

Board of Governors

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

Report by the Director General

1. On 24 September 2005, the Board of Governors adopted a resolution (GOV/2005/77) in which, inter alia, it urged the Islamic Republic of Iran (hereinafter referred to as Iran), in order to help the Director General to resolve outstanding questions and provide the necessary assurances:
 - To implement transparency measures, as requested by the Director General in his report, which extend beyond the formal requirements of the Safeguards Agreement and Additional Protocol, and include access to individuals, documentation relating to procurement, dual use equipment, certain military owned workshops and research and development locations;
 - To re-establish full and sustained suspension of all enrichment-related activity, as in GOV/2005/64, and reprocessing activity;
 - To reconsider the construction of a research reactor moderated by heavy water;
 - Promptly to ratify and implement in full the Additional Protocol;
 - Pending completion of the ratification of the Additional Protocol to continue to act in accordance with the provisions of the Additional Protocol, which Iran signed on 18 December 2003.
2. This progress report builds on the previous reports¹ of the Director General to the Board of Governors on issues related to the implementation of the Agreement between Iran and the Agency for

¹ The initial report to the Board of Governors on this matter was provided by the Director General orally at the Board's meeting on 17 March 2003. The Director General has since then submitted eleven written reports to the Board: GOV/2003/40, dated 6 June 2003; GOV/2003/63, dated 26 August 2003; GOV/2003/75, dated 10 November 2003; GOV/2004/11, dated 24 February 2004; GOV/2004/34, dated 1 June 2004, and Corr.1, dated 18 June 2004; GOV/2004/60, dated 1 September 2004; GOV/2004/83, dated 15 November 2004; INFCIRC/648, dated 1 August 2005; GOV/2005/61, dated 8 August 2005; GOV/2005/62, dated 10 August 2005; and GOV/2005/67, dated 2 September 2005. In addition, the Deputy Director General for Safeguards made oral statements to the Board on 1 March 2005 (GOV/OR.1119) and on 16 June 2005 (GOV/OR.1130).

the Application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons (the Safeguards Agreement²).

A. Developments since September 2005

A.1. Contamination

3. The Agency is continuing to analyse the source(s) of low enriched uranium (LEU) particles, and some high enriched uranium (HEU) particles, which were found in Iran with a view to assessing the correctness and completeness of Iran's declarations concerning its enrichment activities (see paras 9 and 10 of GOV/2005/67). The analysis of the environmental samples collected at a location in another Member State where, according to Iran, the centrifuge components had been stored by the procurement network in the mid-1990s prior to their shipment to Iran (see para. 11 of GOV/2005/67), did not indicate any traces of nuclear material.

A.2. Enrichment Programme

4. In October and November 2005, a number of meetings took place during which further documentation said to have been provided to Iran by the procurement network was made available to the Agency, and the Agency was able to interview two individuals (not previously available to the Agency) who had been involved in Iran's discussions with the procurement network.

A.2.1. The 1987 offer

5. As previously reported to the Board, in January 2005 Iran showed to the Agency a copy of a hand-written one-page document reflecting an offer said to have been made to Iran in 1987 by a foreign intermediary for certain components and equipment (see paras 14 and 15 of GOV/2005/67).³ Iran stated that only some components of one or two disassembled centrifuges, and supporting drawings and specifications, were delivered by the procurement network, and that a number of other items of equipment referred to in the document were purchased directly from other suppliers. Most of these components and items were included in the October 2003 declaration by Iran to the Agency.

6. The documents recently made available to the Agency related mainly to the 1987 offer; many of them dated from the late 1970s and early to mid-1980s. The documents included: detailed drawings of the P-1 centrifuge components and assemblies; technical specifications supporting component manufacture and centrifuge assembly; and technical documents relating to centrifuge operational performance. In addition, they included cascade schematic drawings for various sizes of research and development (R&D) cascades, together with the equipment needed for cascade operation (e.g. cooling water circuit needs and special valve consoles). The documents also included a drawing showing a cascade layout for 6 cascades of 168 machines each and a small plant of 2000 centrifuges arranged in the same hall. Also among the documents was one related to the procedural requirements for the reduction of UF₆ to metal in small quantities, and on the casting and machining of enriched, natural and depleted uranium metal into hemispherical forms, with respect to which Iran stated that it had

² INFCIRC/214.

³ The document contained a list including: a disassembled centrifuge, including drawings, descriptions and specifications for production of centrifuges; drawings, specifications and calculations for a "complete plant"; and materials for 2000 centrifuge machines. The document also made reference to: auxiliary vacuum and electric drive equipment; a liquid nitrogen plant; a water treatment and purification plant; a complete set of workshop equipment for mechanical, electrical and electronic support; and uranium reconversion and casting capabilities.

been provided on the initiative of the procurement network, and not at the request of the Atomic Energy Organization of Iran (AEOI).

7. The Agency is assessing all the documentation referred to above and comparing it with, inter alia, documentation from other sources.

A.2.2. Genesis of the mid-1990s offer

8. Very little new information has been made available regarding the events preceding the mid-1990s offer. Iran has maintained that no documentation on the offer exists apart from the shipping documents confirming the delivery of the P-1 components during the 1994–1995 period. Iran has provided no additional information or documentation to support its statement that it did not pursue any work on the P-2 design between 1995 and 2002.

9. As indicated in earlier reports to the Board, Iran has stated that, between 2002 and 2003, a contracting company had briefly carried out some R&D work on a modified P-2 design, but that this had been terminated in July 2003. Iran re-confirmed that, as part of this R&D work, the contractor had purchased some magnets suitable for the P-2 centrifuge design, and made some additional inquiries regarding magnets. Since September 2005, Iran has provided documentation concerning purchases by the contractor of copper aluminium and by the P-1 team of maraging steel and special oil which were also made available to the contractor. The Agency's assessment of these purchases, and the quantities delivered, is continuing with the assistance of Member States.

A.2.3. Shipping documents and other documentation

10. In addition to the documentation referred to above, since the last report to the Board, Iran also provided the Agency with access to a substantial amount of information and documentation relevant to its procurement efforts in the late 1980s and early 1990s, along with more details on the 1994–1995 deliveries. This information, taken together with information obtained through the interviews held in Iran, the Agency's findings and other information supplied to the Agency thus far, seems to be consistent with Iran's declarations of what had been procured in the late 1980s and early 1990s for the first stage of the P-1 R&D programme of the AEOI. Iran has been asked to provide some additional procurement documents in order to enable the Agency to complete its assessment in this regard.

A.2.4. Technical discussions between Iran and the intermediaries

11. Iran has maintained that, after the meetings leading to the 1987 offer and the actual receipt of components and documentation, no contacts were made between Iranian officials and the procurement network before 1993. Iran reiterated that the contact for the mid-1990s offer had been an initiative by the network, and not by Iran.

12. Iran has previously confirmed that, following the mid-1990s offer, up to ten meetings were held with the intermediaries during the period 1996 to 1999. Information supporting this statement was supplied by one of the individuals interviewed by the Agency. Iran has stated that these meetings were all related to discussions about the poor quality of many of the P-1 components that had been supplied to Iran and to obtaining answers to specific technical questions arising from Iran's efforts to operate the P-1 centrifuges. Iran has maintained that at no time during this period did it discuss the P-2 centrifuge design, nor did Iran discuss the possible supply of P-2 centrifuge components, sub-assemblies or rotors.

A.3. Other Implementation Issues

13. With reference to the other aspects of Iran's past nuclear programme, as identified in para. 48 of GOV/2005/67, there are no new developments to report with respect to Iran's uranium mining activities (see paras 26–31 of GOV/2005/67) or with respect to Iran's activities involving polonium and beryllium (see para. 34 of GOV/2005/67).

14. The Agency is awaiting from IAEA network laboratories the results of the analyses of plutonium samples taken in August 2005 to complete its final assessment of Iran's plutonium experiments (see paras 21–25 of GOV/2005/67).

A.4. Implementation of the Additional Protocol

15. As undertaken in its letter to the Agency of 10 November 2003, Iran has continued to act as if its Additional Protocol were in force. Since September 2005 the Agency has conducted three complementary accesses.

A.5. Transparency Visits and Discussions

16. On 1 November 2005, following a meeting held on 30 October 2005 between Mr. Larijani, the Secretary of the Supreme National Security Council of Iran, and the Deputy Director General for Safeguards (DDG-SG), the Agency was given access to the buildings requested within the area of interest at Parchin (see para. 41 of GOV/2005/67), in the course of which environmental samples were taken. The Agency did not observe any unusual activities in the buildings visited. Its final assessment is pending the results of the environmental sample analysis. There have been no new developments with regard to questions and access related to the Lavisan-Shian site (see paras 37–40 of GOV/2005/67).

A.6. Suspension

17. The Agency has continued to monitor installations related to the uranium gas centrifuge and laser enrichment programmes, and has not observed any inconsistency with Iran's voluntary undertaking not to carry out any enrichment activities.

18. On 24 October 2005, Iran informed the Agency that the uranium conversion campaign begun in August 2005 at the Uranium Conversion Facility (UCF) would end around 1 November 2005, and that another campaign with 150 drums would start after a one-week maintenance period (GOV/INF/2005/13). Feeding of yellow cake to process started on 16 November 2005. All UF₆ so far produced at UCF has remained under Agency containment and surveillance measures.

19. In November 2005, the Agency carried out a design information verification visit at the Iran Nuclear Research Reactor (IR-40) at Arak, during which it was noted that the civil engineering construction of the reactor building was continuing.

B. Current overall assessment

20. In the September 2005 report to the Board of Governors, it was noted that, in light of the difficulty of establishing a definitive conclusion with respect to all of the contamination, it was important to make progress on the issue of the scope and chronology of Iran's P-1 and P-2 programmes (see paras 44–47 of GOV/2005/67). Since that time, Iran has been more forthcoming in providing access to additional documentation related to the 1987 offer and permitting interviews with individuals who had been involved in discussions with the procurement network. However, there still remain issues to be resolved in connection with the genesis of the mid-1990s offer. The Agency is still

seeking additional assurance that no P-2 programme was conducted between 1995 and 2002. The Agency is currently reviewing the new information provided by Iran on the P-1 and P-2 enrichment programmes and has emphasized to Iran the importance of providing the additional requested supporting documentation.

21. As also noted in the previous report to the Board, in order to clarify some of the outstanding issues related to Iran's enrichment programme, Iran's full transparency is indispensable and overdue. Transparency measures should include the provision of information and documentation related to the procurement of dual use equipment, and permitting visits to relevant military owned workshops and R&D locations associated with the Physics Research Centre and the Lavisan-Shian site. In this regard, the Agency welcomes the access provided to the Parchin site. The Agency, however, is still awaiting additional information and permission to undertake additional visits. These should also include interviews on the acquisition of certain dual use materials and equipment, and the taking of environmental samples from the above locations.

22. The Secretariat will continue its investigation of all relevant information available to it as well as of outstanding issues pertaining to Iran's nuclear programme. The Director General will continue to report to the Board as appropriate.