

Board of Governors

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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

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 UF_6 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.¹ 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 UF₆² 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.³

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.⁴ 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 UF_6 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.

¹ On 29 January 2010, of the 8610 centrifuges which had been installed at FEP, 3772 centrifuges were being fed with UF₆.

² The Agency has confirmed, through independently calibrated operator load cell readings, that, between 23 November 2009 and 29 January 2010, 2516 kg of UF₆ was fed into the cascades, and a total of 159 kg of low enriched UF₆ product and 2098 kg of UF₆ tails and dump material was off-loaded into UF₆ cylinders. The difference of 259 kg between the input and output figures comprises natural, depleted and low enriched UF₆ arising mainly from hold-up in the various cold traps and is not inconsistent with the design information provided by Iran.

³ In line with normal safeguards practice, small amounts of nuclear material at the facility (e.g. some waste and samples) are not under containment and surveillance.

⁴ These results have shown particles of low enriched uranium (with up to 4.4% U-235 enrichment), natural uranium and depleted uranium (down to 0.19% U-235 enrichment).

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 a 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%".⁵

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 UF_6 produced at FEP to the feed station of PFEP, and that these activities would be performed on 9 February 2010.⁶ 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 UF_6 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 UF_6 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 UF_6 within a few days. As the Board was previously informed,⁷ there is currently only one cascade installed in PFEP that is capable of enriching the UF_6 up to 20%.

12. On 14 February 2010, Iran, in the presence of Agency inspectors, moved approximately 1950 kg of low enriched UF_6 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 2010.⁸

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,³ 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

⁵ GOV/INF/2010/1.

 $^{^{6}}$ On 9 February 2010, Iran transferred approximately 10 kg of low enriched UF₆ to PFEP.

⁷ GOV/INF/2010/2.

⁸ The results of the environmental samples taken at PFEP from the restart of enrichment testing in February 2006 until 15 August 2009 have shown particles of low enriched uranium (with up to 4.4% U-235 enrichment), natural uranium and depleted uranium (down to 0.27% U-235 enrichment).

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 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 UF_4 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 UF_6 to depleted U_3O_8 .

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 UF_6 has been produced since 10 August 2009; however, since that date, five tonnes of uranium in the form of UF_6 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 UF_6 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.⁹ 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,¹⁰ 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 facility¹¹ 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.

⁹ GOV/2007/22, paras 12–14.

¹⁰ Article 39 of the Safeguards Agreement provides, inter alia, that the Subsidiary Arrangements "may be extended or changed by agreement between the Government of Iran and the Agency …".

¹¹ GOV/2009/74, para. 26.

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,¹² 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

 $^{^{12}}$ A summary of the issues was provided to the Board in Section E of GOV/2008/15, and most recently in GOV/2009/74, para. 31.

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 issues 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.