INTERNATIONAL ATOMIC ENERGY AGENCY: SAFEGUARDS

Safeguards Agreements: The safeguards system establishes legally binding agreements between States and the IAEA pursuant to the commitments made under international and regional nonproliferation agreements. These measures verify that the declarations made by States about their nuclear materials and activities are both bilateral and multilateral in nature and are the basis of the IAEA's verification functions. Most are known as "full scope" or "comprehensive" agreements because they extend to all peaceful nuclear activities and nuclear material in a State. The IAEA is also the verification authority of the Nuclear Non-Proliferation Treaty. Inspectors work to ensure that safeguarded nuclear materials are used for peaceful purposes and not for military purposes.

The IAEA Department of Safeguards oversees the implementation of safeguards throughout the world. This department operates directly under the IAEA Director General and is made up of the following divisions: Office of the Deputy Director General for Safeguards, Division of Technical Support, Division of Operations, Division of Safeguards Information Management, and Division of Concepts and Planning. The current Deputy Director General for Safeguards is Herman Nackaerts (Belgium). Nackaerts was chosen to replace long-time former Deputy Director General Olli Heinonen in September of 2010.

176 NPT non-nuclear weapon states, out of a total of 184, have NPT Safeguards Agreements in force with the IAEA. Currently, 142 States have signed the Additional Protocol (AP), for 119 of them AP entered into force, and for 2 more AP has been approved by the Board but not yet signed. EURATOM has an Additional Protocol in force, as well.

Below are the Annual Safeguards Statements:

Safeguards Statement 2011

Safeguards Statement 2010

Safeguards Statement 2009

Safeguards Statement 2008

Safeguards Statement 2007

Safeguards Statement 2006

Safeguards Statement 2005

Safeguards Statement 2004

Safeguards Statement 2003

Safeguards Statement 2002

Safeguards Statement 2001

Safeguards Statement 2000

Sections:

Multilateral Fuel Cycle Developments

Compliance with Safeguards Agreements

- *Iran*
- *DPRK*
- *Syria*
- *Republic of Korea*
- *Egypt*
- *Libya*
- *Iraq*

The Additional Protocol: Responding to the discovery of Iraq's clandestine nuclear weapons program, North Korea's hidden reprocessing facility, and the loophole that allowed "undeclared facilities" to be outside the reach of IAEA verification, the Agency sought to strengthen its system of safeguards. The Board drafted a safeguards improvement program known as "Program 93+2." The plan, created in 1993, was meant to be implemented by 1995, in time for the NPT review conference. Putting Program 93+2 into effect, however, took more time than expected, and the program has been implemented in two parts. The first part, initiated in January 1996, involved new types of monitoring such as environmental sampling and use of no-notice inspections at key measurement points within declared facilities. It did not require any new legal authority to implement.

© Center for Nonproliferation Studies

The first part also includes some new methods of remote monitoring and analysis. The second part of Program 93+2, which substantially expands the scope of the IAEA's safeguards regime, required a formal expansion of the Agency's legal mandate in the form of an Additional Protocol to be adopted by Member States to supplement their existing Safeguards Agreements with the IAEA. The essence of the Additional Protocol is to reshape the IAEA's safeguards regime from a quantitative system focused on accounting for known quantities of materials and monitoring declared activities to a qualitative system gathering a comprehensive picture of a State's nuclear and nuclear-related activities, including nuclear-related imports and exports. The Additional Protocol also substantially expands the IAEA's ability to check for clandestine nuclear facilities by providing the agency with authority to visit any facility ─declared or not─ and to investigate questions or inconsistencies in a State's nuclear declarations. As of July 2012, 118 countries had the AP in force, and 22 additional states were signatories.

Multilateral Arrangements for the Nuclear Fuel Cycle: In June 2004, Director General ElBaradei commissioned an Expert Group to research potential arrangements for a multilateral nuclear fuel cycle. Dr. ElBaradei added that a multilateral approach to the fuel cycle could be the "Achilles' heel" of the nonproliferation regime. In theory, a State with a fully developed fuel cycle has the requisite materials, know-how, and technology for producing weapons-grade materials. The threat of States exiting the NPT with nuclear weapons capabilities is minimized by consolidating the sensitive technology, thereby creating an alternative to States developing this technology indigenously.

Multilateral Fuel Cycle Developments:

On 4 June 2012, IAEA Director General Yukiya Amano addressed the Board of Directors and informed them that the LEU Fuel Bank had entered the implementation phase and that the site chosen in Kazakhstan had been visited by an Agency team to assess any need for upgrades to safety and security. He expressed his thanks for the contribution of 10 million euros from the European Union for the LEU Bank project.

On 3 December 2010, the Board of Governors authorized the creation of an IAEA-managed LEU bank through the resolution Assurance of Nuclear Fuel Supply (GOV/2010/70). The guidelines for the establishment and principles of operation of the LEU bank are described in the Board of Governors document Establishment of an IAEA LEU Bank for the Supply of LEU to Member States (GOV/2010/67). The resolution establishes an LEU fuel bank in order to assure the supply of fuel for power generation. Should any Member State's LEU supply become disrupted and cannot be restored through State-to-State or commercial market arrangements, nuclear fuel would be provided by the LEU bank. This action was made possible due to the donor pledges of the European Union, Kuwait, Norway, United Arab Emirates, United States, and the Nuclear Threat Initiative.

On 29 March 2010 IAEA Director General Yukiya Amano and Russian Federation's State Atomic Energy (ROSATOM) chief Sergey Kiriyenko signed an agreement that establishes a reserve of LEU for supply to IAEA Member States. The reserve is intended to protect Member States against disruption of supply.

On 27 November 2009, the Board of Governors adopted a resolution entitled *Request by the Russian Federation regarding its Initiative to Establish a Reserve of Low Enriched Uranium (LEU) for the Supply of LEU to the IAEA for its Member States*. The resolution authorized the Director General to implement an Agreement with the Russian Federation to establish a reserve of LEU for supply to the IAEA for its Member States and also to implement future agreements with Member States for the supply of LEU by the IAEA when the DG considers that the request fulfills the eligibility criteria included in the agreement with the Russian Federation.

On 17 June 2009, the Director General Mohamed ElBaradei reported to the Board of Governors regarding general nonproliferation issues. In his statement, ElBaradei commented that an LEU fuel bank is a first step towards total multinationalization of the fuel cycle.

On 2 June 2009, the IAEA circulated INFCIRC/755 in which Austria further describes the details of INFCIRC/706.

On 6 March 2009, Kuwait pledged $10 million towards a multinational fuel bank, which completed the financial goal outlined by NTI in

2006. Director General Mohamed ElBaradei announced that a proposed framework for the fuel bank should now be addressed.

On 10 December 2008, the European Union (EU) announced its pledge for $32 million towards a fuel bank.

On 7 August 2008, the United Arab Emirates (UAE) pledged $10 million to a nuclear fuel bank.

On 17 April 2008, Director General Mohamed ElBaradei gave a statement in Berlin, Germany at the International Conference on Nuclear Fuel Supply on the future of nuclear energy. ElBaradei reasserted that a multinational approach to the fuel cycle is necessary to meet the nonproliferation needs of an increasing nuclear power demand.

On 26 December 2007, the United States announced a contribution of $50 million to a nuclear fuel bank under IAEA control. This contribution matched NTI's previous donation of $50 million.

On 13 September 2007, the IAEA circulated INFCIRC/713 produced by Germany, the Netherlands and the United Kingdom, demonstrating their continued support for the proposals regarding Enrichment Bonds and the Multilateral Enrichment Sanctuary Project.

On 8 June 2007, the IAEA circulated INFCIRC/708 on the Establishment, Structure and Operation of the International Uranium Enrichment Centre. The document provided an outline of the proposal offered by Russian President Putin in 2006.

On 31 May 2007, the IAEA circulated Austria's INFCIRC/706 entitled the Multilateralization of the Nuclear Fuel Cycle. In the proposal, Austria outlined a framework which would, over time, convert national enrichment and reprocessing facilities into international operations.

On 30 May 2007, the United Kingdom distributed INFCIRC/707 entitled Enrichment Bonds: A Voluntary Scheme for Reliable Access to Nuclear Fuel. The proposal outlined the creation of enrichment bonds which would be issued in order to assure export controls for enrichment services.

In May 2007, the IAEA circulated INFCIRC/704, a German proposal also known as the Multilateral Enrichment Sanctuary Project, which proposed building a multilateral enrichment facility.

On 19 September 2006, the Director General Mohammed ElBaradei presented a statement at the 50th Session of the IAEA entitled A New Framework for the Nuclear Fuel Cycle. ElBaradei's proposed framework involved addressing assurance of supply of fuel, assurance of access to nuclear reactors and the transition of enrichment and reprocessing facilities to multinational operations.

At the same event, former Senator Sam Nunn offered on behalf of the Nuclear Threat Initiative (NTI) $50 million to initiate an LEU reserve to guarantee an international supply under IAEA auspices. The contribution was contingent upon other donations from member states providing an additional $100 million.

On 12 September 2006, Japan submitted a follow up proposal to the Six-Country Concept entitled the IAEA Standby Arrangements System for the Assurance of Nuclear Fuel Supply. This proposal intended to assuage Japan's concerns over areas of the Six-Country Concept.

On 1 June 2006, France, Germany, the Netherlands, Russia, the United Kingdom and the United States submitted to the Board of Governors a Concept for a Multilateral Mechanism for Reliable Access to Nuclear Fuel, otherwise known as the Six-Country Concept. The proposal offers a multi-tier plan for assuring supply of nuclear fuel in international markets.

In May 2006, the World Nuclear Association (WNA) outlined a proposal securing the supply of the international fuel cycle using a three-tier system of assurances.

On 25 February 2006, Russian President Vladimir Putin announced at a meeting of the Interstate Council of the Eurasian Economic Community his commitment to create a global infrastructure with International Uranium Enrichment Centers providing nuclear fuel services. He also announced plans to build such a center on Russian territory.

On 6 February 2006, the U.S. Secretary of Energy, Samuel Bodman, announced the creation of the Global Nuclear Energy Partnership (GNEP). GNEP includes proposals which aim to expand nuclear power within the U.S. and to limit the risk of proliferation.

On 28 September 2005, U.S. Ambassador Gregory Schulte announced in a document circulated to all Member States that the U.S. would commit 17 metric tons of HEU to ensure a reliable supply of nuclear fuel available to States which choose not to enrich and reprocess.

In its February 2005 report, the Expert Group identified five approaches to strengthen controls over fuel enrichment, reprocessing, spent fuel storage and repositories. Regarding the assurance of fuel supply, the group recommended reinforcing existing commercial market mechanisms as well as developing and implementing international supply guarantees with the IAEA acting as guarantor.

Committee on Assurances of Supply (CAS):
On 20 June 1980 the IAEA's Board of Governors established a Committee on Assurances of Supply, open to all Member States, to consider and advise the Board on:

i) ways and means in which supplies of nuclear material, equipment and technology and fuel cycle services can be assured on a more predictable and long-term basis in accordance with mutually acceptable considerations of non-proliferation; and

ii) the Agency's role and responsibilities in this regard.

Discussions took place regarding various issues during the meetings of CAS from 1981 to 1987. For example, CAS considered the possibility of creating an international mechanism aimed at assuring countries against the failure of bilateral or multilateral agreements concerning nuclear fuel supply. Among such possible international mechanisms included the discussion of a fuel bank. This bank would work as a reserve for enriched and natural uranium supplied in cases of temporary breakdown in the supply of nuclear fuel. Concerning the establishment of the bank, discussions over whether the bank should have either physical or at least legal control of enriched and natural uranium supplies occurs. CAS also discussed membership to the fuel bank, considering it a source of temporary supply for a country in good standing with respect to non-proliferation and in need of material while seeking new supply arrangements. Several other issues related to the establishment of the fuel bank were identified as follows:

- Criteria for access and membership;
- Physical or virtual assets of the bank;
- Role of the IAEA;
- Physical protection;
- Transport of material;
- Financial aspects; and
- Non-interference by the bank with the international commercial market.

Compliance with Safeguards Agreements:

The following sections cover developments related to State compliance with IAEA safeguards agreements with regard to Iran, the Democratic People's Republic of Korea, Syria, the Republic of Korea, Egypt, Libya, and Iraq.

2011: On 2 February, IAEA Deputy Director General, Head of the Department of Safeguards, Herman Nackaerts, issued a statement addressing future challenges presented to the operations of the Agency.

- Restoration of global confidence in the nuclear nonproliferation regime is necessary. In order for it to take place, challenges presented by Iran, Syria, and DPRK need to be resolved. Given the world's demand for nuclear energy, the international community will depend on the Agency to detect any potential misuse of peaceful nuclear programs.
- Globalization is expected to create challenges for the nuclear nonproliferation regime, providing easier access to proliferation-sensitive information through the use of internet and other media sources. Expansion of global trade will also facilitate covert sales of nuclear technology.
- The IAEA "expects global nuclear electrical generating capacity to grow from anywhere between some 40 and 120 per cent by 2030" as well as "10 and 25 new countries to bring their first nuclear power plants on line within the same period." This means that the safeguards workload will increase significantly.
- The IAEA will be in need of technological advancements as nuclear industry continues to evolve its technology. The Agency will face new

types of nuclear reactors as well as larger and more advanced nuclear fuel cycle facilities, and therefore needs to be able to safeguard them.

- The IAEA has been asked to assist with the implementation of the US-Russia Plutonium Disposition Management Agreement. In addition, the Agency expects to be requested to take additional verification roles in the near future.

The Deputy Director General also addressed the strategies needed to pursue the objectives of the agency:

- Assure states' confidence in the Agency's ability to detect misuse of nuclear material and technology at the early stages.
- Consider a wider range of State-specific factors as safeguards activities in the field and those at Headquarters become more efficient and increasingly information-oriented.
- Obtain adequate and sufficient information about each state; evaluate the information before implementing verification systems and analyzing results obtained by the safeguards.
- Make organizational changes within the Agency, such as better defining responsibilities and improving the skill level of the workforce.

Iran:

Iran ratified the NPT on 2 February 1970 as one of the original signatory States and concluded its comprehensive Safeguards Agreement (INFCIRC/ 214) with the IAEA on 15 May 1974. By the mid-1970s, Iran initiated a nuclear power program, but the 1979 revolution ended all nuclear efforts until 1984, when Iran revived its nuclear power program. Iran's plans for building a civilian nuclear power program have prompted concern among some Western countries, in particular the United States. Although the NPT allows transfers of nuclear technology for peaceful purposes to non-nuclear weapon States, the United States has remained strongly opposed to such cooperation with Iran considering it believes Iran is misusing this provision of the NPT to obtain and develop technologies and materials for a clandestine nuclear weapons program. On 18 December 2003, Iran signed the Additional Protocol in addition to its Safeguards Agreement with the IAEA (INFCIRC/540), which provides for a substantial expansion of the IAEA's authority to visit any facility, declared or undeclared, to check for clandestine nuclear facilities and to investigate any questions or inconsistencies arising from Iran's comprehensive safeguards declarations. Iran acted in accordance with the Protocol's provisions until 2006 and stopped its voluntary implementation after the Board of Governors voted to refer the Iranian file to the UN Security Council. Ratification of the AP by Iranian parliament remains a necessary condition for its entry into force.

2012: The Chair of the Board of Governors for 2011-2012 is the Governor from Italy, Mr. Gianni Ghisi. He succeeds Mr. Ansar Parvez, Governor from Pakistan. The Ambassadors and Resident Representatives of the Czech Republic and Jordan were elected as Vice-Chairmen. They are Ms. Dana Drábová, Governor from the Czech Republic, and Mr. Makram Mustafa Queisi, Governor from Jordan.On 29-30 January, senior IAEA officials traveled to Tehran to resolve outstanding issues related to Iran's nuclear program, particularly the military aspect of the nuclear program.

On 20-21 February, senior IAEA officials met with Iranian officials in Tehran to address unresolved issues related to Iran's nuclear program, in particular its military dimension. The IAEA requested access to the military site at Parchin, but permission was not granted. No agreement was reached.

On 24 February, the Board of Governors issued a report on the *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran*. The report details a series of talks between the IAEA and Iran intended to clarify unresolved issues. The report notes that the IAEA "continues to have serious concerns regarding possible military dimensions to Iran's nuclear programme," and concludes that while the IAEA continues to verify the non-diversion of declared nuclear material under Iran's Safeguards Agreement, the IAEA "is unable to provide credible assurance about the absence of undeclared nuclear material and activities in

Iran," as Iran is not providing the necessary cooperation.

On 8 March, Iran provided the IAEA with an explanatory note in response to the report issued on 24 February. The explanatory note highlighted Iran's invitation to the IAEA DDG for Safeguards to meet in Tehran and noted two rounds of talks between Iran and the IAEA in January and February 2012, events which Iran felt had not been properly emphasized in the report.

On 21 May, Director General Yukiya Amano met with senior officials in Tehran to discuss issues relating to possible military dimensions of Iran's nuclear program. Iran and the IAEA decided to agree on a Structured Approach document to attempt to resolve outstanding issues relating to Iran's nuclear program.

On 25 May, Director General Amano issued a report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* (GOV/2012/23), which noted that the IAEA held a third round of talks with Iran on 14-15 May, and noted that resolutions of the Board of Governors and the Security Council require Iran to suspend its reprocessing activities, including R&D. The report also stated that Iran has not responded to requests for further access to heavy water production plants and is not implementing the provisions of the modified Code 3.1 of the Subsidiary Arrangements General Part to Iran's Safeguards Agreement.

On 8 June, IAEA senior officials met with Iran in Vienna to discuss the Structured Approach paper. However, no progress was reached and the IAEA released a statement expressing its disappointment. No date was set for a future meeting.

On 30 August, IAEA Director General Yukiya Amano circulated his report on nuclear safeguards in Iran to the Board of Governors.

On 10 September, the Board of Governors discussed the *implementation of the NPT Safeguards Agreement and Relevant Provisions of United Nations Security Council Resolutions in the Islamic Republic of Iran*.

On 12 September, the Permanent Mission of the Islamic Republic of Iran issued a communication to the IAEA regarding "Facts on Iran's Nuclear Policy."

On 17 September, Director General Amano met with Dr. Fereydoun Abbasi, Vice President of Iran and head of the Atomic Energy Agency of Iran.

On 16 November, Director General Amano circulated his report on nuclear safeguards in Iran to the IAEA Board of Governors.

On 29 November, the IAEA Board of Governors discussed the *Implementation of the NPT Safeguards Agreements and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran.*

2011: The Chair of the Board of Governors for 2010-2011 is the Governor from Pakistan, Mr. Ansar Parvez. He succeeds Mr. Dato´ Muhammad Shahrul Ikram Yaakob, Governor from Malaysia. The Ambassadors and Resident Representatives Mr. John Hartmann of Denmark and Ms. Olena Mykolaichuk of Ukraine were elected as Vice-Chairmen.

On 25 February, Director General Amano issued two reports entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* and *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic.*

The report on **Iran** details its recent nuclear activities, in particular ongoing enrichment efforts and IAEA verification efforts. Contrary to both the Board of Governors and United Nations Security Council (UNSC) resolutions, Iran continues to produce low enriched uranium at the Fuel Enrichment Plant (FEP) and the Pilot Fuel Enrichment Plant (PFEP) in Natanz. Since 18 October 2010 the FEP has produced 471kg of UF_6, bringing the total production amount to 3,606 kg. The PFEP has produced 25.1 kg of UF_6 enriched up to 20% as of September 2010.

The Director General noted the future of Iran's nuclear program remains uncertain. Iran has not provided further information regarding the Fardow Fuel Enrichment Plant outside of Qom nor its plans to develop 10 more enrichment

facilities. Iran has also not provided clarification on its laser enrichment technology or third generation centrifuges. As a result, the Agency's knowledge of Iran's enrichment activities continues to diminish. The Agency has been able to verify that Iran is not engaged in reprocessing activities only at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production Facility (MIX). Iran has not suspended work on heavy water related projects, including the construction of the IR-40 heavy water moderated reactor, currently under Agency safeguards. It is planned to become operational by 2013. Iran objected to Agency requests for further access to the Heavy Water Production Plant, claiming that such requests go beyond its Safeguard Agreement.

The Agency restated its concerns about the possible existence of past or current undisclosed nuclear related activities of a military nature in Iran. Its requests for further information from Iran have not been met satisfactorily if at all. Finally, the Director General reported that Iran is not implementing the Additional Protocol, contributing to international concern over its nuclear program.

On 7 March, the IAEA received an explanatory note from Iran in response to the report it issued in February. Iran's response criticized IAEA inspectors for reporting excessive information and in doing so, failing to protect sensitive information. Iran stated that the IAEA "is not authorized to reflect detailed information on Iran's nuclear activities in its reports or even reveal them in its so-called technical briefings".

On 24 Mayin Beijing, Iranian Foreign Minister Ali Akbar Salehi invited Chinese Foreign Minister Yang Jiechi to inspect Iran's nuclear facilities. Mr. Jeichi is considering the invitation. China encouraged Iran to return to the negotiation table and discuss its uranium enrichment program with the United States, France, China, Germany, Britain, and Russia. In addition, China requested that Iran cooperate with the safeguards regulations.

On 24 May, Director General Amano issued a report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* (GOV/2011/29). The report noted that Iran had not given a substantive response to requests from the IAEA for further information regarding announcements Iran had made concerning the construction of ten new uranium enrichment facilities. The report also stated that, despite resolutions by the Board of Governors and the UN Security Council, Iran has not suspended its enrichment related activities at Natanz and Qom, despite the fact that these facilities are under IAEA safeguards. Moreover, on 10 May, Iran informed the IAEA that the Bushehr Nuclear Power Plant had reached criticality.

On 9 June, the IAEA received an explanatory note from Iran in response to GOV/2011/29 in which Iran noted that "there has never been any reference in the Agency's reports to any '*non-compliance*' by Iran or any diversion in its peaceful nuclear activities" and declared that the Board of Governors' decision to refer Iran to the UNSC was thereby illegal.

On 12 July Iranian Foreign Minister Ali Akbar Salehi met with IAEA Director General Yukiya Amano in Vienna to discuss Iran's implementation of the NPT Safeguards Agreement. Director General Amano reiterated Agency's stand on the issue of Iran's noncompliance. Iranian Minister expressed his wish for the Agency to address the matters in an innovative approach and stated that the new approach could be a result of the Agency declaring the completion of the Work Plan that was signed in 2007. The Director General stated that he is not in a position to consider the Work Plan as being completed.

On 2 September, Director General Amano issued a report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* (GOV/2011/54). The report stated that Iran was failing to implement its Additional Protocol and that, contrary to resolutions of both the Board of Directors and the UN Security Council, Iran had not suspended all work on heavy water related projects.

On 14 September, the IAEA received an explanatory note from Iran in reference to GOV/2011/54, in which Iran noted that the IAEA is an independent body, not an organ of the UN, and argued that, as the United States did not provide original documents to either the IAEA or to Iran, allegations against Iran based on materials and documents provided by the United States are baseless.

On 8 November, Director General Amano issued a report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* (GOV/2011/65). The report expressed serious concerns regarding possible military dimensions of Iran's nuclear program. The report also concluded that, since Iran had not implemented its Additional Protocol, the IAEA is unable to confirm that all nuclear activity in Iran is of a peaceful nature. It noted that "the information indicates that Iran has carried out activities relevant to the development of a nuclear explosive device. The information also indicates that prior to the end of 2003, these activities took place under a structured program, and that some activities may still be ongoing".

On 18 November the IAEA received an explanatory note from Iran in reference to GOV/2011/65, in which Iran repeated several points it had made in previous explanatory notes and argued that the Director General of the IAEA continued to re-open the issue of a nuclear weapons program well after this issue had been resolved.

2010: On 18 February, the new IAEA Director General Yukiya Amano issued a report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*.

The report details Iran's continued enrichment activities and plans to enrich material up to 20% U-235 at Natanz. The results of Physical Inventory Verification (PIV) at the Fuel Enrichment Plant (FEP) at Natanz and Iran's estimates indicate that 2065kg of low enriched UF6 has been produced as of 29 January 2010, with environmental samples verifying the level of enrichment to be 3.47% U-235. Nuclear material, installed cascades, and feed and withdrawal stations at FEP continue to be subject to IAEA containment and surveillance.

Iran submitted a revised version of the Design Information Questionnaire (DIQ) for the Pilot Fuel Enrichment Plant (PFEP) at Natanz that provides for the production of UF6 enriched to up to 20%. According to the report, in February, Iran transferred part of its LEU stock from FEP to the feed station of PFEP, and by 10 February Iran had started feeding low enriched UF6 into one cascade at PFEP for enrichment to 20% U-235. On 14 February, with Agency inspectors present, Iran moved 1950kg of low enriched UF6 from FEP to the PFEP feed station, which the inspectors then sealed. Iran provided the Agency with mass spectrometry results indicating that "enrichment levels of up to 19.8% U-235 were obtained at PFEP between 9 and 11 February 2010." Material and equipment at PFEP remain under the IAEA containment and surveillance, but the Agency also requested a meeting to discuss a revised safeguards approach in light of new enrichment levels.

The report also notes Iran's failure to implement the Additional Protocol and other requirements contained in relevant resolutions of the Board of Governors and the UN Security Council. Iran's failure to provide information and access to activities involving precision detonators, studies on the initiation of high explosives, missile re-entry body engineering, a project for the conversion of UO2 to UF4 and various procurement related activities have raised concerns "about the possible existence in Iran of past or current undisclosed activities related to the development of a nuclear payload for a missile." The Director General calls on Iran to fully cooperate with the Agency, clarify outstanding issues giving rise to concerns about a possible military dimension to Iran's nuclear program, provide design information for all relevant facilities and to take steps towards implementing the Additional Protocol.

On 31 May, the Director General submitted a report to the Board of Governors, entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*.

The report indicates that since the last PIV at FEP, conducted on 22 November 2009, Iran produced an additional 619kg of low enriched UF6, which puts total current production at 2,427kg. As of March 2010, environmental samples confirmed that the maximum enrichment level of 5% had not been exceeded. At the Pilot Fuel Enrichment Plant (PFEP) in Natanz, Iran installed all centrifuges for a second 164-machine IR-1 cascade to connect to Cascade

1, but as of 25 May Iran had neither started to feed the cascade, nor connected it to the first cascade. According to the report, the IAEA and Iran agreed on a revised safeguards approach to account for the enrichment levels of up to 20% U-235 and the installation of another cascade. New measures include two unannounced inspections per month, monthly DIV and interim inventory verification, application of additional seals, and other steps. The revised approach is being applied since 15 May 2010. Between 9 February and 21 May 2010 a total of about 172kg of low enriched UF6 was fed into the first cascade at PFEP. On 7 April, Iran withdrew 5.7kg of UF6 from the first cascade declaring it had been enriched to 19.7% U-235 although non-destructive measurements by the agency indicated enrichment of 19.3% U-235.

The Director General also noted in the report that, after reiterating on 22 January 2010 a request for a complete Design Information Questionnaire (DIQ) for the Fordow Fuel Enrichment Plant (FFEP), the Agency was still waiting for Iran to submit the DIQ. As of 26 May 2010, no centrifuges had been introduced to the facility. The report additionally noted that construction of the heavy water reactor in Arak was ongoing, and that satellite imagery shows the Heavy Water Production Plant to be in operation again.

The report also noted that in January 2010, the Agency, while conducting a Design Information Verification (DIV), was informed by the facility operator that pyroprocessing R&D activities had been initiated at the Jabr Ibn Hayan Multipurpose Research Laboratory (JHL) in Tehran.

On 6 September, the Director General submitted a report to the Board of Governors on the *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran.* In his report, the Director General took note of Security Council Resolution 1929 (2010) adopted on 9 June 2010, requesting him to report to the Security Council within 90 days on whether Iran has suspended all nuclear activities referred to in resolution 1737 (2006) and taken all required steps found in resolutions 1737 (2006), 1747 (2007), 1803 (2008), and 1929 (2010).

The report noted that on 28 August 2010, Iran had installed 8856 centrifuges at FEP and was feeding UF_6 into a total of 23 cascades with 3772 centrifuges. The remaining centrifuges were not in use. Between 23 November 2009 and 6 August 2010 Iran had produced an additional 995kg of LEU, bringing Iran's total production of LEU to 2803kg. The report noted that there were a number of seals that had been broken at the FEP and that the Agency would be evaluating the consequences of these for safeguards during the next PIV scheduled for October 2010.

The report also indicated that enrichment levels of between 5.0% and 7.1% U-235 (which is higher than that stated in Iran's DIQ) were discovered in a small number of particles from recent environmental samples taken at FEP. The IAEA stated that Iran provided the Agency with a possible explanation for the presence of these particles and that Iran's explanation was not inconsistent with the Agency's findings.

The report also noted that Iran began feeding Cascade 6 at PFEP with tails from Cascade 1, which Iran stated had the purpose of reducing the enrichment of tails from ~2% to ~0.7% U-235. The report also noted that from 9 February 2010 to 20 August 2010 Iran had produced 22kg of UF_6 enriched up to 20% U-235 from Cascade 1 at PFEP.

The report noted that Iran continues to deny the IAEAs request of providing further information regarding construction of FFEP. The IAEA continues to conduct DIVs at FFEP with results of environmental samples indicating no presence of enriched uranium.

Regarding Iran's announcement that it possessed laser uranium enrichment technology and third generation centrifuges, the report noted that Iran had not provided the IAEA with access to additional facilities or information related to these activities. The report also noted that Iran had begun transferring fresh fuel to the reactor containment building at the Bushehr Nuclear Power Plant (BNPP).

With respect to the designation of inspectors, the report noted that Iran objected to two inspectors with experience in Iran's nuclear fuel cycle and facilities. The IAEA stated that the objection of these inspectors by Iran hampers the inspection process and detracts from the Agency's capability to implement effective and efficient safeguards in the country.

On 23 November, the Director General submitted a report to the Board of Governors on the *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran*, which claims that regardless of relevant Board of Governor and Security Council resolutions, Iran has not suspended its enrichment related activities. PIV procedures undertaken at the Natanz Fuel Enrichment Plant place the total amount of natural UF_6 that has been fed into cascades at 34,737 kg, with a total of 3183 kg low enriched UF_6 being produced with an average U-235 enrichment level of 3.37%. PIV procedures undertaken at the Natanz PFEP between 18 and 29 September verified that 352 kg low enriched UF_6 had been fed into cascades since 9 February 2010, and that a total of 25.1 kg of UF_6 enriched up to 20% U-235 had been produced. On 26 September, Iranian authorities informed the IAEA that activities at the FFEP would now include R&D, though as of 14 November, no centrifuges had been introduced.

On 6 November, the IAEA carried out an inspection and DIV at the Tehran Research Reactor. The following day a DIV was carried out at the Molybdenum, Iodine and Xenon Radioisotope Production Facility. The IAEA confirmed that there are no ongoing reprocessing activities occurring at these facilities. On 8 November, the IAEA conducted a DIV at the IR-40 reactor at Iraq and found that no significant changes had occurred since the last Director General report.

On 10 November, a DIV carried out at the Uranium Conversion Facility found that no UF_6 had been produced since 10 August 2009. The IAEA also noted that the installation of equipment needed to convert UF_6 enriched up to 20% U-235 into U_30_8 had not yet been initiated.

On 17 October, Iran informed the IAEA that it would begin loading fuel into the Bushehr Nuclear Power Plant (BNPP) on 12 November. The IAEA confirmed that core loading had occurred at the BNPP. Further containment and surveillance measures were used by the IAEA to maintain continuity of knowledge until the core is sealed.

The report also notes that the IAEA remains concerned about the possible military dimensions of the Iranian nuclear program. On 29 October, the IAEA provided the Iranian government with a list of all the issues needed to be addressed in order to resolve this concern.

2009: On 19 February, the Director General submitted to the IAEA Board of Governors the report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*. The Director General noted that Iran continues to produce and stockpile low enriched uranium (LEU). Physical inventory verification procedures conducted by the IAEA place the total amount of LEU produced (in the form of UF_6) at 1,010 kilograms. While Iran successfully installed hundreds of additional centrifuges at Natanz in recent months, it did not increase the number of operating centrifuges at its declared enrichment facility (the number remains under 4,000.) The Director General reported that Iran has begun producing fuel rods for its heavy water IR-40 reactor and that the Agency's request to visit the reactor was denied. Finally, the Director General reported that Iran has made no additional attempts to resolve the Agency's concerns regarding the outstanding issues surrounding the Alleged Studies. Iran maintains that it has fulfilled all of its obligations under the IAEA work plan, and that IAEA safeguards activities in Iran should return to routine status.

On 5 June, Director General Mohamed ElBaradei submitted to the IAEA Board of Governors the report entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*. This report noted that the number of centrifuges enriching uranium at Natanz has increased. It also stated that the centrifuges' daily LEU production rate has increased. Iran has produced an additional 329 kg of LEU hexafluoride since the last report. In addition, the Director General reported that Iran has continued to deny IAEA access to the IR-40 reactor under construction at Arak, and refused to provide design plans for a planned reactor in Darkhovin. Furthermore, the report notes that Iran recently installed a 10 machine IR-3 cascade which it operates as single machines.

On 28 August, the Director General submitted a report to the Board of Governors entitled *Implementation of the NPT Safeguards*

Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008), and 1835 (2008) in the Islamic Republic of Iran. The report notes installation of IR-1 centrifuges at the Natanz Fuel Enrichment Plant (FEP) continues, and estimates total production of low enriched UF6 is 669kg as of 31 July. A PIV is planned for November. On 17 August Iran provided the Agency access to the IR-40 reactor at Arak, the Agency carried out a DIV noting no reactor vessel was present and construction at the plant was 63% complete, the Agency will continue using satellite imagery to monitor the status of the Heavy Water Production Plant. The Agency has not received requested design information for the nuclear power plant to be built in Darkhovin. It urges Iran to abide by revised Code 3.1 of its Subsidiary Arrangements and implement the Additional Protocol.

On 16 November Director General Mohamed ElBaradei submitted a report to the Board entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*. Reportedly centrifuge installation continues at Natanz and total production of low enriched UF6 at FEP is estimated to be 1763kg. On 21 September Iran notified the Agency of construction of a new pilot fuel enrichment plant near Qom, called the Fordow Fuel Enrichment Plant (FFEP). Iran provided the Agency access and a preliminary DIQ for FFEP, on 26 and 27 October the Agency carried out DIV and held meetings in Tehran to discuss the plant. After reviewing satellite imagery and information from Agency members the Agency requested access to the FFEP project manager, and documents revealing the purpose of the facility. On 22 September Iran supplied the Agency design information for the nuclear power plant to be built in Darkhovin, construction is scheduled to start in 2011. On 5 November the Agency requested an updated DIQ for the fuel manufacturing plant at Esfahan containing fuel assembly information not included in the original DIQ.

2008: In February 2008, the IAEA submitted its report, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran*. The Agency reiterated its inability to verify the non-diversion of declared nuclear material in Iran. It noted that Iran responded to the questions and provided clarifications for the issues raised in the work plan, except for the Alleged Studies on the green salt project, high explosives testing, and the missile re-entry vehicle. The report further stated that Iran's responses remained consistent with the Agency's findings. Also, Iran has resumed submitting additional information similar to that which Iran had previously provided pursuant to the Additional Protocol. With regard to Iran's enrichment activities along with the scope and nature of its program, no change has transpired in either the report or IN Tehran's activities.

2007: On 24 March, the UN Security Council unanimously adopted Resolution 1747, which targets Tehran's arms exports, state-owned bank and elite Revolutionary Guards.

On 22 February 2007, Director General ElBaradei released a report entitled *Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolution 1737 (2006) in the Islamic Republic of Iran* to the Board of Governors. Major points included Iran's discord with transparency measures, its continuation of enrichment activities, and the operation of single machines. This report was issued in response to the UN Security Council's adoption of Resolution 1737 which states that Iran should suspend all enrichment and reprocessing activities and work on heavy water related projects. Furthermore, Iran shall provide the IAEA access to verify suspension.

2006: On 3 January, the Director General informed the Board of Governors of Note Verbale, in which Iran notified the IAEA of its decision to resume "R&D activities on the peaceful nuclear energy programme which has been suspended as part of its expanded voluntary and non-legally binding suspension."

On 10 January, IAEA inspectors confirmed that Iran had begun to remove IAEA seals on its enrichment-related equipment and material at Natanz. On 7 January 2006, Iran requested that the agency remove, before 9 January 2006, specified seals at Natanz, Pars Trash and Farayand Technique. Based on the information currently available, the removal of agency seals

at the enrichment site at Natanz, and at two related storage and testing locations, Pars Trash and Farayand Technique, will be completed by 11 January 2006. Agency containment and surveillance measures will continue to cover the cascade hall and UF6 feed and withdrawal stations at the Pilot Fuel Enrichment Plant (PFEP) at Natanz. Director General ElBaradei expressed concern over Iran's decision to terminate the suspension of enrichment-related activities requested by the IAEA Board of Governors before the agency clarified the nature of Iran's nuclear program.

On 13 January, the IAEA received a document for circulation entitled "E3/EU Statement on the Iran Nuclear Issue" from the United Kingdom, France, and Germany that reports on a meeting in Berlin, 12 January 2006. The statement finds that Iran's decision to restart enrichment activity "a clear rejection of the process the E3/EU and Iran have been engaged in for over two years with the support of the international community." It goes on to state that Iran continues to challenge the authority of the IAEA board and stresses the need to respond firmly to this challenge. In their statement, the E3/EU concluded that involvement of the Security Council is necessary to reinforce the authority of IAEA resolutions and to signal their intention to call for an "Extraordinary IAEA Board meeting with a view for it to take the necessary action to that end."

On 18 January, the representatives of France, Germany, and the United Kingdom sent a letter to the chair of the IAEA Board of Governors requesting a special meeting to discuss the implementation of IAEA safeguards in Iran and related board resolutions. The special meeting has been scheduled for 2 February.

On 24 January, Iran submitted a Note Verbale to the IAEA entitled "Short Glance on Iranian Nuclear Issue" to the IAEA, requesting its distribution as an information circular (INFCIRC/665) for all member states. The document provides an account of developments, particularly in the past three years, that "reveals the facts confirming the exclusive nature of [the] Iranian nuclear program and activities and full cooperation with [the] international community." According to Iran, this review is also intended to demonstrate that "the international community has been, to a great extent misled with bias[ed], politicized and exaggerated information on Iranian nuclear programs and activities." Iran emphasized that the decision to suspend enrichment activities was strictly a voluntary and non-legally binding measure and claims that since the issue of contamination which triggered such a decision has been resolved, "there is no need for the Iranian Government to further deprive its nation from its inalienable right in doing research."

On 31 January, the Foreign Ministers of China, France, Germany, Russia, the United Kingdom, the United States, and the High Representative of the European Union issued a statement on Iran after their meeting in London the previous day. The statement "called on Iran to restore in full the suspension of enrichment-related activity, including R&D, under the supervision of the IAEA." The ministers reached an agreement that the IAEA board meeting should report to the Security Council its decision on the steps required from Iran, but also that the Security Council should await the Director General's report to the March meeting of the IAEA board before deciding to take action.

On 2 February, the Board of Governors convened at a special meeting on Iran's nuclear program. In briefing the press, the Director General remarked that this meeting does not signal the end of diplomacy and that a window of opportunity exists to resolve this issue through negotiations. He expressed his hopes that Iran would "continue to cooperate with the Agency, to clarify remaining outstanding issues."

On 3 February, Iran requested the circulation of a letter to the Director General from Dr. Larijani, secretary of the Supreme Security Council of Iran. The letter stated that the board decision to report the issue to the Security Council lacks legal and technical basis. Iran claims that "the resumption of R&D activities…cannot provide the ground for taking harsh decisions by the Board and reporting the issue to the Security Council. Those activities are exclusively peaceful and completely within the IAEA legal framework…." The letter goes on to state that if the board reaches the decision to refer Iran to the Security Council, Iran "would have no other choice but to suspend all the voluntary measures and extra cooperation with the Agency."

© Center for Nonproliferation Studies

On 4 February, the Board of Governors passed a resolution (GOV/2006/14) requesting the Director General to report to the UN Security Council all IAEA reports and resolutions, as adopted, relating to the implementation of safeguards in Iran. The resolution calls on Iran to "re-establish full and sustained suspension of all enrichment-related and reprocessing activities, including research and development, to be verified by the Agency; reconsider the construction of a research reactor moderated by heavy water; ratify promptly and implement in full the Additional Protocol; pending ratification, continue to act in accordance with the provisions of the Additional Protocol; implement transparency measures, as requested by the Director General, including in GOV/2005/67, which extend beyond the formal requirements of the Safeguards Agreement and Additional Protocol." The resolution further requests the director general to "report on the implementation of this and previous resolutions to the next regular session of the Board, for its consideration, and immediately thereafter to convey, together with any Resolution from the March Board, that report to the Security Council." The resolution also contains a clause expressing support for a nuclear-free Middle East.

The resolution was adopted by a vote of 27 in favor, 3 against, and 5 abstentions. *(For*: Argentina, Australia, Brazil, Belgium, Canada, China, Colombia, Ecuador, Egypt, France, Germany, Ghana, Greece, India, Japan, Republic of Korea, Norway, Portugal, Russian Federation, Singapore, Slovakia, Slovenia, Sri Lanka, Sweden, United Kingdom, United States, and Yemen. *Against*: Cuba, Syria, and Venezuela. *Abstentions*: Algeria, Belarus, Indonesia, Libya, and South Africa).

On 27 February, Director General ElBaradei issued another report (GOV/2006/15) for the Board of Governors to consider in its meeting on 6 March. The report states that, although the IAEA has not seen indications of diversion of nuclear material to nuclear weapons or other nuclear explosive devices, there remain uncertainties with regard to both the scope and the nature of Iran's nuclear program. The two outstanding issues concerning the origin of LEU and HEU particle contamination found at various locations in Iran and the extent of Iran's efforts to import, manufacture, and use centrifuges of both the P-1 and P-2 designs require further clarification. The Director General urged Iran to provide full transparency and take necessary measures to build confidence.

On 6 March, the Board of Governors convened in a meeting to review the Director General's 27 February report and to discuss Iran's nuclear program among other agenda items. No resolution was adopted but instead the board agreed to a carefully worded summary prepared by its chair, Ambassador Amano from Japan. The Chairman's Summary highlighted the division within the board. It indicated that some members expressed regret at the lack of implementation of the confidence-building measure requested of Iran and at Iran's declared intention to suspend the voluntary implementation of non-legally binding measures, including the Additional Protocol. It also showed that other members expressed frustration at the slow pace of progress of the IAEA's work in clarifying outstanding questions relating to Iran's nuclear program and that the agency is still unable to provide assurance as to the absence of undeclared nuclear materials and activities in Iran. On the other hand, the summary revealed that members recognized that Iran had taken corrective and continued transparency measures. They encouraged Iran's continued cooperation with the IAEA and also "re-emphasized the distinction between voluntary confidence building measures and legally binding safeguards obligations." Some other members emphasized that Iran's nuclear issue should be addressed within the context of the establishment of a nuclear-weapon-free zone in the Middle East.

In accordance with the resolution adopted on 4 February, the Director General's report on Iran's nuclear program was transmitted to the Security Council on 8 March, at the close of the meeting. On briefing the press, ElBaradei once again emphasized the importance of diplomacy prevailing and the need to prevent further escalation of tensions. In this regard, the he advised all the states involved to tone down their rhetoric and also to seek a "cool-headed approach." ElBaradei stated that the IAEA will continue with its verification work and ask Iran to heighten its level of transparency. At the same time, the Security Council must deliberate this issue and "lend its weight to the IAEA's efforts

so as to make sure Iran will work as closely as possible" with the agency.

On 28 April, the Director General submitted his latest report on Iran's implementation of its safeguards agreement to the Board of Governors and the UN Security Council. This report was prepared at the request of the Security Council in its presidential statement on 29 March 2006. The Security Council statement requested "in 30 days a report from the Director-General of the IAEA on the process of Iranian compliance with the steps required by the IAEA Board, to the IAEA Board of Governors and in parallel to the Security Council for its consideration." In anticipation of the Director-General's report, Iran submitted a letter in which it indicated its willingness to cooperate in terms of complying with the Additional Protocol, provided that the Security Council drops the case and returns it to the IAEA.

The Director General's report did not reflect any elements of progress in the IAEA's verification work in Iran. As in the case of all previous reports, this latest report does not provide conclusive evidence that Iran's nuclear program is not designed exclusively for peaceful purposes. Moreover, the report confirmed Iran's claims to have enriched uranium to the level of 3.6%. With regards to Iran's statements in press reports that it is conducting research and development on and testing P-2 centrifuges, a more sophisticated type of enrichment technology, the report offers no further insights. The report reiterated calls from previous reports urging Iran's full cooperation and transparency, "transparency that goes beyond the measures prescribed in the Safeguards Agreement and Additional Protocol." The report noted with regret that Iran has not been forthcoming with implementing these additional transparency measures. This fact, in addition to Iran's decision to cease implementation of the Additional Protocol in February 2006, has severely impeded the IAEA's verification work in providing clarification on outstanding issues and assurance as to the absence of undeclared nuclear material and activities. According to the report, while the safeguards system of the IAEA remains indispensable in verifying a state's compliance with its treaty obligations, it is unequipped with the means to verify a state's "future compliance or intentions."

On 8 June, the Director General circulated his latest report (GOV/2006/38) for the board members for consideration at its meeting that convenes on 12 June. The report covers developments since April and reflects the stalled progress in resolving outstanding verification issues. Iran has continued to withhold important information that could provide the key to mending gaps in understanding in the agency's verification work, such as the 15-page document "describing the procedures for the reduction of UF6 to uranium metal and the casting and machining of enriched and depleted uranium metal into hemispheres." Furthermore, the report details recent Iranian nuclear activity, which includes resumption of uranium enrichment. The report states that on 6 June 2006, Iran "started feeding UF6 into the 164-machine cascade." In addition, according to the report, Iran continues its installation work begun in April on other 164-centrifuge networks.

2005: On 2 March, after the board's meeting, the Director General commented that while the agency has no new revelations on Iran's nuclear program, it is making progress in understanding its nuclear activities, particularly with regard to the outstanding issue of enrichment. However, ElBaradei stressed the need for additional information and transparency from Iran. In a parallel development, also expressed the agency's support in negotiations between Iran and the European Union supported EU3 (United Kingdom, France, and Germany), and, recently, the United States. These multilateral talks seek to reach a solution on Iran's declared capacity of enrichment. The board also considered a U.S. proposal to create a special board committee to look into the Iran issue. However, after opposition from a broad spectrum of members, no final decision was reached on the proposal. Although no action was taken by the board, the issue of Iran's nuclear program will continue to stay on the board's agenda.

On 14 June, the director general briefed the board on IAEA verification activities in Iran. The statement notes the agency's verification of Iran's voluntary enrichment suspension. The director general stated progress was made by the IAEA in identifying the origin of the low- and highly enriched uranium contamination on centrifuges and verifying information provided by Iran regarding its enrichment programs.

On 1 August, Iran issued a Note Verbale (INFCIRC/648) informing the IAEA that it had "decided to resume the uranium conversion activities at UCF [Uranium Conversion Facility] in Isfahan on 1 August 2005." Iran requested the IAEA "to be prepared for the implementation of the Safeguards related activities in a timely manner prior to the resumption of the UCF activities."

On 11 August, the Board of Governors adopted resolution GOV/2005/64 regarding the implementation of IAEA safeguards in Iran. The resolution expresses serious concern over Iran's decision to resume conversion activities at the Uranium Conversion Facility in Isfahan. It urges Iran to re-establish full suspension of all enrichment-related activities on the same voluntary, non-legally binding basis as requested in previous board resolutions, and to permit the Director General to reinstate the seals that have been removed at the Uranium Conversion Facility in Esfahan.

On September 2, the Director General reported to the Board of Governors on the developments related to the implementation of IAEA safeguards in Iran since November 2004. The report notes:

- IAEA analysis supports Iran's claim that HEU contamination on its centrifuges stems from Pakistan.
- Developments in four areas relate to the IAEA's verification of Iran's P-1 centrifuge enrichment program.

On 24 September, the Board of Governors adopted resolution GOV/2005/77 regarding the implementation of IAEA safeguards in Iran. The resolution finds that Iran's many failures and breaches of its obligations to comply with its NPT Safeguards Agreement constitute noncompliance in the context of Article XII.C of the agency's statute.

The resolution states that "the history of concealment of Iran's nuclear activities referred to in the Director General's report, the nature of these activities, issues brought to light in the course of the Agency's verification of declarations made by Iran since September 2002 and the resulting absence of confidence that Iran's nuclear programme is exclusively for peaceful purposes have given rise to questions that are within the competence of the Security Council, as the organ bearing the main responsibility for the maintenance of international peace and security."

The resolution was adopted by a vote of 22 in favor and 1 against; there were 12 abstentions. (For: Argentina, Australia, Belgium, Canada, Ecuador, France, Germany, Ghana, Hungary, India, Italy, Japan, Republic of Korea, Netherlands, Peru, Poland, Portugal, Singapore, Slovenia, Sweden, UK, USA. Against: Venezuela. Abstain: Algeria, Brazil, China, Mexico, Nigeria, Pakistan, Russia, South Africa, Sri Lanka, Tunisia, and Vietnam).

On 26 September, the Director General, in a statement to the Forty-Ninth Regular Session of the IAEA General Conference, stated that "Iran has failed in a number of instances over an extended period of time to meet its obligations under its Safeguards Agreement." The director general urged Iran is cooperating with the IAEA, acknowledging that Iran is "a special verification case that requires additional transparency measures as a prerequisite for the Agency to be able to reconstruct the history and nature of all aspects of Iran's past nuclear activities, and to compensate for the confidence deficit created."

On 17 November, in response to the 24 September resolution, Iran submitted a letter to the IAEA rejecting the resolution as "unfair and imbalanced." The letter explained Iran's reservations regarding the legality and language of the resolution by analyzing each paragraph separately. Iran pointed out that the Board of Governors' request for Iran to ratify promptly the Additional Protocol is invalid because it lies outside the board's mandate.

On 18 November, Director General ElBaradei briefed the board on developments regarding Iran's safeguards agreement. The director general stated that

- Iran made available more information to the IAEA on its involvement in the A.Q. Khan network; the IAEA is still examining documentation on centrifuge technology related to the 1987 offer
- issues still remain to be resolved on the genesis of the mid-1990s offer relating to the P-2 enrichment program
- Iran has continued to act as if the Additional Protocol were in force.

On 24 November, the Director General reported to the Board of Governors that Iran had provided additional documentation, permitted interviews with relevant individuals, and allowed further access. While the agency intends to continue its efforts to clarify the extent and nature of Iran's nuclear program, Iran was urged to cooperate further on the scope and chronology of its centrifuge enrichment program. However, the agency observed no deviations from Iran's voluntary suspension of enrichment activities, and the board adopted no resolution on the issue.**2004:** On 24 February, Director General ElBaradei issued a report detailing the Agency's findings following a series of inspections at key sites in Iran throughout January and February. This report cited a number of concerns that the Agency hopes to clarify in the future, including the following points:

- While Iran claims that its Uranium Conversion Facility (UCF) under construction at Esfahan is being built on the basis of drawings and technical support from a foreign supplier appears credible, questions remain regarding the intended use of the uranium metal produced at this facility.
- "Given the size and capacity of the equipment used [in Iran's conversion experiments], the possibility cannot be excluded that larger quantities of nuclear material could have been involved than those declared by Iran as having been consumed and produced during testing and experimentation."
- Environmental samples of uranium contamination differ in enrichment levels between domestic and imported centrifuge components and in type between the Kalaye Electric Company and Natanz, thereby raising questions about Iran's claim that contamination came solely from imported components.
- While Iran provided details of its P-1 centrifuges, it failed to mention its possession of P-2 centrifuge designs in its October 2003 declaration. Its admission of such possession occurred only after an inquiry on the part of the IAEA in January of 2004. This initial omission is seen by the Agency as running counter to Iran's declaration. In addition, the nature and scope of Iran's activities involving these centrifuge designs will need future clarification.
- The nature and scope of Iran's laser isotope enrichment research and its associated equipment needs clarification.

On 5 March, Iran issued a Note Verbale (INFCIRC/628) commenting on the 24 February Report by the Director General to, "clarify a number of inadvertent omissions in the report and augment the information in other parts." In this communication Iran:

- Emphasized its adherence to the Additional Protocol prior to its ratification by the Parliament, as well as its granting of a number of complementary accesses;
- Reaffirmed that the centrifuge components that Iran imported were previously used, a fact confirmed by third-party investigations, thereby "shedding light on the source of contamination for which Iran cannot provide a conclusive account";
- Clarified that the bismuth irradiation project was aborted 13 years ago, and observed that declaration of bismuth irradiation is not required under the Safeguards Agreement;
- Surmised that Iran was not required to provide the Agency with information on its P-2 designs as "neither construction of a nuclear facility nor nuclear material was involved";
- Indicated that Iran received general engineering designs only for the P-2 centrifuge, and did not obtain manufacturing designs or components from the intermediary; and
- Asserted that research projects involving uranium conversion at the Tehran Nuclear Research Centre and the Esfahan Nuclear Technology Centre were not confidential, as reflected in the presentation of papers on uranium conversion at the International Conference on Nuclear Science and Technology held at Bushehr in 1985 and the detailed information regarding Iranian uranium conversion activities present in the IAEA fellowship application forms by AEOI experts.

On 13 March, the Board of Governors met to approve draft resolution GOV/2004/20 regarding the implementation of IAEA safeguards in Iran. During this meeting, the Iranian delegation claimed that many of the previous outstanding issues had been resolved, and pointed to the Director General's repeated statements describing the implementation of IAEA

safeguards in Iran as a "work in progress," and praising Iran's "extensive active cooperation." According to Iran, the only outstanding issue is the contamination of uranium enriched to beyond 1.2 percent, which Iran claimed had been difficult to resolve due to the involvement of a foreign source. Most delegations offered qualified praise for Iran's cooperation with the Agency and urged Iran to be more forthcoming in the future to resolve all outstanding issues and to ratify the Additional Protocol. The United States, Canada, and Australia however, expressed serious concern over Iran's explanations of some of its program's sensitive issues. The U.S. delegation compared Libya's voluntary renunciation of its pursuit of weapons of mass destruction, with Iran's, "policy of denial, deception and delay." According to the United States, the resolution adopted on 13 March, "made it clear that Iran had yet to discharge the obligation of full cooperation, compliance, and transparency essential to the fulfillment of its legal commitments."

In spite of these differing assessments of Iran's cooperation with the Agency, the Board of Governors decided to adopt GOV/2004/20 without a vote. This resolution deferred both the consideration of Iran's degree of compliance with IAEA safeguards, and the Board's response to a number of omissions from Iran's declarations until its June meeting. The resolution also welcomed Iran's voluntary suspension of enrichment activities and its signature of the Additional Protocol. However, it also expressed concern over the outstanding issues described in the Director General's reports. In particular:

- Iran's omission of its P-2 centrifuge designs in its October 2003 declarations;
- The unsubstantiated purpose of "Iran's activities related to experiments on the production and intended use of poilonium-210";
- LEU and HEU contamination at the Kalaye Electric Company and Natanz; and
- The nature and scope of Iran's laser isotope enrichment research.

To address these concerns, the resolution called on Iran to "be pro-active in taking all necessary steps on an urgent basis to resolve all outstanding issues."

During the 2004 NPT PrepCom held between 26 April and 7 May, the United States used the conference as an opportunity to condemn Iran's alleged pursuit of a nuclear weapons program, pointing to Iran's failure to fully comply with its Safeguards Agreement.

On 21 May, Iran submitted its initial declarations pursuant to its Additional Protocol.

On 1 June, the Director General issued a report detailing the Agency's progress with the implementation of safeguards in Iran. While this report continued to find that Iran had engaged in a high degree of cooperation with the Agency, several issues have yet to be fully resolved, including the following:

- After stating that it had not received P-2 centrifuge components from abroad, Iran revealed that it had in fact acquired magnets relevant to P-2 centrifuges from Asian suppliers. On 30 May, Iran provided the Agency with information on the quantities and sources of these imported magnets. In addition, Iran admitted to making inquiries with a European intermediary regarding the procurement of 4,000 magnets suitable for use in P-2 centrifuges, although no magnets have been delivered by the intermediary.
- While Iran has provided additional evidence to clarify the discrepancy between the enrichment levels of the uranium contamination found at the Kalaye Electric Company, Natanz, and Farayand Technique, Agency experts believe more information will be required before this issue can be resolved. Although Iran claimed that it does not know the origin of this equipment, it has identified some of the intermediaries involved. The Agency has questioned these intermediaries and has concluded that, without additional information, "it is unlikely that the Agency will be able to conclude that the 36 percent uranium-235 contamination found at Kalaye and Farayand was due to components originated from the State in question."
- The Agency has concluded that Iran understated the amount of plutonium that it produced, although the amounts produced were in the milligram range. In addition, this plutonium was found to be more recently produced than the 12- to 16-year range specified by Iran.

- While the Agency has been able to verify Iran's voluntary suspension of enrichment activities, it has found Iran's continued generation of uranium hexafluoride (UF6) at the Uranium Conversion Facility to be, "at variance with the Agency's previous understanding as to the scope of Iran's decision regarding suspension."

On 18 June, the IAEA Board of Governors issued a resolution that essentially reiterated the concerns of previous resolutions. Although the resolution welcomed Iran's submission of its Articles 2 and 3 declarations under the Additional Protocol, it deplored the fact that Iran's cooperation with the Agency had not been "as full, timely, and proactive as it should have been," particularly noting the postponement of Agency visits originally scheduled in March until mid-April, thereby delaying the process of environmental sampling and analysis. The resolution also called on Iran to:

- Resolve all outstanding questions, in particular the issue of LEU and HEU contamination found in various locations, including a cluster of 36-percent-HEU particles, and the nature and scope of Iran's P-2 centrifuge program;
- Ensure that the implementation of its voluntary suspension of enrichment-related and reprocessing activities is consistent with the Agency's understanding of the scope of such suspension, in particular refraining from the production of UF6 and centrifuge components and allowing the Agency to verify this suspension; and
- Voluntarily reconsider both its decisions to begin production testing at the Uranium Conversion Facility and to begin construction of a heavy water research reactor as confidence-building measures.

The resolution also urges Iran to ratify its Additional Protocol.

On 1 September, IAEA Director General ElBaradei issued a report entitled "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran" (GOV/2004/60), in fulfillment of the request made by the Board in June 2004. Even though the report welcomed the new information provided by Iran, it pointed mostly to the remaining inconsistencies. The following outstanding issues are identified in the report:

- The accuracy of the Iranian statements regarding its P-2 centrifuge enrichment program and its chronology continues to be in question. Questions remain unanswered regarding the scope of Iran's efforts to import, manufacture, and use centrifuges of both the P-1 and P-2 design. The alleged absence of P-2 centrifuge related activities in Iran between 1995 and 2002 and the P-2 centrifuge procurement-related activities are also subject to further investigation. Given concerns over clandestine supply networks, ongoing IAEA investigations should shed light on the origin of both Iran's P-1 and P-2 centrifuge enrichment program.
- According to Iran, the low-enriched uranium (LEU) and highly enriched uranium (HEU) particles found on different locations of the Iranian territory derive from imported P-1 centrifuge components. The report concluded that the source and reasons of HEU and LEU contamination detected in various locations in Iran are still not clear. The information explaining each particular case may look plausible; however the different pieces of information do not fit together.
- Regarding the Iranian atomic vapor laser isotope separation (AVLIS) program, the levels of enrichment declared by Iran are consistent with the IAEA determinations. The IAEA has pointed out that the AVLIS facility at Lashkar Ab'ad could have been capable of HEU production (albeit gram quantities only).
- Iran finally agreed with the Agency's estimate regarding the amounts of plutonium that have been produced by irradiation. However, Iran claims an age of 12 to 16 years, while the IAEA is pursing the possibility that it was irradiated more recently.
- Although Iran has provided some new information on hot cells, the IAEA is still trying to obtain a clear picture of their plans in this regard.
- Iran has not yet ratified the Additional Protocol. Its initial voluntary declarations are still being reviewed by the Agency, along with information revealed in the most recent meetings between the IAEA and Iran.
- Following questions that arose during the June board meeting concerning a potential concealment effort of alleged nuclear-related activities at the Lavisan-Shian site in Tehran,

Iran granted Agency experts access to that site. The inspectors were allowed to examine the site, and the Agency continues to analyze data collected during the visit.

- Discussions on open source information relating to dual-use equipment and materials, which could have both military and civilian applications, have been initiated.
- Neither Iran's safeguards agreements nor its Additional Protocol obligations require the suspension of enrichment activities. Such activities are permitted under these agreements, provided that they are declared to the Agency and that they are within limits of a non-military nuclear program. The report points out that the Agency has been able to verify Iran's suspension of enrichment-related activities at specific sites, and that as of September 1, 2004, the Agency has not detected any activities at those locations.

On 18 September, the IAEA Board of Governors adopted resolution GOV/2004/79 on the Implementation of the NPT Safeguards Agreement on Iran. The resolution does not establish a deadline, but it requests the IAEA Director General to submit (in advance of the 25 November Board's meeting):

- A report on Iran's implementation of the resolution;
- A report on Iran's response to the requests made by the Board in previous resolutions, especially requests relating to full suspension of all enrichment-related and reprocessing activities and;
- A recapitulation of the Agency's findings on the Iranian nuclear program since September 2002, as well as a full account of past and present Iranian cooperation with the Agency, including the timing of declarations and a record of the development of all aspects of the program, as well as a detailed analysis of the implications of those findings in relation to Iran's implementation of its Safeguards Agreement.

The Board also stated its deep regret that the implementation of Iranian voluntary decisions to suspend enrichment-related and reprocessing activities, notified to the Agency on 29 December 2003 and 24 February 2004, fell significantly short of the Agency's understanding of the scope of those commitments and also that Iran has since reversed some of those decisions.

In the resolution, the Board also stated that at its November meeting, a decision will be taken on whether or not further steps are appropriate in relation to:

- Iran's obligations under its NPT safeguards agreements; and
- The requests made of Iran, as confidence-building measures, by the Board in this and previous resolutions.

On 21 September, the Iranian government announced the resumption of their enrichment program, which had voluntarily suspended as a confidence-building measure.

After intense negotiations between the government of the Islamic Republic of Iran and the EU3, an agreement was reached regarding Iran's enrichment activities on November 14.

As a confidence-building measure and not as a legal obligation, Iran agreed to suspend all enrichment-related and reprocessing activities, specifically the manufacture and import of gas centrifuges and their components; the assembly, installation, testing, or operation of gas centrifuges; work to undertake any plutonium separation or to construct or operate any plutonium separation installation; and all tests or production at any uranium conversion installation. In return, the E3/EU will support the IAEA Director General, inviting Iran to join the Expert Group of Multilateral Approaches to the Nuclear Fuel Cycle. The agreement also stated that once suspension has been verified, the negotiations with the EU on a Trade and Cooperation Agreement will resume. The E3/EU will actively support the opening of Iranian accession negotiations at the World Trade Organization (WTO).

On November 15, in the report by the Director General to the Board, the Agency stated: "All the declared material in Iran has been accounted for, and therefore such material is not diverted to prohibited activities. The Agency is, however, not yet in a position to conclude that there are no undeclared nuclear materials or activities in Iran" On November 22, the IAEA Director General stated that the IAEA was verifying that Iran had

stopped all the enrichment and related activities that it was committed to in the agreement. He announced that the Agency would be able to confirm the information by November 25.

However, the Board, in its resolution of November 29, noted its concern with Iran's continuing to include, in its enrichment activities, the production of UF6 up to November 22, in spite of a request by the Board in September to suspend all enrichment activities. Additionally, it recognized the voluntary status of Iran's acceptance of its AP and its non-legally binding agreement to suspend enrichment as part of a confidence-building gesture. The Board also recognized States' rights to pursue civilian nuclear programs under Treaty obligations.

2003: Concerns over Iran's nuclear program increased in February 2003 when Iranian authorities revealed a new plan to develop a nuclear energy program using entirely domestic resources. The United States in particular raised concerns that these facilities might contribute to Iran's development of a complete nuclear fuel cycle, which would enable Iran to build nuclear weapons without importing nuclear material. These concerns particularly relate to Iran's compliance with its safeguards undertakings; concerns regarding the undeclared imported nuclear material (UF6, UF4, and UO2); the processing and use of this material without notifying the IAEA at a uranium enrichment facility at Natanz; and the development of a (still not operating) uranium enrichment plant. In addition, questions have been raised regarding the on-going construction of a heavy water production plant and plans for constructing a 40-megawatt (th) heavy water research reactor at Arak. Iran informed the IAEA in May 2003 about its intentions to build this heavy water reactor for research, training, and development purposes. Although heavy water production plants are not covered by comprehensive Safeguard Agreements, concerns exist that the heavy water reactor (for which construction was planned to begin in 2004) could potentially yield weapons-grade plutonium.

Following these allegations, IAEA Director General ElBaradei and other senior IAEA officials visited the pilot-scale hexafluoride gas centrifuge enrichment plant under construction at Natanz on 21 February 2003, and discovered that the centrifuges they were shown were at least twice as powerful as claimed by Iran in its comprehensive safeguards declaration. This discrepancy was narrowed down to a factor of two following an additional visit by IAEA officials to the Natanz facility on 25 February 2003. As a result of these visits, the Agency prepared a report to the Board of Governors indicating a number of failures by Iran to report the material, facilities, and activities in question in a timely manner considering its obligations to do so pursuant to the Safeguards Agreement. In this regard, the report stated that Iran:

- failed to declare the import of natural uranium in 1991, and its subsequent transfer for further processing (referring to the import of 3,960 pounds of uranium imported from China in 1991);
- failed to declare activities involving the subsequent processing and use of the imported natural uranium, including the production and loss of nuclear material where appropriate, and the production and transfer of waste resulting thereof. Iran has acknowledged the production of uranium metal (that bears little relationship to an energy program which is what the Iranian government asserts to be its only purpose), uranyl nitrate, ammonium uranyl carbonate, UO2 pellets, and uranium wastes; and
- failed to declare the facilities where such material (including the waste) was received, stored, and processed.

The IAEA report also stated that while these failures are being rectified by Iran, the process of verifying the correctness and completeness of the Iranian declarations (in terms of its Safeguards Agreement) is ongoing. Iran was requested to cooperate with the Agency to address a series of "open questions," including:

- The completion of a more thorough expert analysis of the research and development carried out by Iran in the establishment of its enrichment capabilities.
- Further follow-up on information regarding allegations about undeclared enrichment of nuclear material, including, in particular, at the Kalaye Electric Company.
- Further enquiries about the role of uranium metal in Iran's nuclear fuel cycle.
- Further enquiries about Iran's program related to the use of heavy water, including heavy

water production and heavy water reactor design and construction at Arak.

On 6 May, Iranian Vice-President and head of Iran's Atomic Energy Organization H.E. Reza Aghazadeh noted Iran's intention to accept the Additional Protocol. He said that his "country has no difficulty accepting this protocol, as a matter of fact, it is approaching it positively." He added, however, that Iran "doesn't intend to ratify and enforce the provisions of this protocol without any condition" referring to restrictions on the supply of nuclear-related technologies and materials imposed by the United States, the United Kingdom, and other members of the Nuclear Suppliers Group (NSG). The Iranian representative at the IAEA Board of Governor's meeting on 18 June 2003 reiterated Iran's intention to conclude the Additional Protocol when he said that Iran "would like to state over again [its] positive consideration of the Additional Protocol….The positive outcome of this session will be conducive towards the settlement of this issue."

On 18 June, the IAEA Board of Governors considered the Agency report. Despite some pressure to do so, the Board did not declare Iran in violation of its obligations under the NPT and its IAEA Safeguards Agreement. It also did not adopt a resolution on Iran. Instead, the Chairperson of the Board, Kuwaiti Ambassador Nabeela Al-Mulla, referred to the findings of the IAEA report in her summary of the meeting. The Chairperson stated that the Board:

- noted Iranian actions taken thus far to correct these failures, and urged Iran to promptly rectify all safeguards problems identified in the report and resolve questions that remain open;
- welcomed Iran's reaffirmed commitment to full transparency and expected Iran to grant the Agency all access deemed necessary by the Agency in order to create the necessary confidence in the international community;
- encouraged Iran, pending the resolution of related outstanding issues, not to introduce nuclear material at the pilot enrichment plant, as a confidence-building measure;
- called on Iran to co-operate fully with the Agency in its on-going work and in this regard, took note of the Director General's 16 June Introductory Statement which called on Iran to permit the Agency to take environmental samples at the particular location allegedly involved in enrichment activities;
- welcomed Iran's readiness to look positively at signing and ratifying an Additional Protocol, and urged Iran to promptly and unconditionally conclude and implement an Additional Protocol to its Safeguards Agreement, in order to enhance the Agency's ability to provide credible assurances regarding the peaceful nature of Iran's nuclear activities, particularly the absence of undeclared material and activities.

Following the Board's consideration of the Iranian report, Director General ElBaradei in his concluding statement remarked: "there is a need to encourage Iran to cooperate fully and demonstrate full transparency" to resolve the outstanding questions identified in the IAEA report as soon as possible before the next Board meeting in September 2003 and, if deemed necessary, the Board could meet at a special session to consider further options.

Further discussions on the outstanding questions regarding Iran's nuclear program and Iran's possible conclusion of an Additional Protocol took place throughout July and August 2003, with visits to Iran by the Director General and IAEA technical and legal experts. Environmental samples taken from the Natanz facility that indicated the presence of highly enriched uranium particles were chief among the outstanding issues requiring clarification. In addition, the IAEA requested permission to take environmental samples at the Kalaye Electric Company in Tehran and to visit two other locations (Lashkar Ab'ad and Ramandeh) where alleged nuclear-related activities occurred. Both of these requests were granted in mid-August. At the same time, Iran also expressed to the IAEA its readiness to begin negotiations on the Additional Protocol.

In preparation for the September Board of Governors meeting, the Director General's second report was issued on the implementation of Iran's NPT Safeguards Agreement. The report provided an update on the status of the issues raised in the previous report, and included new questions that had arisen over the course of the more recent discussions. In particular, the report noted that:

- Having acknowledged in August that uranium conversion experiments had taken place in

the early 1990s, Iran is in the process of gathering and providing further information. The IAEA is continuing its efforts to audit and verify the import and use of the nuclear material.

- The Agency is continuing discussions on the presence of depleted uranium detected through environmental samples, and is awaiting results of samples taken from other nuclear facilities.
- The IAEA is evaluating new information received in August regarding the chronology and details of Iran's centrifuge enrichment program, and is awaiting environmental samples taken from the Kalaye Electric Company workshop.
- In working with Iran to identify the origin of highly enriched uranium particles detected at the Natanz pilot enrichment plant, the IAEA will conduct discussions with relevant Iranian personnel and will visit relevant locations. In addition, the Agency has requested assistance from Member States that have knowledge of any external nuclear-related assistance provided to Iran.
- The Agency is evaluating design information on Iran's heavy water reactor.

The report concluded that although Iran has demonstrated an increased degree of cooperation with the Agency, including its decision to begin negotiations on the conclusion of an Additional Protocol, "it should be noted that information and access were at times slow in coming and incremental and that…some of the information was in contrast to that previously provided by Iran. In addition, there remain a number of important outstanding issues, particularly with regard to Iran's enrichment program, that require urgent resolution. Continued and accelerated co-operation and full transparency on the part of Iran are essential for the Agency to be in a position to provide at an early date the assurances required by Member States."

The second report was considered during the Board of Governor's September 2003 meeting, with Board members debating several proposals regarding the most effective way to proceed. Two draft resolutions (one by France, Germany, and the United Kingdom and another by South Africa) were submitted on the first day of the Board meeting, however, the resolution ultimately adopted on 12 September was based on a later draft submitted by Australia, Canada, and Japan (GOV/2003/69). The resolution urged Iran to provide accelerated cooperation and full transparency to the IAEA, and to ensure that no further reporting failures occurred. The resolution further expressed concern with regard to:

- the Director General's statement on the nature of Iran's cooperation and contrasting information;
- the finding of highly enriched uranium at the Natanz facility;
- the considerable modifications that had been made at the Kalaye Electric Company prior to Agency inspections;
- the discrepancies in Iran's statements to the IAEA and the increasing number of outstanding issues; and
- the introduction of nuclear material into the pilot centrifuge enrichment cascade at Natanz, despite the Board's June 2003 encouragement to refrain from doing so as a confidence-building measure.

The resolution called on Iran to suspend all further uranium enrichment-related activities and any reprocessing activities as a confidence-building measure, pending assurances by the Director General and satisfactory application of the provisions of the Additional Protocol. It also designated a 31 October 2003 deadline for Iran to provide full cooperation and to take any actions necessary to remedy all failures identified by the Agency, including:

- providing a full declaration of all imported material and components relevant to the enrichment program, and collaborating with the Agency in identifying the source, date of receipt, storage locations, and use of those imports;
- granting unrestricted access, including environmental sampling, to any locations deemed necessary by the Agency for verification purposes; and
- resolving outstanding questions, particularly on the scope of Iran's enrichment and conversion activities.

Finally, the resolution requested the cooperation of third countries in clarifying outstanding questions and urged Iran to promptly and unconditionally sign, ratify, and fully implement the Additional Protocol. The resolution

concluded by requesting the Director General to continue his efforts to resolve the outstanding issues, and to submit a report in November 2003 on the implementation of the resolution, "enabling the Board to draw definitive conclusions."

Although adopted without a vote, the resolution did not enjoy total consensus. Only 20 of the 35 members had indicated that they would vote in favor. The Non-Aligned Movement issued a statement expressing its reservations with regard to the final resolution, and Iran left the meeting in protest before the official adoption took place. Iran denounced the resolution again in its opening statement to the IAEA General Conference but reiterated its commitment to the NPT and to the strengthened safeguards regime.

Over the next two months, Agency inspectors continued to conduct safeguards inspections, talk to relevant nuclear personnel, and to carry out other verification activities. The results of the environmental samples taken at Natanz and at the Kalaye Electric Company, both of which had yielded traces of both high and low enriched uranium particles, were discussed with Iranian representatives. During this period, Iran demonstrated on several occasions an increased level of transparency and cooperation with the Agency. On 9 October, a letter was sent to the Agency from Iran's Atomic Energy Organization, providing information on previously undeclared research activities carried out on uranium conversion processes. Iran expressed to the Director General on 18 October its readiness to conclude the Additional Protocol and to accelerate its cooperation, and on 21 October, issued with the Foreign Ministers of Britain, France, and Germany an agreed statement in which Iran agreed to settle all outstanding issues with the IAEA. In the agreement, Iran also announced its decision to sign and commence the ratification process for the Additional Protocol, and to voluntarily suspend all uranium enrichment and reprocessing activities as defined by the IAEA. Eight days before the 31 October deadline, Iran provided the Agency with a declaration of its past and current nuclear program. On 10 November, the Agency received Iran's official notification of its acceptance of the draft Additional Protocol text and its willingness to abide by the provisions of the protocol pending its entry into force. Iran also informed the Agency that the actual suspension of its enrichment-related and reprocessing activities went into effect from 10 November.

Taking these events into consideration, the Director General issued his third report on 10 November on the implementation of Iran's Safeguards Agreement. The 30-page report acknowledged Iran's increased cooperation, but also contained details on a number of reporting and other failures by Iran to fulfill its obligations under its Safeguards Agreement. It referenced at least nine instances of undeclared foreign assistance, including by entities from at least four countries that provided components, material, and information used in Iran's laser enrichment program.

Notable reporting failures included:

- Undeclared reprocessing experiments resulting in the separation of gram quantities of plutonium;
- Undeclared laboratory-scale uranium conversion experiments using imported nuclear material– some of which, when found to be missing, was intentionally misreported to the Agency as a process loss; and
- An 18-year effort to develop a uranium centrifuge enrichment program and a 12-year effort on the more complex laser enrichment program. These two programs involved undeclared production of small amounts of low enriched uranium, and not only failure "to report a large number of conversion, fabrication and irradiation activities involving nuclear material," but also intentional efforts to conceal these failures.

In addition, the report contained further details on Iran's heavy water reactor program, including on the planned 40-megawatt (th) heavy water reactor and on the output capacity of its heavy water production plant currently under construction. With regard to Iranian transparency, the report noted, "Iran's policy of concealment continued until [October], with co-operation being limited and reactive, and information being slow in coming, changing and contradictory."

The report stated, "Iran's nuclear programme, as the Agency currently understands it, consists of a practically complete front end of a nuclear fuel cycle, including uranium mining and milling, conversion, enrichment, fuel fabrication, heavy water production, a light water reactor, a heavy water research reactor and associated research

and development facilities." It further noted, "While most of the breaches identified to date have involved limited quantities of nuclear material, they have dealt with the most sensitive aspects of the nuclear fuel cycle, including enrichment and reprocessing." It acknowledged the numerous reporting and other failures by Iran to meet its obligations under its Safeguards Agreement, but also noted that recent actions, such as provision of inventory change reports and facility design information, have been taken by Iran in addressing and correcting these failures. The report concluded, "To date, there is no evidence that the previously undeclared nuclear material and activities referred to above were related to a nuclear weapons programme. However, given Iran's past pattern of concealment, it will take some time before the Agency is able to conclude that Iran's nuclear programme is exclusively for peaceful purposes." In this regard, the report noted the necessity of Iranian implementation of the Additional Protocol and of full cooperation from relevant third countries.

The report was considered at the mid-November Board of Governors meeting. Although the Board meeting was scheduled to conclude on November 18, negotiations regarding the next appropriate step in addressing Iran's nuclear program delayed adoption of a resolution until the following week. The United States strongly opposed what it viewed as a weakly worded draft resolution submitted by Britain, France and Germany, and pushed for referral of the Iranian case to the UN Security Council. Ultimately, however, a resolution was adopted on 26 November that:

- Acknowledged Iran's recently increased co-operation, but strongly deplored its past failures and breaches of its obligations to comply with the provisions of its Safeguards Agreement;
- Urged Iran to swiftly sign and ratify its Additional Protocol (which was approved by the Board on 21 November) and to act in accordance with its provisions pending ratification;
- Requested Iran to continue to suspend all enrichment-related and reprocessing activities in a "complete and verifiable manner"; and
- Reiterated the necessity of urgent, full and transparent co-operation of all relevant third countries.

The resolution also stated that should any "further serious failures come to light," it would meet immediately to consider "in the light of the circumstances and of advice from the Director General, all options at its disposal, in accordance with the IAEA Statute and Iran's Safeguards Agreement." It concluded by requesting the Director General to submit another report before the March 2004 Board of Governors meeting.

Remarking on the resolution's adoption, the Director General stated, "This is a good day for peace, multilateralism, and non-proliferation," but also noted that much verification work remains unfinished.

In continuance with this verification work, the Agency carried out ad hoc inspections at the Tehran Nuclear Research Centre (TNRC) and the Natanz facility, conducted design information verification at TNRC, Natanz, and the Esfahan Nuclear Technology Centre (ENTC), and obtained complimentary access at ENTC and Karaj between the 8th and 16th of December.

On 18 December, Iran signed the Protocol Additional to its Safeguards Agreement. Iran also specified the scope of suspension of its enrichment and reprocessing activities in a 29 December Note Verbale. These activities would be suspended immediately, and included:

- all activities at the Natanz enrichment facility;
- the production of all feed material for enrichment ant the importation of enrichment-related items;
- the operation and/or testing of any centrifuges, either with or without nuclear material, at the Pilot Fuel Enrichment Plant (PFEP)at Natanz;
- further introduction of nuclear material in any centrifuges; and
- the installation of new centrifuges at the PFEP and the Fuel Enrichment Plant (FEP) at Natanz.

In addition, Iran agreed to withdraw nuclear material from any centrifuge enrichment facility if and to the extent practicable.

>>back

Democratic People's Republic of Korea:

The DPRK joined the NPT in 1985 and its comprehensive Safeguards Agreement with the Agency entered into force in 1992. However, since 1993 the IAEA has been unable to verify Pyongyang's compliance with its Safeguards Agreement.

Between 1994 and 2002, the Agreed Framework aimed at bringing the DPRK into compliance with its safeguards obligations. However, the reports about a clandestine uranium enrichment program, the end of the "freeze" pursuant to the Agreed Framework, and the expulsion of IAEA inspectors brought this phase to an end. Responding to this, the international community initiated separate negotiations, the six-party talks between the DPRK, China, Russia, Japan, the ROK, and the United States. However, since that time the Board has continually called for the DPRK to remedy its noncompliance with its safeguards agreements and noted with concern that the DPRK has not permitted Agency verification since December of 2002; the IAEA is therefore unable to provide assurances on its nuclear material or activities.

2012: On 29 February, IAEA Director General Yukiya Amano issued a statement noting the significance of the United States' recent talks with the DPRK and reaffirming the IAEA's readiness to resume monitoring activities once given permission to do so by the DPRK.

On 16 March, Director General Yukiya Amano received a communication from the Director General of the General Department of Atomic Energy of the DPRK inviting a delegation from the IAEA to the DPRK to discuss technical issues relating to the monitoring of a moratorium on uranium enrichment activities at Yongbyon. This was the first time the IAEA had been invited since 2009.

On 4 June, in his address to the Board of Directors, Director General Amano noted that "it has become clear that there is no immediate prospect of an Agency mission taking place" and called for the DPRK to come into full compliance with the NPT and cooperate with the IAEA.

2011: On 7 March the IAEA Director General expressed serious concern about the DPRK's nuclear program, and called on the DRPK to comply with the relevant General Conference and Security Council resolutions. He emphasized the need for compliance with Security Council Resolution 1874 in abandoning all nuclear weapons and nuclear programs, and stressed the important role the Agency has to play in verifying the DPRK's nuclear program.

On 6 June, Director General Amano informed the Board of Governors that the DPRK's nuclear program remains a serious concern for the Northeast Asia region and beyond, and stressed the IAEA's role in verifying the DPRK's nuclear program.

On 2 September, the IAEA issued its report entitled *Application of Safeguards in the Democratic People's Republic of Korea*, noting that it has not been able to verify the DPRK's safeguards compliance and that "the nuclear program of the DPRK is a matter of serious concern and reports about the construction of a new uranium enrichment facility and a light water reactor in the DPRK are deeply troubling".

On 12 September, in his report to the Board of Governors, the IAEA Director General noted his concern regarding reports on the construction of a new uranium enrichment facility and a light water reactor in the DPRK.

2010: On 1 March the IAEA Director General informed the Board of Governors that he had nothing new to report regarding safeguards in the DPRK as inspectors had been banned from the country since April of 2009. He commended China and other parties in their efforts to resume the Six-Party Talks and stated the IAEA should play a key role in future verification arrangements.

On 7 June, the Director General recalled that the DPRK continued to be bound by UNSC resolutions requiring them to act in accordance with relevant NPT and IAEA safeguards agreements. He stated that the increased tension in the Korean Peninsula underscored the need to address this issue and urged the DPRK to return to its nuclear nonproliferation obligations. He also called for the resumption of Six-Party Talks.

On 13 September, the Director General repeated to the Board of Governors that he had nothing new to report regarding safeguards in the DPRK as inspectors have been banned from the country since April of 2009. The Director General urged the DPRK to return to its nuclear non-proliferation obligations and called for the resumption of Six-Party Talks.

During his introductory statement to the Board of Governors on 2 December, the Director General announced that no progress had been made on the DPRK safeguards issue. He continued to urge the DPRK to fully implement all relevant resolutions of the General Conference and the Security Council.

On December 20, during New Mexico governor and former U.S. ambassador to the United Nations Bill Richardson's unofficial trip to Pyongyang, DPRK signaled its willingness to readmit IAEA inspectors to the country and transfer 12,000 fresh fuel rods to another state. IAEA Director General Yukiya Amano urged DPRK to follow through on its offer.

2009: On 2 March, in his introductory statement to the Board of Governors, the Director General reported the Agency's continued monitoring and verification of the Yongbyon facilities. In addition, all discharged fuel rods from the 5 MWe reactors remained under the containment and surveillance of the IAEA.

On 14 April, DRPK had informed the IAEA that they were ceasing all cooperation with the Agency. On 16 April inspectors removed seals and surveillance equipment from the Yongbyon nuclear facility and left the country.

On 17 June, the Director General reported to the Board of Governors that the last seventeen years of verification issues in the DPRK have demonstrated how not to conduct verification. Dr. ElBaradei went on to say that at the next Board meeting, he will have nothing further to report as the IAEA is no longer in the DPRK.

On 30 July, the Director General released a report entitled *Application of Safeguards in the Democratic People's Republic of Korea.* The report highlighted the Agency's ceased implementation of ad hoc monitoring and verification arrangement at the behest of the DPRK. As a result the Agency has been unable to monitor or verify nuclear activities within the DPRK and therefore cannot provide any conclusions concerning the DPRK's nuclear activities.

2008: On 2 September the Director General submitted a report to the Board of Governors General Conference, which concluded that the Agency was continuing to verify the shutdown of the nuclear facilities at Yongbyon and Taechon. Also, the Agency reported implementing the ad hoc monitoring and verification agreement. The report noted that the Agency's actions were limited to observing dismantlement activities and did not take part in the hands-on dismantlement processes.

On 22 September, the DPRK asked the Agency to remove the seals from the reprocessing plant at the Yongbyon nuclear facility. The DPRK informed IAEA inspectors that they planned to produce nuclear fuel within one week of the seal removal, and inspectors would no longer be granted access to the plant. However, following an agreement reached between the United States and the DPRK on a Verification Protocol, the DPRK reversed their position and restored access to their facilities. The interruption lasted from 9 to 13 of October. Agency inspectors were permitted to re-apply containment seals and surveillance equipment to the facility. In his statement before the Board of Governors on 28 October, ElBaradei stated "I naturally still hope that the conditions can be created for the DPRK to return to the NPT soon and for the resumption by the Agency of comprehensive safeguards."

2007: On 13 February, the Six Party Talks agreed upon "Initial Actions for the Implementation of the Joint Statement," which foresaw IAEA verification of the shutdown and sealing of the Yongbyon nuclear facility. On 3 July, ElBaradei submitted a report to the Board of Governors outlining an ad hoc agreement between the IAEA and the DPRK on monitoring and verification. The Board of Governors authorized the Director General to implement the agreement. On 17 August at the 51st regular session of the General Conference, ElBaradei's report stated that, following initial verification, the DPRK had shut down the Nuclear Fuel Fabrication Plant, Radiochemical Laboratory, the 5MW(e) Experimental Nuclear Power Plant and the 50 MW(e) Nuclear Power Plant at the Yongbyon nuclear facility. The Director General also reported that the Agency was continuing work on verification and monitoring as outlined in the ad hoc agreement.

2006: On 14 October, the United Nations Security Council passed Resolution 1718 in response to the Democratic People's Republic of Korea's October 2006 nuclear test. The resolution condemned the test, applied sanctions, and called for DPRK's immediate return to party talks. The resolution barred any military action, but froze a range of goods and banned international travel for those individuals related

to the nuclear weapon program. The council prohibited the provision of large-scale arms and nuclear technology in DPRK, and stressed the importance of inspecting international cargo. China, however, remained dubious of cargo inspections as they fear the measures will intensify the conflict. Resolution 1718 was passed unanimously on 14 October 2006.

2005: On 3 March, the Chairman of the Board expressed serious concern over the DPRK's recent announcements that it would suspend indefinitely and then re-engage in the six-party talks. Further, the Chairman called the DPRK's nuclear issue "a serious challenge to the international nuclear nonproliferation regime as well as to the peace and stability in Northeast Asia."

On 14 June, the director general, in a statement to the IAEA Board of Governors, stated that "The Agency stands ready to work with the DPRK — and with all others — towards a solution that addresses the needs of the international community to ensure that all nuclear activities in the DPRK are exclusively for peaceful purposes, as well as addressing the security needs of the DPRK."

On 26 September, the Director General, in a statement to the Forty-Ninth Regular Session of the IAEA General Conference, welcomed "that the DPRK has expressed its commitment "to abandon all nuclear weapons and existing nuclear programs and [to return], at an early date, to the Treaty on the Non-Proliferation of Nuclear Weapons and to IAEA safeguards." The director general called the agreement reached by the six-party talks "a significant step forward."

On 24 November, the director general updated the Board of Governors on implementation of safeguards in the DPRK. The Director General stated that the agency has not performed any verification activities in the DPRK since December 2002 and therefore cannot provide any assurance about DPRK´s nuclear activities since that time.

2004: On 17 March, the Director General informed the Board that his letter to the DPRK had elicited no response and that the DPRK's stated re-starting of its 5 MW reactor at Yongbyong constituted a further safeguards agreement violation. He also said "the situation in the DPRK is currently the most immediate and most serious threat to the nuclear nonproliferation regime."

On 16 August the Director General, in a report to the Board, recalled that since 1993 the Agency has not been able to implement fully its comprehensive safeguards agreement and advised that the agreement still is in force with the DPRK.

The Board resolution of 24 September noted with concern the DPRK's repeated official statements declaring its intention to build up a nuclear deterrent force and its announcement that it had reprocessed 800 spent fuel rods; it called on the State to completely and promptly dismantle any nuclear weapons program.

2003: On 6 January, the IAEA Board of Governors adopted resolution GOV/2003/3 calling on the DPRK to comply with the Safeguards Agreement and readmit inspectors, deploring in the strongest terms the DPRK's unilateral actions. The resolution also affirmed that unless the DPRK fully cooperates with the Agency, the DPRK will be in further non-compliance with its Safeguards Agreement. It requested the Director General to transmit the Board's resolution to the DPRK, to continue to pursue urgently all efforts with the aim of the DPRK's coming into full compliance with its safeguards obligations, and to report again to the Board of Governors as a matter of urgency.

On 10 January, the DPRK announced its withdrawal from the NPT stating that its withdrawal "will come into force automatically and immediately" on the next day. It stated that it had suspended its 1994 withdrawal from the NPT on the last day of the required three-month notice period and thus did not need to give a further notice to other NPT Parties and Security Council as required under Article X.

On 12 February, the Board of Governors adopted a third resolution (GOV/2003/3) on 12 February 2003, declaring that North Korea was "in further non-compliance with its obligations under its Safeguards Agreement pursuant to the NPT" and decided to report "to the United Nations General Assembly and the Security Council, North Korea's continued non-compliance and the Agency's inability to verify non-diversion of nuclear material that is subject to safeguards."

Although no statement to this effect has been issued by the NPT State Parties, the generally

held view is that North Korea's withdrawal came into effect on 10 April 2003, when its three-month notice of withdrawal expired.

During the 47th session of the General Conference, IAEA Member States adopted a resolution expressing concern with regard to the nuclear actions taken by North Korea. They called upon the DPRK to reconsider its actions and statements and accept and fully comply with comprehensive IAEA safeguards, and strongly encouraged diplomatic efforts to facilitate a peaceful resolution of the DPRK nuclear issue.

2002: No tangible progress has been made with respect to safeguards in the DPRK. The Agency continues to be unable to verify the correctness and completeness of the initial declaration of nuclear material made by the country. On 16 October, North Korea admitted that it had been conducting a clandestine nuclear weapons development program for the past several years. The Director General expressed great concern regarding the information reported by the United States and urged both countries to provide information on this report.

On 29 November, the IAEA Board of Governors adopted Resolution GOV/2002/60 on the implementation of IAEA safeguards in the DPRK at its meeting in Vienna. The Director General, Dr. Mohamed ElBaradei, in a message to the DPRK confirmed the Agency's readiness to dispatch a senior team to the DPRK, or to receive a DPRK team in Vienna, to discuss the general question of implementation of IAEA safeguards in the DPRK.

In December, the DPRK requested that the IAEA remove seals and monitoring cameras at all of its nuclear facilities. The DPRK also announced that it would lift the freeze on its nuclear facilities maintained pursuant to the 1994 Agreed Framework and to resume operations of these facilities for power generation on 12 December, 2002. Subsequently, the DPRK cut most of the seals and impeded the functioning of surveillance equipment installed at both the fuel rod fabrication plant and the reprocessing facility. Furthermore, in response to the DPRK's request, IAEA inspectors left the country at the end of December 2002.

2001: As of December 2001, the Agency was unable to verify the correctness and completeness of the initial report of the nuclear material made by the DPRK, and, therefore, unable to conclude that there has been no diversion of nuclear material. The IAEA considers Pyongyang to be in non-compliance with its Safeguards Agreement that remains binding and in force.

2000: In his Statement to the 2000 NPT Review Conference in New York on 24 April, 2000, the Director General noted that with regard to the DPRK, there was regrettably little to report since the 1995 NPT Conference and that the DPRK remained in non-compliance with its Safeguards Agreement

The DPRK continued to accept IAEA activities solely in the context of the "Agreed Framework," which it concluded in October 1994 with the United States. As requested by the Security Council, the Agency was monitoring a "freeze" of the DPRK's graphite-moderated reactors and related facilities under that agreement.

In November 2000, the IAEA Secretary-General voiced hope that with the recent positive developments on the Korean Peninsula, the DPRK would soon be ready to commence active co-operation with the Agency so that it can verify that all nuclear material in the country, subject to safeguards, had been declared. The Agency was permitted by the DPRK to identify some of the documents that needed to be preserved for verification.

1999: Technical rounds held in March and December 1999 yielded little to no progress. At the June 1999 meeting of the Board of Governors, the Director General noted again the Secretariat's continued inability to verify the DPRK's initial inventory declaration, and that the DPRK remained in non-compliance with its Safeguards Agreement. He further said that there remained a fundamental difference of view between the Agency and the DPRK regarding the status of the Safeguards Agreement. The Agency viewed the Safeguards Agreement as binding and in force, while the DPRK did not accept all the measures required under the Safeguards Agreement. In practice, the DPRK accepted ad hoc and routine inspections at facilities not subject to the freeze mandated by the Agreed Framework without major difficulties. The DPRK also continued to link progress with the IAEA to the implementation of the Agreed Framework.

1998: As there was also no progress made during the ninth round of technical discussions in February 1998, the Director General emphasized to the Board of Governors in June that the Agency continued to be unable to verify the correctness and completeness of the DPRK's initial report and could not verify that there had been no diversion of nuclear material. Furthermore, the canning operation of spent fuel rods had been suspended in April at the DPRK's request; 97 percent of the irradiated discharged rods were canned and under Agency seal by that time. Further technical rounds in June and October 1998 did not lead to any progress.

1997: At the meeting of the Board of Governors on 17 March 1997, the Director General reported that the seventh round of technical discussions, which took place on 20-24 January, 1997, in Pyongyang, also produced few results. No progress was made on the issues of the preservation of information or the reprocessing plant. The Director General informed the Board that the Agency inspectors had a continuous presence in the Yongbyon area to monitor the freeze. As of August 1997, the canning operation for the irradiated fuel rods from the 5 MWe reactor, which started in April 1996, was about 90 percent complete. The rods were placed in containers under Agency seals. In January 1997, the DPRK clarified that the nuclear graphite manufactured for use at the 5 MWe power reactor was subject to IAEA monitoring. In October 1997, at the eighth round of technical discussions, no progress was made on the outstanding issues.

1994: On 13 June 1994, the DPRK, which had been an IAEA Member State since 1974, announced its withdrawal from the Agency. The withdrawal did not affect the DPRK's obligations under its Safeguards Agreement, which in the Agency's view remained binding and in force. The DPRK asserted that it was in a special position with regard to the Safeguards Agreement and that it was no longer obliged to allow the inspectors to carry out their work under agreement.

1993: The IAEA Board of Governors on 1 April 1993 concluded that the DPRK was in non-compliance with its Safeguards Agreement and, in line with Article XII.C of the IAEA Statute, referred this non-compliance to the UN Security Council.

>>back

Syria:

2012: On 20 February, Syria issued a response to Director General Amano's request that Syria grant access to IAEA inspectors and asked for "understanding of 'the difficult circumstances and the delicate situation that Syria is passing through"

2011: The report on **Syria** highlights questions regarding the Dair Alzour site. Syria continues to maintain that the building was a "non-nuclear military installation." Such claims are inconsistent with Agency information and Syrian Atomic Energy Commission activities, creating uncertainty regarding the facilities and Syria's activities there. The IAEA has not received satisfactory explanations for the origins and presence of anthropogenic natural uranium found at the site. Since 2008, the Agency has repeatedly requested further cooperation from Syria regard the Dair Alzour site; however, Syria maintains that such requests go beyond its Safeguards Agreement.

The Agency is also concerned about unidentified anthropogenic uranium particles found in 2009 in the Miniature Neutron Source Reactor (MNSR). Syria's declarations are inconsistent with Agency findings that remain unresolved. The Director General urged Syria to bring into force an Additional Protocol and to expediently resolve outstanding questions regarding its nuclear activities.

On 1-5 April, IAEA inspectors visited the Homs facility, which produces yellowcake uranium as a byproduct of acid purification activities. Inspectors were denied access to the Dair Alzour site.

On 24 May, the Board of Directors released Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic: Report by the Director General (GOV/2011/30), which included the IAEA's analysis of the nature of the destroyed facility at Dair Alzour. The report concluded that it was very likely that the facility had been an undisclosed nuclear reactor.

On 9 June, the IAEA referred Syria to the UN Security Council by a vote of 17-6 for violating its safeguards agreement. The IAEA cited Syria's failure to declare an alleged reactor at

Dair Alzour and its failure to provide the IAEA with designs prior to the construction of the facility. As a result

On 25-26 October, IAEA officials met with the Syrian government in Damascus, but were unable to persuade Syria to allow inspections at Dair Alzour, and at three additional locations thought to be linked to the bombed facility.

On 1 November, the IAEA reported that it had discovered a facility at al-Hasakah, in northwestern Syria, whose layout was nearly identical to that of a plan for a uranium enrichment site in Libya which had been provided by the WMD proliferator A.Q. Khan

2010: On 18 February, the new Director General Yukiya Amano issued a report entitled *Implementation of the NPT Safeguards in the Syrian Arab Republic*. This report highlighted that since 2008, Syria has declined to have substantive discussions with the Agency about the Dair Alzour site, has not provided detailed information requested by the Agency and has not granted the Agency further access to the site or 3 surrounding facilities of interest. The report also emphasized that Syria's previous explanation of the origin of anthropogenic natural uranium particles found at the Miniature Neutron Source Reactor (MNSR) were not supported by the Agency's analysis of samples, and a possible link to the particles found at the Dair Alzour site required further examination.

Syria has offered another explanation for the origin of particles at MNSR, suggesting they originated from other materials present at the site, such as yellowcake and uranyl. The report noted that environmental samples taken in November 2009 "confirmed the characteristics of the material as declared by Syria," but the Agency required further clarification regarding the presence and use of anthropogenic natural uranium at the MNSR. In addition, it was reported that Syria has not provided design information concerning irradiation of uranium at the MNSR or met its nuclear material reporting obligations under the Safeguards Agreement.

On 31 May, the Director General submitted a report to the Board of Governors, entitled *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic*. The Report highlights that Syria has continued to refuse access to information concerning the Dair Alzour site including infrastructure, procurement efforts which Syria stated were related to civilian non-nuclear activities, technical documentation related to the construction of the destroyed building, and access to locations where debris from the destroyed building are now situated. A physical inventory verification (PIV) undertaken at the Miniature Neutron Source Reactor on 31 March 2010 provided the Agency with information involving the undeclared conversion of yellowcake to uranyl nitrate. Syria states the yellowcake's origin was Homs.

On 6 September, the Director General submitted a report to the Board of Governors on the *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic*. The report noted that Syria had refused to increase its cooperation with the IAEA and to provide access to all relevant information and locations with regards to the Dair Alzour site as requested by the Agency. The Director General reported that the IAEA had not been able to resolve outstanding issues related to this matter.

The report also noted that the IAEA remained engaged with Syria on clarifying the discovery of anthropogenic uranium particles found at the MNSR. The IAEA provided Syria with results of the March 2010 PIV at MNSR and requested to have discussions concerning inconsistencies discovered by the results. The IAEA met with Syria on 3 September to discuss questions raised by the results and agreed on a plan of action for resolving this issue.

On 23 November, the Director General submitted a report to the Board of Governors, entitled *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic*. Due to lack of cooperation, the IAEA has not been able to make any progress on resolving concerns in regards to the Dair Alzour site. According to the report, as time passes, information concerning this site is deteriorating or has been lost entirely. Regarding MNSR, Syria's responses did not resolve inconsistencies identified by the IAEA. The Director General continued to urge Syria to bring into force an Additional Protocol to its Safeguards Agreement.

2009: On 19 February 2009, the Director General presented GOV/2009/9 to the Board of Governors. The Director General reported that a low probability exists that the uranium was introduced by missiles. The isotopic and

chemical compositions, as well as the morphology of the uranium particles are "all inconsistent with uranium based munitions." The Director General called upon Syria to provide additional information as soon as possible pertaining to the Dair Alzour site development. Dr. El Baradei also requested information on related procurement activities, as well as access to other locations related to Dar Alzour.

On 5 June, Director General submitted a report to the Board of Governors entitled *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic*. This report highlights a chronology of correspondence between Syria, Israel, and the IAEA. The Director General reported that the Agency received the results of a routine environmental sampling from the MNSR in Damascus, which confirmed the existence of undeclared particles of anthropogenic natural uranium, a type not declared by the facility. However, the presence of the uranium particles at the Dair Alzour site has yet to be determined. The report also raises questions involving cooperation between Syria and the DPRK. Syria has not yet responded to clarify the Agency's questions.

2008: On 23 June, Syria allowed IAEA inspectors full access to the site. Syria has maintained that the site was a military site not used for nuclear material development. Syrian officials noted that insufficient access to electricity and large quantities of treated water, as well as limited access human resources due to its remote location prevented nuclear material development at Dair Alzour. During their visit to the site in June 2008, inspectors reported that the box-shaped building may have had underground levels. Inspectors also reported that the water pumping infrastructure at the site was adequate for a 25MWth reactor, and observed sufficient electrical capacity for such a reactor.

Environmental samples revealed large quantities of anthropogenic natural uranium particles, which are produced from chemical processing. In a letter from 11 November 2008, Syria argued that "the only explanation for the presence of these modified uranium particles is that they were contained in the missiles that were dropped from the Israeli planes onto the building to increase the destructive power." Israel has refuted these claims as false.

2007: On 19 November 2008, the Director General presented GOV/2008/60 to the Board of Governors. The report alleges that on 6 September, Israeli warplanes bombed a building located on the Euphrates River in northeastern Syria. The site is referred to as Dair Alzour or al Kibar. Based on commercial satellite imagery, construction activities began between 26 April 2001 and 4 August 2001 and continued until August 2007. On 27 October, 2007 ElBaradei said, regarding the Israeli attack, that "to shoot first and ask questions later [is] unhelpful."

>>back

The Republic of Korea:

2007: In a statement to the sixty-second regular session of the UNGA on 29 October, the Director General discussed a renewed interest in nuclear power. Along with 11 other states, the Republic of Korea was said to have been working to add new reactors to its existing program.

2005: On 28 February, the Director General reported to the Board of Governors that the Republic of Korea requested Agency assistance with energy assessments. ElBaradei pointed out that, due to the large size of nuclear power plants, they are often unsuitable for certain electricity grids. For this reason, the Republic of Korea sought an innovative solution. In order to meet their energy demands, they planned to construct a one-fifth scale demonstration plant of the 330 megawatt SMART pressurized water reactor by 2008.

2004: On 19 February, the Additional Protocol between the ROK and the IAEA entered into force.

On 23 August, during initial discussions between the agency and the Republic of Korea (ROK) on its declaration of nuclear materials and activities contingent on its acceptance of its Additional Protocol, ROK revealed to the agency that rogue scientists within the country had conducted laboratory-scale experiments to enrich uranium past the civil enrichment level. The board meeting of 13 September 2004 stated that, while these activities were considered a breach of the ROK's prior commitments, they did not constitute a proliferation hazard since they were conducted in only insignificant quantities.

>>back

Egypt:

2005: In January, a circumstance similar to that of the ROK's transpired, in which it was reported that Egypt had engaged in unreported uranium conversion activities, with most of the work carried out in the 1980s and 1990s. In response to the situation, the Director General, on 28 February 2005, was quoted as saying, "It is regrettable that some activities have not been reported to us, although, again as we have said before we haven't seen a proliferation concern." However, he went on to stress that states must take their reporting and nonproliferation obligations with the utmost seriousness. This matter was not referred to the board.

>>back

Libya:

Libya signed the NPT on 18 July 1968 and ratified it on 26 May 1975. Pursuant to this treaty, Libya concluded a comprehensive safeguards agreement (INFCIRC/282) with the IAEA on 8 July 1980. On 11 April 1996, it signed the African Nuclear-Weapon-Free-Zone Treaty (Treaty of Pelindaba) and subsequently deposited its instrument of ratification with the African Union on 11 May 2005.

Libya's research reactor and other nuclear facilities were mainly supplied by the Soviet Union during the 1970s. Other attempts to acquire nuclear-related technology were made with different levels of success in the following decades. In 1970, Libya's efforts to buy nuclear weapons directly from China failed. Libya relied on foreign technology to develop a nuclear capability rather than developing its own expertise. Through renewed contacts with Russia, Libya tried in the last decade to revive its civilian nuclear program. Although its peaceful nuclear program was placed under IAEA safeguards in 1980, it is now evident that Libya was in the process of developing a parallel nuclear weapons program in breach of the NPT. In December 2003, Libya announced its intention to abandon its WMD programs. This decision seems to have resulted from a combination of strenuous diplomatic efforts and Libya's strategic interest in regaining its full role in the international community. In late December 2003, inspections carried out by the IAEA showed that Libya had the basis for a nuclear program, but it was, according to IAEA Director General ElBaradei, at a very early stage.

2005: On 24 August, Libya signed a Sister Laboratory Arrangement with the United States, which established a cooperative framework for scientific research on peaceful applications of nuclear energy.

2004: In January, in consonance with its new positive approach to nonproliferation, Libya ratified both the Comprehensive Test-Ban Treaty (CTBT) and the Chemical Weapons Convention (CWC) on 6 January 2004.

According to UN inspectors, Col. Qadhafi had been buying complete sets of uranium enrichment centrifuges (apparently a few thousand) on the international black market for a secret nuclear bomb program. However, the centrifuges were still dismantled in boxes, IAEA Director General ElBaradei reported on January 16, and no evidence of nuclear weapons activities was found. Some sources have confirmed that Libya acquired two different types of centrifuges. The designs for at least one of the centrifuge models were very similar to European-developed centrifuges that Iran is suspected of acquiring from Pakistan.

On January 28, the IAEA issued a note to its Member States saying that inspectors had just completed the initial phase of their work in Libya, which included an inventory of sensitive nuclear components and materials and the application of IAEA seals. Also, the IAEA inspectors provided logistical support to the U.S. and U.K. personnel who removed these materials from the country with the agreement of Libyan authorities. Sensitive items have been removed under IAEA supervision and remain under IAEA seal and oversight. A team of IAEA inspectors, including centrifuge and weaponization experts, remained in Libya to continue their work. In the coming weeks, IAEA inspectors will be undertaking verification work on nuclear components, equipment, and materials inside Libya and on items that have been removed.

On February 18, Libya issued a letter to the Agency stating that it would conclude an Additional Protocol and that, as of 29 December 2003, it would act as though the Additional Protocol had entered into force.

On February 20, The Director General issued a report detailing Libya's nuclear activities since the early 1980s. The report recognizes Libya's cooperation in granting unrestricted access to all locations of interest to the Agency, and in providing documentation related to its undeclared nuclear activities. In particular, the report identifies a number of reporting failures that rendered Libya in non-compliance with its obligations under its Safeguards Agreement. These failures include the import of UF6 and other uranium compounds and their subsequent storage; activities involving conversion of uranium oxides, UF4, and uranium metal; the fabrication and irradiation of uranium targets; the separation of a small amount of plutonium; the provision of information for the pilot centrifuge facility; the provision of design information for the uranium conversion facility; and the provision of design information for hot cells associated with the research reactor. The report also observes that Libya's undeclared nuclear activities relied heavily on the importation of nuclear material and key equipment. The Agency is currently in the process of investigating the supply routes and sources of these materials and equipment.

On March 10, Libya signed a Protocol Additional to its Safeguards Agreement. The Board of Governors adopted a resolution on the implementation of NPT safeguards in Libya. The resolution essentially praises Libya's cooperation with the agency, including its adoption of an Additional Protocol, and requests continued cooperation and the full disclosure of previously undeclared nuclear activities. It also requests that the Director General report to the Security Council on the matter of Libyan non-compliance for information purposes only. Finally, the resolution urges all third countries to cooperate with the Agency to clarify questions regarding Libya's nuclear program.

On 26 May, Libya submitted its initial declarations under its Additional Protocol and the nuclear material accountancy reports for the Tajura Nuclear Research Centre (TNRC).

On 28 May, The Director General issued a report detailing the Agency's verification of the dismantlement of Libya's nuclear program. The report recognized the "decisive" role played by Libya's procurement network for nuclear material and sensitive nuclear equipment. The list of equipment acquired through this network includes a uranium conversion plant, different types of gas centrifuges, supporting equipment for these centrifuges, tools for producing centrifuge components, and some quantities of UF6. The report also notes that Libya confirmed that it received nuclear weapon design and fabrication information from a foreign source at the end of 2001 or early 2002. While the Agency has not yet found any evidence that Libya began to incorporate this information into its own nuclear program, verification work to ensure that Libya did not construct any facilities related to nuclear weapon design will continue. Finally, the report notes that while much of Libya's past nuclear activities have been clarified by the Agency, a number of issues are still under assessment, including:

- Libya's intention to produce and/or acquire UF6, and confirmation of the origin of the UF6 received in 2000 and 2001;
- Verification of the sources of LEU and HEU contamination found on gas centrifuge equipment in Libya;
- Evaluation of Libya's activities involving gas centrifuge enrichment, including the results of environmental and nuclear material samples;
- Verification of uranium ore concentrations in Libya; and
- Assessment of Libyan nuclear weapons-related activities, "including organizational arrangements and supporting documentation."

On 30 August, a report by the Director General to the board stated that Libya had shown good cooperation with the agency since the beginning of verification activities following its December 2003 declaration. It also stated that the Agency's assessment of Libya's declarations, in regard to its uranium conversion program, enrichment program, and other past related activities appear to be consistent with the information available to and verified by the Agency.

2003: During March, US-British talks with Libya reportedly began and eventually led to Libya's revelation in December that it had a 15-year-old nuclear weapons program. The IAEA was not included in these negotiations.

On 12 September, following both Libya's decision to accept responsibility for the 1988

bombing of a Pan Am jetliner over Lockerbie, Scotland, and the 1989 bombing of a French UTA flight over Niger and its commitment to pay $2.7 billion to the victim's families, the UN Security Council (adopting its resolution by a vote of 13 to 0 with the United States and France abstaining) ended the 11-year-old sanctions against Libya. The sanctions, imposed between 1992 and 1994, were suspended in 1999 after Libya allowed two suspects in the Pan Am case to stand trial in Scotland.

In October, British and U.S. ships seized an illegal shipment sailing under the German flag bound for Libya with thousands of parts for uranium-enrichment equipment aboard.

On December 19, Libya announced its intention to halt its WMD program and eliminate, under full verification by the international community, any stockpiles of WMD or WMD materials.

On December 28, with Col. Qadhafi's permission, IAEA inspections in Libya began with visits to four previously unvisited nuclear sites in the Tripoli area.

On December 29, Libya committed to immediately start acting as if the Additional Protocol had already entered into force.

On December 30, after inspections of the previously secret sites in Tripoli, IAEA Director General ElBaradei told reporters that no industrial-scale facility to produce highly enriched uranium or any enriched uranium had been found. According to the IAEA, the Libyan nuclear program was at an embryonic stage. However, ElBaradei expressed concern regarding the identity of the suppliers to Libya. The fact that Libya acquired enrichment technology while under UN sanctions showed that export controls were not working and that a black market was active.

1996: Libya's official news agency restated Col. Qadhafi's position that the Arab States should acquire nuclear weapons to counter Israel's nuclear hegemony in the region.

1992 and 1993: Security Council Resolutions 748 and 883 imposed sanctions on Libya. These sanctions consisted of an economic boycott, a general air blockade, and a prohibition against supplying any arms or other military equipment and specified equipment that can be used in the production, storage, or transport of arms and related material of all types.

1990: In mid-April, Col. Qadhafi called for the inclusion of a nuclear component in the development of a multifaceted deterrent force.

>>back

Iraq:

The IAEA is in charge of applying safeguards in Iraq under a comprehensive Safeguards Agreement signed in 1973 as required by the NPT. The Agency's activities in Iraq are carried out by the Iraq Nuclear Verification Office (formerly known as the Action Team). As of December 2002, the Action Team had 24 staff members from 13 different nations.

Since 1991, the IAEA has carried out inspections in Iraq pursuant to several United Nations Security Council (UNSC) resolutions. Under Resolution 687, the IAEA's mandate in Iraq includes two tasks:

- Uncovering and dismantling Iraq's clandestine nuclear program.
- Developing and implementing an Ongoing Monitoring and Verification (OMV) Plan.

Between 1991 and 1996, the IAEA Action Team in cooperation with UNSCOM conducted 29 on-site inspections related to implementation of Resolution 687. Since 1994, it had also conducted more than 1,500 OMV inspections, which allowed the Agency to build a comprehensive picture of Iraq's past nuclear program.

With the adoption of UNSC Resolution 1409 on 14 May, 2002, the IAEA's mandate was extended. UNSC Resolution 1409 defines a new system for the sale or supply of commodities and products to Iraq, through the adoption of the Goods Review List (GRL) and associated procedures. In this regard, Iraq Nuclear Verification Office (INVO) experts evaluate each contract application, as received by the Office of the Iraq Program (oil-for-food), to determine whether it contains any nuclear or nuclear-related items referred to in Section D (nuclear) of the GRL.

The Agency's mandate in Iraq was further extended with the adoption of UNSC Resolution 1441 on 8 November 2002. The new resolution

instructed Iraq to provide the IAEA and UNMOVIC with "immediate, unimpeded, unconditional, and unrestricted access to any and all" suspect sites and facilities, as well as unrestricted access in interviewing (either inside or outside of the country) any relevant Iraqi officials and other persons with possible connections to a WMD program. The IAEA and UNMOVIC were requested to resume inspections within 45 days of the resolution's adoption and to report to the Security Council 60 days after on the implementation of the resolution.

2010: On 18 January, in a letter to the UN Security Council Iraqi Minister for Foreign Affairs expressed Iraq's support to the international nonproliferation regime and readiness to comply with disarmament treaties and other relevant international instruments, including ratification of the CTBT and provisional application of the Additional Protocol until its entry into force. On 26 February the UNSC welcomed this commitment stating its readiness to review, with a view towards lifting, the restrictions in resolutions 687 (1991) and 707 (1991) related to weapons of mass destruction and civil nuclear activities, once such measures were put in place.

On 15 December, due to the progress made by the Iraqi Government, the UN Security Council adopted UNSCR 1956 (S/RES/1956), UNSCR 1957 (S/RES/1957), and UNSCR 1958 (S/RES/1958). UNSCR 1956 terminates UN supervised arrangements over the Development Fund for Iraq. UNSCR 1957 terminates WMD, missile, and civil nuclear-related UN restrictions on Iraq and urges the Iraqi Government to ratify the Additional Protocol to the Comprehensive Safeguards Agreement and the Comprehensive Nuclear-Test-Ban Treaty as soon as possible. UNSCR 1958 terminates the residual activities of the Oil for Food program.

2007: On 29 June, the UN Security Council adopted UNSCR 1762 (S/RES/1762), which terminated the mandate of the IAEA in Iraq that had been put in place by previous UNSC resolutions. The IAEA will continue to implement safeguards in Iraq under Iraq's NPT obligations.

2005: In September, the IAEA completed the annual Physical Inventory Verification of Iraq's declared nuclear material. The material—natural or low-enriched uranium—is consolidated at a storage facility near the Tuwaitha complex, south of Baghdad. The inspectors found no diversion of nuclear material.

2004: On 11 April, the DG sent a letter to the UN Security Council stating that since 17 March of 2003 the IAEA has not been in a position to implement its mandate in Iraq under UNSC Res. 687 (1991) and related resolutions, but that it remains ready, subject to Security Council guidance (and security conditions), to resume its mandated verification activities in Iraq.

During 2004, the IAEA focused its activities on conducting investigations of sensitive and contaminated items exported from Iraq: analyzing additional information collected during inspections, consolidating its information assets, refining its plan for resumed verification activities, and evaluating lessons learned through past experience in Iraq.

2003: On 27 January 2003, Director General ElBaradei noted in his address to the UN Security Council meeting that "no prohibited nuclear activities had been identified during the [IAEA's] inspections." As of 7 March 2003, the IAEA had conducted a total of 218 inspections at 141 sites, including 21 that had not been inspected before. ElBaradei reported the following to the UN Security Council on 7 March 2003: "after three months of intrusive inspections, we have to date found no evidence or plausible indications of the revival of a nuclear weapons program in Iraq, making use of all the additional rights granted to us by resolutions 1441 (2002) and all additional tools that might be available to us, including reconnaissance platforms and all relevant technologies." ElBaradei stated that the IAEA had found "no indication of resumed nuclear activities…[nor was there any indication] of nuclear related prohibited activities at any inspected sites." He noted that Iraq had been "forthcoming in its cooperation, particularly with regard to the conduct of private interviews and in making available evidence that could contribute to the resolution of matters of IAEA concern." While these statements revealed that, according to the IAEA, Iraq was not developing a nuclear weapons program, the Agency was forced to withdraw its inspection team on 18 March 2003, along with all United Nations inspectors. On 20 March 2003, coalition forces led by the United

States and United Kingdom initiated "Operation Iraqi Freedom" and invaded Iraq.

During the 19 March UNSC meeting, Secretary-General Kofi Annan addressed the Council expressing deep regret about the "fact that it [was] not possible [for the Council] to reach a common position" on the situation in Iraq. Several members acknowledged the hope that "implementation of the Council resolution for Iraqi disarmament could be achieved through peaceful means" and yet, the Council could not find convergence of views among its members on Iraq.

In the aftermath of the Iraq war, IAEA inspectors have been granted limited access to Iraqi nuclear facilities. On 22 April 2003, ElBaradei noted at the UN Security Council that "the IAEA continues to be the sole organization with legal powers – derived from both the Nuclear Non-Proliferation Treaty and successive Security Council Resolutions – to verify Iraq's nuclear disarmament." He advised the coalition about the need for physical protection of the location of Iraq's declared nuclear material. On 6 June 2003, the Agency re-entered the country for the first time to begin an assessment of the 23,000-acre Tuwaitha Nuclear Facility 14 miles south of Baghdad. Pentagon officials, however, noted that this was "a one-time project and that the IAEA should not expect blanket access to all nuclear sites in Iraq." ElBaradei implored the United States for access to the Tuwaitha site in May when it became clear the nuclear facility had been looted and potentially radioactive contaminated items had made their way into the surrounding community.

2002: On 30 January, 2002, the IAEA inspection team completed inspections of safeguarded nuclear material at the Tuwaitha facility in Iraq. The inspections carried out under Iraq's Safeguard Agreement with the IAEA, which concluded pursuant to the NPT and were limited to verifying stocks of nuclear material sealed under IAEA safeguards. The Agency's January safeguards activities were not related to the inspections in Iraq mandated by the UN Security Council; these inspections, which grant the Agency broader inspection rights, ceased in December 1998 and have not been resumed yet.

In October, representatives of Iraq, UNMOVIC, and the IAEA had focused talks in Vienna on the practical arrangements needed for facilitating resumed inspections. The Iraqi representatives announced that Iraq accepts all the inspections provided for in all the relevant Security Council resolutions.

The latest Security Council Resolution (1441), demanding resumption of inspections in Iraq, was adopted on November 8, 2002. Iraq accepted the resolution in a letter to the UN on November 13.

Under the Security Council Resolution, on 27 November, the first inspections in the four years since the withdrawal of UNSCOM resumed in Iraq. On 7 December, one day before the deadline set in the Resolution, Iraq submitted its 12,000-page declaration of its past WMD and missile programs and facilities to the UN. IAEA Director General ElBaradei and UNMOVIC Executive Chairman Blix told the UN Security Council that Iraq's declaration falls short of a full disclosure of its weapons programs. The United States declared that Iraq is in material breach of UN Resolution 1441.

2001: In January 2001, the Agency inspection team carried out a physical inventory verification of the declared nuclear material remaining in Iraq under IAEA seal. As in the case of a previous inspection, its objectives were limited to verifying the presence of nuclear material and could not serve as a substitute for activities under the relevant Security Council resolutions.

In an October 2001 letter from the IAEA Director General to the President of the UN Security Council, he stated that the IAEA was not able to provide any assurance that Iraq was in compliance with its obligations under UN Security Council Resolution 687 and related resolutions. He noted that the Agency maintained readiness to resume verification and monitoring activities in Iraq pursuant to the UN Security Council resolutions; it had kept the core staff of the Agency's Action Team and was prepared to resume these activities at short notice, with the assistance and cooperation of UNMOVIC.

2000: In January 2000, pursuant to a comprehensive Safeguards Agreement the Agency was able to inspect the nuclear material subject to safeguards still in Iraq. This inspection was limited to a physical inventory verification of nuclear material remaining at the Tuwaitha site and was not a substitute for the required activities under the relevant Security Council

resolutions. The Agency could therefore not provide any assurance that Iraq was in compliance with its obligations under those resolutions. In May 2000, the Agency completed the destruction of a filament winding machine and its spare parts that Iraq had planned to use in its clandestine uranium enrichment program. In his Statement to the 2000 NPT Review Conference in New York on 24 April 2000, the Director General ElBaradei, noted that with regard to Iraq, the Agency has not been in a position since December 1998 to implement its mandate under UN Security Council Resolution 687 and related resolutions.

1999: Security Council resolution 1284 (1999), which established UNMOVIC as UNSCOM's successor, reaffirmed the provisions of the relevant resolutions with regard to the role of the IAEA in addressing compliance by Iraq with Resolution 687 (1991) and other related resolutions, and requested the Director General of the IAEA to maintain this role with the assistance and cooperation of UNMOVIC. The Security Council also requested the Executive Chairman of UNMOVIC and the Director General of the IAEA to establish a unit to be responsible for the export/import mechanism established to ensure that Iraq did not reconstitute its weapons of mass destruction programs.

1998: The IAEA reported in October 1998 that no indication of prohibited equipment, material, or activities had been detected in its most recent inspections in Iraq. In August, Iraq had suspended cooperation with both UNSCOM and the IAEA, but in November, the IAEA resumed its activities in Iraq until just before the US-UK military action in mid-December 1998. On 16 December 1998, the Agency withdrew its personnel out of concern for their safety and security. Since December 1998, the Action Team has focused on preparations to resume inspections, including creating a detailed plan for resumption of activities, revising the list of items to be reported to the IAEA in the context of the OMV plan and export-import mechanism, conducting additional analysis of available information, etc.

>>back