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Board of Governors

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Status of Iran's Nuclear Programme in relation to the Joint Plan of Action

Report by the Director General

- 1. As foreshadowed in GOV/2014/2, this report provides information on the status of the Islamic Republic of Iran's (Iran's) nuclear programme in relation to the "voluntary measures" that Iran has agreed to undertake as part of the Joint Plan of Action (JPA) agreed between the E3+3 and Iran on 24 November 2013. The JPA took effect on 20 January 2014, initially for a period of six months. On 24 July 2014, the duration of the JPA was extended until 24 November 2014.
- 2. The Agency confirms that since 20 January 2014, Iran has:
 - i. not enriched uranium above 5% U-235 at any of its declared facilities;
 - ii. not operated cascades in an interconnected configuration at any of its declared facilities;

¹ The text of the JPA was communicated to the Director General by the High Representative of the European Union (EU), on behalf of the E3+3 (INFCIRC/855), and by the Resident Representative of Iran to the IAEA, on behalf of Iran (INFCIRC/856).

² Previous reports on the status of Iran's nuclear programme in relation to the JPA were provided in GOV/INF/2014/1 (20 January 2014), GOV/2014/10, Annex 3 (20 February 2014), GOV/INF/2014/6 (20 March 2014), GOV/INF/2014/10 (17 April 2014), GOV/2014/28, Annex 3 (23 May 2014), GOV/INF/2014/14 (20 June 2014), GOV/INF/2014/16 (20 July 2014), GOV/INF/2014/19 (20 August 2014) and GOV/INF/2014/21 (19 September 2014).

³ The extension of the JPA was communicated to the Director General in a letter from the E3/EU+3 and Iran dated 23 July 2014 (GOV/INF/2014/18, Annex).

- iii. diluted down to an enrichment level of no more than 5% U-235 108.4 kg of UF₆ enriched up to 20% U-235;⁴
- iv. fed 100 kg of UF₆ enriched up to 20% U-235 into the conversion process at the Fuel Plate Fabrication Plant (FPFP) for conversion into uranium oxide;
- v. had no process line to reconvert uranium oxides back into UF₆ at FPFP;
- vi. not made "any further advances" to its activities at the Fuel Enrichment Plant (FEP), the Fordow Fuel Enrichment Plant (FFEP) or the Arak reactor (IR-40 Reactor), including the manufacture and testing of fuel for the IR-40 Reactor;
- vii. provided an updated Design Information Questionnaire (DIQ) for the IR-40 Reactor and concluded with the Agency a safeguards approach for the reactor⁵ (based on the updated DIQ and the safeguards measures agreed on 5 May 2014);
- viii. fed 1505 kg of UF₆ enriched up to 5% U-235 into the conversion process at the Enriched UO₂ Powder Plant (EUPP) for conversion into uranium oxide;⁶
- ix. continued its safeguarded enrichment R&D practices at the Pilot Fuel Enrichment Plant (PFEP), without accumulating enriched uranium;
- x. not carried out reprocessing related activities at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility or at any of the other facilities to which the Agency has access;
- xi. provided information and managed access to the uranium mine and mill at Gchine,⁷ to the Saghand Uranium Mine⁸ and the Ardakan Uranium Production Plant;⁹
- xii. continued to provide daily access to the enrichment facilities at Natanz and Fordow;
- xiii. provided regular managed access to centrifuge assembly workshops, centrifuge rotor production workshops and storage facilities, and provided information thereon; and
- xiv. provided, ¹⁰ in relation to enhanced monitoring, the following:
 - plans for nuclear facilities and a description of each building on each nuclear site;

 $^{^4}$ On 20 January 2014, Iran's inventory of UF₆ enriched up to 20% U-235 was 209.1 kg. As of 14 April 2014, Iran had diluted 104.56 kg of this nuclear material. Since 14 April 2014, Iran has diluted an additional 3.84 kg of UF₆ enriched up to 20% U-235 that had previously been present in cylinders as heels. A further 0.6 kg of UF₆ enriched up to 20% U-235 are under Agency seal at Iran's declared enrichment facilities where previously it had been used as reference material for mass spectrometry. An additional 0.1 kg of UF₆ enriched up to 20% U-235 was contained in samples taken by the Agency. Iran converted the remaining 100 kg of its inventory of UF₆ enriched up to 20% U-235 into uranium oxide by 20 July 2014 (as referred to in para. 2.iv).

⁵ On 31 August 2014.

⁶ Iran continues to optimise the conversion process at EUPP using natural uranium and, as of 14 October 2014, had produced about 550 kg of natural UO₂.

⁷ On 29 January 2014.

⁸ On 6 May 2014.

⁹ On 7 May 2014.

¹⁰ As of 20 April 2014: pursuant to Iran's undertaking to provide this information within three months of the JPA taking effect, i.e. 20 January 2014.

- descriptions of the scale of operations being conducted for each location engaged in specified nuclear activities; and
- information on uranium mines and mills, and on source material.
- 3. In addition, the Agency confirms that since 24 July 2014, Iran has:
 - i. used 17.1 kg of U_3O_8 , converted from UF₆ enriched up to 20% U-235, for the manufacture of fuel items for TRR; and
 - diluted about 4118 kg of UF₆ enriched up to 2% U-235 down to the level of natural ii. uranium.11

¹¹ Of the 4118 kg, an estimated 22 kg of nuclear material remains in the equipment used in the dilution process and will be

verified by the Agency prior to 24 November 2014.