

The International Regime for Nuclear Liability: A Key Element of the Legal Framework for the Transport of Nuclear and Radioactive Material

The safe and secure transport of nuclear and radioactive material requires not only robust technical and operational measures but also a clear and predictable legal framework. Nuclear third-party liability laws form a critical part of that framework, as they provide legal certainty regarding compensation in the event of a transport-related nuclear incident.

The importance of these liability provisions for transport was recognized at the International Conference on the Safety of Transport of Radioactive Material (Vienna, July 2003), where “It was noted that there are a number of liability conventions to which many States are Parties but to which many others are not, and that the provisions of the liability conventions and the relationships between them are not simple to understand.” Also, as highlighted in the Executive Summary of that Conference, the “lack of broad adherence to a global liability regime creates uncertainty as to the legal consequences of a transport accident.” The Conference concluded that explanatory texts of the nuclear liability instruments should be prepared.

As a consequence, the IAEA Director General established the International Expert Group on Nuclear Liability (INLEX) in 2003 to create a forum of expertise to advise on nuclear liability, to enhance global adherence by nuclear and non-nuclear States to an effective liability regime based on various international nuclear liability conventions, and to assist in the development of national nuclear liability legal frameworks in IAEA Member States.

The international nuclear liability regime has evolved over decades. While the probability of a nuclear accident is low, the potential consequences are significant. As early as the 1960s, suppliers and contractors required governments to indemnify them against nuclear damage before engaging in nuclear activities. In response, governments and industry agreed on key liability principles that became embedded in both national legislation and international conventions, ensuring compensation for victims while enabling nuclear development. Following the Chernobyl accident, the IAEA launched a review of its 1963 Vienna Convention on Civil Liability for Nuclear Damage, which culminated in the 1997 Protocol to Amend the Vienna Convention. In force since 2003, this instrument expanded compensation amounts, broadened the scope of compensable damage, and extended geographic coverage. It also paved the way for the Convention on Supplementary Compensation for Nuclear Damage (CSC), designed as a global umbrella convention open to all States, regardless of whether they were already party to other treaties. The CSC entered into force in 2015, following Japan’s ratification, reflecting lessons learned from the Fukushima accident.

In parallel, under the auspices of the Organization for Economic Co-operation and Development (OECD), the Paris Convention on Third Party Liability in the Field of Nuclear Energy was modernized and amended through successive protocols (2004, 2022). In addition, the Joint Protocol, which entered into force in 1992, created a bridge between the Paris and Vienna Conventions.

Today, distinct conventions govern nuclear liability. Although built on common principles, their coexistence has contributed to a complex landscape with uneven adherence across States. Against this backdrop, the work of INLEX remains crucial to clarifying these regimes, enhancing understanding of their provisions, including those applicable to transport, and promoting a more coherent and widely accepted global liability framework. This paper will present the principles of third-party nuclear liability, the provisions applicable to the transport of nuclear and radioactive material, and an overview of the various international nuclear liability conventions. It will also discuss the work of INLEX, particularly its efforts related to transport issues throughout its existence, and its objectives for the future, including its support to IAEA Member States in developing national liability frameworks.

Country or International Organization

Instructions

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