Editorial: Nuclear Disarmament in Crisis

The state of nuclear disarmament and arms control has deteriorated dramatically almost unnoticed by the public. Although the overflowing US and Russian nuclear arsenals have been greatly reduced since the end of the East-West conflict, this process is reversing. The five "official" nuclear powers USA, Russia, Britain, France and China are implementing modernization programs designed to keep their nuclear deterrent operational well into the middle of the century. For the first time in 50 years, the two superpowers, the US and Russia, no longer hold disarmament talks, even though their nuclear arsenals are well beyond a reasonable minimum deterrent. The road to a nuclear-free world, as envisaged by Obama in 2009, is blocked and the "momentum of disarmament" of recent years is declining. According to SIPRI, nine states worldwide still have nearly 15,000 nuclear weapons. 1,800 of them can be used immediately and 3,750 are deployed. A megaton yield is enough to destroy a big city; a global nuclear war would have planetary effects and destroy modern civilization. The current "US Nuclear Posture Review" announced new US nuclear weapons, and President Putin presented futuristic strategic weapons. The pendulum turns back to warfare capability. Even the use of nuclear weapons in response to a massive cyber attack is discussed. A new arms race between the superpowers has begun.

In response to the threat of an all-destroying global nuclear war, arms control was developed and implemented after the Cuban missile crisis of 1962 for purposes of war and crisis prevention. Contracts, transparency measures and verifiable verification are stipulated to reduce threats and minimize risks. Arms control has a procedural character, should transform the conflictive relations between states themselves, and make disarmament possible.

Today, these achievements of arms control seem forgotten. Major players increasingly rely on power politics and neglect contract-based agreements. The Iran agreement was celebrated as an important development of non-proliferation policy, but is now carelessly devalued by the US. Central treaties such as the CTBT or the FMCT are blocked. On the rise again are those scenarios that plan a limited use of nuclear weapons as a flexible option not only in response to a nuclear attack, but also in a regional context. Armament dynamics are also fueled by technical advancements, but they are not hedged in by preventive arms control. It again seems opportune to use nuclear arsenals directly or with their potential for threats, even for local or geopolitical interests in the competition of the major powers. On the other hand, this development faces the frustration of those who complain about the lack of will for disarmament of the superpowers. The new Treaty on the Prohibition of Nuclear Weapons adopted by 122 states is an expression of the discontent of these states over the unwillingness of the nuclear powers to disarm. Overall, we see a lack of interest in transparency and mutual predictability in international relations. Meanwhile, the US and Russia even openly question the Europe-wide INF treaty. An extension of N-START is pending, but currently not a priority. A final blow to nuclear arms control seems to be approaching, which would have unforeseeable consequences for the NPT.

How operational are the decades-long developed and well-tested treaty regimes and prohibitions of arms control, and what possibilities exist for adapting them to the conditions of the 21st century? Can the end of arms control be averted? The 2/2018 issue of S+F is dedicated to the central treaty regimes of nuclear arms control and their problems and challenges. Some experts see a competition or tension between the central NPT and the new Treaty on the Prohibition of Nuclear Weapons.

In his article, *Harald Müller* analyzes whether the newly adopted Nuclear Weapons Prohibition Treaty is „harmonious, compatible, incompatible" with the NPT's established non-proliferation regime. He sees in the new treaty neither a threat to the NPT, nor a permanent solution to the nuclear problem.

Steven Pifer describes the concrete danger that the 2010 N-START Treaty could soon expire without any subsequent treaty, given the many unresolved political and technological challenges (missile defense, new strategic weapons systems, etc.) – resulting in a lack of a limiting effect serving strategic arms control. One reason is that the INF Treaty, which is at the core of European security, could collapse unless the US and Russia make serious efforts to dispel the mutual allegations of breach of the accord.

Oliver Meier describes these challenges and points out that an end to INF would make an extension of N-START almost impossible. Transparency measures such as mutual inspections could solve the problems, but require serious political will.

Daryl G. Kimball points out that the 1996 Comprehensive Nuclear Test Ban Treaty (CTBT) established a global norm against the testing of new nuclear weapons with great international support. This prevents the further development of new nuclear weapons. Although the global verification system for nuclear testing is almost completed, the CTBT is still not in force due to the lack of ratification by eight key states, including the US and China. Renewed diplomatic efforts are needed to revive the regime and to strengthen the verification system.

Annette Schaper describes the efforts made since 1996 to create a Fissile Material Cutoff Treaty (FMCT), which have so far failed. This is mainly due to the dispute on whether or not already existing stocks of nuclear material should be included and how effective verification measures would look like. What is more, the FMCT cannot solve the deficiencies and injustices of the nuclear order. Nevertheless, the need to isolate and control weapon-capable splitting material remains.

Elisabeth Suh examines the complex prehistory and the political problems that form the background for a possible "denuclearization" of North Korea. Diplomatic efforts and the lifting of sanctions in response to North Korea's progress play a crucial role here as well as the consistent application of arms control. In a regional context, nuclear arms control is also linked to the arms control of conventional weapons and armed forces.

The follow-up issue of S&F 3/2018 will look at the status and opportunities for new non-nuclear arms control. Outside this issue's special section, *Kerstin Schlögl-Flierl* and *Alexander Merkl* discuss the challenges of introducing Civil Clauses against Military Research at German Universities.

Götz Neuneck und Patricia Schneider

Prof. Dr. **Götz Neuneck** is Deputy Director of the Institute for Peace Research and Security Policy IFSH at the University of Hamburg (IFSH). Current working areas are: Nuclear Arms Control and Disarmament, nuclear Verification and Nonproliferation, Missile Defense, Outer Space and Cyber Security, and emerging technology.

Patricia Schneider, Dr. phil., Senior Resercher at Institute for Peace Research and Security Policy IFSH at the University of Hamburg (IFSH), Academic Coordinator and Lecturer of the Master Program "Peace and Security Studies", Managing Editor of S+F.