

IV. North Korea's nuclear programme

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During 2011 the Six-Party Talks on the nuclear programme of the Democratic People's Republic of Korea (DPRK, or North Korea) remained blocked by disagreement over the terms for restarting negotiations.¹ North Korea repeatedly stated its willingness to return to the talks but emphasized that it would not accept any preconditions for doing so.² South Korean and US officials insisted that North Korea must first halt its uranium-enrichment programme and impose a moratorium on nuclear weapon and missile tests before negotiations could resume. North Korea rejected this demand in separate meetings held in July 2011 with South Korea's chief nuclear negotiator, Wi Sung-lac, and with the special US envoy on North Korean affairs, Glyn Davies.³ However, on 24 August, after a meeting between Russian President Dmitry Medvedev and the North Korean leader, Kim Jong-il, North Korea reportedly indicated that it would be willing to observe a moratorium on the production and testing of nuclear weapons and missiles in the context of resumed talks.⁴

On 17 December 2011 there were unconfirmed media reports that North Korea had agreed to suspend its uranium-enrichment programme in exchange for food aid from the United States.⁵ US officials had previously denied that there was any linkage between the issue of food aid deliveries to North Korea and progress in bilateral discussions of nuclear issues.⁶ The planned US announcement of the decision to resume food aid reportedly had to be postponed, however, following the announcement on 19 December of the death of Kim Jong-il.⁷ As the year ended, the uncertainties created by Kim's death appeared to halt, at least for the time being, further North Korean-US talks.

During the year there were renewed questions and concerns about the scope of North Korea's nuclear programme and its possible connection

¹ The Six-Party Talks began in Aug. 2003 as a Chinese diplomatic initiative to reach a deal under which international aid would be provided to North Korea in return for North Korea verifiably giving up its nuclear weapon capabilities. In addition to China and North Korea, the other parties are Japan, the Republic of Korea (South Korea), Russia and the United States.

² 'North Korea ready to discuss nuclear enrichment', BBC News, 15 Mar. 2011, <<http://www.bbc.co.uk/news/world-asia-pacific-12742016>>.

³ Mydans, S. and Choe, S., 'North Korea is said to weigh nuclear test moratorium', *New York Times*, 25 Aug. 2011.

⁴ Dyomkin, D., 'North Korea ready to discuss nuclear moratorium: Kremlin', Reuters, 24 Aug. 2011.

⁵ 'U.S., N. Korea agree on 240,000 tons of food assistance: source', Yonhap, 17 Dec. 2011.

⁶ US Department of State, 'Remarks by Special Representative Davies in Beijing, China', 15 Dec. 2011, <<http://www.state.gov/p/eap/rls/rm/2011/12/178875.htm>>.

⁷ Rogin, J., 'Kim's death thwarts Obama's North Korean engagement attempts', The Cable, *Foreign Policy*, 19 Dec. 2011, <http://thecable.foreignpolicy.com/posts/2011/12/19/kim_s_death_thwarts_obama_s_north_korean_engagement_attempts>.

with the A. Q. Khan network. These had to do with the previously undeclared centrifuge enrichment plant, located at the Yongbyon nuclear site, that North Korea had shown to a visiting US scientific delegation in November 2010. North Korea claimed that the purpose of the enrichment plant was to produce low-enriched uranium for use as fuel in two light-water power reactors. A leaked report prepared by the United Nations Security Council's panel of experts on North Korea said that the enrichment plant and reactor projects constituted serious violations of the sanctions imposed by the Security Council on North Korea after its 2006 and 2009 nuclear tests.⁸

There was an emerging consensus among experts that the enrichment plant revealed in 2010 had been built with assistance from the Khan network. A report on North Korea issued in September 2011 by the IAEA Director General, Yukiya Amano, noted that the design and physical characteristics of the plant's centrifuge cascade were 'broadly consistent with a design' that had been disseminated through the network.⁹ It also stated that 'information available to the agency' indicated that North Korea had attempted to procure material and equipment suitable for use in an enrichment programme from a wide range of suppliers. According to the UN panel's leaked report, in the 1990s the Khan network had supplied North Korea with a 'starter kit' of centrifuges that included first-generation (P-1) and second-generation (P-2) centrifuges based on Pakistani designs.¹⁰

There was also evidence to support speculation that North Korea had covertly transferred to other states material, equipment and technology of relevance for the development of nuclear weapons and their means of delivery. The IAEA report concluded that uranium hexafluoride found in a cylinder shipped to Libya by the Khan network in 2001 was 'very likely' to have originated in North Korea.¹¹ The UN panel concluded that North Korea had routinely shared prohibited 'ballistic missile-related items' with Iran in breach of UN sanctions on North Korea.¹² The transfers were believed to have taken place on regular scheduled flights 'through a neighboring third country', which several UN diplomats identified as China.¹³

⁸ Panel of experts established pursuant to Resolution 1874 (2009), Report, p. 19. The leaked report is available at <<http://www.scribd.com/doc/55808872/UN-Panel-of-Experts-NORK-Report-May-2011>>. The sanctions were imposed by UN Security Council resolutions 1718, 14 Oct. 2006; and 1874, 12 June 2009. On the sanctions see also chapter 10, section III, in this volume.

⁹ IAEA, Board of Governors and General Conference, 'Application of safeguards in the Democratic People's Republic of Korea', Report by the Director General, GOV/2011/53-GC(55)/24, 2 Sep. 2011, p. 8. The report did not indicate on what basis the IAEA had made this assessment.

¹⁰ Panel of experts established pursuant to Resolution 1874 (note 8), p. 20. See also Pollack, J., 'The secret treachery of A. Q. Khan', *Playboy*, Jan./Feb. 2012.

¹¹ IAEA, GOV/2011/53-GC(55)/24 (note 9), p. 10. The IAEA thus assessed that North Korea had an undeclared uranium conversion capability prior to 2001.

¹² Panel of experts established pursuant to Resolution 1874 (note 8), p. 40.

¹³ Bilefsky, D., 'China delays report suggesting North Korea violated sanctions', *New York Times*, 14 May 2011.