6. World nuclear forces

Overview

At the start of 2014 nine states—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and the Democratic People’s Republic of Korea (DPRK, or North Korea)—possessed approximately 16,350 nuclear weapons, of which 4,150 were deployed or ready for use on short notice (see table 6.1). Roughly 1,800 of these are kept in a state of high operational alert.

Overall inventories of nuclear warheads are declining, primarily due to Russia and the USA continuing the drawdown of their nuclear arsenals as a result of their 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) and unilateral reductions. But the pace of reductions appears to be slowing compared with a decade ago. At the same time, all the nuclear-armed states are modernizing their remaining nuclear forces and appear determined to retain sizeable nuclear arsenals for the foreseeable future.

Both the USA and Russia have extensive modernization programmes under way for their remaining nuclear delivery systems, warheads and production facilities (see sections I and II in this chapter). The nuclear arsenals of the other nuclear-armed states are considerably smaller (see sections III–IX), but all are either developing or deploying new weapons or have announced their intention to do so. China, India, North Korea and Pakistan are the only nuclear weapon states that are expanding their nuclear arsenals.

Reliable information on the status of the nuclear arsenals and the capabilities of the nuclear-armed states varies considerably. The USA has disclosed substantial information about its stockpile and forces, and France and the UK have also declared some information. Russia refuses to disclose the detailed breakdown of its forces counted under New START (even though it shares the information with the USA), and the US Government has stopped releasing detailed information about Chinese and Russian nuclear forces. The Indian and Pakistani governments provide statements about some of their missile tests but no information about the status or size of their arsenals. Israel has a policy of not commenting on its nuclear arsenal, and North Korea provides no information about its nuclear capabilities.

While North Korea has by far the smallest stockpile of nuclear warheads, in 2013 it demonstrated its intention to continue developing its nuclear weapon programme by conducting its third nuclear test explosion, taking the total number of nuclear explosions recorded since 1945 to 2055 (see section XI). It
is not known whether North Korea used highly enriched uranium (HEU) in the explosive device or, as in its first two tests, plutonium. HEU and plutonium are the most common fissile materials, which are essential for all types of nuclear explosive. China, France, Russia, the UK and the USA have produced both HEU and plutonium for use in their nuclear weapons; India and Israel have produced mainly plutonium; and Pakistan has produced mainly HEU (see section X).