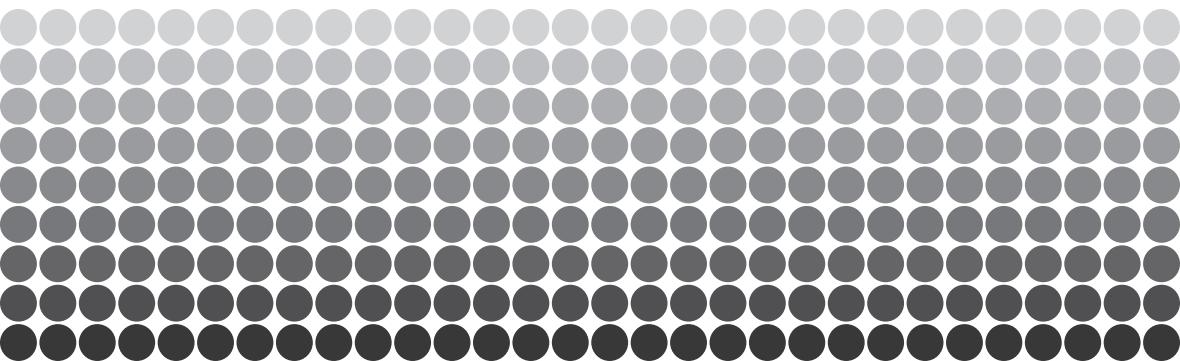


# **SIPRI YEARBOOK 2013**

## Armaments, Disarmament and International Security

### North Korea's nuclear programme

SHANNON N. KILE



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## II. North Korea's nuclear programme

SHANNON N. KILE

The Six-Party Talks on the nuclear programme of the Democratic People's Republic of Korea (DPRK, North Korea) were launched following the country's announcement of its withdrawal from the 1968 Treaty on the Non-proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT) in 2003.<sup>1</sup> Five rounds of negotiations were held until North Korea walked out in April 2009 in protest against a new round of United Nations sanctions imposed in response to its nuclear weapon and missile tests. Disagreement over the terms for restarting negotiations have subsequently blocked the talks.<sup>2</sup>

In early 2012 a potential break in this diplomatic impasse was made. On 29 February, following three rounds of bilateral talks held since July 2011, North Korea and the United States announced in separate statements that the former had agreed to halt its uranium-enrichment programme and observe a voluntary moratorium on further long-range missile and nuclear weapon tests.<sup>3</sup> North Korea had also agreed to invite International Atomic Energy Agency (IAEA) inspectors to return to its Yongbyon nuclear complex, for the first time since their expulsion in 2009, to verify the cessation of uranium-enrichment activities and the shutdown of the partially dismantled nuclear research reactor that had been used to produce plutonium for North Korea's two nuclear explosive tests. In return, the USA announced that it would provide North Korea with 240 000 tonnes of food aid, contingent on the latter's acceptance of intrusive external monitoring of its distribution.<sup>4</sup> The announcement of the so-called Leap Day deal was welcomed by other states in the region as a step towards resuming the Six-Party Talks and as an important initial test of the intentions of the new North Korean leader, Kim Jong Un, following the death of his father in December 2011.<sup>5</sup>

<sup>1</sup> 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. The 6 parties to the talks are China, Japan, North Korea, South Korea, Russia and the USA. For a summary and other details of the NPT see annex A in this volume.

<sup>2</sup> On developments in 2011 see Kile, S. N., 'North Korea's nuclear programme', *SIPRI Yearbook 2012*. On developments in earlier years see relevant editions of the SIPRI Yearbook.

<sup>3</sup> Korean Central News Agency (KCNA), 'DPRK Foreign Ministry spokesman on result of DPRK-U.S. talks', 29 Feb. 2012, <<http://www.kcna.co.jp/item/2012/201202/news29/20120229-37ee.html>>.

<sup>4</sup> US Department of State, 'U.S.-D.P.R.K. bilateral discussions', Press statement, 29 Feb. 2012, <<http://www.state.gov/r/pa/prs/ps/2012/02/184869.htm>>.

<sup>5</sup> Choe, S., 'In North Korea deal, son inherits father's framework', *New York Times*, 2 Mar. 2012.

## **Breakdown of the North Korean-US nuclear suspension agreement**

Hopes for a diplomatic breakthrough proved to be short-lived. On 16 March North Korea's news agency announced plans for the launch of a rocket that would place in orbit a civilian earth observation satellite as part of the celebration of the 100th anniversary of the birth of the state's founder, Kim Il Sung.<sup>6</sup> The USA, the Republic of Korea (South Korea) and Japan promptly denounced the planned launch as a disguised attempt by North Korea to continue the flight testing of its Taepodong-2 long-range ballistic missile that had been under development for more than a decade.<sup>7</sup> Declaring that the launch would violate North Korea's moratorium on missile launches under the Leap Day deal, the USA announced that it had suspended the food assistance package.<sup>8</sup>

The subsequent launch, conducted on 13 April 2012 in the presence of international observers, was a widely publicized failure. The three-stage Unha-3 rocket exploded shortly after lift-off from the new Sohae Launching Station at Tongchang-ri, North Pyongan province, near North Korea's western border with China.<sup>9</sup>

North Korea's decision to proceed with the launch elicited a wave of international criticism. On 16 April the UN Security Council unanimously adopted a presidential statement condemning the launch as a 'serious violation' of resolutions 1718 (of 2006) and 1874 (of 2009), which prohibited North Korea from conducting any type of launch using ballistic missile technology.<sup>10</sup> The Security Council ordered its Sanctions Committee on North Korea to designate additional 'individuals, entities and items' to be subjected to the arms and technology embargoes imposed in 2006 and strengthened in 2009. The order came amid reports that a Chinese firm had supplied North Korea with the chassis for a new type of mobile launch vehicle, in contravention of the UN arms embargo on North Korea.<sup>11</sup>

North Korea responded with a strongly worded statement dismissing the UN Security Council's 'unreasonable behaviour' in violating its 'legitimate

<sup>6</sup> Korean Central News Agency (KCNA), 'DPRK to launch application satellite', 16 Mar. 2012, <<http://www.kcna.co.jp/item/201203/news16/20120316-20ee.html>>.

<sup>7</sup> 'China "concerned" over North Korea rocket launch plan', BBC News, 17 Mar. 2012, <<http://www.bbc.co.uk/news/world-asia-17413054>>.

<sup>8</sup> Parrish, K., American Forces Press Service, 'Officials suspend North Korea nutrition aid over planned launch', US Department of Defense, 28 Mar. 2012, <<http://www.defense.gov/News/NewsArticle.aspx?ID=67738>>; and Ide, W., 'US suspends food assistance to North Korea', Voice of America, 27 Mar. 2012, <<http://www.voanews.com/content/us-suspends-north-korea-food-aid-144680865/181146.html>>.

<sup>9</sup> Choe, S. and Gladstone, R., 'North Korean rocket fails moments after liftoff', *New York Times*, 13 Apr. 2012.

<sup>10</sup> United Nations, Security Council, Statement by the President of the Security Council, S/PRST/2012/13, 16 Apr. 2012.

<sup>11</sup> On this and other reported breaches of the embargo see chapter 10, section II, in this volume.

right to launch satellites' for peaceful space research.<sup>12</sup> It described the US-drafted presidential statement as another example of the USA reneging on 'its promise [in the Leap Day deal] that "it respects the sovereignty of [North Korea] and has no hostile intent toward it"'. The statement declared that since the USA had repeatedly violated the agreement through its 'undisguised hostile acts', North Korea would no longer be bound by it. It also warned that North Korea would take unspecified 'necessary retaliatory measures'—a formulation that raised international concern that the country would conduct another nuclear test explosion, as it had done following the failure of a rocket launch in 2009.<sup>13</sup>

### **Renewed concern about North Korea's nuclear and missile programmes**

North Korea's announcement that it had cancelled the Leap Day deal with the USA also led to renewed speculation about its long-term nuclear intentions and the sincerity of its professed willingness to 'abandon' its nuclear programme. In revisions to the country's constitution approved in April 2012, North Korea was formally identified as a 'nuclear power'.<sup>14</sup> While North Korea had called itself a nuclear power for the past several years, the inclusion of its capability in the constitution highlighted the importance the regime attached to possessing nuclear weapons.<sup>15</sup>

During the second half of 2012 North Korea's ballistic missile capabilities remained a focus of concern for the USA and its allies in North East Asia. In October 2012 the USA consented to South Korea revising its missile guidelines—required by the USA in 1979 because of its concern over a regional arms race—to allow it to deploy ballistic missiles with a range of up to 800 kilometres. This would enable the missile to reach any target in North Korea. The amendment to the guidelines also allowed South Korea to increase its previous missile payload limit of 500 kilograms, depending on the range of the missile.<sup>16</sup>

<sup>12</sup> Korean Central News Agency (KCNA), 'DPRK rejects UNSC's act to violate DPRK's legitimate right to launch satellite', 17 Apr. 2012, <<http://www.kcna.co.jp/item/2012/201204/news17/20120417-25ee.html>>.

<sup>13</sup> Lim, B. K., 'China pushes North Korea to drop nuclear test plan: sources', Reuters, 16 May 2012. On North Korea's nuclear test preparations see chapter 6, section IX, in this volume.

<sup>14</sup> 'N. Korea puts nuclear arms in constitution', *Chosun Ilbo*, 31 May 2012, <[http://english.chosun.com/site/data/html\\_dir/2012/05/31/2012053100646.html](http://english.chosun.com/site/data/html_dir/2012/05/31/2012053100646.html)>; and Constitution of the Democratic People's Republic of Korea, <<http://naenara.com.kp/ko/great/constitution.php>>, Preamble (in Korean).

<sup>15</sup> E.g. Hayes, P., 'The DPRK's nuclear constitution', *Nutilus Peace and Security Weekly*, 14 June 2012, <<http://nutilus.org/napsnet/napsnet-weekly/the-dprks-nuclear-constitution/>>.

<sup>16</sup> Choe, S., 'U.S. allows South Korea to extend range of missiles', *New York Times*, 8 Oct 2012. The previous guidelines, as amended in 2001, had prevented South Korea from deploying ballistic missiles with a range of more than 300 km.

On 12 December North Korea announced with considerable fanfare that it had launched a Unha-3 rocket that successfully put into orbit an earth-observation satellite named Kwangmyongsong-3.<sup>17</sup> The Canadian-US North American Aerospace Defense Command (NORAD) confirmed that the rocket had apparently placed a satellite into polar orbit, although subsequent reports indicated that it was tumbling out of control and presumably non-functional.<sup>18</sup> However, the event confirmed that North Korea was mastering the technology for multistage rockets—one of several steps required for developing an intercontinental ballistic missile (ICBM) capable of delivering a nuclear warhead.<sup>19</sup>

The UN Security Council promptly condemned the North Korean rocket launch as a clear violation of its resolutions banning the country from conducting ballistic missile tests.<sup>20</sup> Several member states urged the Council to expand existing UN sanctions against North Korea.<sup>21</sup> However, the year ended with no decision by the Council to impose new punitive measures or take other steps in response to the North Korean rocket launch.

Developments in North Korea's nuclear and ballistic missile programmes in 2012 suggested that the new North Korean leadership under Kim Jong-un would prioritize the country's so-called 'military-first' policy underpinned by advances in its nuclear and ballistic missile capabilities. The year ended with deepening pessimism in North East Asia about the prospects for restarting multilateral negotiations aimed at inducing North Korea to give up its nascent nuclear arsenal in exchange for international assistance.

<sup>17</sup> Korean Central News Agency (KCNA), 'KCNA releases report on satellite launch', 12 Dec. 2012, <<http://www.kcna.co.jp/item/2012/201212/news12/20121212-09ee.html>>.

<sup>18</sup> Broad, W. J., and Choe, S., 'Astronomers say North Korean satellite is most likely dead', *New York Times*, 18 Dec. 2012.

<sup>19</sup> Richardson, D., 'Unha-3 was largely of North Korean manufacture', *Jane's Missiles and Rockets*, Mar. 2013, pp. 4–6.

<sup>20</sup> United Nations, Security Council, Press Statement on Democratic People's Republic of Korea, 12 Dec. 2012, <[http://www.new-york-un.diplomatic.de/Vertretung/newyorkvn/en/\\_pr/press-releases/2012/20121212-sc-on-dprk.html](http://www.new-york-un.diplomatic.de/Vertretung/newyorkvn/en/_pr/press-releases/2012/20121212-sc-on-dprk.html)>; and Penn, D., 'Security Council condemns North Korea rocket launch', United Nations Radio, 12 Dec. 2012, <<http://www.unmultimedia.org/radio/english/2012/12/security-council-condemns-north-korea-rocket-launch/>>.

<sup>21</sup> 'UN Security Council condemns North Korea rocket launch', BBC News, 13 Dec. 2012, <<http://www.bbc.co.uk/news/world-asia-20697922>>.