



**IAEA**

الوكالة الدولية للطاقة الذرية

国际原子能机构

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**2004/Note 17**

## Note by the Secretariat

### **Secretariat response to Comments and Explanatory notes provided by Iran in INFCIRC/628 on the Director General's report on "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran" (GOV/2004/11)**

1. On Friday 5 March 2004 the Agency received a Note Verbale (No. 350-1-5/1990) from the Permanent Mission of Iran attaching "Comments and Explanatory Notes by the Islamic Republic of Iran on the Report of the IAEA Director General (GOV/2004/11)" (reproduced as INFCIRC/628 of 5 March 2004).
2. The Note Verbale states that "While Iran recognizes the professionalism and hard work of the Secretariat, it is necessary to clarify a number of inadvertent omissions in the report and augment the information in other parts". In response to the request of a number of Member States, the Secretariat's response to Iran's comments and explanatory notes is found below.

#### Point 1

- *Iran's Note states that "Iran's implementation of the Additional Protocol prior to its ratification by the Parliament, which is a clear indication of a voluntary political undertaking for utmost co-operation and transparency, has been omitted from paragraph 5 of the report".*

It should be noted that in GOV/2003/75 of 10 November 2003 it is stated in paragraph 18 that, on 10 November 2003, "Iran indicated that it was prepared to sign the Additional Protocol, and that, pending its entry into force, Iran would act in accordance with the provisions of that Protocol".

Since section A of GOV/2004/11 gives the Chronology since November 2003, there was no need to duplicate the information provided already in GOV/2003/75.

- *Iran's Note states that "as of the date of the DG's report, six complementary accesses with two hours' notice have been granted".*

The Agency implemented four complementary accesses (CA) under Article 4.b.(i) with at least 24 hours notice and two CAs under Article 4.b.(ii) with at least 2 hours notice.

- *Iran's Note states that "Although the request by the Agency for complementary access prior to the submission of declarations were not legally justified, complementary accesses were granted by Iran in the spirit of co-operation and confidence".*

The Agency's requests for complementary access to four locations (TNRC, ENTC, Karaj and the Kalaye Electric Company workshop), were based on Iran's letter of 10 November 2003 to the Agency, which stated that Iran "will continue to co-operate with the Agency in accordance with the Additional Protocol".

Article 5.a.(i) of the Additional Protocol does in fact provide for access to "any place on a site". TNRC, ENTC and Karaj are all sites of nuclear facilities that have been declared to the Agency by Iran under its Safeguards Agreement and for which design information has been provided by Iran. The submission of the Article 2 declaration is therefore not a prerequisite for CA to those locations.

#### Point 2

*Iran's Note states that the "destruction of the dismantled equipment.....is not duly reflected in paragraph 19 of the report".*

The Agency does not see anything of significance that is not reflected in paragraph 19.

#### Point 3

*Iran's Note states that the total amount of plutonium produced by Iran was estimated by the Agency as being 2 mg (referencing DDG-SG's briefing of 27 February 2004) and that the phrase "substantially higher" in paragraph 26 of the DG's report 'may be misleading'.*

Paragraph 26 of the report indicates that "Iran has estimated that the original amount of plutonium in the solution was approximately 200 µg" and that, "until sample results are available, the Agency cannot verify the accuracy of that estimate". It then adds that "based on Agency calculations, the amount of plutonium produced in 3kg of depleted uranium targets under the declared irradiation conditions should have been substantially higher. The reason for this discrepancy is not yet clear". As stated in the DG's report, this matter remains under discussion with Iran. (N.B. There was no mention by DDG-SG of 2 mg.).

#### Point 4

*Iran's Note states that the phrase contained in paragraph 37 of the Report, that "most of the workshops are owned by military industrial organisations" is not correct. It further states that 'as detailed in the documents submitted on 21 October 2003, three out of ten workshops have been involved in manufacturing centrifuge components belong to the Defense Industry'.*

In addition to the information contained in Iran's 21 October 2003 report, more detailed information received from the AEOI on 8 December 2003 indicates that there were 13 workshops involved in the domestic production of centrifuge components. From the information provided, it appears that 7 of the workshops are located on Defense Industry sites.

#### Point 5

*Iran's Note states that, in paragraph 38, the phrase "managed access" is incorrect "since, during the inspections, the Agency inspectors were granted full and unrestricted access".*

The Agency was provided access to visit the locations referred to in paragraph 38 as an act of transparency and without reference to complementary access. The Agency's visit was "managed" in the sense that the inspectors were not permitted to take pictures with IAEA cameras or use their own electronic equipment. Paragraph 38 is simply a description of the factual situation and is not meant to imply criticism.

#### Point 6

*Iran's Note states that Iran's detailed explanation of environmental sample analyses has been submitted to the Agency on 16 February 2004.*

This explanation was delivered on 20 February 2004 and the information is currently being assessed by the Agency.

#### Point 7

*Iran's Note states that the phrase "revealed existence" in paragraph 41 is incorrect".*

The Agency confirms that the "existence" of Farayand Technique and Pars Trash were known to the Agency since October 2003. What was "revealed" in January 2004 was that these companies were subsidiaries of the Kalaye Electric Company.

#### Point 8

*With reference to paragraph 57 of the DG's report, Iran's Note recalls the additional information Iran provided to the Agency regarding the reason for the lack of detailed final information on hot cells adjacent to the heavy water reactor.*

The Secretariat does not find Iran's explanation contained in the Note Verbale adequate since the procurement order for the manipulators appears to specify the thickness of the hot cells walls.

#### Point 9

*Iran's Note discusses issues related to the source of contamination, indicating that the components that were sold to Iran had been previously used.*

Iran's comments do not answer the questions raised in paragraphs 39 and 40 of GOV/2004/11. The issue of contamination therefore remains open.

#### Point 10

*Iran's Note discusses the issue of irradiation of bismuth metal samples to produce polonium-210.*

The document provided to the Agency by Iran suggests that investigation into Po-210 production was initiated around 1990 as a result of interest in exploring radioisotope thermoelectric generators (RTG) applications. It should be noted, however, that no contemporary (ca 1990) applications for Po-210 were provided by Iran as examples of their reason for pursuing the production of this isotope.

IAEA studies show that Po-210 had been largely abandoned in other countries as an active RTG source by the mid-1960s to mid-1970s. In addition, those few RTG applications that did involve Po-210 were mostly short-lived satellite/space vehicle applications, for which Iran does not seem to have had a need in 1990.

#### Point 11.b

*Re Iran's points regarding P-2 centrifuges and its statement that "the Agency was informed of the R&D project well in advance".*

The 21 October 2003 declaration received from Iran was entitled "Summary of Explanation to the Chart of R&D Centrifuge Chronology", but there was no reference made to the R&D work that had been carried out by two individuals who have now been identified as having studied other options such as P-2 centrifuges. However, it is correct that one of these persons stated in June 2003 to the IAEA team that he had done some work "on composite rotors which was not successful", although he also said, at that time, that his work had been based entirely on information which he had drawn from open sources and that he had had no drawings or other foreign support. In addition, these comments were made in the context of the P-1 design. In none of the discussions with Iran in 2003 did Iranian officials make any reference to the acquisition of drawings from a foreign source, or to any mechanical tests for P-2 type centrifuges.

#### Point 11.c

*Iran's Note makes further points regarding its P-2 components.*

The Agency will pursue verification of statements made by Iran with regard to the P-2 centrifuge R&D programme.

#### Points 11.d and 11.e

*Iran states (11.d) that "according to comprehensive Safeguards Agreements (INFCIRC/153), Iran was not required to report to the Agency information on P-2 drawings and the handful of rotor tubes (domestically made), since neither construction of a nuclear facility nor nuclear material was involved".*

*Iran states (11.e) that it "intended to submit information on R&D of P-2 along with further declarations it is required to provide in accordance with its obligations under the Additional Protocol".*

In accordance with Article 42 of Iran's Safeguards Agreement, and Code 3.1 of the General Part of the Subsidiary Arrangements thereto, Iran would have been obliged to inform the Agency of any decision to construct a facility based on such drawings or using the rotor tubes, and to provide preliminary design information thereon, even if nuclear material had not been involved. However, if, as Iran states, no such decision was taken, the Agreement and Subsidiary Arrangements provisions related to the early submission of design information would not have required Iran to report the import of either the design or the rotor tubes. That having been said, the expectation was that Iran's 21 October 2003 declaration would contain a complete explanation of Iran's enrichment activities, including a complete centrifuge R&D chronology, as noted in para 74 of the DG's report (GOV/2004/11). This expectation is evidenced by the understanding of the Board of Governors in OP1 of its November resolution (GOV/2003/81) which reads "and underlines that, in proceeding, the Board considers it essential that the declarations that have now been made by Iran amount to the correct, complete and final picture of Iran's past and present nuclear programme, to be verified by the Agency."

#### Point 12

*Iran's Note contains comments on the R&D on uranium conversion.*

Iran states in its Note that "during past 25 years a total amount of about 50 kg of Natural Uranium in form of yellow cake has been used". According to information provided by Iran a total amount of about 57 kg U of natural uranium as uranium ore concentrate was used, as well as about 327 kg of uranium of different chemical compounds (e.g. UF<sub>4</sub>, UO<sub>2</sub>, depleted U<sub>3</sub>O<sub>8</sub>), which are referred to in more detail in GOV/2003/75.

