11. World nuclear forces

Overview

At the start of 2015, 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 15 850 nuclear weapons, of which 4300 were deployed with operational forces (see table 11.1). Roughly 1800 of these weapons are kept in a state of high operational alert.

Inventories of nuclear warheads are declining, primarily due to the USA and Russia continuing the drawdown of their nuclear arsenals as a result of the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) and of unilateral reductions. The pace of reductions appears to be slowing compared with a decade ago, however, and neither party has made substantial reductions in its deployed strategic nuclear forces since New START entered into force in February 2011.

Both the USA and Russia have extensive and expensive modernization programmes under way for their remaining nuclear delivery systems, warheads and production facilities (see sections I and II). 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 has embarked on a modernization programme as part of its long-standing minimum deterrence strategy. India and Pakistan are both expanding their nuclear weapon stockpiles as well as their missile delivery capabilities, while Israel is testing a long-range nuclear-capable ballistic missile. North Korea appears to be improving its military nuclear capability but it is not known whether it has developed a nuclear warhead that can be carried by a ballistic missile.

The existence of reliable information on the status of the nuclear arsenals and capabilities of the nuclear-armed states varies considerably. The USA has disclosed substantial information about its stockpile and forces, and the UK and France have also declared some information. Even though it shares such information with the USA, Russia does not otherwise disclose the detailed breakdown of its forces counted under New START. The US Government has stopped publishing detailed information about Russian and Chinese nuclear forces. China remains highly non-transparent, and little information is publicly available about its nuclear forces and weapon production complex. The governments of India and Pakistan make statements about some of their

Table 11.1. World nuclear forces, January 2015

All figures are approximate. The estimates presented here are based on public information and contain some uncertainties, as reflected in the notes to tables 11.1–11.9.

Country	Year of first nuclear test	Deployed warheads[a]	Other warheads[b]	Total inventory
United States	1945	~2 080[c]	5 180	~7 260[d]
Russia	1949	~1 780[e]	~5 720[f]	~7 500[g]
United Kingdom	1952	150	~65	~215
France	1960	290	~10	~300
China	1964	–	~260	~260
India	1974	–	90–110	90–110
Pakistan	1998	–	100–120	100–120
Israel	. .	–	~80	~80
North Korea	2006	–	. .	(6-8)[h]
Total		**~4 300**	**~11 545**	**~15 850**

. . = not applicable or not available; – = zero; ( ) = uncertain figure.

[a] 'Deployed' means warheads placed on missiles or located on bases with operational forces.

[b] These are warheads in reserve, awaiting dismantlement or that require some preparation (e.g. assembly or loading on launchers) before they become fully operationally available.

[c] In addition to strategic warheads, this figure includes approximately 180 non-strategic (tactical) nuclear weapons deployed in Europe.

[d] This figure includes the US Department of Defense nuclear stockpile of *c.* 4700 warheads. Another *c.* 2500 retired, but still intact, warheads are awaiting dismantlement.

[e] This represents an increase from the figure published in *SIPRI Yearbook 2014*, reflecting a recalculation based on New START aggregate data and news media reports.

[f] This figure includes nearly 700 warheads for bombers and nuclear-powered ballistic missile submarines (SSBNs) being overhauled, nearly 2000 non-strategic nuclear weapons for use by short-range naval, air force and air defence forces, and *c.* 3100 retired warheads awaiting dismantlement.

[g] This figure includes a military stockpile of *c.* 4300 nuclear warheads and another *c.* 3200 retired, but still intact, warheads are awaiting dismantlement.

[h] North Korea is believed to have the capability to build nuclear weapons, but it is not known based on publicly available evidence whether it has done so.

missile tests but provide no information about the status or size of their respective arsenals. Israel has a policy of not commenting on its nuclear arsenal and North Korea provides no public information about its nuclear capabilities.

The raw material for nuclear weapons is fissile material, either highly enriched uranium (HEU) or separated plutonium. 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. All states with a civilian nuclear industry are capable of producing fissile materials (see section X).

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