

### North Korea's Nuclear/Missile Development and Japan's Response

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#### 1. Assessing North Korea's nuclear/missile development

##### (1) Nuclear development

-Assessing nuclear capabilities

###### a) Plutonium

Operations of the 5MW reactor in Nyongbyon

> North Korea possesses plutonium enough for 8-12 nuclear bombs

###### b) Weaponization

October 2006 nuclear test = North Korea predicted 4 kt, achieved 1kt: "Successful, but not perfect"

###### c) Miniaturization

The Institute for Science and International Security (ISIS) = North Korea is "likely capable of deploying nuclear warheads on its ballistic missiles that can reach Japan."

> North Korea's ability to actually use nuclear weapons is limited, but it is improving daily.

##### (2) Missile development

- Development of missiles capable of reaching Japan

No Dong test in 1993; Taepo Dong 1 test in 1998; No Dong multiple tests in 2006; Taepo Dong 2 test in 2006 (failed)

> The biggest threat to Japan is No Dong.

- No Dong = Payload 1,000 kg; Range 1,300 km; Circular Error Probable (CEP) 2.5 km; Reaches Japan in 10 minutes; Mach 20 at the time of impact; Deployed on some 30 mobile launchers (Hard to destroy on the ground); Can carry conventional, nuclear, chemical, biological warheads; Some 100-175 have been deployed

\*North Korea is already capable of attacking Japan with ballistic missiles. Conventional, chemical, or biological weapons can be used (although it is technically difficult to use chemical or biological weapons effectively). North Korea is not likely to have a capability to use nuclear weapons against Japan.

##### (3) North Korea's intentions

- Diplomatic objectives

Normalization of relations with the United States (and Japan)

Obtaining economic assistance



\*North Korea is not likely to launch massive missile attacks against Japan. It might launch limited attacks to scare Japanese people into diplomatic submission.  
Kim Jong Il might launch massive suicidal attacks against Japan to leave his legacy when his regime is collapsing.

### 2. Japanese response

#### (1) Military response

- Decision to deploy BMD systems in 2003; deployment began in 2007; it will be completed by 2012
  - a) SM-3 = Upper-tier, Aegis-destroyer-deployed system
  - b) PAC-3 = Ground-based, lower-tier system

#### \*Expected effects of BMD deployment

- a) Damage limitation
- b) Deterrence by denial and by complicating North Korea's strategic calculations
- c) Undermine effectiveness of North Korean missiles as a diplomatic bargaining chip

#### (2) Diplomatic response

- Assumption: North Korea's most important policy objective is regime survival (by way of defying military pressure from outside, normalizing relations with the United States and Japan, and obtaining economic rewards).
  - > Japan-DPRK Pyongyang Declaration of September 2002
    - > Japan offered a massive economic aid package to North Korea.

