



FOREWORD

In commemoration of the 30th Anniversary of PIR Center (1994-2024)

The textbook *Nuclear Nonproliferation and Arms Control. Digital Papers* was prepared in 2023-2024 by PIR Center under the auspices of the educational project *Global Security: A View from Russia for the Youth Around the World* with support of the Presidential Grants Foundation.

The Papers were designed as a preparation to, and a continuation of the [First PIR Center Online Course on Nuclear Nonproliferation and Arms Control](#). We are in no doubt about their topicality and significance for the youth (but not only for them) around the globe.

While preparing the textbook *Nuclear Nonproliferation and Arms Control. Digital Papers*, we were motivated by the following factors. First of all, nowadays we are facing the unprecedented level of international tensions. The modern architecture of international security is being put under pressure. There are also many talks about the crisis of the existing international organizations. But how do these trends affect international regimes in general and the international regime of nuclear nonproliferation as a part of the global security architecture?

For many years we have been observing the degradation of the military-political situation on the regional and global levels. There are still many hotbeds of tensions which can turn into nuclear disasters. We cannot rule out an apocalyptic scenario in the context of such trends as lowering of nuclear threshold, miniaturization of nuclear weapons, restoration of the limited nuclear war concept, etc. The arms control regime is being disrupted, which can entail a new phase of nuclear proliferation and a new arms race, this time a multilateral one. Right now, even strategic stability talks are non-existent. Shall we be able to restore arms control and strategic dialogue to prevent nuclear escalation?

The development of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) seems to be yielding no results. The two previous conferences on the NPT operation ended in the atmosphere of mutual accusations, whereby no final documents were adopted. Will the states demonstrate their ability and readiness to conduct impartial, mutually respectful dialogue to eliminate all the threats and challenges in the nuclear field?

We hope that this new digital textbook will help you to find your own answers and raise new questions. The *Digital Papers* are intended for a wide foreign English-speaking audience of diplomats and government officials, journalists, employees of research centers and institutes, instructors and students, functionaries of public organizations dealing with international cooperation and public diplomacy, as well as all those who are simply interested in the nuclear domain or adhere to the principle of *life-long*



learning. It will also be of interest to Russian specialists who would like to develop their professional vocabulary and conceptual system in English. There is no distinction as to race, nationality, language, age, or gender, as nuclear issues concern all humanity. A deeper understanding of all the nuclear risks and threats helps us lay the groundwork for a safer and more stable future for all mankind.

Besides, over the last few years Russia has been frequently reproached for *not observing* the basic conditions of the nuclear nonproliferation and arms control regimes. The role of Soviet and Russian specialists in providing the nuclear nonproliferation regime and arms control has been just as frequently downplayed. The official position of Russia on nuclear aspects of global security is being distorted or withheld, which causes misinformation about Russia, its foreign and defense politics to develop into false convictions and affects the international situation. We want the voice of the Russian experts to be heard, we want other countries and nations to be sure: Russia is and has always been a reliable player on the international arena and a staunch supporter of equal and indivisible security.

To make our *Digital Papers* more diverse, comprehensive, and versatile, offering different perspectives on issues, we invited many Russian experts with different professional background and experience, views, and opinions. Advantageously, the authors of the *Digital Papers* include reputable Russian experts who scored weighty results in their professional field, as well as beginning specialists in nuclear nonproliferation and arms control who aspire to make their contribution to the analysis of recurring problems in the nuclear sphere.

Thanks to our authors you will have an opportunity to get acquainted with the theoretical approaches to the study of nuclear nonproliferation and arms control regimes, their history, and, of course, the current challenges and threats in all three pillars of the NPT, i.e., nonproliferation, disarmament, and peaceful uses of nuclear energy. The textbook *Nuclear Nonproliferation and Arms Control. Digital Papers* includes **five key units** and **21 papers**.

The **Introductory Unit** is dedicated to the theory of international regimes. Together with **Dr. Igor Istomin** you will dive into the general provisions of the theory of international regimes, their nature, formation and disintegration, advantages, and disadvantages. Also, you will find his views on the uniqueness of nuclear nonproliferation and arms control regimes from the standpoint of international relations theory.

The papers 2-6 of Elena Karnaukhova and Dr. Vladimir Orlov in Unit I focus on the historical aspects of the development of the nuclear nonproliferation regime, the provisions of the NPT, the NPT review process (using the example of the 1995 NPT Review and Extension Conference and the 2022 10th NPT Review Conference). Special attention is paid to the review of the current challenges and threats in all three pillars of the NPT: nuclear nonproliferation, nuclear disarmament, and peaceful uses of nuclear energy.

Unit II offers more details on the most pressing issues of nuclear nonproliferation. **Paper 7 by Daria Pakhomova** examines the nature of nuclear-weapon-free zones and pays special attention to the difficulties of the establishment of the Middle East WMD-free zone. In



Paper 8 Elena Karnaukhova and Igor Vishnevetsky scrutinize the international mechanisms of exports control. **Papers 9-10 by Adlan Margoev and Dr. Alexander Vorontsov**, respectively, deal with the situation around the Iranian nuclear program and the issue of denuclearization of the Korean Peninsula, from the historical roots of the problems to the current state of affairs. The Unit ends with the **Paper 11 by Sergey Semenov** that addresses the factors and current trends which could lead to a new wave of nuclear proliferation in the world.

The authors of **Unit III** speak to the reader frankly about the situation in arms control and touch upon the subject of nuclear disarmament. In his **papers 12 and 14 Dmitry Stefanovich** addresses the historical aspects of the nuclear arms control regime, the technological and geopolitical factors of its collapse as well as the problem of the resuming nuclear testing and maintaining nuclear tests moratorium. **Paper 13** was superadded to the Unit, and it tells the reader about the 2010 New START based on the Russian-language monograph of **Ambassador Anatoly Antonov** who had headed the Russian-American talks on the Treaty in the context of the reset between the two countries in 2009-2010. **Paper 14 by Dr. Elena Chernenko** is another valuable add-on to the Unit, as it allows the reader to get a better idea of the connection between strategic stability and cybersecurity using the example of Russian-American interaction in the sphere. **Dr. Andrey Malov in his Paper 16** provides a comprehensive analysis of multifaceted formats of nuclear disarmament and writes of the main obstacle on the way to the *nuclear zero*, as well as of verification issues. Unit III ends with **Paper 17 by Dr. Dmitry Trenin**, where the author covers some of the most sensitive issues of the current nuclear agenda, i.e., nuclear deterrence, fear of nuclear weapons, and the use of nuclear weapons.

Unit IV concentrates on the issues of peaceful uses of nuclear energy appealing to international law and physico-technical approaches. There you can find **papers 18-21** by **Dr. Mikhail Lysenko, Vladimir Kuchinov, Dr. Alexey Ubeev, Gleb Efremov** offering a lot of supporting data and profound analyses of the current state and prospects of international cooperation in the sphere of peaceful atom, as well as Russia's approaches, the basics of IAEA activities and functioning, the specifics of nuclear safety and nuclear security, features of the international uranium market and its players.

Each paper is in fact rich in useful supporting data, such as excerpts from official documents, statements of officials, memoirs, mass media reports, statistical data, even maps and cartoons. Thus, the *Digital Papers* provide sufficient food for thought. There are also reliable references to literature and external information sources – please find them in the footnotes. Most provided link refers the reader to Internet publications highly recommendable for a better grasp of the subjects. Also, please refer to the [web-site of PIR Center](#) and our educational platform NONPROLIFERATION.WORLD for more texts and videos on nonproliferation, arms control and global security, etc. – all the materials PIR Center has been accumulating since its foundation in 1994.

This year PIR Center turns 30, and the publication of *Nuclear Nonproliferation and Arms Control. Digital Papers* is dedicated to this anniversary. We put all our experience and expertise in the work and now share it with our readers. Since its foundation date, April 30, 1994, PIR Center has been loyal to its mission of educating new generations of experts, analyzing international processes, providing a better understanding of Russia's



foreign and defense politics, maintaining an international dialogue on nuclear nonproliferation, arms control and global security. We shall remain loyal to the mission in the new decades to come.

Have a wonderful intellectual trip to the world of nuclear nonproliferation and arms control! Whether or not you already are specialists in nuclear domain-related issues, whether or not you agree with the positions, views and thoughts expressed by our authors, we are convinced that the history and current problems of the international nuclear agenda will not leave you indifferent.

The editorial staff of the textbook Nuclear Nonproliferation and Arms Control. Digital Papers would like to give the words of gratitude to all our authors as well as the following people for their great contribution to preparing the Digital Papers: Anton Anufriev, Asya Arakelyan, Ksenia Mineeva, Veronika Terpugova, Anatoly Shchekin, Grace Smith.

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