NPT Safeguards Agreement with the Islamic Republic of Iran

Report by the Director General

A. Introduction

1. This report of the Director General is on the implementation of the NPT Safeguards Agreement\(^1\) and the Additional Protocol\(^2\) in the Islamic Republic of Iran (Iran). It describes the Agency’s efforts and interactions with Iran to clarify information relating to the correctness and completeness of Iran’s declarations under its Safeguards Agreement and Additional Protocol.

B. Evaluation of safeguards-relevant information

2. The comprehensive evaluation of all safeguards-relevant information available to the Agency is essential in ascertaining that there are no indications of diversion of declared nuclear material from

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\(^1\) The Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/214), which entered into force on 15 May 1974.

\(^2\) Iran’s Additional Protocol (INFCIRC/214/Add.1) was approved by the Board of Governors on 21 November 2003 and signed by Iran on 18 December 2003. Iran implemented voluntarily the Additional Protocol between December 2003 and February 2006. Since 16 January 2016, Iran has been provisionally applying the Additional Protocol in accordance with Article 17(b) of the Additional Protocol. On 16 February 2021, Iran informed the Agency that, as of 23 February 2021, Iran will stop the implementation of the voluntary transparency measures as envisaged in the JCPOA, including “Provisions of the Additional Protocol to the CSA” (see GOV/INF/2021/13).
peaceful nuclear activities and that there are no indications of undeclared nuclear material and activities in a State with a comprehensive safeguards agreement.3

3. The Agency’s evaluations regarding the absence of undeclared nuclear material and activities for Iran are ongoing. All safeguards-relevant information available to the Agency related to Iran is subject to an extensive and rigorous corroboration process.4

C. Agency findings and Iran’s explanations

C.1. Location 1

4. As previously reported,5 according to information available to the Agency in September 2018, a location in Iran not declared to the Agency had allegedly been involved in the storage of nuclear material and equipment. From early November 2018 onwards, the Agency observed, through the analysis of commercial satellite imagery, scraping and landscaping activities at the location. These activities were consistent with sanitization of the location. As a result of its ongoing evaluations, the Agency identified a number of questions related to possible undeclared nuclear material and nuclear-related activities at this location.

5. In February 2019, the Agency conducted a complementary access and took environmental samples at this location (hereafter referred to as location 1). The Agency detected the presence of natural uranium particles of anthropogenic origin, the composition of which indicated that they might have been produced through uranium conversion activities.6 The Agency also detected isotopically altered particles7 of low enriched uranium, with a detectable presence of U-236, and of slightly depleted uranium.8 The Agency requested Iran to provide clarifications and information, and to answer questions related to the Agency’s findings regarding the presence of these particles.9

6. During interactions between the Agency and Iran in relation to the particles of natural uranium of anthropogenic origin, including the taking of environmental samples by the Agency at two declared locations in Iran, Iran provided information and explanations. However, as reported to the Board of Governors in November 2020, the Agency assessed Iran’s response to be unsatisfactory because it was not technically credible.10 The Agency also noted the amount of time that had elapsed in addressing the Agency’s request. In relation to the particles of low enriched uranium, Iran informed the Agency that “the evidence of such contamination is under investigation”. The Agency informed Iran that it continued to consider its response to be not technically credible and that Iran needed to provide a full and prompt

4 The Agency follows the same process for all States with a safeguards agreement in force.
5 Statement by the Deputy Director General for Safeguards to the Board of Governors, 7 November 2019, GOV/OR.1532.
6 GOV/2019/55, para. 29.
7 These particles had been identified as a result of the Agency’s further analysis of the samples it took in February 2019 and which was conveyed to Iran for the first time in an Agency letter to Iran, dated 2 September 2020.
8 The Agency noted in its letter to Iran dated 2 September 2020 that the compositions of these isotopically altered particles were similar to particles found in Iran in the past, originating from imported centrifuge components (see GOV/2008/4, para.11).
9 GOV/2020/51, para. 33.
10 GOV/2020/51, para. 35.
explanation for the presence of multiple uranium particles of anthropogenic origin, including isotopically altered particles, at location 1.

7. In a letter dated 14 December 2020, the Agency reminded Iran to provide the information requested. In its reply dated 20 January 2021, Iran reiterated its previous explanation regarding the presence of particles of natural uranium of anthropogenic origin and, in relation to the presence of isotopically altered particles, Iran said that “no reason or basis has been found for such an assertion”.

8. In a letter dated 25 January 2021, the Agency noted that it continued to assess the explanations provided by Iran for the uranium-rich particles found at location 1 to be not technically credible. The Agency urged Iran to provide substantive additional clarifications to explain the presence of uranium-rich particles at location 1 and required Iran to do so within two weeks. In the absence of a reply, the Agency sent a letter of reminder to Iran, dated 10 February 2021. As of the date of issuance of this report, Iran had not provided any additional clarification.

C.2. Locations 2, 3 and 4

9. As previously reported,11 as a result of its ongoing evaluations, the Agency identified a number of questions related to possible undeclared nuclear material and nuclear-related activities at three other locations in Iran that had not been declared to the Agency. The locations and related questions are as follows:

• **Location 2**: The possible presence in Iran between 2002 and 2003 of natural uranium in the form of a metal disc, with indications of it having undergone drilling and processing, which may not have been included in Iran’s declarations; the origin of this disc; and where such material is currently located;

• **Location 3**: The possible use or storage of nuclear material and/or conducting of nuclear-related activities, including research and development activities related to the nuclear fuel cycle. This location may have been used for the processing and conversion of uranium ore including fluorination in 2003. This location also underwent significant changes in 2004, including the demolition of most buildings; and

• **Location 4**: The possible use and storage of nuclear material where outdoor, conventional explosive testing may have taken place in 2003, including in relation to testing of shielding in preparation for the use of neutron detectors. From July 2019 onwards, the Agency observed activities consistent with efforts to sanitize part of the location.

10. In July and August 2019, the Agency requested responses to these questions from Iran, pursuant to Article 69 of the Safeguards Agreement and Article 4.d. of the Additional Protocol. The Agency specified the precise locations and provided Iran with detailed information upon which the Agency had made its requests.12

11. As location 2 had undergone extensive sanitization and levelling in 2003 and 2004,13 the Agency assessed that there would be no verification value in conducting a complementary access at this location. In relation to its questions concerning location 2, the Agency decided to conduct additional verification activities at a declared facility in Iran where uranium metal had been previously produced (1995-2000). The uranium metal produced at this facility was declared to the Agency in 2003 and has since been

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11 GOV/2020/15.
12 GOV/2020/15, para. 4.
under Agency seal there. The purpose of the verification activities would be to verify whether the natural uranium in the form of a metal disc identified at location 2 is currently stored at this facility.\textsuperscript{14}

12. In relation to locations 3 and 4, in January 2020, the Agency notified Iran, pursuant to Article 4.b.(i) and Article 5.c. of the Additional Protocol, to provide access to each location to carry out location-specific environmental sampling. The purpose of this sampling was to assist the Agency in assuring the absence of undeclared nuclear material and activities at these locations and to resolve the Agency’s questions. Iran denied the Agency access to both locations.\textsuperscript{15}

13. Over the next few months, the Agency continued interacting with Iran with a view to satisfying the Agency’s access requirements without delay to the two locations and answers to its questions, but to no avail.

14. The Board of Governors, in its resolution adopted on 19 June 2020, called on Iran, inter alia, to “fully cooperate with the Agency and satisfy the Agency’s requests without any further delay, including by providing prompt access to the locations specified by the Agency” and requested the Director General to report any developments to the Board of Governors.\textsuperscript{16}

15. On 25 and 26 August 2020, the Director General had discussions in Tehran with H.E. Dr Hassan Rouhani, President of Iran, H.E. Mohammad Javad Zarif, Foreign Minister of Iran, and H.E. Ali Akbar Salehi, Vice-President of Iran and Head of the Atomic Energy Organization of Iran. The objectives of the Director General’s visit were, inter alia, to make concrete progress in addressing the Agency’s outstanding questions related to safeguards; in particular to resolve the issue of access. On 26 August 2020, the Director General and Iran issued a Joint Statement\textsuperscript{17} in which, inter alia, Iran and the Agency reached an agreement on the resolution of the safeguards implementation issues specified by the Agency. In August and September 2020, the Agency conducted complementary accesses at locations 3 and 4 and took environmental samples at both locations. These samples were analysed by the Agency’s laboratories at Seibersdorf and by a number of laboratories within the Agency’s Network of Analytical Laboratories. In September 2020, the Agency also conducted the aforementioned additional verification activities at the declared facility in Iran (see paragraph 11 above).

16. In relation to location 2, Iran has not answered the Agency’s questions and, as the result of the additional verification activities in September 2020 was inconclusive, an additional verification at the declared facility needs to be conducted. Therefore, the current location of the natural uranium in the form of a metal disc remains to be clarified.

17. The analytical results of the environmental samples taken at locations 3 and 4 indicated the presence of anthropogenic uranium particles that required explanation by Iran. On 14 January 2021, the Agency conveyed to Iran in separate letters the results of the analysis and related Agency questions in connection with locations 3 and 4. Iran has yet to provide answers to the Agency’s related questions.

\textsuperscript{14} GOV/2020/30, para. 4, footnote 9.

\textsuperscript{15} GOV/2020/30, para. 5.

\textsuperscript{16} GOV/2020/34, paras 4 and 5.

\textsuperscript{17} Note by the Secretariat (2020/Note 50), 26 August 2020.
D. Modified Code 3.1

18. As previously reported, in a letter dated 15 February 2021, Iran informed the Agency that Iran “will stop the implementation of voluntary transparency measures as envisaged in the JCPOA, as of February 23, 2021”, including modified Code 3.1 of the Subsidiary Arrangements to Iran’s Safeguards Agreement.

19. As previously reported, in a letter dated 16 February 2021, the Director General reminded Iran that implementation of the modified Code 3.1 is a legal obligation for Iran under the Subsidiary Arrangements to its Safeguards Agreement which, in accordance with Article 39 of Iran’s Safeguards Agreement, cannot be modified unilaterally and that there is no mechanism in the Safeguards Agreement for the suspension of implementation of provisions agreed to in the Subsidiary Arrangements.

E. Summary

20. The presence of multiple uranium particles of anthropogenic origin, including isotopically altered particles, at location 1, which was not declared by Iran, is a clear indication that nuclear material and/or equipment contaminated by nuclear material has been present at this location. After 18 months, Iran has not provided the necessary, full and technically credible explanation for the presence of the nuclear material particles. In the absence of such an explanation from Iran, the Agency is deeply concerned that undeclared nuclear material may have been present at this undeclared location and that such nuclear material remains unreported by Iran under its Safeguards Agreement.

21. Iran has not answered the Agency’s questions with regard to location 2 and the Agency has yet to clarify the current location of the natural uranium in the form of a metal disc.

22. With regard to the presence of anthropogenic uranium particles at locations 3 and 4, and to the questions regarding these locations, Iran has yet to provide answers.

23. The Director General, during his trip to Tehran on 20-21 February 2021, stressed to the Government of Iran his concern at the lack of progress in clarifying the safeguards issues outlined above and expressed his readiness to engage Iran in a proactive and focussed effort to break the impasse, and clarify and resolve these issues without further delay.

25. In accordance with Article 39 of Iran’s Safeguards Agreement, agreed Subsidiary Arrangements and their implementation cannot be modified unilaterally. Therefore, given the legally binding nature of the agreed Subsidiary Arrangements, Iran is required to continue the implementation of the modified Code 3.1 of the Subsidiary Arrangements to its Safeguards Agreement. Should Iran fail to implement the modified Code 3.1 as it had agreed to in 2003 it would be inconsistent with Iran’s obligations under the Subsidiary Arrangements to its Safeguards Agreement.

26. The Director General will continue to report to the Board of Governors as appropriate.

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18 GOV/INF/2021/13.

19 GOV/INF/2021/13.