

## **Abstract**

### **Assessment of North Korea's Nuclear Capability through Nuclear Tests' Yields**

On May 25 2009, North Korea conducted the second nuclear test. Since it has been confirmed that the seismic magnitude caused by the second nuclear test was larger than that by the first nuclear test on October 9 2006, many persons have been very concerned about North Korea's nuclear weapon development capability, in particular, whether North Korea has already completed the miniaturization of a nuclear warhead. In this paper, the nuclear weapon development capability of North Korea was assessed using the data resulting from North Korea's nuclear tests. For this, 2 nuclear test scenarios were assumed: ① a test using 20kt-yield nuclear bomb; and ② a test using 4kt-yield nuclear bomb. As a result, the estimated explosion yield of the second nuclear test shows that the possibility of using 4kt nuclear bomb is a little higher than that of using 20kt nuclear bomb.

**Key words:** North Korea, Nuclear Test, Nuclear Weapon Development Capability