agency and the Governments of the Republic of France, the Islamic Republic of Iran and the Russian Federation for Assistance in Securing Nuclear Fuel for a Research Reactor in Iran for the Supply of Nuclear Fuel to the Tehran Research Reactor; appreciating the intensive efforts of the Director General to achieve an agreement on his proposal,
- (f) Noting with serious concern that Iran continues to defy the requirements and obligations contained in the relevant IAEA Board of Governors and UN Security Council Resolutions,
- (g) Also noting with serious concern that Iran has constructed an enrichment facility at Qom in breach of its obligation to suspend all enrichment related activities and that Iran's failure to notify the Agency of the new facility until September 2009 is inconsistent with its obligations under the Subsidiary Arrangements to its Safeguards Agreement,
- (h) Affirming that Iran's failure to inform the Agency, in accordance with the provisions of the revised Code 3.1, of the decision to construct, or to authorize construction of, a new facility as soon as such a decision is taken, and to submit information as the design is developed, does not contribute to the building of confidence,
- (i) Underlining that Iran's declaration of the new facility reduces the level of confidence in the absence of other nuclear facilities and gives rise to questions about whether there are any other nuclear facilities under construction in Iran which have not been declared to the Agency,
- (j) Noting with serious concern that, contrary to the request of the Board of Governors and the requirements of the Security Council, Iran has neither implemented the Additional Protocol nor cooperated with the Agency in connection with the remaining

issues of concern, which need to be clarified to exclude the possibility of military dimensions to Iran's nuclear programme,

(k) Emphasizing the Director General's assertion that unless Iran implements the Additional Protocol and, through substantive dialogue, clarifies the outstanding issues to the satisfaction of the Agency, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran, and

(l) Noting that the Director General has repeatedly declared that he is unable to verify that Iran's programme is for exclusively peaceful purposes,

1. Urges Iran to comply fully and without delay with its obligations under the above mentioned resolutions of the Security Council, and to meet the requirements of the Board of Governors, including by suspending immediately construction at Qom;

2. Urges Iran to engage with the Agency on the resolution of all outstanding issues concerning Iran's nuclear programme and, to this end, to cooperate fully with the IAEA by providing such access and information that the Agency requests to resolve these issues;

3. Urges Iran to comply fully and without qualification with its safeguards obligations, to apply the modified Code 3.1 and implement and ratify promptly the Additional Protocol;

4. Urges Iran specifically to provide the Agency with the requested clarifications regarding the purpose of the enrichment plant at Qom and the chronology of its design and construction;

5. Calls on Iran to confirm, as requested by the Agency, that Iran has not taken a decision to construct, or authorize construction of, any other nuclear facility which has as yet not been declared to the Agency;

6. Requests the Director General to continue his efforts to implement the Safeguards Agreement in Iran, resolve the outstanding issues which give rise to concerns, and which need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear programme, and to implement the relevant provisions of UNSC resolutions;

7. Further requests the Director General to report this resolution to the UNSC; and

8. Decides to remain seized of the matter.

**Annual Threat Assessment of the US
Intelligence Community for the Senate Select
Committee on Intelligence**

[Statement for the record: February 2 2010]

[Eds...]

Iranian WMD and Missile Program

The Iranian regime continues to flout UN Security Council restrictions on its nuclear program. There is a real risk that its nuclear program will prompt other countries in the Middle East to pursue nuclear options.

We continue to assess Iran is keeping open the option to develop nuclear weapons in part by developing various nuclear capabilities that bring it closer to being able to produce such weapons, should it choose to do so. We do not know, however, if Iran will eventually decide to build nuclear weapons.

I would like to draw your attention to two examples over the past year that illustrate some of the capabilities Iran is developing.

First, published information from the International Atomic Energy Agency indicates that the number of centrifuges installed at Iran's enrichment plant at Natanz has grown significantly from about 3,000 centrifuges in late 2007 to over 8,000 currently installed. Iran has also stockpiled in that same time period approximately 1,800 kilograms of low-enriched uranium. However, according to the IAEA information, Iran also appears to be experiencing some problems at Natanz and is only operating about half of the installed centrifuges, constraining its overall ability to produce larger quantities of low-enriched uranium.

Second, Iran has been constructing—in secret until last

September—a second uranium enrichment plant deep under a mountain near the city of Qom. It is unclear to us whether Iran's motivations for building this facility go beyond its publicly claimed intent to preserve enrichment know-how if attacked, but the existence of the facility and some of its design features raise our concerns. The facility is too small to produce regular fuel reloads for civilian nuclear power plants, but is large enough for weapons purposes if Iran opts to configure it for highly enriched uranium production. It is worth noting that the small size of the facility and the security afforded the site by its construction under a mountain fit nicely with a strategy of keeping the option open to build a nuclear weapon at some future date, if Tehran ever decides to do so.

Iran's technical advancement, particularly in uranium enrichment, strengthens our 2007 NIE assessment that Iran has the scientific, technical and industrial capacity to eventually produce nuclear weapons, making the central issue its political will to do so. These advancements lead us to reaffirm our judgment from the 2007 NIE that Iran is technically capable of producing enough HEU for a weapon in the next few years, if it chooses to do so.

We judge Iran would likely choose missile delivery as its preferred method of delivering a nuclear weapon. Iran already has the largest inventory of ballistic missiles in the Middle East and it continues to expand the scale, reach and sophistication of its ballistic missile forces—many of which are inherently capable of carrying a nuclear payload.

We continue to judge Iran's nuclear decision-making is guided by a cost-benefit approach, which offers the international community opportunities to influence Tehran. Iranian leaders undoubtedly consider Iran's security, prestige and influence, as well as the international political and security environment, when making decisions about its nuclear program.

That is as far as I can go in discussing Iran's nuclear program at the unclassified level. In my classified statement for the record, I have outlined in further detail the Intelligence Community's judgments regarding Iranian nuclear-related activities, as well as its chemical and biological weapons activities and refer you to that assessment.

Iran's growing inventory of ballistic missiles and its acquisition and indigenous production of anti-ship cruise missiles (ASCMs) provide capabilities to enhance its power projection. Tehran views its conventionally armed missiles as an integral part of its strategy to deter—and if necessary retaliate against—forces in the region, including US forces. Its ballistic missiles are inherently capable of delivering WMD, and if so armed, would fit into this same strategy.

[Eds...]

Iran plans to produce 20% enriched uranium at Natanz site

[Salehi, 7 February 2010]

Speaking to IRNA, [Salehi] said Iran is capable to produce 20 percent enriched uranium with Laser technology but it has no plans to do so.

He said that Iran will not produce 20% enriched uranium with laser technology adding that the news agencies have misquoted Iranian president about a decision to enrich 20 percent uranium with laser which is not right.

Iranian president has explained the capabilities of laser in various fields such as enrichment of uranium which does not mean that the country is to do it.

Iranian president has instructed the AEOL to initiate a plan to enrich uranium 20 percent, he said adding that currently negotiations are underway between Iranian president and some countries on swap deal.

Iranian president has underlined that the main focus has been the swap deal and that Iran never accepts any new precondition to this end.

Iranian president has instructed the AEOL to start production of 20 percent enriched uranium if talks on swap deal fail.

Production of 20 percent enriched uranium will be handled at

Natanz nuclear site in due course, he said.

As soon as the Iranian president declares that talks on swap deal is over, and upon direct order from president the operation will start at Natanz site, he added.

The fact is that the president aimed to help western countries get rid of the current stalemate created by themselves through fabricated documentations, Salehi said.

Iranian president has underlined that Iran still remains committed to the fuel swap deal, Salehi said.

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran

[GOV/2010/10 18 February 2010]

[Editorial note: Footnotes not included]

Report by the Director General

1. On 16 November 2009, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of relevant Security Council resolutions in the Islamic Republic of Iran (Iran) (GOV/2009/74). The Director General issued two additional reports on 8 and 10 February 2010 (GOV/INF/2010/1 and GOV/INF/2010/2, respectively).

A. Current Enrichment Related Activities

A.1. Natanz: Fuel Enrichment Plant and Pilot Fuel Enrichment Plant

2. In November 2003, Iran informed the Agency that it would suspend all enrichment related and reprocessing activities in Iran. Specifically, Iran announced that it would suspend all activities on the site of Natanz, not produce feed material for enrichment processes and not import enrichment related items. In February 2004, Iran expanded the scope of that suspension to include the assembly and testing of centrifuges, and the domestic manufacture of centrifuge components. In June 2004, Iran stopped implementing the expanded voluntary measures in connection with the manufacturing of centrifuge components and the assembling and testing of centrifuges. In November 2004, Iran notified the Agency that it had decided, "on a voluntary basis and as [a] further confidence building measure, to continue and extend its suspension to include all enrichment related and reprocessing activities". In January 2006, Iran informed the Agency that it had decided to resume "R&D activities on the peaceful nuclear energy programme which ha[d] been suspended as part of its expanded voluntary and non-legally binding suspension", which included the activities carried out at the Fuel Enrichment Plant (FEP) and the Pilot Fuel Enrichment Plant (PFEP) located at Natanz. Iran restarted enrichment tests at PFEP in February 2006; FEP was put into operation in February 2007.

3. There are two cascade halls at FEP: Production Hall A and Production Hall B. According to the design information submitted by Iran, eight units (Units A21 to A28) are planned for Production Hall A, with 18 cascades planned for each unit. No detailed design information has been provided for Production Hall B.

4. On 31 January 2010, Iran was feeding natural UF₆ into the 17 cascades of Unit A24, and 6 cascades of Unit A26, at FEP. One cascade of Unit A24 and one cascade of Unit A26 were under vacuum on that date. A number of centrifuges from the remaining 11 cascades of Unit A26 had been disconnected. Sixteen cascades of Unit A28 had been installed. Of the remaining 2 cascades of Unit A28, all centrifuges had been removed from one cascade and removal of the centrifuges from the other cascade was ongoing. Installation work in Units A25 and A27 was ongoing. All centrifuges installed to date are IR-1 machines with 164 machines per cascade. There has been no installation work on centrifuges in Production Hall B.

5. Between 21 November 2009 and 2 December 2009, the Agency conducted a physical inventory verification (PIV) at FEP and verified that, as of 22 November 2009, 21 140 kg of natural

UF₆ had been fed into the cascades since February 2007, and a total of 1808 kg of low enriched UF₆ had been produced. The enrichment level of the low enriched UF₆ product, as measured by the Agency, was 3.47% U-235. The Agency is continuing with its assessment of the PIV and is discussing the results with Iran. Iran has estimated that, between 23 November 2009 and 29 January 2010, it produced an additional 257 kg of low enriched UF₆, which would result in a total production of 2065 kg of low enriched UF₆ since the startup of FEP. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades and the feed and withdrawal stations, are subject to Agency containment and surveillance.

6. The results of the environmental samples taken at FEP as of 21 November 2009 indicate that the maximum enrichment level as declared by Iran in the relevant Design Information Questionnaire (DIQ) (i.e. less than 5.0% U-235 enrichment) has not been exceeded at that plant. Since the last report, the Agency has successfully conducted 4 unannounced inspections at FEP, making a total of 35 such inspections since March 2007.

7. Between 14 and 16 September 2009, the Agency conducted a PIV at the PFEP, the results of which confirmed the inventory as declared by Iran, within the measurement uncertainties normally associated with such a facility. Between 28 October 2009 and 2 February 2010, a total of approximately 113 kg of natural UF₆ was fed into a 10-machine IR-2m cascade, a 10-machine IR-4 cascade, a 20-machine IR-2m cascade and single IR-1, IR-2, IR-2m and IR-4 centrifuges at PFEP.

8. On 8 February 2010, the Agency received a letter from Iran dated 7 February 2010 referring to “the announcement made by H.E. the President of the Islamic Republic of Iran concerning the production of the required fuel for the Tehran Research Reactor”, and in that regard, submitting revised version of the DIQ for PFEP. Iran informed the Agency that the “provision of production of less than 20% enriched uranium is being foreseen in this revised version of the DIQ”. The DIQ provides for the “production of enriched UF₆ up to 20%”.

9. On 8 February 2010 the Agency received a separate letter from Iran, dated 8 February 2010, informing the Agency that the operator of FEP intended to transfer low enriched UF₆ produced at FEP to the feed station of PFEP, and that these activities would be performed on 9 February 2010. Iran requested that the Agency be present on the site on that date.

10. On 9 February 2010, the Agency wrote to Iran seeking clarification regarding the starting date of the process for the production of UF₆ enriched up to 20% U-235 and other technical details, and requesting that, in light of Article 45 of the Safeguards Agreement, no low enriched uranium be fed into the process at PFEP for enriching the material up to 20% U-235 before the necessary additional safeguards procedures were in place.

11. On 10 February 2010, when the Agency inspectors arrived at PFEP, they were informed that Iran had already begun to feed the low enriched UF₆ into one cascade at PFEP the previous evening. They were also told that it was expected that the facility would begin to produce up to 20% enriched UF₆ within a few days. As the Board was previously informed, there is currently only one cascade installed in PFEP that is capable of enriching the UF₆ up to 20%.

12. On 14 February 2010, Iran, in the presence of Agency inspectors, moved approximately 1950 kg of low enriched UF₆ from FEP to the PFEP feed station. The Agency inspectors sealed the cylinder containing the material to the feed station. Iran provided the Agency with mass spectrometry results which indicate that enrichment levels of up to 19.8% U-235 were obtained at PFEP between 9 and 11 February 2010.

13. While the nuclear material at PFEP, as well as the cascade area and the feed and withdrawal stations, remain subject to Agency containment and surveillance, additional measures need to be put in place to ensure the Agency's continuing ability to verify the non-diversion of the nuclear material at PFEP. In a letter to Iran dated 9 February 2010, the Agency requested a meeting to discuss a revised safeguards approach for PFEP.

A.2. Qom: Fordow Fuel Enrichment Plant

14. On 21 September 2009, Iran informed the Agency that it had decided “to construct a new pilot fuel enrichment plant”, the Fordow

Fuel Enrichment Plant (FFEP), located near the city of Qom. The Agency met with Iran between 25 and 28 October 2009, at which time it carried out design information verification (DIV) at FFEP, and held discussions with Iran on the chronology of the design and construction of FFEP, as well as its status and original purpose. The Agency verified that FFEP is being built to contain sixteen cascades, with a total of approximately 3000 centrifuges. Iran indicated that it currently planned to install only IR-1 centrifuges at FFEP, but that the facility could be reconfigured to contain centrifuges of more advanced types should Iran take a decision to use such centrifuges in the future. On 28 October 2009, Iran provided the Agency with an updated DIQ for FFEP.

15. In a letter dated 2 December 2009 responding to the Agency's questions in its letter dated 6 November 2009 regarding the timing of the decision to build a third enrichment plant in Iran, other than PFEP and FEP, Iran stated that “The location [near Qom] originally was considered as a general area for passive defence contingency shelters for various utilizations. Then this location was selected for the construction of [the] Fuel Enrichment Plant in the second half of 2007”. On 16 December 2009, the Agency wrote to Iran, pointing out that some of its answers had not fully addressed the Agency's requests for clarifications regarding FFEP. In the letter, the Agency referred specifically to the Agency's request that Iran confirm when the decision to construct a third enrichment plant (other than PFEP and FEP) had been taken and reiterated the need for access to companies involved in the design and construction of FFEP to confirm Iran's statement regarding the chronology and purpose of the facility. The Agency informed Iran that it had received extensive information from a number of sources detailing the design of the facility, which was consistent with the design as verified by the Agency during the DIV, and that these sources alleged that design work on the facility started in 2006, i.e. at a time when Iran itself accepts that it was bound by the modified Code 3.1 to have informed the Agency.

16. In a letter dated 22 January 2010, the Agency asked Iran for a complete DIQ for FFEP, and again reiterated its request made in October 2009 for access to relevant design documents and to companies involved in the design of the third enrichment plant in Iran. Iran has not yet responded to these requests.

17. Since 26 October 2009, the Agency has conducted five DIVs at FFEP. During three of these, the Agency took environmental samples. The results of the analyses of the samples taken on 27 October 2009 from two passivation tanks at FFEP showed the presence of a small number of depleted uranium particles that were similar to particles found at Natanz. According to Iran, the tanks had been brought to FFEP from the Natanz site. The results of the analyses of the later environmental samples are pending. The Agency has verified that the construction of the facility is ongoing, but that no centrifuges had been introduced into the facility as of 16 February 2010.

B. Reprocessing Activities

18. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. The Agency carried out an inspection and a DIV at TRR on 11 November 2009, and on 23 January 2010 at the MIX Facility. There were no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not currently available to it for Iran.

C. Heavy Water Related Projects

19. In resolution 1737 (2006), the Security Council decided in operative paragraph 2 thereof that Iran was to suspend certain activities, including “work on all heavy water-related projects, including the construction of a research reactor moderated by heavy water, also to be verified by the IAEA”. In that resolution, the Council also decided, inter alia, that Iran “shall provide such access and cooperation as the IAEA requires to be able to verify the suspension outlined in paragraph 2 and to resolve all outstanding issues, as identified in IAEA reports”.

20. As indicated in GOV/2009/74, during a DIV carried out at the Uranium Conversion Facility (UCF) at Esfahan on 25 October

2009, the Agency observed a large number of drums said by Iran to contain heavy water. In a letter dated 10 November 2009, the Agency asked Iran to confirm the number of drums and their contents, and to provide information on the origin of the heavy water. In its letter dated 18 November 2009 responding to the Agency, Iran stated that "the origin of the heavy water is the Islamic Republic of Iran".

21. In light of the request of the Security Council that the Agency verify the suspension by Iran, *inter alia*, of all heavy water related projects, and to report on whether Iran has established full and sustained suspension thereof, the Agency needs to be able to confirm the contents of the drums, and the origin of the heavy water said to be contained in the drums. To that end, in a letter dated 7 January 2010, the Agency informed Iran that, during the DIV at UCF scheduled for 17 January 2010, it planned to take samples of the heavy water for destructive analysis. In a letter dated 14 January 2010, Iran objected to the taking of such samples, stating that there was no provision in the Safeguards Agreement for the sampling of non-nuclear material for destructive analysis. During the 17 January 2010 DIV, the Agency counted 756 50-litre drums said by Iran to contain heavy water, and weighed a small number of randomly selected drums, but was not permitted to take samples of the heavy water to confirm the contents of the drums.

22. On 13 January 2010, the Agency carried out a DIV at the Fuel Manufacturing Plant (FMP). It confirmed that no new process equipment had been installed at the facility and that no new assemblies, rods or pellets had been produced since May 2009. On 18 January 2010, the Agency received a revised DIQ for FMP which included information originally requested by the Agency in June 2009 on the design features of the fuel assembly verified by the Agency during its May 2009 inspection at FMP.

23. On 8 February 2010, the Agency carried out a DIV at the IR-40 reactor at Arak. The Agency verified that the construction of the facility was ongoing. However, as previously indicated to the Board, in light of Iran's refusal to permit the Agency access to the Heavy Water Production Plant (HWPP), the Agency has had to rely on satellite imagery to monitor the status of that plant. Based on recent images, the HWPP seems to be in operation again. However, it has to be noted that these images can only provide information on what was happening at the time the images were taken. In accordance with the Security Council's request that the Agency verify the suspension of heavy water related projects in Iran, and particularly in light of the presence at UCF of what Iran has described as Iranian origin heavy water, the Agency needs direct access to the HWPP.

24. In a letter dated 15 February 2010, the Agency reiterated its requests that Iran make the necessary arrangements to provide the Agency, at the earliest possible date, with access to: the HWPP; the heavy water stored at UCF for the purpose of taking samples for destructive analysis; and any other location in Iran where heavy water related projects are being carried out.

D. Other Implementation Issues

D.1. Uranium Conversion

25. According to the design information provided by Iran and revised as of 12 November 2009, UCF will eventually include the following process lines:

- production of natural UF₆ from uranium ore concentrate for further enrichment (completed and operational);
- production of natural UO₂ from uranium ore concentrate for the IR-40 reactor fuel (expected to be completed by March 2010);
- production of natural uranium metal ingots from UF₄ for research and development (R&D) purposes (completed but not yet in operation);
- production of low enriched UO₂ (maximum 5% U-235 enrichment) from UF₆ for light water reactor fuel (building under construction);
- production of low enriched uranium metal (maximum 19.7% U-235 enrichment) from UF₆ for R&D purposes (no equipment installed yet);
- production of depleted UF₄ powder from UF₆ for further

conversion process to uranium metal (building under construction);

- and production of depleted uranium metal from UF₄ for storage and shielding purposes (construction not yet started).

Under cover of a letter dated 11 February 2010, Iran submitted an updated DIQ for UCF which included a reference to an additional R&D activity on the conversion of depleted UF₆ to depleted U₃O₈.

26. In October 2009, the Agency requested Iran to provide information regarding the layout, equipment and installation schedule for an analytical laboratory which Iran had indicated would be installed in an underground location in one of the storage areas of UCF. Under cover of a letter dated 13 December 2009, Iran submitted an updated DIQ for UCF which included, *inter alia*, the layout of the laboratory. On 9 February 2010, the Agency provided comments on the DIQ to Iran, reiterating its request that Iran include information related to the equipment and installation schedule for the laboratory.

27. On 17 January 2010, the Agency carried out an inspection and a DIV at UCF. At that time, the plant was undergoing maintenance. No UF₆ has been produced since 10 August 2009; however, since that date, five tonnes of uranium in the form of UF₆ which had been previously produced but were held up in the process were discharged from the process on 15 November 2009. The total amount of uranium in the form of UF₆ produced at UCF since March 2004 therefore is 371 tonnes (some of which has been transferred to FEP and PFEP), which remains subject to Agency containment and surveillance. Currently, there are 42 tonnes of uranium in the form of uranium ore concentrate (UOC) stored at UCF.

D.2. Design Information

28. In a letter dated 29 March 2007, Iran informed the Agency that it had decided to suspend the implementation of the modified Code 3.1 of the Subsidiary Arrangements General Part, which Iran had accepted in 2003. On 30 March 2007, the Agency requested Iran to reconsider its decision. The Agency reiterated that request in a letter dated 16 October 2008.

29. The modified Code 3.1, to which Iran agreed in 2003, provides for submission to the Agency of design information for new facilities as soon as the decision to construct, or to authorize construction of, a new facility has been taken. The modified Code 3.1 also provides for the submission of further design information as the design is developed early in the project definition, preliminary design, construction and commissioning phases.

30. In accordance with Article 39 of Iran's Safeguards Agreement, agreed Subsidiary Arrangements cannot be changed unilaterally; nor is there a mechanism in the Safeguards Agreement for the suspension of a provision agreed to in Subsidiary Arrangements. Therefore, the modified Code 3.1, as agreed to by Iran in 2003, remains in force for Iran.

31. Both in the case of the Darkhovin facility and FFEP, Iran did not notify the Agency in a timely manner of the decision to construct or to authorize construction of the facilities, as required in the modified Code 3.1, and has provided only limited design information. Iran's actions in this regard are inconsistent with its obligation under the Subsidiary Arrangements to its Safeguards Agreement, and raise concerns about the completeness of its declarations.

32. In a letter to Iran dated 6 November 2009 referring to Iran's decision to build FFEP, the Agency asked Iran, *inter alia*, to confirm that it had not taken a decision to construct or to authorize construction of any other nuclear facilities, and that there were currently no such facilities in Iran which have not been declared to the Agency. In its reply dated 2 December 2009, Iran stated that, "The Islamic Republic of Iran will inform the Agency, as it has been done before, on the existence of any other nuclear facility in Iran in accordance to the Safeguards Agreement with the Agency (INFCIRC/214)".

33. In a letter dated 2 December 2009, the Agency referred to Iran's public announcement of its intention to build ten new uranium enrichment facilities and to statements reportedly made by Iran that the location of five sites had already been decided and that five other plants would be built throughout the country, and asked Iran whether the information contained in these reports was

correct. The Agency further requested that, if a decision to construct new enrichment facilities has been taken by Iran, Iran provide the Agency with further information regarding the design and scheduling of the construction of such facilities. In its reply dated 17 December 2009, in which Iran referred to its letter of 29 March 2007 suspending the implementation of the modified Code 3.1 and reverting to the implementation of the version reflected in the Subsidiary Arrangements dated 12 February 1976, Iran stated that it would "provide the Agency with the required information if necessary".

34. Article 45 of Iran's Safeguards Agreement requires that the Agency be provided with design information in respect of a modification relevant for safeguards purposes sufficiently in advance for the safeguards procedures to be adjusted when necessary. An increase in the maximum declared enrichment level from 5% U-235 to up to 20% U-235 is clearly relevant for safeguards purposes, and, accordingly, should have been notified to the Agency with sufficient time for the Agency to adjust the existing safeguards procedures at PFEP.

35. Iran has not yet resumed implementation of the modified Code 3.1. It remains the only State with significant nuclear activities which has a comprehensive safeguards agreement in force but is not implementing the provisions of the modified Code 3.1. It is important to note that the absence of such early information reduces the time available for the Agency to plan the necessary safeguards arrangements, especially for new facilities, and reduces the level of confidence in the absence of other nuclear facilities.

D.3. Other Matters

36. On 8 December 2009, at the request of Iran, seals were detached from 31 containers at the Bushehr Nuclear Power Plant (BNPP) so that a technical examination of the fuel assemblies imported from the Russian Federation for use at the BNPP could be carried out. Upon completion of the technical examination, the fuel assemblies will be re-verified by the Agency, and placed again under seal.

37. On 9 January 2010, the Agency conducted a DIV at the Jabr Ibn Hayan Multipurpose Research Laboratory (JHL) in Tehran, during which the Agency was informed that pyroprocessing R&D activities had been initiated at JHL to study the electrochemical production of uranium metal. In a letter dated 3 February 2010, the Agency requested Iran to provide more information regarding these activities.

38. Based on satellite imagery, the Agency assesses that uranium recovery activities are continuing in the area of the Bandar Abbas Uranium Production Plant.

39. Since early 2008, the Agency has requested that Iran provide access to additional locations related, inter alia, to the manufacturing of centrifuges, R&D on uranium enrichment and uranium mining and milling (GOV/2008/15, para. 13). Particularly in light of recent developments in, and statements by, Iran regarding the planned construction of new nuclear facilities, the Agency requests Iran to grant the Agency access to these locations as soon as possible.

E. Possible Military Dimensions

40. In order to confirm, as required by the Safeguards Agreement, that all nuclear material in Iran is in peaceful activities, the Agency needs to have confidence in the absence of possible military dimensions to Iran's nuclear programme. Previous reports by the Director General have detailed the outstanding issues and the actions required of Iran, including, inter alia, that Iran implement the Additional Protocol and provide the Agency with the information and access necessary to: resolve questions related to the alleged studies; clarify the circumstances of the acquisition of the uranium metal document; clarify procurement and R&D activities of military related institutes and companies that could be nuclear related; and clarify the production of nuclear related equipment and components by companies belonging to the defence industries.

41. The information available to the Agency in connection with these outstanding issues is extensive and has been collected from a variety of sources over time. It is also broadly consistent and credible in terms of the technical detail, the time frame in which the activities were conducted and the people and organizations involved. Altogether, this raises concerns about the possible

existence in Iran of past or current undisclosed activities related to the development of a nuclear payload for a missile. These alleged activities consist of a number of projects and sub-projects, covering nuclear and missile related aspects, run by military related organizations.

42. Among the activities which the Agency has attempted to discuss with Iran are: activities involving high precision detonators fired simultaneously; studies on the initiation of high explosives and missile re-entry body engineering; a project for the conversion of UO_2 to UF_4 , known as "the green salt project"; and various procurement related activities. Specifically, the Agency has, inter alia, sought clarification of the following: whether Iran was engaged in undeclared activities for the production of UF_4 (green salt) involving the Kimia Maadan company; whether Iran's exploding bridgewire detonator activities were solely for civil or conventional military purposes; whether Iran developed a spherical implosion system, possibly with the assistance of a foreign expert knowledgeable in explosives technology; whether the engineering design and computer modelling studies aimed at producing a new design for the payload chamber of a missile were for a nuclear payload; and the relationship between various attempts by senior Iranian officials with links to military organizations in Iran to obtain nuclear related technology and equipment.

43. The Agency would also like to discuss with Iran: the project and management structure of alleged activities related to nuclear explosives; nuclear related safety arrangements for a number of the alleged projects; details relating to the manufacture of components for high explosives initiation systems; and experiments concerning the generation and detection of neutrons. Addressing these issues is important for clarifying the Agency's concerns about these activities and those described above, which seem to have continued beyond 2004.

44. Since August 2008, Iran has declined to discuss the above issues with the Agency or to provide any further information and access (to locations and/or people) to address these concerns, asserting that the allegations relating to possible military dimensions to its nuclear programme are baseless and that the information to which the Agency is referring is based on forgeries.

45. With the passage of time and the possible deterioration in the availability of information, it is important that Iran engage with the Agency on these issues, and that the Agency be permitted to visit all relevant sites, have access to all relevant equipment and documentation, and be allowed to interview relevant persons, without further delay. Iran's substantive engagement would enable the Agency to make progress in its work. Through Iran's active cooperation, progress has been made in the past in certain other areas where questions have been raised; this should also be possible in connection with questions about military related dimensions.

F. Summary

46. While the Agency continues to verify the non-diversion of declared nuclear material in Iran, Iran has not provided the necessary cooperation to permit the Agency to confirm that all nuclear material in Iran is in peaceful activities.

47. Iran is not implementing the requirements contained in the relevant resolutions of the Board of Governors and the Security Council, including implementation of the Additional Protocol, which are essential to building confidence in the exclusively peaceful purpose of its nuclear programme and to resolve outstanding questions. In particular, Iran needs to cooperate in clarifying outstanding issue which give rise to concerns about possible military dimensions to Iran's nuclear programme, and to implement the modified text of Code 3.1 of the Subsidiary Arrangements General Part on the early provision of design information.

48. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has continued with the operation of PFEP and FEP at Natanz, and the construction of a new enrichment plant at Fordow. Iran has also announced the intention to build ten new enrichment plants. Iran recently began feeding low enriched UF_6 produced at FEP into one cascade of PFEP with the aim of enriching it up to 20% in U-235. The period of notice provided by Iran regarding related changes made to PFEP was insufficient for the Agency to adjust the existing safeguards procedures before Iran started to feed the material into PFEP. The

Agency's work to verify FFEP and to understand the original purpose of the facility and the chronology of its design and construction remain ongoing. Iran is not providing access to information such as the original design documentation for FFEP or access to companies involved in the design and construction of the plant.

49. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has also continued with the

construction of the IR-40 reactor and related heavy water activities. The Agency has not been permitted to take samples of the heavy water which is stored at UCF, and has not been provided with access to the Heavy Water Production Plant.

50. The Director General requests Iran to take steps towards the full implementation of its Safeguards Agreement and its other obligations, including the implementation of its Additional Protocol.

51. The Director General will continue to report as appropriate.