



IAEA

Atoms for Peace and Development

Board of Governors

GOV/2025/25

Date: 31 May 2025

Original: English

For official use only

Item 7 (f) of the provisional agenda
(GOV/2025/23 and Add.1)

NPT Safeguards Agreement with the Islamic Republic of Iran

Report by the Director General

A. Introduction

1. On 21 November 2024, the Board of Governors (Board) adopted resolution GOV/2024/68 entitled *NPT Safeguards Agreement with the Islamic Republic of Iran* in which the Board, inter alia, reiterated “its profound concern that Iran has still not provided necessary, full and unambiguous cooperation with the Agency and has not taken the essential and urgent actions as decided by the Board in its June 2024 resolution, with the consequence that safeguards issues remain outstanding despite numerous interactions with the Agency since 2019, with serious implications for the Agency’s ability to ensure verification of the non-diversion of nuclear material required to be safeguarded under Iran’s NPT Safeguards Agreement to nuclear weapons or other nuclear explosive devices”.¹

2. The Board also requested the Director General “to produce a comprehensive and updated assessment on the possible presence or use of undeclared nuclear material in connection with past and present outstanding issues regarding Iran’s nuclear programme, including a full account of Iran’s cooperation with the IAEA on these issues, addressing the Agency’s ability to verify Iran’s implementation of its safeguards obligations including the non-diversion of nuclear material, based on all information available, for consideration by the March 2025 Board of Governors or at the latest by spring 2025”.² This report is in response to the Board’s request.

¹ GOV/2024/68, para. 2.

² GOV/2024/68, para. 6.

3. The assessment contained in this report is based upon an evaluation of all safeguards-relevant information available to the Agency in exercising its rights and fulfilling its safeguards obligations pursuant to the NPT Safeguards Agreement with the Islamic Republic of Iran (Iran).³

A.1. NPT Safeguards Agreement

4. Iran has been a non-nuclear-weapon State (NNWS) Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) since 5 March 1970. Under Article II of the NPT, each NNWS Party undertook “not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.” Under Article III.1 of the NPT, each NNWS Party undertook “to accept safeguards, as set forth in an agreement to be negotiated and concluded with the [IAEA] in accordance with the Statute of the [IAEA] and the Agency’s safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under this Treaty with a view of preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices [...]” The NPT Safeguards Agreement entered into force on 15 May 1974 and has been implemented since.⁴

5. Article 1 of Iran’s NPT Safeguards Agreement provides for Iran’s undertaking, pursuant to Article III.1 of the NPT, “to accept safeguards, in accordance with the terms of this Agreement, on all source or special fissionable material in all peaceful nuclear activities within its territory, under its jurisdiction or carried out under its control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices”.⁵ Article 2 of the Agreement provides that “[t]he Agency shall have the right and obligation to ensure that safeguards will be applied, in accordance with the terms of this Agreement, on all source or special fissionable material in all peaceful nuclear activities within its territory, under its jurisdiction or carried out under its control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices”.⁶ Article 3 of the Agreement requires Iran and the Agency “to cooperate to facilitate the implementation of the safeguards provided for in this Agreement”.⁷

6. Iran’s Additional Protocol (AP) (INFCIRC/214/Add.1) was approved by the Board on 21 November 2003 and signed by Iran on 18 December 2003. Iran implemented voluntarily the AP between December 2003 and February 2006. On 16 January 2016, Iran began provisionally applying

³ 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.

⁴ INFCIRC/214.

⁵ INFCIRC/214, Article 1.

⁶ As provided for in Article 2 of a comprehensive safeguards agreement (CSA), the Agency has the right and obligation to verify that all nuclear material required to be safeguarded under the CSA is declared by the State, i.e. the correctness and completeness of the State’s declarations (see for example GOV/DECISIONS 1990-91, 90-91/71; GOV/DECISIONS 1991-92, 91-92/39; GOV/DECISIONS 2004-05, 04-05/16 and GOV/DECISIONS 2004-05, 04-05/35).

⁷ To ensure the effective implementation of safeguards under the CSA, the State is required, for example, to provide timely, correct and complete nuclear material accounting reports and design information, access to facilities and other locations, facilitate Agency verification activities during design information verification visits and inspections, and to clarify and resolve any questions, inconsistencies, anomalies or discrepancies identified by the Agency in the course of implementation of safeguards under the CSA.

the AP in accordance with Article 17(b) of the AP. As of 23 February 2021, Iran stopped the implementation the AP.⁸

A.2. Evaluation of safeguards-relevant information

7. The comprehensive evaluation of all safeguards-relevant information available to the Agency is essential in ascertaining that there are no indications of the diversion of declared nuclear material from peaceful nuclear activities and that there are no indications of undeclared nuclear material and activities in a State with a comprehensive safeguards agreement (CSA).⁹

8. As described in the Agency's annual Safeguards Implementation Report,¹⁰ to ascertain that there are no indications of diversion of declared nuclear material from peaceful nuclear activities, no indications of undeclared production or processing of nuclear material at declared facilities and locations outside facilities (LOFs), and no indications of undeclared nuclear material or activities in a State as a whole, the Agency needs to carry out a comprehensive evaluation of the consistency of all safeguards-relevant information available to it about a State. This includes:

- Information provided by the State itself under the CSA and AP¹¹ in force with regard to, inter alia, the design and operation of nuclear facilities and LOFs, the State's nuclear material accounting reports and AP declarations, including clarifications and amplifications at the Agency's request, and information provided voluntarily;
- Information from safeguards activities conducted by the Agency in the field and at Headquarters to verify the information provided by the State under the CSA and AP¹¹; and
- Other relevant information, e.g. open source information or third party information.

9. The Agency evaluates, inter alia, whether information has been submitted by the State as required and whether access to nuclear material, facilities, sites and other locations was provided in accordance with the CSA and AP.¹¹ Moreover, all anomalies, discrepancies, or inconsistencies identified in the course of the Agency's implementation of safeguards must be addressed appropriately.

10. Accordingly, this assessment for Iran is based on an evaluation of all safeguards-relevant information available to the Agency, including information provided by Iran under its NPT Safeguards Agreement and AP (when this was being provisionally implemented by Iran), information gathered from the Agency's own verification activities – including from satellite imagery and complementary accesses conducted when Iran's AP was being provisionally implemented, information from open sources and third party information.

B. Background

11. As previously reported,¹² as a result of its evaluations of all safeguards-relevant information, the Agency identified in 2019 a number of questions related to possible nuclear material and nuclear-related

⁸ GOV/INF/2021/13, para. 2.

⁹ GOV/2025/10, para. 2.

¹⁰ GOV/2025/22, paras 11 and 12.

¹¹ The evaluation process performed for States with CSAs in force but no APs in force is as described in paragraphs 8 and 9 of this report. Safeguards relevant information available to the Agency for such States does not include any AP related information. See GOV/2025/22, paras 19 and 20.

¹² GOV/2020/15, paras 3 and 4; GOV/2020/30, paras 3 and 4.

activities in Iran that had not been declared to the Agency and requested responses to these questions from Iran, pursuant to Article 69 of Iran's NPT Safeguards Agreement and Article 4.d. of its AP. The Agency also provided Iran with detailed information upon which the Agency had made its requests for clarification.

12. In his report to the Board dated 23 February 2021,¹³ the Director General presented the Agency's findings concerning four locations in Iran that had not been declared by Iran to the Agency, identified at that time only numerically – as Locations 1 (Turquzabad), 2 (Lavisian-Shian), 3 (Varamin) and 4 (Marivan), and Iran's explanations regarding these locations. At three of these locations (Turquzabad, Varamin and Marivan) where the Agency conducted complementary access (CA) and location-specific environmental sampling, the Agency found multiple uranium particles of anthropogenic origin that required explanation by Iran. As Lavisian-Shian had undergone extensive sanitisation and levelling in the past, the Agency assessed that there would be no verification value in conducting a CA at this location. The Agency's evaluation as of May 2022 of the issues relating to all four undeclared locations and Iran's responses to the Agency's requests for clarification were provided in the Director General's report to the Board dated 30 May 2022.¹⁴

C. Comprehensive evaluations of the four locations

C.1. Lavisian-Shian

13. As previously reported,¹⁵ the Lavisian-Shian location in Tehran was first referred to in the June 2004 meeting of the Board in connection with alleged nuclear-related activities and the possibility of a concealment effort through the demolition of the buildings at that location. During discussions with the Agency at that time, Iran stated that "no nuclear material declarable in accordance with the Agency's safeguard[s] was present" and that "no nuclear material and nuclear activities related to fuel cycle were carried out at Lavisian-Shian".¹⁶

14. More recently, as also previously reported,¹⁷ in 2019, the Agency had indications of the possible presence in Iran of natural uranium in the form of a metal disc, and of it having undergone drilling and processing at an unidentified location in Iran in 2003, which may not have been included in Iran's declarations. Subsequently, through continued analysis of all available safeguards-relevant information, the Agency identified this location as Lavisian-Shian.¹⁸ In July 2019, the Agency asked Iran a number of questions, pursuant to its NPT Safeguards Agreement and AP, related to this possible undeclared nuclear material and nuclear-related activities; no response was received from Iran.¹⁹ In January 2022, the Agency provided Iran with its assessment of the issues related to Lavisian-Shian.²⁰

15. Further to its previous reporting, the Agency has been able to determine that, based on the evaluation of all safeguards-relevant information, the aforementioned natural uranium was drilled,

¹³ GOV/2021/15, Section C.

¹⁴ GOV/2022/26, para. 7 and Section D.

¹⁵ See, for example GOV/2004/60 and GOV/2004/83.

¹⁶ GOV/2004/83, para. 100.

¹⁷ GOV/2022/26, para. 7.

¹⁸ GOV/2022/26 para. 7.2.

¹⁹ GOV/2022/26, para. 7.

²⁰ GOV/2022/5, para. 6.

processed and used in the production of explosively-driven neutron sources (EDNS, also referred to as ‘neutron initiators’) at Lavisan-Shian on at least two occasions in 2003. These EDNS use small quantities of natural or depleted uranium and are designed to initiate a nuclear device by producing neutrons in response to an imploding shockwave. The Agency’s evaluation also indicates that the EDNS produced at Lavisan-Shian were small-scale and designed for testing, and were integrated into scaled implosion systems and explosively tested on at least two occasions (on 15 February and 3 July 2003).

16. In addition, the Agency’s evaluation also indicates that equipment was developed and tested at Lavisan-Shian that included neutron detectors and housings; an identical housing for neutron detectors was deployed in an explosive test at Marivan on 15 April 2003 (see Section C.2.).

17. Based on the evaluation of all safeguards-relevant information, the Agency concludes that approximately 10 kg of natural uranium metal, which had not been declared by Iran, was available to the Applied Physics Institute (API) operating at Lavisan-Shian in the period 2002-2003.²¹ This uranium metal was used in the production of EDNS; the source of this material is assessed to be the conversion experiments carried out at the Jaber Ibn Hayan Multipurpose Laboratory (JHL) between 1995-2000. This assessment is based primarily on a comparison between the detailed results of the material analysis from information available to the Agency, and those provided by Iran after the JHL experiments were declared to the Agency in 2003, and between the methods used for these two analyses. Additionally, there are similarities between the physical characteristics of the material produced at JHL and the material in pictures, videos and presentations in other information available to the Agency.

18. Given the above assessment and the fact that Iran did not provide answers to the Agency’s questions regarding Lavisan-Shian (see paragraph 14), the Agency conducted additional verification activities at JHL to try to resolve its questions, specifically to determine whether the disc of natural uranium metal, which the Agency assesses had been used to produce EDNS at Lavisan-Shian and of which it has photographs, was then part of the declared inventory. During these additional verification activities, in September 2020 and November 2021, the Agency was unable to identify this specific uranium metal disc, although it could not exclude that the disc had been melted, re-cast and had become part of the declared nuclear material inventory at JHL.²²

19. Hence, having exhausted all available safeguards measures, and with no further questions beyond those to which Iran had not provided any response, the Director General reported to the Board on 5 March 2022²³ that the issue could be considered no longer outstanding at that stage. The Agency notes that ‘no longer outstanding at this stage’ does not mean ‘resolved’. The Agency assessment, in fact, remains unchanged, i.e. that Lavisan-Shian was a location where undeclared nuclear material was stored and processed to produce components for nuclear-device-related testing, and that Iran has not declared the nuclear material and nuclear-related activities associated with this location. Because of the lack of technically credible answers by Iran, the Agency is not in a position to determine whether the nuclear material available at Lavisan-Shian has been consumed, mixed with other declared material, or is still outside of safeguards.

C.1.1. The discrepancy in nuclear material balance

20. As stated previously (see paragraph 17), based on the evaluation of all safeguards-relevant information, the Agency assesses that the source of the uranium metal used to produce EDNS at Lavisan-Shian was the undeclared conversion experiments carried out at JHL between 1995 and 2000. The

²¹ The main objective of the API, as declared by Iran, was to use the capabilities of Iranian universities to for the education and R&D needs of the Ministry of Defence. See GOV/2004/83, para. 101.

²² GOV/2022/5, para. 5.

²³ GOV/2022/5, para. 7.

experiments and the nuclear material involved were only declared by Iran in 2003²⁴ and verification of the material by the Agency was then hampered by the difficulty of accurately measuring the amount of uranium contained in the waste resulting from the experiments. Therefore, the uranium content in the waste as well as the resulting material balance was based only on Iran's declarations provided to the Agency in 2003. The Agency re-evaluated this material balance in 2014, using an improved non-destructive assay technique, and assessed that the newly-identified amount of natural uranium unaccounted for was within the measurement uncertainties associated with nuclear material accountancy and related measures available at that time. Iran's subsequent decision in 2022 to dissolve the waste material originating from the uranium metal conversion experiments, as described in paragraph 21, allowed the Agency to independently verify the actual uranium content in the waste and therefore to perform a more accurate analysis of the material balance of nuclear material used in those experiments.

21. On 9 March 2022, Iran informed the Agency of its intention to transfer the uranium metal and scrap holdings from JHL to the Uranium Conversion Facility (UCF) at Esfahan. On 14 March 2022, Iran informed the Agency of its intention to introduce the material it had transferred from JHL into the conversion process at UCF. As previously reported,²⁵ in March 2022, the Agency monitored at UCF the dissolution of 302.7 kg of natural uranium, as declared by Iran, in the form of solid waste and items of uranium metal transferred from JHL and related to the previously undeclared uranium metal experiments carried out at JHL.

22. The natural uranium metal produced at JHL was converted almost entirely from UF₄ imported from a single foreign source. This imported material contained a specific U-236 isotopic ratio, which was indicated in the export documentation and later confirmed by Agency measurement. The Agency also measured a specific U-234 isotopic ratio. Together these two measurements provide a characteristic signature of this material.

23. Following its analysis of the above-referenced dissolution campaign, the Agency determined that an additional amount of natural uranium was present in the dissolution tank, beyond that which had been transferred from JHL. The Agency was able to determine this through analysis of the isotopes of the dissolved material (i.e., as mentioned earlier, the JHL material possessed a characteristic level of U-236, but the added material did not: hence, after dissolution, the overall U-236 level had been lowered by a measurable amount). The Agency has communicated to Iran its assessment of this added material.²⁶ In response, Iran indicated that an unknown quantity of material had already been present in the dissolution vessel at UCF from previous use, and that this was a common occurrence at UCF. The Agency, through the analysis of the U-236 content in the dissolved material, has been able to accurately determine the amount of this additional material, and thus the size of the discrepancy between the amount of uranium initially declared as shipped from JHL and the amount of uranium resulting from the dissolution of the material at UCF.

24. The material arising from the JHL experiments was under Agency seal from its initial declaration in 2003 until it was dissolved at UCF; thus, the discrepancy originates from Iran's initial declarations of the JHL experiments in 2003. The Agency, on the basis of the verification of the uranium content in the waste, performed a new evaluation of the material mass balance of the uranium metal experiments from JHL and determined that the uranium unaccounted for was much larger than the measurement uncertainties. This material is therefore deemed to be unaccounted for.

²⁴ GOV/2003/75, para. 25.

²⁵ GOV/2023/26, Section C.1.2.

²⁶ During a technical meeting in Tehran on 20 September 2024, and in a letter dated 21 September 2024.

25. In February 2024, Iran provided the Agency with corrected nuclear material accounting reports, on the basis of which the Agency considered the discrepancy in the nuclear material balance at UCF to have been rectified.²⁷ However, as a consequence of this rectification, the Agency determined that there is an issue with the nuclear material balance of the uranium metal production experiments at JHL. During two recent technical exchanges between Iran and the Agency, Iran not only did not provide technically credible explanations for the material unaccounted for in the material balance of the uranium metal conversion experiments but also rejected, without a technically valid justification, the discrepancy identified by the Agency between the declared uranium content in the waste shipped from JHL and the uranium verified by the Agency after the dissolution at UCF. The Agency informed Iran that the rectified discrepancy at UCF was technically sound, and that the reopening of the discrepancy at UCF would not be conducive to resolving the discrepancy at JHL.²⁸ Nevertheless, in a letter to the Agency dated 2 October 2024, Iran withdrew the corrected nuclear material accounting report; thus, the discrepancy in the nuclear material balance at UCF can no longer be considered to have been rectified. However, the Agency's assessment of the discrepancy and the quantity of the material unaccounted for remains unchanged.

26. The quantity of the nuclear material unaccounted for indicates that more uranium metal than the approximately 10 kg previously assessed by the Agency to be available to the Applied Physics Institute, which was operating Lavisan-Shian (see paragraph 17), was available to Iran. The current whereabouts of this nuclear material remains unknown to the Agency. Therefore, the Agency is not in a position to determine whether it has been consumed, mixed with other declared material, or is still outside of safeguards.

27. As mentioned previously, the natural uranium metal produced at JHL possesses a characteristic isotopic signature that was also identified in the particles of uranium found at Turqzabad (see Section C.4. for more details).

C.2. Marivan

28. Based on the evaluation of all safeguards-relevant information, including photographs, the Agency assesses that Iran, in 2003, planned to use nuclear material at a location near Abadeh, also known as 'Marivan'. Marivan consists of two proximate areas: an explosives test area,²⁹ and an associated support area. Marivan was located via comparison of ground-level photographs, from information available to the Agency, with commercial satellite imagery, including identification of distinctive mountain formations. The location was further confirmed by the Agency during the CA conducted at this location in 2020,³⁰ when those ground-level photographs were compared with features and buildings observed by Agency inspectors at the location.

29. The evaluation of all safeguards-relevant information available to the Agency indicates that in 2003 Iran conducted a number of explosive tests at this location. In four of these tests Iran utilised full-scale hemispherical implosion systems, diagnosed using at least one high-speed camera. Iran also prepared to use neutron detection equipment for future tests at this location,³¹ and on 15 April 2003 conducted a preparatory test of blast shielding for this neutron detection equipment. These neutron detectors, and the housing fielded at Marivan, were developed and their characteristics tested at Lavisan-Shian. The Agency assesses that the aim of fielding the neutron detectors at an explosive test at Marivan

²⁷ GOV/2024/8, para. 15.

²⁸ GOV/2025/10, para. 21.

²⁹ GOV/2022/26, para. 13.

³⁰ GOV/2020/47, paras 11 and 12.

³¹ GOV/2020/30 para. 4, third bullet; GOV/2021/15, para. 9, third bullet.

was to measure the neutrons generated by an EDNS, a component that would have contained small quantities of nuclear material.

30. In the support area of Marivan, from July 2019 onwards, the Agency observed, through the analysis of commercially available satellite imagery, the demolition of buildings. This began immediately after the Agency had informed Iran of the results of the environmental samples taken by the Agency at Turquzabad.³² In August 2019,³³ the Agency asked Iran a number of questions, pursuant to its NPT Safeguards Agreement and AP, related to possible undeclared nuclear material and nuclear-related activities at Marivan. The Agency also provided Iran with supporting documents, including photographs, related to the Agency's questions. Iran provided no answers. In January 2020, the Agency requested a CA to the location to carry out location-specific environmental sampling: Iran denied such access.³⁴ Following the issuance of the Joint Statement of 26 August 2020,³⁵ in which Iran agreed to provide access, the Agency conducted a CA at the location. The Agency took location-specific environmental samples, the analytical results of which indicated the presence of depleted uranium particles at the support area that required explanation by Iran. In January 2021, the Agency conveyed to Iran the results of the analysis of these samples and related Agency questions.³⁶ Subsequent to the access, the Agency observed through the analysis of commercially available satellite imagery that bunkers at the explosives test area of Marivan had been removed.³⁷

31. When asked for an explanation of the activities assessed to have taken place at the Marivan explosives test area, Iran, in a letter dated 24 August 2021, stated that the bunkers were mainly "to shelter the bomb disposal unit during the deactivation of worn-out or mal-functioned munitions".³⁸ This explanation is assessed as not technically credible because such small bunkers are not required to protect personnel during disposal of munitions at such large outdoor explosive test ranges; instead, sufficient distance from the detonation is all that is necessary to protect personnel.

32. Based on further evaluation of all safeguards-relevant information, the Agency assesses that in 2003 Iran planned to conduct future EDNS manufacturing at Marivan, which would have involved the use of small quantities of natural or depleted uranium. Iran's explanation for the presence of the depleted uranium particles was that these particles might originate from mining operations carried out by another Member State in the 1960s and 1970s,³⁹ though the Agency notes that depleted uranium can also be used for the production of EDNS.

33. Having exhausted all safeguards measures available, and with no further questions beyond those to which Iran had not provided any response, the Director General in his report to the Board, dated 31 May 2023,⁴⁰ informed the Board that the issue, and specifically the matter of depleted uranium particles detected at the location, could be considered no longer outstanding at that stage. The Agency notes that 'no longer outstanding at that stage' does not mean 'resolved'. The Agency's assessment, in fact, continues to be that, in 2003, Iran conducted a number of explosive tests at this location. These tests utilised full-scale implosion systems, and were diagnosed with at least one high-speed camera. Iran

³² GOV/2020/30, para. 4, third bullet.

³³ GOV/2020/15, para. 4.

³⁴ GOV/2020/30, para. 5.

³⁵ GOV/2020/47, paras 10-12 and Annex.

³⁶ GOV/2021/15, para. 17.

³⁷ GOV/2022/26, para. 14.

³⁸ GOV/2022/26, paras 15 and 16.

³⁹ GOV/2023/26, para. 17.

⁴⁰ GOV/2023/26, para. 18.

also planned to use neutron detectors at future tests at this location, and conducted tests of shielding for this equipment in preparation for those future tests.⁴¹ The same neutron detectors and housing were developed and calibrated at Lavisan-Shian. The neutron detectors were intended to measure neutrons produced during tests at Marivan of EDNS, that would have contained nuclear material. The Agency has no information as to whether these planned tests were carried out at Marivan.

C.3. Varamin

34. As previously reported,⁴² the Agency had information on the possible use or storage of nuclear material and/or conduct of nuclear-related activities, including research and development activities related to the nuclear fuel cycle, at Varamin. This location also underwent significant changes in 2004, including the demolition of most of the buildings. The location of Varamin was identified by the Agency via the comparison of ground-level photographs, from information available to the Agency, with commercial satellite imagery. The location was further confirmed by the Agency during the CA conducted at this location in 2020,⁴³ when the aforementioned ground-level photographs were positively compared with remaining features and buildings at the location.

35. Based on the evaluation of all safeguards-relevant information, the Agency assesses that Varamin was set up initially under the Physics Research Centre (PHRC) in 1997, before being folded into the coordinated activities described herein in c.2000. As declared by Iran, PHRC was based at Lavisan-Shian from 1989 until 1998,⁴⁴ demonstrating an organisational link between Varamin and Lavisan-Shian.

36. Agency analysis, including of commercial satellite imagery, reveals decommissioning and clean-up of the facility in late 2003/early 2004, during which equipment and material, including nuclear material, was characterised, sorted, and shipped from the facility. This equipment included all of the essential equipment for a uranium conversion facility, and included small but heavily contaminated (and possibly full) UF₆ cylinders, uranium extractants (such as tributyl phosphate (TBP)), uranium extraction and conversion hardware, fluorine-based chemicals (hydrofluoric acid (HF) and potassium difluoride (KHF₂)), and radiation monitoring equipment.

37. The evaluation of all safeguards-relevant information available to the Agency indicates that, of the 13 shipping containers used to remove material and equipment from Varamin, five were considered “essential” and eight “non-essential”; one of the containers considered essential contained the small UF₆ cylinders and other “special materials”. All of these materials were categorised by the operators of Varamin to be of the highest level of contamination.

38. In January 2020, the Agency requested a CA to the location to carry out location-specific environmental sampling: Iran denied such access.⁴⁵ Following the issuance of the Joint Statement of 26 August 2020,⁴⁶ in which Iran agreed to provide access, the Agency conducted a CA at the location. The Agency took location-specific environmental samples, the analytical results of which indicated the presence of anthropogenic natural uranium particles, which required explanation by Iran.

⁴¹ GOV/2020/30, para. 4, third bullet; GOV/2021/15, para. 9, third bullet.

⁴² GOV/2020/30, para. 4, second bullet.

⁴³ GOV/2020/47, paras 11 and 12.

⁴⁴ GOV/2004/83, paras 100 and 101.

⁴⁵ GOV/2020/30, para. 5.

⁴⁶ GOV/2020/47, paras 10-12 and Annex.

39. Based on the evaluation of all safeguards-relevant information, including the results of the analysis of the environmental samples taken during the CAs at Turquzabad and Varamin, the Agency assesses that containers removed from Varamin during decommissioning of the facility were eventually transferred to Turquzabad and retained there until 2018.

40. When asked for an explanation for the anthropogenic uranium particles found in environmental samples, Iran was unable to provide a technically credible explanation, offering only the unsubstantiated possibility of sabotage by a third party. Iran subsequently said that the location had been used for the production of sodium sulphate; this explanation is not supported by analysis of environmental samples taken at that location, analysis of commercial satellite imagery, nor by other information available to the Agency.⁴⁷ Iran further stated, in March 2024, with respect to Varamin that there has “never been any undeclared location which is required to be declared under the CSA”.⁴⁸

41. The analysis of all safeguards-relevant information available to the Agency related to Varamin, including the results of environmental samples, indicates the use and storage of nuclear material and/or the conduct of nuclear-related activities there, including research and development activities related to the nuclear fuel cycle. The Agency assesses that Varamin was an undeclared pilot-scale facility for the processing and milling of uranium ore and conversion into uranium oxide and possibly, at laboratory scale, into UF₄ and UF₆, used between 1999 and 2003,⁴⁹ and that feed material at the facility was sourced from the Bandar Abbas/Gchine mine. In addition, a follow-on, production-scale facility was planned, though the Agency has no information whether this additional facility was built. Iran has not declared to the Agency the nuclear material and nuclear-related activities associated with Varamin. Because of the lack of technically credible answers provided by Iran, the Agency is not in a position to determine whether the nuclear material at Varamin has been consumed, mixed with other declared material, or is still outside of safeguards.

C.4. Turquzabad

42. In September 2018 information became public that Turquzabad, which had not been declared to the Agency, had allegedly been involved in the storage of nuclear material and equipment.⁵⁰ The Agency analysed this information, together with all other relevant safeguards information related to it,⁵¹ and began monitoring the location using commercial satellite imagery, but could not initially confirm the open-source information and thus did not engage Iran on this matter.

43. From early November 2018 onwards the Agency observed, through the analysis of commercially available satellite imagery, scraping and landscaping activities at the location.⁵² In accordance with Iran’s NPT Safeguards Agreement and the AP and further to the evaluation of all safeguards-relevant information available to the Agency, in January 2019, the Agency requested Iran to clarify whether it had used or stored any nuclear material and/or had conducted any nuclear-related activity at the location. Iran replied that there was no undeclared nuclear material and/or undeclared activity at the location.⁵³

44. In February 2019, on the basis of the Agency’s analysis of commercially available satellite imagery for Turquzabad, the Agency requested Iran to provide additional information on the movement

⁴⁷ GOV/2022/26, para. 24.

⁴⁸ INFCIRC/1183, 7 March 2024, Attachment, para. 13.

⁴⁹ GOV/2022/26, para. 25.

⁵⁰ GOV/2022/26, para. 28.

⁵¹ Statement by the Deputy Direct General for Safeguards to the Board of Governors, 7 November 2018, GOV/OR.1532.

⁵² GOV/2021/42, para. 11.

⁵³ GOV/2022/26, para. 29.

of containers to and from this location during the period from 2010 to 2018 and the dismantlement of some containers in the second half of 2018. The Agency also requested information about the activities carried out at the location between November 2018 and January 2019, which the Agency considered as being consistent with the location's sanitisation.⁵⁴

45. Later in February 2019, the Agency conducted a CA and took environmental samples at Turquzabad.⁵⁵ The Agency detected the presence of multiple natural uranium particles of anthropogenic origin, the composition of which indicated that they might have been produced through uranium conversion activities. Pursuant to Iran's NPT Safeguards Agreement and AP, 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. Subsequent analysis of these environmental samples also indicated the presence of isotopically altered particles, including low enriched uranium particles with a detectable presence of U-236, and particles of natural uranium. The Agency asked Iran to provide further explanations. The Agency recently compared environmental sample results from Turquzabad with samples taken during the UCF dissolution campaign in 2022, which revealed the presence of natural uranium particles with the same characteristic signature as the material used to produce uranium metal at JHL (in both U-236 and U-234 isotopic ratios) at both locations. The Agency informed Iran of these new findings and requested Iran to provide clarifications.

46. In response to the Agency's initial questions and requests for clarification, Iran provided explanations, including that the location was a scrap metal yard which might have received equipment from declared fuel cycle related locations.⁵⁶ Iran stated that a piece of equipment sold from Bandar Abbas Uranium Production Plant (BUPP), which had previously been used at UCF, could have been handled at Turquzabad as scrap. The Agency analysed Iran's explanations, including by conducting verification activities at these locations to seek to corroborate them. The absence of key impurities in the uranium-rich particles found in the environmental samples from Turquzabad, impurities which are widespread at BUPP, is not consistent with the possible explanation provided by Iran. The Agency therefore found the explanations provided to be not technically credible. Additionally, Iran has provided no technically credible explanation for the presence of the isotopically altered particles, nor any for the presence of particles with the same signature as those collected during the UCF dissolution campaign, arising from the JHL experiments.⁵⁷ Iran has also stated that "[t]here has not been any nuclear activity or storage at this location".⁵⁸

47. During meetings with the Agency, Iran stated that containers from Turquzabad had been broken down for scrap and sent to a smelter in Iran, which Iran proposed the Agency could visit. The Agency is ready to conduct such a visit and conduct environmental sampling upon invitation by Iran, while noting that this would not address the question of the origin of the anthropogenic uranium particles found at Turquzabad nor the current whereabouts of the contents of the containers. During a meeting on 29 April 2025, Iran showed a video demonstrating that containers of the type stored at Turquzabad in 2018 can be broken down quickly, claiming that all containers were dismantled for scrap. Analysis of commercial satellite imagery does not fully support Iran's statements.

48. At the meeting, Iran and the Agency also discussed the discrepancy at UCF and Lavisan-Shian. Iran, while recognizing the existence of a discrepancy at UCF, rejected the fact that the discrepancy had

⁵⁴ GOV/2022/26, para. 30.

⁵⁵ GOV/2021/42, para. 12.

⁵⁶ GOV/2020/51, para. 33.

⁵⁷ The Agency notes that Iran has only been informed recently of the presence of these characteristic particles at both locations and may need more time to respond to the Agency's request for clarifications.

⁵⁸ INFCIRC/1183, 7 March 2024, Attachment, para. 14.

a measurable impact on the uranium metal conversion carried out at JHL and its material balance. Iran did not provide any clarification to the Agency's questions and assessment about Lavisan-Shian.

49. In a meeting in Tehran on 28 May 2025, Iran presented to the Agency the results of its intelligence investigation into possible explanations for the nuclear material traces found at Varamin and Turqzabad. Iran alleged that a clandestine network involving Iranians, some with dual citizenship, was involved in a number of activities aimed at, inter alia, creating false accusations to discredit Iran, in collaboration with foreign nationals of at least three, named, countries. To support this allegation, Iran presented official documents in Farsi, information from western media outlets, and hard copies of two emails which it claimed demonstrated the existence of this network and its links to Varamin and Turqzabad, and alleged that this network had possibly been responsible for the sabotage of both locations in the form of planted nuclear contamination, which the Agency subsequently detected during CAs.

50. When asked, Iran could provide no evidence of sabotage activities at Turqzabad, despite the security cameras known to have been in use at the location. Iran also provided no further clarifications regarding the activities the Agency assesses took place at Varamin; this assessment is based on more than the results of environmental sample analysis. On this basis, the Agency informed Iran that the unsubstantiated elements presented at the meeting were insufficient to change the Agency's assessments regarding these locations and activities.

51. Based on the evaluation of all safeguards-relevant information, the Agency assesses that nuclear material and/or heavily contaminated equipment, from at least two of the above locations, was stored at Turqzabad:

- The Agency assesses that nuclear material and/or contaminated equipment from Varamin were at Turqzabad.⁵⁹ This assessment is conclusively supported by the results of environmental sample analysis from the two locations.
- The Agency assesses that material used between 1995 and 2000 at JHL for the production of uranium metal, much of which was subsequently dissolved at UCF in 2022, was also present at Turqzabad, in the form of nuclear material and/or of contaminated equipment. This assessment is conclusively supported by analysis of environmental samples taken at these locations.
- The Agency has no assessment regarding the source of the low-enriched uranium particles, including some enriched up to 18% U-235.
- The Agency assesses that while some of the containers stored at Turqzabad were dismantled at the location, others may have been removed from the location intact in 2018 and moved to an unknown location.⁶⁰ The whereabouts of the contents of the containers, whether dismantled or removed, remains unknown.

52. The analysis of all safeguards-relevant information available to the Agency related to Turqzabad, including the results of environmental sample analysis, indicates that nuclear material and/or heavily contaminated equipment was stored at this location, arising from Varamin, JHL, possibly Lavisan-Shian and other locations. The high levels and wide distribution of contamination indicate that nuclear material was present at Turqzabad. Iran has not declared the nuclear material and nuclear-related activities associated with Turqzabad. Because of the lack of technically credible answers provided by Iran, the

⁵⁹ GOV/2022/26, para. 26.

⁶⁰ GOV/2025/10, para. 12.

Agency is not in a position to determine whether the nuclear material at Turquzabad has been consumed, mixed with other declared material, or is still outside of safeguards.

D. Cooperation between Iran and the Agency

53. The cooperation between States and the Agency is a pre-requisite for the effective implementation of safeguards agreements. Effective and proactive cooperation not only demonstrates a State's commitment to the peaceful use of nuclear energy, it is also essential for the effective and efficient implementation of safeguards. Further, under Article 3 of Iran's NPT Safeguards Agreement, cooperation between Iran and the Agency to facilitate the implementation of safeguards is a legal obligation. Additionally, under Article 8 of Iran's NPT Safeguards Agreement, Iran has the obligation to provide information on all nuclear material subject to safeguards and the features of facilities relevant to safeguarding it, while under Article 2 the Agency has the right and the obligation to ensure that safeguards will be applied to such material. Iran, therefore, has a legal obligation to respond to the Agency's questions regarding possible undeclared nuclear material or facilities.

D.1. Cooperation in the area of safeguards implementation

54. Iran continues to cooperate with the Agency on matters of routine safeguards implementation, and the Agency implements a large verification effort in Iran commensurate with Iran's nuclear fuel cycle and activities.⁶¹ However, in a number of respects as outlined in this report its cooperation with the Agency has been less than satisfactory, as described below.

D.1.1. Withdrawal of designation of experienced inspectors

55. Iran has, over several years, used the withdrawal of the designation of experienced inspectors in such a way that it undermines the Agency's ability to conduct effective and efficient safeguards. The repeated removal of the designation of experienced inspectors with little or no notice has a detrimental effect on the planning, implementation, and effectiveness of safeguards in Iran. While removing the designation of inspectors is formally permitted by the NPT Safeguards Agreement, Iran is a notable outlier for the frequency and rationale with which it withdraws these designations. Selectively withdrawing the designation of experienced inspectors and doing so, in most of the cases, in response to other Member States' positions in relation to Iran's nuclear programme is unjustified and not in line with the spirit of cooperation that is a prerequisite of the effective implementation of safeguards.

D.1.2. Sanitisation activities

56. The Agency has, over several years, reported to the Board locations in Iran where activities consistent with sanitisation have been observed. A summary of those reports related to the four locations is given in the table below. Such sanitisation is an example of activities which undermine the effective implementation of safeguards.

⁶¹ The Agency spent 2345 days in Iran during 2024 for verification activities (GOV/2025/22, Table 11.12).

Location in Iran	Observed activity, consistent with sanitisation	First identified in open source or raised with Iran by the Agency	Date of activity consistent with sanitisation	Date accessed by the Agency
Lavisan-Shian	Demolition of all buildings and sanitisation	May 2003 (open source)	December 2003 - March 2004	28 June 2004
Varamin	Demolition of most buildings and ground scraping	August 2019 (Agency requests clarification regarding storage or use of nuclear material at the location)	January - May 2004	28 September 2020
Turquzabad	Removal of containers and sanitisation	September 2018 (open source)	July 2018 - February 2019	22 February 2019
Marivan support area	Demolition of most major buildings	17 July 2019 (Agency requests Iran to stop demolition activity)	July - December 2019	27 August 2020
Marivan explosives test area	Demolition of control bunker		December 2020 - January 2021	27 August 2020 Control bunker could not be accessed.

D.1.3. Other examples of limited levels of cooperation

57. As detailed in Section C.2, when asked for an explanation of the activities assessed to have taken place at the Marivan explosives test area, Iran said that the bunkers were mainly “to shelter the bomb disposal unit during the deactivation of worn-out or mal-functioned munitions”.⁶² This explanation, as indicated earlier, is assessed as not technically credible because such small bunkers are not required to protect personnel during the disposal of munitions at such large outdoor explosive test ranges; instead, as noted above, sufficient distance from the detonation is all that is necessary to protect personnel. Iran’s explanation has not assisted the Agency in clarifying the nature and purpose of the explosive testing activities carried out at this location.

58. When asked to explain the environmental sample results from samples taken at Turquzabad, see Section C.4., Iran provided explanations for some of the results. The Agency found these limited explanations to be not technically credible, and Iran failed to give any explanation for the presence of isotopically altered particles. During meetings in Iran in March 2022,⁶³ Iran stated that, having exhausted all other possibilities, its explanation for the anthropogenic uranium particles was sabotage. During the CA to Turquzabad on 22 February 2019, inspectors noted an unusually high number of security cameras for a warehouse in that area. During the same meeting in Iran in March 2022, the Agency asked Iran if those cameras had captured any evidence of the alleged sabotage. Iran presented slides stating that these cameras were installed only after negative publicity had identified the location on 27 September 2018, hence could not have captured any alleged sabotage occurring prior to that date. However, open-source information, including photographs in the Iranian media, show that these cameras were present at Turquzabad prior to 27 September 2018. The provision of inaccurate and sometimes contradictory

⁶² GOV/2022/26, para. 15.

⁶³ GOV/2022/26, para. 33.

explanations seriously obstructs the Agency's ability to clarify and verify the presence of the nuclear material and/or heavily contaminated equipment previously stored at this location.

59. As described in Section C, in 2019 and 2020, the Agency conducted CAs at Turquzabad (2019), Varamin (2020) and Marivan (2020) and found uranium particles of anthropogenic origin at each location, for which it sought explanations from Iran. Over multiple meetings and in multiple exchanges of letters, the Agency explained its questions relating to these locations and to Lavisan-Shian, and the associated use/presence of nuclear material. The Agency provided Iran with its assessment related to all four locations, but has yet to receive technically credible explanations from Iran regarding either the presence of nuclear material at three of these locations (Lavisan-Shian, Varamin and Turquzabad), or the nuclear-related activities carried out at all four locations.

60. Conclusive evidence of highly confidential documents belonging to the Agency having been actively collected and analysed by Iran raises serious concerns regarding Iran's spirit of collaboration and may undermine the effective application of safeguards in Iran

D.2. Legal obligations under modified Code 3.1

61. The modified Code 3.1 of the Subsidiary Arrangements General Part to Iran's NPT Safeguards Agreement provides for the submission to the Agency of design information for new nuclear facilities as soon as the decision to construct, or to authorize construction of, a new facility has been taken, whichever is the earlier. The modified Code 3.1 also provides for the submission of fuller design information as the design is developed early in the project definition, preliminary design, construction, and commissioning phases.⁶⁴ Iran remains the only State with significant nuclear activities in which the Agency is implementing a CSA that is not implementing the provisions of the modified Code 3.1.

62. As previously reported, Iran has made a number of references to having decided the locations for new nuclear facilities, for which it has not provided the Agency with preliminary design information despite having been requested to do so.⁶⁵

63. On 23 February 2021, Iran stopped implementing modified Code 3.1.⁶⁶ In February 2024, Iran reiterated to the Agency that "implementation of modified Code 3.1 is suspended"; "currently the implementation of the initial Code 3.1 is the legal obligation" for Iran "under the Subsidiary Arrangements (General Part) of the CSA"; and that "the relevant safeguards information for any new facilities... will be provided in due time".⁶⁷

64. The Agency has reminded Iran on many occasions that implementation of modified Code 3.1 is a legal obligation for Iran under the Subsidiary Arrangements to its NPT Safeguards Agreement. In February 2024, the Agency again reiterated to Iran that the Subsidiary Arrangements cannot be modified, or their implementation suspended, unilaterally by Iran. The Agency reminded Iran that Iran had accepted modified Code 3.1 in 2003 and that, according to Article 39 of Iran's NPT Safeguards Agreement, the Subsidiary Arrangements can only be changed by agreement with the Agency. The Agency also indicated to Iran that the Joint Comprehensive Plan of Action (JCPOA) has no legal effect

⁶⁴ The initial Code 3.1 only required the submission of design information for a new facility "normally not later than 180 days before the facility is scheduled to receive nuclear material for the first time".

⁶⁵ Information published on the AEOI website in June 2023 indicated that Iran has decided the locations for new power reactors and a new research reactor in Iran (GOV/2023/43, footnote 29). In November 2023, Vice-President Eslami made a statement referring to the excavation of the main building of the planned IR-360 reactor "in the coming days" and information available on the AEOI website referred to the "start of the executive operation of the construction of "Iran Hormoz" nuclear power plants by order of the president" (GOV/2024/8, para. 20).

⁶⁶ GOV/INF/2021/13.

⁶⁷ GOV/2024/8, para. 21.

on Iran's obligations under its NPT Safeguards Agreement and Subsidiary Arrangements thereto. Therefore, Iran's unilateral decision to stop implementation of modified Code 3.1 is contrary to its legal obligations set out in Article 39 of Iran's Safeguards Agreement and in the Subsidiary Arrangements.⁶⁸

65. In a letter dated 12 June 2024, Iran reiterated the position outlined in February 2024. In its reply dated 18 July 2024, the Agency stated that, contrary to Iran's assertion, Iran had accepted modified Code 3.1 as a legally binding obligation. Therefore, the Agency repeated its request for Iran to provide preliminary design information for the power reactors and research reactors previously cited. Iran has not done so.

66. As previously reported,⁶⁹ contrary to its legal obligation under modified Code 3.1, Iran only informed the Agency for the first time about the Fordow Fuel Enrichment Plant (FFEP) in September 2009 when it was already under construction. The design information verification (DIV) conducted by the Agency on 26 and 27 October 2009 showed the facility was at an advanced stage of construction. Hence, an enrichment facility was already nearing completion in Iran without the Agency having had any design information or any access during the construction through DIV. This serves as an example of the necessity of Iran fully and effectively fulfilling its legal obligation to implement modified Code 3.1.

67. Iran's failure to implement the provisions of modified Code 3.1 has prevented the Agency from receiving early design information for any of the new nuclear reactors which Iran has publicly announced it plans to construct. This significantly obstructs the Agency's ability to conduct DIVs in respect of such new facilities and to provide assurance of the peaceful nature of Iran's nuclear programme. Iran's unilateral decision to stop implementation of modified Code 3.1 is a significant reduction in the Agency's ability to verify whether Iran's nuclear programme is entirely peaceful, and is contrary to its legal obligations set out in Article 39 of Iran's Safeguards Agreement and in the Subsidiary Arrangements.

E. High-level meetings and consultations

68. In parallel to, but also as an integral part of, the Agency's constant efforts to address the outstanding safeguards issues, a number of high-level consultations were held between the Agency and Iran. Over the past five years the Director General has taken a series of initiatives and engaged senior Iranian officials on multiple occasions in an attempt to make progress. This has resulted in the following Joint Statements being agreed between the Director General and the Head of the AEOI.

69. **Joint Statement of 26 August 2020:** The Director General had discussions in Tehran with President Rouhani, Foreign Minister Zarif, and Vice-President Salehi, Head of the AEOI. The objectives of the Director General's visit were, inter alia, to resolve the issue of access to two of the locations, which, contrary to its obligations under its Additional Protocol, Iran had denied. On 26 August 2020, the Director General and Iran issued a Joint Statement (see Annex)⁷⁰ in which, inter alia, Iran and the Agency reached agreement to facilitate access. In August and September 2020, the Agency conducted complementary access at Varamin and Marivan and took environmental samples at both locations.

70. **Joint Statement of 21 February 2021:** The Director General and Vice-President Eslami, Head of the AEOI, agreed on a Joint Statement (see Annex) which "recalled and reaffirmed the spirit of

⁶⁸ GOV/2025/10, para. 27.

⁶⁹ GOV/2009/74, Section A.2.

⁷⁰ Note by the Secretariat (2020/Note 50), 26 August 2020, and GOV/2021/15, para. 15.

cooperation and enhanced mutual trust that led to the Joint Statement of 26 August 2020, and the importance of continuing that cooperation and trust”, without being specific.⁷¹ The AEOI informed the Agency that in order to comply with Iranian law, Iran would stop the implementation of the voluntary measures as envisaged in the JCPOA, as of 23 February 2021.⁷² No clarifications were provided in relation to the outstanding safeguards issues.

71. **Joint Statement of 12 September 2021:** The Director General and Vice-President Eslami, Head of the AEOI, agreed another Joint Statement (see Annex). The Joint Statement provided, inter alia, that Agency inspectors would service Agency monitoring and surveillance equipment and replace the storage media, which would be kept in Iran under “joint”⁷³ seals of the Agency and the AEOI.⁷⁴ Iran agreed that Agency inspectors could service the identified Agency monitoring and surveillance equipment and to replace storage media. No clarifications were provided in relation to the outstanding safeguards issues.

72. **Joint Statement of 4 March 2023:** The Director General participated in separate discussions with President Raisi, Foreign Minister Amir-Abdollahian, and Vice-President Eslami, Head of the AEOI, on matters related to the cooperation between Iran and the Agency. During these discussions the Director General and Vice-President Eslami agreed another Joint Statement, which covered the implementation of Iran’s Safeguards Agreement, the outstanding safeguards issues and further verification measures (see Annex). In the Joint Statement,⁷⁵ Iran expressed its readiness to continue its cooperation⁷⁶ and provide further information and access to address the outstanding safeguards issues. Iran has yet to provide this further information to the Agency.

73. On 14 November 2024, the Director General met President Pezeshkian, and other senior Iranian officials, including Vice-President Eslami, Head of the AEOI, and Foreign Minister Araghchi. During these high-level meetings, discussions of the issues covered by the Joint Statement agreed in March 2023 continued. While the issue related to the discrepancy in the nuclear material balance and possible elements to address the outstanding safeguards issues related to Varamin were discussed, no clarifications were provided.

74. During the same meetings on 14 November 2024, the possibility of Iran not further expanding its stockpile of uranium enriched up to 60% U-235 was also discussed. On 16 November 2024, the Agency verified at FFEP and at the Fuel Enrichment Plant (FEP) at Natanz that Iran had begun implementation of preparatory measures aimed at stopping the increase of its stockpile of uranium enriched up to 60% U-235.⁷⁷ These preparatory measures were reversed by Iran following the tabling of a draft resolution,⁷⁸ later adopted by the Board on 21 November 2024.⁷⁹

⁷¹ GOV/2021/10, Annex.

⁷² GOV/2021/10, para. 8.

⁷³ GOV/INF/2021/42, Annex, para.2.

⁷⁴ GOV/INF/2021/42, Annex para. 2.

⁷⁵ GOV/2023/9, Annex.

⁷⁶ Iran has allowed the Agency to install some additional surveillance cameras at workshops at one location, where centrifuge rotor tubes and bellows are manufactured. GOV/2023/26, para. 26.

⁷⁷ GOV/2024/61, para. 15.

⁷⁸ GOV/2024/66.

⁷⁹ GOV/2024/68.

75. On 16 April 2025, the Director General met Foreign Minister Araghchi and Vice-President Eslami, Head of the AEOL, and discussed ways to revive the implementation of the Joint Statement of 2023. No clarifications were provided in relation to the outstanding safeguards issues.

76. Despite the repeated efforts by the Director General to advance the implementation of the Joint Statements, specifically but not only for the resolution of the safeguards issues related to the four locations, those safeguards issues remain unresolved. The Agency has made, and continues to make, its best efforts to progress these issues. During high-level meetings over the course of 2024 and 2025, several proposals aimed at reviving the implementation of the Joint Statement of 2023 were made. Unfortunately, no significant progress has been made.

F. Overall assessment

77. The analysis of all available safeguards-relevant information, and the lack of answers and clarifications provided by Iran to the Agency's questions related to three locations (specifically Lavisan-Shian, Varamin, and Marivan), has led the Agency to conclude that these three locations, and other possible related locations, were part of an undeclared structured nuclear programme carried out by Iran until the early 2000s and that some activities used undeclared nuclear material.

78. Having evaluated all available safeguards-relevant information, including information provided by Iran, information from safeguards activities conducted by the Agency, and other relevant information (for example, open source and third party information), the Agency assesses that Iran retained unknown nuclear material and/or heavily contaminated equipment, and other assets, arising from the former undeclared structured nuclear programme, at Turqzabad in the period 2009 until 2018, after which items were removed from the location.

79. The Agency has no credible indications of an ongoing, undeclared structured nuclear programme of the type described above in Iran and notes the statements of the highest officials in Iran that the use of nuclear weapons is incompatible with Islamic Law. However, repeated statements by former high-level officials in Iran related to Iran having all capabilities to manufacture nuclear weapons continue to provide concerns in this area.

80. While safeguarded enrichment activities are not forbidden in and of themselves, the fact that Iran is the only non-nuclear-weapon State in the world that is producing and accumulating uranium enriched to 60% remains a matter of serious concern, which has drawn international attention given the potential proliferation implications.

G. Summary

81. While Iran continues to cooperate with the Agency on matters of routine safeguards implementation, in a number of respects as outlined in this report its cooperation with the Agency has been less than satisfactory. In particular, Iran has repeatedly either not answered, or not provided technically credible answers to, the Agency's questions and has sanitised locations as listed in this report, which has impeded Agency verification activities. The withdrawal of the designation of several experienced inspectors was also not in line with the required spirit of cooperation.

82. Extensive consultations and exchanges, most recently on 28 May 2025, including at a high level, between the Agency and Iran, have so far not resulted in the Agency receiving from Iran technically

credible answers regarding the nuclear material at three locations (specifically Lavisan-Shian, Varamin, and Turquzabad) and nuclear-related activities at all four locations described in the relevant sections of this report.

83. Therefore, at present, the Agency concludes that Iran did not declare nuclear material and nuclear-related activities at three undeclared locations in Iran, specifically, Lavisan-Shian, Varamin, and Turquzabad. Because of the lack of technically credible answers provided by Iran, the Agency is not in a position to determine whether the nuclear material at these three undeclared locations in Iran has been consumed, mixed with other declared material, or is still outside of safeguards.

84. Iran's insistence on a unique and unilateral approach to its legally binding obligation under modified Code 3.1 obstructs the Agency's visibility of relevant activities, thereby undermining the effective implementation of safeguards in Iran. Unlike all other States with a CSA, Iran is the only country that is not meeting its obligations related to the implementation of the modified Code 3.1, contrary to the established practice of all such States.

85. The rapid accumulation of highly enriched uranium is of serious concern and adds to the complexity of the issues described in this report, which the Agency cannot ignore given the potential proliferation implications.

86. In light of the above assessment, the Director General reiterates his urgent call upon Iran to cooperate fully and effectively with the Agency. Unless and until Iran assists the Agency in resolving the outstanding issues, the Agency will not be in a position to provide assurance that Iran's nuclear programme is exclusively peaceful.

Annex

Joint Statement by the Director General of the IAEA and the Vice-President of the Islamic Republic of Iran and Head of the AEOI, Tehran, 26 August 2020

The International Atomic Energy Agency (IAEA) and the Islamic Republic of Iran (Iran) agreed to further reinforce their cooperation and enhance mutual trust to facilitate the full implementation of Iran's Comprehensive Safeguards Agreement (CSA) and the Additional Protocol (AP) thereto, which is provisionally applied by Iran since 16 January 2016.

After intensive bilateral consultations, Iran and the IAEA reached an agreement on the resolution of the safeguards implementation issues specified by the IAEA, in good faith. In this regard, Iran is voluntarily providing the IAEA with access to the two locations specified by the IAEA and facilitating the IAEA verification activities to resolve these issues. Dates for the IAEA access and the verification activities have been agreed. The IAEA verification activities will proceed in accordance with the CSA and the AP, and the IAEA's standard verification practice as implemented for all States with CSAs and APs on equal basis and without discrimination.

In the context of resolution GOV/2015/72 adopted by the Board of Governors on 15 December 2015, the IAEA and Iran recognize that these safeguards implementation issues are exclusively related to nuclear material and activities subject to safeguards under the CSA and the AP.

In this present context, based on analysis of available information to the IAEA, the IAEA does not have further questions to Iran and further requests for access to locations other than those declared by Iran under its CSA and AP.

Both sides recognize the independence, impartiality and professionalism of the IAEA continue to be essential in the fulfilment of its verification activities.

The IAEA will continue to take into consideration Iran's security concerns, by protecting all safeguards confidential information in accordance with the IAEA's Statute, the relevant provisions of the CSA and the AP, and the established IAEA confidentiality regime, standards and procedures.

Joint statement by the Vice-President of the Islamic Republic of Iran and Head of the AEOI and the Director General of the IAEA, 21 February 2021

The Atomic Energy Organization of Iran (AEOI) and the International Atomic Energy Agency (IAEA) recalled and reaffirmed the spirit of cooperation and enhanced mutual trust that led to the Joint Statement in Tehran on 26 August 2020, and the importance of continuing that cooperation and trust.

The AEOI informed the IAEA that in order to comply with the act passed by the Parliament of the Islamic Republic of Iran called "Strategic Action Plan to Lift Sanctions and Protect Iranian Nation's Interests" (The "Law") Iran will stop the implementation of the voluntary measures as envisaged in the JCPOA, as of 23 February 2021.

In view of the above and in order for the Agency to continue its verification and monitoring activities, the AEIOI and the IAEA agreed:

1. That Iran continues to implement fully and without limitation its Comprehensive Safeguards Agreement with the IAEA as before.
2. To a temporary bilateral technical understanding, compatible with the Law, whereby the IAEA will continue with its necessary verification and monitoring activities for up to 3 months (as per technical annex).
3. To keep the technical understanding under regular review to ensure it continues to achieve its purposes.

Joint Statement by the Vice-President and the Head of Atomic Energy Organization of the Islamic Republic of Iran and the Director General of the International Atomic Energy Agency, 12 September 2021

A meeting between His Excellency Mr. Mohammad Eslami, Vice-President and the Head of Atomic Energy Organization of the Islamic Republic of Iran (AEIOI) and His Excellency Mr. Rafael Grossi, Director General of the International Atomic Energy Agency (IAEA) took place on September 12, during his visit to Tehran.

1. In this meeting the parties recalled and reaffirmed the spirit of cooperation and mutual trust and its continuation and emphasized on the necessity of addressing the relevant issues in a constructive atmosphere and exclusively in a technical manner.
2. In the framework of the existing cooperation, the two sides decided to maintain their mutual interactions and meetings at relevant levels. To this end, the Vice-President and the Head of AEIOI will meet the IAEA Director General at the sidelines of the upcoming General Conference, and the IAEA Director General will also visit Tehran in the near future to hold high-level consultations with the Government of the Islamic Republic of Iran with the aim of enhancing cooperation between Iran and the IAEA in different fields and discussing current issues of mutual interest.
3. IAEA's inspectors are permitted to service the identified equipment and replace their storage media which will be kept under the joint IAEA and AEIOI seals in the Islamic Republic of Iran. The way and the timing are agreed by the two sides.

Joint Statement by the Atomic Energy Organization of Iran (AEIOI) and the International Atomic Energy Agency (IAEA), 4 March 2023

IAEA Director General H. E. Mr. Rafael Mariano Grossi visited the Islamic Republic of Iran on 3 and 4 March 2023. In the context of his visit, he met President of the Islamic Republic of Iran, H. E. Mr. Ebrahim Raisi, as well as with the Minister of Foreign Affairs, H. E. Mr. Hossein Amir-Abdollahian, and the Vice-President of the Islamic Republic of Iran and President of the Atomic Energy Organization of Iran (AEIOI), H. E. Mr. Mohammad Eslami.

These high-level meetings addressed the importance of taking steps in order to facilitate enhanced cooperation, to expedite as appropriate the resolution of outstanding safeguards issues.

Both sides recognize that such positive engagements can pave the way for wider agreements among state parties.

The AEOI and the IAEA agreed on the following:

- Interactions between the IAEA and Iran will be carried out in a spirit of collaboration, and in full conformity with the competences of the IAEA and the rights and obligations of the Islamic Republic of Iran, based on the comprehensive safeguards agreement.
- Regarding the outstanding safeguards issues related to the three locations, Iran expressed its readiness to continue its cooperation and provide further information and access to address the outstanding safeguards issues.
- Iran, on a voluntary basis will allow the IAEA to implement further appropriate verification and monitoring activities. Modalities will be agreed between the two sides in the course of a technical meeting which will take place soon in Tehran.