

Röhrlich, Elisabeth: *Inspectors for Peace*. Baltimore: Johns Hopkins University Press 2022. ISBN: 978-1-4214-4333-1. xiii, 329 pp. US\$ 59.99

The International Atomic Energy Agency (IAEA) has been in the spotlight frequently since the beginning of the Russian aggression against Ukraine. In the first few days, Russian forces occupied the ruins of the infamous Chernobyl nuclear power plant and attacked Europe's largest nuclear power plant in Zaporizhzhia. Trying to protect the nuclear plants, the IAEA's Director General, Rafael Mariano Grossi, appeared constantly in the media. Thereby, he became one of the most prominent heads of an international organisation. Elisabeth Röhrlich, a historian and Associate Professor at the University of Vienna, was unable to cover the events unfolding in Ukraine as the manuscript of the book under review here was completed in 2021. Yet, *Inspectors for Peace* helps to understand the IAEA's behaviour in this delicate situation by providing an in-depth analysis of its 65-year history.

Inspectors for Peace is the first comprehensive book on the history of Vienna's oldest international organisation. While the histories of other international organisations, such as the United Nations (UN)¹ or the International Monetary Fund,² have been written by scholars, the history of the IAEA had, prior to Röhrlich's book, almost exclusively been written by the Agency itself.³ To change this, the University of Vienna launched the IAEA History Research Project in 2011. Led by Röhrlich, the project ultimately resulted in *Inspectors for Peace*. The book analyses the IAEA's role in various post-war crises and developments.

The book begins with an embarrassing anecdote: Shortly after IAEA safeguards inspectors arrived in India in spring 1974 to verify that India had not diverted any nuclear material from civilian to military use, *Smiling Buddha*, India's first nuclear explosive built with Western materials, exploded under the Rajasthan desert. The inspectors were informed of this explosion by smirking people in their hotel, who eventually showed them a newspaper article reporting about the explosion. The IAEA was present to verify that no nuclear material had been diverted for military purposes in a state that had

¹ E. g. Evan Lunard's two volume piece, *A History of the United Nations* (London: MacMillan 1982 and 1989); Stanley Meiser, *United Nations – A History* (New York: Grove Press 1995).

² Kazuhiko Yago, Yoshio Asai and Masanao Itoh (eds), *The History of the IMF* (Tokyo, Heidelberg: Springer 2015).

³ The most important book about the history of the IAEA prior to *Inspectors for Peace* was David Fischer, *History of the International Atomic Energy Agency: the First Forty Years* (Vienna: IAEA 1997). David Fischer was a South African diplomat who was one of the drafters of the IAEA Statute and worked at the IAEA for 25 years.

received technical assistance from the IAEA. Instead, the Agency witnessed what it intended to avoid.

In more than 200 pages, Röhrlich traces the two conflicts which the anecdote illustrates and which have dominated daily life at the IAEA during its 65 years of existence: Firstly, how can the IAEA promote nuclear energy and provide technical assistance to states (Art. II cl. 1 IAEA Statute) and also prevent these countries from turning their civilian nuclear infrastructure into a nuclear weapons programme (Art. II cl. 2 IAEA Statute)? Helping a country to build a nuclear infrastructure regularly carries the risk of potentially supporting the development of a nuclear weapons programme. Secondly, how can the IAEA remain focused on technical bureaucracy while dealing with highly political issues such as energy and the global security order? Röhrlich sees the solution to this problem in the fact that the IAEA was founded as a purely technical organisation (p. 81). Initially, state representatives on the IAEA Board of Governors were almost exclusively scientists, not diplomats. Nevertheless, she sharply analyses that the IAEA's dual mandate never allowed for exclusively technical discussions. Every technology raises to some extent a political dimension: Should the apartheid regime in South Africa continue to receive technical assistance from Vienna (pp. 159 ff.)? Should the IAEA continue to promote nuclear energy despite the thousands of lives lost in Chernobyl (pp. 182 ff.)? Can the IAEA be sure that Iraq has no clandestine nuclear weapons programme in the early 2000s (pp. 223 ff.)?

The book then moves on to the establishment of the IAEA. Inspired by Eisenhower's famous *Atoms for Peace* Speech to the United Nations General Assembly in 1953, eighteen states established the IAEA in 1957. In this context, the author clarifies a common misconception: Although the media usually refer to the IAEA as the UN's nuclear watchdog and despite its emblem's similarities with the UN logo in terms of colour and symbol, the IAEA remains outside the UN system. It is not a specialised UN agency. Röhrlich explains this somewhat paradoxical situation with the desire of the United States (US) to exert its influence on the Agency and to keep the newly established organisation at distance from nuclear disarmament talks (p. 44). Nuclear disarmament has been at the heart of the UN since its foundation, from the General Assembly's very first resolution in 1946 to the adoption of the Treaty on the Prohibition of Nuclear Weapons (TPNW) in 2017. Thus, the IAEA is an independent international organisation which is tied to the UN only by a Relationship Agreement.

An underlying hypothesis runs throughout the book: At least in the IAEA, the Soviet Union and the US had a solid working relationship, contrary to many other fora where the effects of the cold war regularly paralysed

collaboration (e.g. pp. 39 ff., 132, 176). As Röhrlich argues, the IAEA was rather dominated by conflicts between the Global South and the Global North than by East-West conflicts (pp. 165 ff.). She further explains this finding with the special structure of the Agency: Within the IAEA, two departments account for most of the staff and resources: Technical Assistance on the one hand, and Safeguards on the other. While the Global North – already advanced in nuclear technologies and interested in maintaining the security order – focuses more on safeguards, states from the Global South are mainly interested in technical assistance to support their economic development. In addition, the Global South sees the discrimination between nuclear-weapon states and non-nuclear-weapon states as a superpower cartel (p. 134).

The author focuses on major international crises and how they affected the IAEA. Her first example is the apartheid regime in South Africa. At the time, the IAEA was one of the last international organisations to speak out and act against South Africa. Pushed by the G-77, it took until 1976 for South Africa to be expelled from the IAEA's influential Board of Governors against the opposition of Global North countries (chapter 7). According to the author, the IAEA sought to exclude this political issue from its technical mandate. Moreover, the IAEA and its safeguards system could not prevent South Africa from building a nuclear weapon. Throughout her analysis, Röhrlich tries to follow the model of the IAEA itself: she tries to remain neutral without pointing the finger at anyone. An international lawyer might have wished for a critical analysis of the IAEA's mandate during the crises and its role within the UN system, though.

The author proceeds with the IAEA's safeguards system. As Röhrlich shows, the safeguards regime has regularly been at the centre of international crises. This system is the IAEA's control and verification mechanism to ensure that no nuclear material is diverted from peaceful uses to military programmes. However, the track record is at least mixed. Since the IAEA was established, France, China, India, Pakistan, South Africa, Israel, and North Korea have succeeded in building nuclear weapons, and many others, such as Iraq, Libya, Iran, and even Sweden, have had nuclear weapons programmes. Röhrlich points to the example of Iraq. This case had a particularly profound impact on the IAEA due to three controversies surrounding Iraq within a quarter of a century. In 1981, Israeli forces destroyed the Iraqi Osirak reactor that was under construction. Israel feared that the reactor could be used for a nuclear weapons programme. As the author points out, the situation was particularly challenging for the IAEA, which had inspected the reactor and found no evidence of any diversion. She shows that this attack not only damaged Iraq's infrastructure, but also took an emotional toll on the IAEA itself, as the Agency felt its own safeguards system had been

attacked (pp. 165 ff.). The author goes on to show a second challenging event for the IAEA safeguards system ten years later. The IAEA missed Iraq's clandestine nuclear weapons programme at an undeclared site adjacent to a declared site. This incident led to the strengthening of the IAEA safeguards system by extending the IAEA's rights for inspections. Another decade later, the third and last Iraqi incident occurred which the IAEA had to deal with. Just a few days before the start of the US-UK invasion of Iraq, the Director General of the IAEA addressed the UN Security Council and – in an uncharacteristically strong statement contradicting a member state's (here the US) position – declared that there was no evidence or plausible indication of the resumption of a nuclear weapons programme (p. 224).

Röhrlich rightly concludes that clandestine nuclear weapons programmes have led to a strengthening of the nuclear non-proliferation framework (pp. 231 f.). Not only have more countries signed and ratified the Nuclear Non-Proliferation Treaty (NPT), but the Board of Governors has also adopted a Model Protocol that extends the rights of IAEA inspectors. She argues that many states saw the proliferation potential inherent to nuclear technologies as affecting their security interests. At these crucial junctures – rather than abandoning the Agency – states turned to the IAEA to improve their safeguards system. Although still imperfect, the author correctly concludes that the safeguards system remains a trusted system that contributes to the global security order today. Röhrlich points out the shortcomings and benefits of the safeguards system, quoting former Director General Blix: 'If you had a sign saying that the owner of the house has inspected [the elevator], maybe there wouldn't be the same credibility' as there is with regular inspections by a credible company (p. 180).

Röhrlich then analyses the IAEA's second mandate, the promotion of peaceful nuclear energy. She argues that nuclear accidents jeopardised the whole purpose of the Agency's existence (p. 188). While the oil crisis of the 1970s catalysed the interest in nuclear energy, the world's confidence in nuclear power as a safe energy source came to a sudden halt in the 1980s. She lists the various nuclear incidents and accidents, beginning with the Three Miles Island accident in 1979 and culminating in the 1986 Chernobyl accident. She then argues, correctly, that the global anti-nuclear movement gained enormous momentum (p. 197). It took many years and much persuasion by the IAEA to strengthen the public's confidence in the safety of nuclear energy, only to be set back – this time only temporarily – once again in 2011 with the Fukushima-Daichi accident.

Throughout the book, Röhrlich explains well the difficulties that the IAEA still faces today: The IAEA is neither the world's nuclear regulator nor the world's nuclear watchdog. It is an international organisation that operates

within the powers and mandates given to it by its member states. However, as it is the case with all international organisations, states are often reluctant to accept the involvement of international organisations, especially regarding issues so important to their sovereignty such as energy and security. To emphasise this point, the author quotes the Agency's former Director General ElBaradei: 'The mandate of the IAEA is as expansive, or as limited, as you [the member states] want it to be' (p. 240).

The book ends with a focus on the shift in the Agency's mandate. Not only has the IAEA's motto changed from 'Atoms for Peace' to 'Atoms for Peace and Development', but its activities are now broader than ever. In addition to its traditional tasks, the IAEA is involved in food and medical research and helps to achieve the UN's Sustainable Development Goals (p. 239). However, one final assumption of the book needs to be clarified: Röhrlich claims that the IAEA had toned down its language on the promotion of nuclear energy (pp. 239 f.). Recent activities show quite the opposite. Driven by the world's need for greenhouse gas-free electricity production and the increase in fossil fuel prices due to the war in Ukraine – similar to the oil crisis in the 1970s – a new perspective for nuclear energy is emerging. To reach net-zero by 2050 and to meet the Paris Agreement's goal of limiting global warming to well below 2°C compared to pre-industrial levels, studies suggest that installed nuclear power will need to triple. Many countries are interested in building new nuclear power plants, including existing nuclear states like France and the United Kingdom, as well as new nuclear states such as Poland. There is a growing interest in nuclear power, also on the African continent. Following these trends, the IAEA recently toned up its language on the promotion of nuclear energy. The IAEA was present with large pavilions at COP26 and COP27. Moreover, it organised the First International Conference on Nuclear Law in 2022. These activities brought together different stakeholders from the entire world with the aim to promote nuclear energy. Apart from that, the IAEA is also heavily involved in new nuclear technologies, such as small modular fission reactors and nuclear fusion.

Two events could have been covered in more detail, which would have allowed for a broader and more critical approach to the IAEA. Firstly, with the adoption of the Comprehensive Test Ban Treaty in 1996, there was a need for an organisation to verify that no nuclear tests are conducted. Instead of entrusting the IAEA with this role, a new international organisation (Comprehensive Nuclear-Test-Ban Treaty Organization [CTBTO]) was established in the very same building where the IAEA has its headquarters. Secondly, the Treaty on the Prohibition of Nuclear Weapons also requires an international organisation for verification. Many states were opposed to the IAEA taking on this role. Thus the question of which organisation would

carry out the verification is still open. By addressing where the IAEA has not been involved, the author could have given a more detailed account on the Agency's role in the highly political topics of arms control and nuclear disarmament.

Otherwise, the book is extremely well-written and focuses on all the major events in the history of the IAEA. By analysing historical events and turning points, rather than stoically presenting the history year by year, the author gives a broad overview of the IAEA's position in post-war international relations. *Inspectors for Peace* is a must-read for anyone interested in the field of nuclear law.

Since the manuscript was submitted in 2021, the role of the IAEA has evolved. While the tradition of being a neutral actor remains strong, the IAEA has become a much more political actor. Contrary to the Agency's 65-year practise, a member state has been directly criticised for occupying a nuclear power plant and endangering global security. At least once a week, the IAEA publishes a statement by the Director General on the situation in Ukraine where Russian actions against nuclear facilities are often criticised.⁴ The Board of Governors regularly calls upon Russia to cease all actions against nuclear facilities in Ukraine.⁵ By leading several missions to Ukraine and through direct negotiations between its Director General Rossi and Russian President Putin, the IAEA has been an important factor in preventing a nuclear catastrophe. The IAEA remains the central international organisation for all matters relating to the atom.

Philipp Sauter, Heidelberg

⁴ They are available at <<https://www.iaea.org/nuclear-safety-and-security-in-ukraine>>, last accessed 21 March 2023.

⁵ IAEA documents GOV/2022/17; GOV/2022/58; GOV/2022/71.