

Nuclear Energy in Times of War: Militarisation and the Protection of Nuclear Power Plants

Webinar: Zoom
25 March 2025

Recent global conflicts have exposed long-standing weaknesses in the global governance system. The blurred lines between conventional warfare and nuclear risk challenge the global nuclear non-proliferation regime, highlight the urgent need to strengthen international mechanisms for nuclear safety, security, and the protection of nuclear facilities during armed conflict.

Africa has a proud track record of leadership in non-proliferation, nuclear safety, and the peaceful use of nuclear energy as established by the African [Nuclear-Weapon-Free Zone Treaty](#) (Pelindaba Treaty). Article 11 of this Treaty prohibits armed attacks on nuclear installations. But is there sufficient international political will to address these emerging nuclear challenges? And could Africa play a leading role in advancing this process?

This webinar will also launch the document “Enhancing Nuclear Safety: Protecting Nuclear Power Plants Against Military Threats” that analyses the occupation of, and attacks on the Zaporizhzhya Nuclear Power Plant (ZNPP) and the complex risks posed to nuclear safety and security in contemporary armed conflicts. Based on this assessment, the document identifies key areas where regulation should be strengthened to enhance nuclear safety and security across the African continent:

- developing internationally binding regulations, supported by enforcement mechanisms, to effectively prevent the military occupation of, or armed attacks on, nuclear facilities;
- expanding the IAEA’s mandate to monitor and ensure nuclear safety and security;
- safeguarding nuclear-related infrastructure that may not be formally classified as nuclear installations;
- upholding and protecting labour and human rights, ensuring physical safety and psychological well-being of nuclear personnel and operators, particularly in the case of occupation;
- strengthening corporate responsibility and accountability frameworks* for nuclear operating companies to ensure compliance with safety, security, and human rights standards across jurisdictions.

This document has been developed through a partnership between South African and Ukrainian experts from the South African Institute of International Affairs, Ilko Kucheriv Democratic Initiatives Foundation, the Ukrainian Association of South Africa and Dixi Group. It draws upon the policy brief “[Nuclear Safety During the Military Invasion: A Case Study of the Ukraine–Russia Conflict](#),” which was presented at the 2024 African Union Mid-Year Coordination Meeting in Accra. Elements of that brief have been refined, expanded, and incorporated into the present analysis. All information contained in this document is current as of June 2025. The document was created with support from the following institutions:

Programme

16.00 - 16.10	Welcome remarks <i>Steven Gruzd</i> , head of the African Governance and Diplomacy Programme at SAIIA <i>Collins Omondi</i> , Acting Executive Secretary, African Commission on Nuclear Energy (AFCONE)
16.10 – 16.20	Global disorder and the new risks for the nuclear non-proliferation and nuclear technology <i>Prof Zwelethu Jolobe</i> , Head of the Department of Political Studies at the University of Cape Town
16.20 – 16.35	International and African Frameworks for Regulating and Responding to the Military Invasion of Nuclear Facilities <i>Isabel Bosman-Burnett</i> , Researcher at SAIIA
16.35 – 16.50	The Zaporizhzhia Nuclear Power Plant Crisis: Implications for Nuclear Safety and Security Governance <i>Dzvinka Kachur</i> , Fellow Researcher at the Centre for Sustainability Transitions, Stellenbosch University; Honorary President of the Ukrainian Association of South Africa
16.50 – 17.00	Addressing Nuclear Risks in a Changing World: Insights from Latin America <i>Pedro Villagra Delgado</i> , Ambassador, Member of the Argentine Council on International Relations' (CARI) Consultative Board and Director of the Committee on Nuclear Affairs.
17.00 – 17.10	Addressing Nuclear Risks in a Changing World: Insights from Qatar <i>Rashid Al-Mohanadi</i> , a non-resident fellow, the Middle East Council on Global Affairs
17.10 - 17.20	Nuclear Safety and the Role of International Sanctions <i>Dr Samuel Ramani</i> , associate fellow at the RUSI
17.20 - 17.50	Q & A + Discussion Moderated by <i>Steven Gruzd</i> , head of the African Governance and Diplomacy Programme at the SAIIA
17.50 - 18.00	Concluding remarks <i>Steven Gruzd</i> , head of the African Governance and Diplomacy Programme at SAIIA