

# 11. Nuclear disarmament, arms control and non-proliferation

## Overview

*On balance, 2021 was another difficult year for nuclear arms control and non-proliferation efforts. There was some positive news at the start of the year, when the Russian Federation and the United States agreed to an extension of the 2010 New Strategic Arms Reduction Treaty (New START) for another five years (see section I). However, questions remained as to whether the five-year extension of New START will yield a replacement agreement before 2026, as well as the extent to which both old and new weapon systems would be covered in a follow-on treaty.*

*Despite these concerns, a joint statement in June 2021 following a meeting between US President Joe Biden and Russian President Vladimir Putin proclaimed that ‘a nuclear war cannot be won and must never be fought’. This repeated a 1985 declaration from then leaders Ronald Reagan and Mikhail Gorbachev and preceded a similar joint statement by China and Russia. Following this declaration, a bilateral Russian–US strategic stability dialogue held in July and September came to play a central role in maintaining communication channels between the two countries.*

*While Russia and the USA agreed to discuss future arms control options as part of the dialogue, the bipartisan view in the USA is that, for nuclear arms control to be effective, China must be engaged. Following a November 2021 meeting between Chinese President Xi Jinping and US President Biden, the US national security advisor stated that China is willing to carry forward discussions on strategic stability. However, China’s official statements have been more muted, reflecting some of the challenges to China’s participation in bilateral talks with the USA, much less trilateral talks with the USA and Russia.*

*The breakdown of the short-lived bilateral nuclear diplomacy between the Democratic People’s Republic of Korea (DPRK, or North Korea) and the USA since 2019 continued into 2021. Despite having announced in January 2020 that it would no longer observe its unilateral moratoriums on nuclear test explosions and test flights of long-range ballistic missiles that it had declared in 2018, North Korea conducted no such tests during 2021. However, it continued development of its shorter-range ballistic missiles (see chapter 10).*

*The previously slow unravelling of the 2015 Joint Comprehensive Plan of Action (JCPOA) on Iran’s nuclear programme sped up in 2021 (see section II). US sanctions remained in place and Iran stepped up its nuclear activities, notably by increasing the enrichment of uranium up to 60 per cent of the isotope*

uranium-235. Iran also began restricting for the first time the inspections by the International Atomic Energy Agency (IAEA) authorized under the JCPOA. Despite the stated intent by both the Biden administration and the new Iranian government of President Ebrahim Raisi to restore the JCPOA, the USA and the remaining JCPOA parties failed to reach an agreement in the seven rounds of negotiations that were held in two phases in 2021. Whether the JCPOA could still be revived remained an open question at the end of 2021.

In the case of multilateral nuclear arms control, disarmament and non-proliferation efforts, the most notable development was the entry into force of the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) on 22 January 2021. The United Nations secretary-general described the entry into force as 'an important step towards a world free of nuclear weapons', while civil society portrayed it as a 'critical milestone'. The TPNW is the first treaty to establish a comprehensive ban on nuclear weapons, including their development, deployment, possession, use and threat of use. This prohibition has brought to the fore the tension between nuclear disarmament and nuclear deterrence: while civil society and many non-nuclear weapon states welcomed the entry into force of the treaty, the nuclear weapon states and their allies viewed it as undermining the existing nuclear order based on the 1968 Non-Proliferation Treaty (NPT) and have not joined the treaty.

The 10th review conference of the NPT was postponed due to the Covid-19 pandemic for a second year. Initially planned for April–May 2020, the review conference is now scheduled to take place in August 2022. It would have marked the 50th anniversary of the NPT's entry into force and a quarter of a century since the treaty was indefinitely extended. However, the annual UN Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and other Weapons of Mass Destruction held its second annual session in November–December 2021 despite the pandemic, albeit without the participation of Israel.

Another milestone in 2021 was the 25th anniversary of the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT)—the international treaty that would ban all nuclear test explosions in all environments. While it has not yet entered into force, over the past quarter of a century the CTBT has established an international norm against nuclear testing and has had a significant impact by, for example, slowing down the development of nuclear weapon capabilities and curbing significant radioactive contamination. Its unique international global monitoring network of stations and laboratories for treaty verification has strengthened the nuclear non-proliferation and disarmament regime and become an unmatched source of data and technical expertise.