Access to Justice in Eastern Europe
ISSN 2663-0575 (Print)
ISSN 2663-0583 (Online)
http://ajee-journal.com

Research Article

DESIGNING AN INTERNATIONAL MEDIATION HUB FOR NUCLEAR-RELATED DISPUTES: PROCEDURAL GUARANTEES AND ACCESS TO JUSTICE

Sholpan Saimova, Alibek Bolat*, Alimzhan Irzhanov and Bakhtygul Chingayeva

DOI:
https://doi.org/10.33327/AJEE-18-9.2-a0001967

Date of submission: 9 Jan 2026
Date of acceptance: 30 Mar 2026
Publication: 20 May 2026

Disclaimer:
The authors declare that their opinions and views expressed in this manuscript are free of any impact from any organizations.

ABSTRACT

Background: *Nuclear-related disputes, covering safeguards compliance, safety and security incidents, nuclear liability, and transboundary environmental harm, highlight a persistent deficit in international dispute resolution. Persons affected by nuclear risk frequently lack meaningful access to remedies, whereas states and operators often avoid litigation because of sovereignty sensitivities, fragmented jurisdiction, and the need to protect classified or commercially sensitive information. Existing fora and administrative processes provide only partial coverage and seldom integrate confidentiality with minimum procedural guarantees. This article, therefore, asks how an international mediation hub for nuclear-related disputes can be designed to deliver credible access to justice while safeguarding security-relevant information and maintaining trust among states, operators, and affected communities.*

Method: *The study uses doctrinal and comparative legal analyses. It examines treaty regimes and general principles relevant to nuclear governance and dispute processing, including due process and participation standards, standing and admissibility, transparency and confidentiality, state responsibility, and pathways for the recognition of mediated settlements. It then compares procedural models from established international mediation and arbitration frameworks to identify design features that can be adapted to nuclear sensitivities. Sources include treaties, institutional rules, jurisprudence, state practice, and peer-reviewed scholarship.*

Results and Conclusions: *The article proposes a blueprint for a specialized international mediation hub for nuclear-related disputes: a consent-based, non-adjudicative mechanism administered by an independent international secretariat and supported by a multidisciplinary roster of mediators and vetted technical experts. Rather than functioning as a court-adjacent extension of domestic adjudication, the hub is conceived as a complementary international interface that can process safeguards-related coordination disputes, nuclear safety and security coordination disputes, mixed public-private operational disputes, and participation-sensitive disputes under differentiated admissibility rules. The article's original contribution lies in four design outputs: a typology of disputes linked to mediation-suitability criteria; a three-track intake model; a tiered confidentiality or public-interest protocol; and a differentiated enforceability model. Where settlement agreements are international and commercial in nature, the framework contemplates structured use of the Singapore Convention; where disputes are state-centered or public-law in character, implementation would rely on recorded settlements, monitoring clauses, and agreed conversion pathways into other procedures.*

1 INTRODUCTION

Nuclear technologies sit at the intersection of international peace and security, energy policy, public health, and environmental protection. When disagreements arise over safeguards compliance, safety obligations, emergency notification, or compensation for transboundary harm, the legal and political stakes are unusually high, and so are the practical barriers to dispute resolution. International law presumes that such disputes should be addressed through peaceful means chosen by the parties, yet the available pathways often fragment across institutions, regimes, and domestic courts in ways that are difficult to navigate for non-specialists and frequently inaccessible for affected individuals and communities.[1]

For all interested parties, the proposed mediation hub is particularly relevant for Eastern Europe and Central Asia, where a shared post-Soviet legal legacy, transboundary

1 Charter of the United Nations (UN Charter) (signed 26 June 1945) XV UNCIO 335, Ch VI art 33 <https://www.un.org/en/about-us/un-charter/full-text> accessed 8 January 2025.

environmental risks, and renewed security concerns keep nuclear risk high on the procedural agenda. The region combines a history of transboundary nuclear harm and complex liability issues with contemporary debates about confidentiality, public accountability, and effective legal remedies. A mediation center built on procedural safeguards offers a structured way to manage confidential information while preserving access to justice, which is often inadequately provided in fragmented multi-forum systems.

In the nuclear field, the core regulatory architecture was not primarily built as a dispute-resolution system. Non-proliferation relies on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and on verification arrangements implemented through IAEA safeguards agreements, which are technocratic in operation and state-centered in standing.[2] Nuclear safety cooperation is organized through dedicated conventions that prioritize prevention, peer review, and inter-state coordination, such as the Convention on Nuclear Safety, and the conventions on early notification and on assistance in the event of accidents or radiological emergencies.[3] Where civil redress is concerned, the international liability regime is convention-based and plural (Vienna, Paris and related instruments), and it presupposes domestic adjudication under harmonized rules rather than a direct international forum for victims.[4] This combination has created a recurrent design tension: nuclear governance is legally dense and technically sophisticated, but dispute settlement-especially where claims implicate public interests, cross-border harms, or sensitive information-remains procedurally uneven and institutionally dispersed.[5]

2 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) (adopted 12 June 1968) [1974] 729 UNTS 161 <https://www.iaea.org/publications/documents/treaties/npt> accessed 8 January 2025; International Atomic Energy Agency, *The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/153 (Corrected), IAEA 1972) <https://inis.iaea.org/records/rpr4y-sd344> accessed 8 January 2025.

3 Convention on Nuclear Safety (CNS) (adopted 17 June 1994) 1963 UNTS 293 <https://www.iaea.org/topics/nuclear-safety-conventions/convention-nuclear-safety> accessed 8 January 2025; Convention on Early Notification of a Nuclear Accident (adopted 26 September 1986) [1997] 1439 UNTS 275 <https://www.iaea.org/topics/nuclear-safety-conventions/convention-early-notification-nuclear-accident> accessed 8 January 2025; Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (adopted 26 September 1986) [1997] 1457 UNTS 133 <https://www.iaea.org/topics/nuclear-safety-conventions/convention-assistance-case-nuclear-accident-or-radiological-emergency> accessed 8 January 2025.

4 Vienna Convention on Civil Liability for Nuclear Damage (adopted 21 May 1963) [1985] 1063 UNTS 265 <https://www.iaea.org/topics/nuclear-liability-conventions/vienna-convention-on-civil-liability-for-nuclear-damage> accessed 8 January 2025; OECD, *Convention on Third Party Liability in the Field of Nuclear Energy (Paris Convention)* (OECD/LEGAL/0038, OECD Publishing 2025); Convention on Supplementary Compensation for Nuclear Damage (adopted 12 September 1997, amended 13 January 2026) <https://www.iaea.org/topics/nuclear-liability-conventions/convention-supplementary-compensation-nuclear-damage> accessed 8 January 2025.

5 Kimberly Sexton Nick and Stephen G Burns (eds), *Principles and Practice of International Nuclear Law* (OECD Publishing 2022) doi:10.1787/58b25dca-en; Carlton Stoiber and others, *Handbook on Nuclear Law: Implementing Legislation* (IAEA 2010).

A further institutional implication is that 'nuclear dispute resolution' is not a blank slate. The Statute of the International Atomic Energy Agency contains its own dispute-settlement clause, and safeguards agreements include consultation and arbitration mechanisms. Yet authoritative analyses of international nuclear law emphasize that there is no standing judicial tribunal competent to resolve disputes between the IAEA and a State concerning the interpretation or application of safeguards agreements, and that arbitral recourse has not been used in safeguards practice. This reinforces the case for a procedurally structured, non-adjudicative hub that can operate upstream of escalation, while remaining compatible with existing treaty-based mechanisms.[6]

The access-to-justice dimension complicates this picture. Access to justice is commonly understood not merely as access to a courtroom, but as effective access to procedures and remedies capable of making rights meaningful.[7] In human-rights terms, procedural guarantees such as equality before tribunals, independence and impartiality, and reasoned decision-making function as enabling conditions for substantive rights.[8] Environmental governance has gone further in articulating participatory entitlements (information, participation, and review), crystallized most clearly in the Aarhus Convention[9]. Nuclear-related risks and harms have repeatedly tested these principles, including in litigation concerning access to information and the practical ability of individuals to pursue remedies where official secrecy and evidentiary asymmetries are significant.[10] The result is a persistent gap between the state-centric structure of many nuclear regimes and the justice claims that arise when nuclear activities affect persons beyond national borders or outside conventional political accountability channels.

Against this background, the broader field of dispute resolution has undergone a parallel evolution toward mediation, institutionalized standards, and enforceability.[11] The UN has

6 OECD, *International Nuclear Law: History, Evolution and Outlook* (OECD Publishing 2010) doi:10.1787/9789264106888-en.

7 Mauro Cappelletti and Bryant Garth, 'Access to Justice: The Newest Wave in the Worldwide Movement to Make Rights Effective' (1978) 27 *Buffalo Law Review* 181.

8 International Covenant on Civil and Political Rights (adopted 16 December 1966) [1983] 999 UNTS 171, art 14 <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights> accessed 8 January 2025; UN Human Rights Committee, *General Comment No 32: Article 14: Right to equality before courts and tribunals and to a fair trial* (CCPR/C/GC/32, 23 August 2007) <https://www.refworld.org/legal/general/hrc/2007/en/52583> accessed 8 January 2025; Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights ECHR) (signed 4 November 1950) 5 ETS, art 6 <https://www.echr.coe.int/documents/d/echr/convention_eng> accessed 8 January 2025.

9 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998) [2003] 2161 UNTS 447 <https://unece.org/environment-policy/public-participation/aarhus-convention/text> accessed 8 January 2025.

10 *McGinley and Egan v United Kingdom* Apps 21825/93, 23414/94 (ECtHR, 9 June 1998) <https://hudoc.echr.coe.int/eng?i=001-58175> accessed 8 January 2025.

11 Elisabetta Silvestri, 'The Singapore Convention on Mediated Settlement Agreements: A New String to the Bow of International Mediation?' (2019) 2(3) *Access to Justice in Eastern Europe* 5, doi:10.33327/ajee-18-2.4-a000016.

developed policy-level guidance on mediation design and legitimacy, emphasizing consent, impartiality, inclusivity, and coherence with applicable legal frameworks.[12] At the level of transnational commercial practice, UNCITRAL has provided a model procedural framework for international mediation, and the Singapore Convention supplies enforcement architecture for qualifying mediated settlement agreements.[13] These instruments are not nuclear-specific, but they demonstrate that mediation can be 'procedurally thick', that is, supported by formal guarantees and predictable consequences, without collapsing into adjudication.[14]

The scholarship relevant to this article, therefore, spans three adjacent literatures. First, international nuclear law scholarship has richly documented the substantive regimes of safety, security, safeguards, and liability, and has mapped their institutional techniques (reporting, peer review, and harmonized domestic implementation).[15] Second, access-to-justice literature has clarified why procedural structures, participation, and remedy design are decisive for making legal protections effective, particularly in complex and transboundary contexts.[16] Third, mediation and ADR scholarship (and associated practice guidance) has focused on legitimacy conditions, appropriate participation, and institutional safeguards that preserve fairness while retaining flexibility.[17] What remains comparatively underdeveloped is an integrated institutional design proposal for nuclear-related disputes that treats *procedural guarantees* and *access to justice* as first-order design variables rather than as external constraints.

This gap is sharpened by two recurring controversies. One concerns confidentiality: nuclear disputes frequently involve national security, safeguards-sensitive information, or proprietary technical data, leading some to argue that meaningful transparency is structurally incompatible with effective nuclear dispute settlement. Another concern is legitimacy: critics of confidential settlement processes contend that disputes touching public safety and environmental risk require stronger transparency and participation to secure public trust and accountability, and that «private justice» can erode norm development. Comparable debates in other mixed public-private regimes have generated

12 UN, *Guidance for Effective Mediation* (UN Secretary-General 2012) <https://peacemaker.un.org/en/documents/united-nations-guidance-effective-mediation> accessed 8 January 2025.

13 UNCITRAL, *Model Law on International Commercial Mediation and International Settlement Agreements Resulting from Mediation with Guide to Enactment and Use* (2018) (UN Publishing 2022); United Nations Convention on International Settlement Agreements Resulting from Mediation (Singapore Convention on Mediation) (adopted 20 December 2018 UNGA Res 73/198) <https://digitallibrary.un.org/record/1660341> accessed 8 January 2025.

14 Timothy Schnabel, 'The Singapore Convention on Mediation: A Framework for the Cross-Border Recognition and Enforcement of Mediated Settlements' (2019) 19(1) Pepperdine Dispute Resolution Law Journal 1.

15 Nick and Burns (n 5); Stoiber and others (n 5).

16 Cappelletti and Garth (n 7) 191.

17 UN, *Guidance for Effective Mediation* (n 12).

procedural responses, including codified transparency rules and structured third-party participation.[18] The central question, therefore, is not whether confidentiality or transparency should prevail categorically, but how an institution can calibrate both while still delivering credible fairness and workable outcomes.

At the same time, the existing literature on nuclear-related disputes has only weakly engaged with the broader mediation, ADR, and access-to-justice scholarship. This matters because the normative plausibility of a specialized mediation mechanism depends not only on the existence of disputes, but also on whether mediation can deliver procedural fairness, meaningful participation, and institutionally credible outcomes in technically complex and public-interest-sensitive cases. Scholarship on mediation and access to justice has emphasized that dispute system design must be evaluated not only by settlement efficiency, but also by voice, procedural justice, inclusivity, and the ability of affected parties to participate on an informed basis. Bringing this body of literature into conversation with nuclear governance helps clarify both the promise and the limits of a specialized international mediation hub.[19]

This article responds by developing a blueprint for an international mediation hub for nuclear-related disputes designed around procedural guarantees, access to justice, and calibrated confidentiality. The article's original contribution is fivefold: first, it classifies nuclear-related disputes by both subject matter and mediation suitability; second, it proposes a three-track intake architecture; third, it specifies a feasible institutional model for an internationally administered hub; fourth, it develops a confidentiality or public-interest protocol that protects sensitive information without nullifying community rights; and fifth, it differentiates enforcement pathways between commercial and public-law settlements. The hub is not presented as a substitute for adjudication or for existing IAEA and treaty-based procedures, but as a complementary international mechanism for de-escalation, structured technical exchange, and settlement facilitation in disputes where authoritative adjudication is either unavailable, over-brittle, or poorly matched to the problem.[20]

18 UNCITRAL, *Rules on Transparency in Treaty-based Investor-State Arbitration* (CL-53, UN Publishing 2014).

19 Mary Anne Noone and Lola Akin Ojelabi, 'Ensuring Access to Justice in Mediation within the Civil Justice System' (2014) 40(2) Monash University Law Review 528.

20 UN Charter (n 1) art 33; UN, *Guidance for Effective Mediation* (n 12); UNCITRAL, *Model Law on International Commercial Mediation* (n 13) art 7; Singapore Convention on Mediation (n 13) art 5(1).

2 METHODOLOGY

This article applies a doctrinal-comparative legal methodology combined with design-oriented institutional analysis to develop a procedural blueprint for an international mediation hub for nuclear-related disputes. The overall aim is to specify how such a hub can operationalize procedural guarantees and access to justice while managing confidentiality and transparency in a domain shaped by national security sensitivities and technical asymmetries. The research is structured around four research questions: 1) What procedural guarantees are minimally required for a mediation process to be credible as an access-to-justice mechanism in nuclear-related disputes? 2) Which guarantees are already embedded in relevant international legal regimes and dispute-resolution instruments, and where are the gaps? 3) How can confidentiality be tiered to protect sensitive information without undermining fairness, participation, and public-interest accountability? 4) What institutional features (standing, rosters, expert support, and recording or enforcement pathways) are necessary for a mediation hub to function as a complementary, 'court-adjacent' mechanism rather than a substitute for adjudication?

Source selection and corpus construction. The analysis relies exclusively on publicly accessible legal materials and secondary literature. The primary corpus comprises: a) general international law on peaceful settlement and procedural fairness; b) nuclear governance instruments addressing safeguards, safety, emergency notification or assistance, and civil liability; c) human-rights and environmental law materials relevant to participation rights and effective remedies; and d) mediation or ADR instruments relevant to procedural design and enforceability. These materials were selected because they 1) structure the legal environment in which nuclear disputes arise, 2) contain transferable procedural standards, or 3) shape the feasibility constraints for transparency and participation.

Secondary sources were collected through targeted searches in major legal databases and indexing services, using combinations of keywords aligned with the article's conceptual pillars (e.g., 'nuclear dispute' and 'mediation'; "IAEA safeguards' and 'dispute settlement'; 'nuclear liability' and 'access to justice'; 'confidentiality' and 'public interest' and 'mediation'; 'procedural fairness' and 'ADR'). Inclusion criteria were: 1) direct relevance to nuclear dispute processing, access to justice, procedural guarantees, confidentiality or transparency, or mediation institutional design; 2) clear methodological quality (peer-reviewed scholarship, authoritative institutional reports, or widely cited doctrinal works); and 3) legal-analytical usefulness for deriving design requirements. Exclusion criteria were: purely technical or engineering publications without legal-procedural implications, and policy commentary lacking traceable legal grounding.

The literature base was not limited to nuclear law and international institutional materials, but also included selected scholarship on mediation, ADR, and access to justice in order to

evaluate the procedural legitimacy, participation standards, and design feasibility of a specialized dispute-resolution mechanism.

To avoid a purely instrument-driven account, the study prioritized peer-reviewed scholarship in three streams: 1) international nuclear law and institutional design, 2) dispute system design and mediation theory in public or technically complex disputes, and 3) access-to-justice and procedural guarantees in international and transboundary settings. Inclusion criteria were a) direct relevance to dispute settlement or procedure (standing, confidentiality, compliance, enforceability), and b) analytical rather than purely descriptive treatment. Sources focused exclusively on domestic ADR practice without cross-border or institutional implications were excluded.

The research proceeds in three replicable stages. First, the study constructs a typology of disputes to prevent overgeneralization. Nuclear-related disputes are grouped into 1) state-to-state compliance or cooperation disagreements (e.g., safeguards and reporting controversies), 2) mixed public-private disputes implicating operators and regulators (e.g., security measures and incident response), and 3) disputes involving affected persons or communities (e.g., information access, participation, and compensation following transboundary harm). Each category is mapped against likely confidentiality constraints, evidentiary asymmetries, and plausible remedy expectations. Second, the study performs comparative procedural mapping. A coding matrix is used to extract and compare procedural safeguards across the selected instruments and practice models. The coding categories are defined ex ante and include: standing channels; independence and impartiality; conflict-of-interest controls; equality of arms (including access to expertise); participation modalities for affected persons; transparency, confidentiality rules, and exceptions; protection of sensitive information (security); reasoned procedural determinations; timeliness; language, and legal-aid support; and outcome formalization (settlement recording, enforcement pathways). The matrix is populated by close reading of the primary materials and then iteratively refined to ensure that each safeguard is formulated as an operational rule (i.e., capable of being implemented in institutional procedures) rather than an abstract principle. Third, the study undertakes normative synthesis and design testing. The extracted safeguards are translated into a proposed hub architecture: entry points and admissibility filters; an independent mediator roster supported by vetted technical experts; tiered confidentiality and narrowly tailored public-interest disclosure mechanisms; and standardized settlement recording. The design is then tested against the dispute typology through scenario-based stress testing (e.g., safeguards-sensitive disputes requiring strict confidentiality; accident-related disputes requiring participation and remedial pathways; mixed disputes requiring expert equality and enforceable outcomes). In each scenario, the hub's rules are evaluated for 1) fairness and access-to-justice adequacy, 2) feasibility under confidentiality constraints, and 3) institutional complementarity with existing regimes.

3 STATE OF PLAY: EXISTING PROCEDURES AND THEIR LIMITATIONS

Safeguards and compliance-related disagreements (IAEA-centered processes). In the safeguard's domain, dispute processing is formally available but institutionally underused. The IAEA Statute contains a settlement-of-disputes clause, providing that unresolved disputes on interpretation or application may be referred to the International Court of Justice unless the parties agree on another mode of settlement.[21] Comprehensive safeguards agreements concluded on the basis of INFCIRC 153 also foresee consultation pathways and, in principle, arbitration for certain disputes; however, safeguards practice has largely relied on political-institutional management through reporting, consultations, and Board processes rather than formal adjudicatory escalation. Procedurally, this creates a «thin» pathway for states: disagreements can persist as compliance controversies without a predictable, fair-process forum that can handle sensitive technical evidence while offering parties confidence in impartial facilitation.[22]

Nuclear safety, notification or assistance, and incident-response disputes (coordination without remedies). Safety and emergency conventions are primarily prevention and coordination-oriented. Their procedures are well-suited to information exchange, peer review, and assistance, but they are not designed as remedy-providing dispute systems for affected persons or for mixed disputes involving regulators, operators, and transboundary communities. In practice, post-incident conflicts often fragment into administrative review, domestic litigation, or diplomatic exchanges, each constrained by evidentiary asymmetry and confidentiality claims.

Civil nuclear liability and compensation disputes (domestic channeling; cross-border barriers). The nuclear liability regime is convention-based and generally channels jurisdiction to domestic courts under harmonized rules.[23] This delivers legal certainty for operators and insurers, but for cross-border victims it can generate access-to-justice barriers: forum concentration, language hurdles, evidentiary asymmetries, and difficulties in meaningfully participating where key data are classified or commercially sensitive.[24] As a result, 'rights on paper' may not translate into practical remedies for affected persons in transboundary settings.

21 Stephen Gorove, 'Sanctions and the Settlement of Disputes: Focus on the IAEA' (1970) 16(2) The Catholic Lawyer 163.

22 Marianne Nari Fisher and North Carolina Mayhew, 'Safeguards Non-Compliance and the Utility of Arbitration under Safeguards Agreements: A Review of Arbitral Mechanisms and Reflections for Today' (*Vienna Center for Disarmament and Non-Proliferation*, May 2023) <https://vcdnp.org/wp-content/uploads/2023/05/ID-09-%E2%80%93-Fisher.pdf> accessed 29 January 2026.

23 Jakub Handrlica, 'A New Transnational Regime for Nuclear Liability and Compensation in Europe' (2022) 13 Czech Yearbook of Public and Private International Law 225.

24 Nathan Swartz, 'The Impact of the Convention on Supplementary Compensation for Nuclear Damage' (2016) 12(2) University of Pennsylvania Asian Law Review 312.

Access-to-information and participation disputes (Aarhus interface; nuclear sensitivity). Nuclear activities frequently trigger contestation under environmental participation regimes[25]. Aarhus Convention practice demonstrates that nuclear-related decisions (including license changes and lifetime extensions) can raise compliance disputes about timely public participation and access to review.[26] Yet even when review mechanisms exist, nuclear-specific secrecy claims and technical complexity often reduce the practical equality of arms between authorities and the public.

Cross-cutting procedural shortcomings (why the 'hub' problem is real). Synthesizing across the above procedures, four deficits recur. First, fragmentation: different regimes address different slices of the same dispute, forcing parties to navigate multiple forums. Second, standing asymmetry: many nuclear processes remain state-centered, while affected persons face indirect, domestic, or prohibitively costly routes. Third, confidentiality dominance: safeguards-sensitive, security-classified, or proprietary data are often protected through blanket non-disclosure rather than calibrated, reviewable protocols, undermining perceived fairness and legitimacy.[27] Fourth, no structured 'upstream' de-escalation layer: many disputes escalate politically because available forums are either too technocratic (verification), too diplomatic (consultations), or too adversarial (litigation), with little space for procedurally guaranteed problem-solving.

The problem is not merely hypothetical. In the MOX Plant dispute, Ireland and the United Kingdom pursued a controversy over radioactive discharges and the Sellafield MOX facility through overlapping UNCLOS, ITLOS, or PCA, and EU-law pathways, demonstrating how nuclear-environmental disputes can become procedurally fragmented and jurisdictionally contested.[28] In safeguards practice, the picture is different but equally revealing: safeguards agreements contain arbitration clauses, yet the IAEA's own Legal Framework for Safeguards notes that no recourse to arbitration has been made to date in safeguards implementation, leaving politically sensitive disputes largely within diplomatic and Board-managed processes.[29] Participation disputes are also concrete rather than speculative: the CJEU's judgment in Inter-Environnement Wallonie (C-411/17) concerned the Belgian extension of reactor operation without a prior

25 Leslie-Anne Duvic-Paoli and Priska Lueger, 'A Democratic Nuclear Energy Transition? Public Participation in Nuclear Activities' (2022) 31(1) RECIEL 199, doi:10.1111/reel.12433.

26 ÖKOBÜRO, *International Case-Law in Nuclear Matters* (ÖKOBÜRO - Alliance of the Environmental Movement, January 2022) <https://www.oekobuero.at/files/416/international_nuclear_case-law_2022.pdf> accessed 12 March 2026.

27 Michael G Faure and Kévine Kindji, *Cross-Border Nuclear Safety, Liability and Cooperation in the European Union: Study for the PETI committee* (European Parliament 2019).

28 Case No 2002-01 *MOX Plant Case (Ireland v United Kingdom)* (PCA, 6 June 2008) <https://pca-cpa.org/es/cases/100/> accessed 12 March 2026.

29 Laura Rockwood, *Legal Framework for IAEA Safeguards* (IAEA 2013).

environmental impact assessment,[30] while UNECE Espoo/Aarhus practice on the Belarusian NPP in Ostrovets and on Dukovany shows recurring transboundary and participation conflicts around nuclear siting, life-extension, and public review.[31]

A useful real-world comparator in the liability field is the post-Fukushima compensation architecture in Japan, which created a Dispute Reconciliation Committee and a dedicated ADR center for nuclear-damage claims. Their experience shows both the value of specialized dispute-processing and its limits: the mechanism was domestically anchored, accident-specific, and not designed to solve transboundary claims or mixed public-private disputes beyond the Japanese setting.[32]

Implication for the present study's research task. Against this state of affairs, the research task is not merely to propose an institution in the abstract, but to derive a design that 1) fits existing treaty constraints, 2) remains confidentiality-capable, and 3) supplies minimum procedural guarantees that make mediation credible as an access-to-justice-relevant pathway in nuclear governance.

4 SCOPE, JURISDICTION, AND PROCEDURE OF THE PROPOSED HUB

Material scope (what counts as a 'nuclear-related dispute' for the hub). For the purposes of this article, a 'nuclear-related dispute' means a disagreement with a substantial nexus to: a) safeguards implementation and compliance cooperation; b) nuclear safety and security obligations, including incident-response coordination; c) nuclear civil liability and compensation arrangements; or d) nuclear-adjacent environmental and human-rights procedure claims (information, participation, access to review) where the underlying decision concerns nuclear activities. The hub is not designed for criminal accountability, sanctions determinations, or coercive enforcement actions; nor does it adjudicate treaty breaches. Its function is structured dispute processing and settlement facilitation under agreed procedural guarantees.

Not every nuclear-related dispute should be admitted to the hub. In addition to a substantial nuclear nexus, the hub should require five cumulative suitability criteria: 1) a residual zone of negotiability remains despite disagreement on law or facts; 2) mediation would not prejudice non-derogable obligations, criminal accountability, or coercive enforcement processes; 3) the immediate problem is operational, interpretive,

30 Case C-411/17 *Inter-Environnement Wallonie ASBL and Bond Beter Leefmilieu Vlaanderen ASBL v Conseil des ministres* (CJEU, 29 July 2019) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A62017CJ0411> accessed 12 March 2026.

31 EIA/IC/S/4 Belarus (UNECE, 2011-2025) <https://unece.org/environmental-policy/environmental-assessment/eiaics4-belarus> accessed 12 March 2026.

32 Daniel H Foote, '*Japan's ADR System for Resolving Nuclear Power-Related Damage Disputes*' (2017) 12 The University of Tokyo Law Review 102.

compensatory, participatory, or coordinative rather than the need for an authoritative public determination of illegality; 4) the dispute can benefit from structured exchange of technical information under confidentiality controls; and 5) where affected communities are implicated, participation can be organized without defeating safety or security requirements. The hub is therefore unsuitable for atrocity accountability, sanctions design, or disputes in which no implementable settlement space remains.

Jurisdiction by dispute type (linking the typology to the hub's 'tracks'). The typology developed in the methodology is operationalized through a three-track intake model: Track A (State-State or State-Institution): disputes over interpretation of safeguards, notification duties, cooperation obligations, and related compliance coordination (high confidentiality; technical-expert support mandatory). Track B (Mixed public-private): regulator-operator or state-operator disputes about safety measures, incident response, cost allocation, and operational compliance where a negotiated outcome is feasible (managed confidentiality; expert equality of arms essential). Track C (Participation-sensitive disputes): disputes implicating affected persons (access to information pathways) where legal appropriateness and admissibility criteria are met (higher legitimacy needs; structured participation modalities; tailored confidentiality). This mapping clarifies which classes of the proposed dispute classification fall within the hub's jurisdiction and prevents an overly broad «all nuclear disputes» claim.

Consent-based referral (voluntariness) and entry pathways. Mediation rests on voluntariness; accordingly, the hub's jurisdiction is triggered only by consent. To make consent realistic rather than merely theoretical, the hub can operate through five entry pathways: 1) Post-dispute submission agreement (ad hoc consent once a dispute arises); 2) Standing consent declarations (opt-in instrument by which a state pre-accepts hub mediation for defined categories of disputes, with reservations); 3) Treaty or protocol clauses (future instruments or optional protocols can incorporate a «consultation - hub mediation» step before ICJ); 4) Contractual model clauses (operators, suppliers, insurers, and host states can incorporate hub mediation clauses in nuclear-adjacent commercial arrangements); 5) Domestic referral gateways (where permitted, domestic courts or regulators may stay proceedings to allow parties to attempt hub mediation, without prejudice to later adjudication). These pathways preserve voluntariness while making the hub practically reachable through institutionalized consent architectures rather than relying on rare ad hoc agreements.

Initiation, admissibility, and case management (what happens once a request is filed). A request must identify the parties, the dispute category (A, B, C), the requested confidentiality tier, and the desired outcome form (non-binding settlement, recorded settlement, or «mediation-plus» with agreed escalation). An intake panel issues a reasoned procedural determination on: 1) jurisdictional consent; 2) admissibility (nuclear nexus; no parallel coercive enforcement determination being sought; good-faith participation); 3) confidentiality tiering; and 4) participation modalities (Track C).

This intake design clarifies initiation and case-management steps by requiring a structured request, reasoned admissibility determinations, and an explicit confidentiality configuration from the outset.

The mediator roster should be multidisciplinary rather than purely generalist. Eligibility should normally require demonstrable competence in at least one core domain – public international law and nuclear law; safeguards and verification practice; nuclear safety, security, and radiation protection; nuclear liability and insurance; environmental participation and human-rights procedure; or complex public-private mediation, combined with completed mediation training and experience in high-complexity disputes.[33] Appointment should be made through an independent appointments committee using publicly available criteria, written disclosure of interests, cooling-off periods for recent employment by a party, challenge and removal procedures, regular ethics review, and a binding code of conduct. For cases involving affected communities or cross-border impacts, language capability, regional familiarity, and diversity considerations should also be taken into account.[34]

This ethical architecture is not merely aspirational: under the Singapore Convention, relief may be refused where there has been a serious breach of standards applicable to the mediator or a failure to disclose circumstances raising justifiable doubts as to impartiality or independence.[35]

Confidentiality tiering and equality of arms (minimum procedural guarantees). The hub should use a tiered confidentiality protocol, but confidentiality must not function as a blanket veto over participation or accountability. Tier 1 should cover safeguards-sensitive, national-security, and facility-vulnerability information subject to strict access controls. Tier 2 should cover proprietary technical or commercial information subject to redaction, secure data rooms, and expert-only review where justified. Tier 3 should cover public-interest information concerning health, environmental risk, emergency measures, participation rights, or settlement implementation. Where Tier 1 or Tier 2 restrictions materially affect affected communities or non-state participants, the hub should issue a reasoned confidentiality determination, provide the maximum feasible redacted summary, and, where necessary, appoint a community representative, public-interest advocate, or amicus-type expert with security-cleared access. Equality of arms is operationalized through vetted neutral technical experts, party-appointed experts with challenge rights, and an internal review channel for core decisions on disclosure and participation.[36]

33 International Mediation Institute, *Code of Professional Conduct* (IMI 2017) <https://imimediation.org/practitioners/code-professional-conduct/> accessed 12 March 2026.

34 UN, *Guidance for Effective Mediation* (n 12).

35 Singapore Convention on Mediation (n 13).

36 Nancy A Welsh, 'Disputants' Decision Control in Court-Connected Mediation: A Hollow Promise without Procedural Justice' (2002) 1 Journal of Dispute Resolution 179.

Outcomes, non-settlement value, and «what if mediation does not decide». Mediation does not produce a binding «decision» unless parties so provide. Where no settlement is reached, expediency is ensured through three deliverables: 1) Issue-narrowing record (agreed statement of resolved and unresolved issues); 2) Procedural closure report (non-substantive summary of steps taken and confidentiality designations, enabling later forums to proceed efficiently); 3) Agreed escalation ladder (where parties consent at intake): mediation - neutral evaluation - ICJ or domestic litigation, with preserved confidentiality controls. Thus, even in non-settlement scenarios, the hub reduces escalation risk, structures evidence handling, and lowers transaction costs for subsequent procedures.

Fit with existing treaty mechanisms (complementarity). The hub is designed to remain compatible with treaty-based dispute settlement clauses rather than displacing them. Where instruments foresee negotiation, arbitration, or ICJ referral (as in the IAEA Statute and safeguards-related arrangements), the hub serves as a structured upstream step that the parties may choose as an 'other mode of settlement'.

Institutional anchoring of the hub. The proposed hub should not operate under the jurisdiction of a domestic court or as an internal organ of any single regulator. The most workable model is an independent international facility established by a multilateral memorandum or optional instrument and operating under the IAEA's auspices solely for technical liaison, not under the Agency's adjudicatory control. Case administration would be performed by a separate secretariat; roster governance, appointments, budget, and ethics would be supervised by a small governing board composed of participating States, an independent chair, and non-voting liaison points from relevant organizations, including the IAEA and, where appropriate, UNECE 'Aarhus' or 'Espoo' bodies. This design preserves technical compatibility with existing nuclear institutions while avoiding the impression that the hub is either a domestic court annex or an internal compliance arm of the IAEA.

5 DESIGN OUTPUTS

The analysis yields a central design finding: nuclear-related disputes require a mediation architecture that is procedurally 'thick' (guarantee-driven) yet confidentiality-capable, because the disputes are simultaneously high-stakes (peace and security, public safety, transboundary impacts) and information-constrained (safeguards-sensitive, security-classified, or proprietary technical data).

What is original in this article is not the abstract proposition that mediation can sometimes be useful, but the conversion of that proposition into a concrete institutional design for the nuclear field. The article contributes: 1) a dispute typology linked to admissibility and mediation-suitability standards; 2) a three-track intake architecture; 3) a hybrid hosting model combining international administration with technical liaison; 4) a mediator-and-expert selection framework built around ethics and conflict controls; 5) a reviewable

confidentiality or public-interest protocol; and 6) a differentiated enforceability model separating commercial from public-law settlements. These elements are offered as an integrated package because, in nuclear governance, mediation becomes normatively persuasive only when procedural legitimacy is engineered in advance rather than assumed.

The proposed hub, therefore, treats procedural guarantees and tiered confidentiality as coequal design variables, rather than assuming that confidentiality must dominate and access-to-justice concerns can be handled externally. This conclusion is consistent with the UN Charter's recognition of mediation among peaceful means of dispute settlement and with the UN's institutional guidance that legitimacy in mediation depends on impartiality, inclusivity, and coherence with applicable legal frameworks.[37]

A second finding is that existing nuclear governance instruments are predominantly state-centered and cooperation-oriented, which is effective for prevention and coordination but leaves a procedural gap when disputes involve mixed actors (states, regulators, operators) and when individuals or communities seek meaningful participation or remedies. Safeguards arrangements (as operationalized through INFCIRC/153-type agreements) structurally prioritize confidentiality and technical verification; safety and emergency conventions focus on prevention, notification, and assistance rather than remedial pathways; and civil liability conventions channel compensation primarily through harmonized domestic processes rather than a dedicated international forum. The hub blueprint is designed as a complement to these regimes: it does not replace safeguards or liability rules, but supplies a structured dispute-processing layer for disagreements that otherwise escalate or remain unaddressed.[38]

A third finding concerns the minimum procedural guarantees needed for the hub to plausibly function as an access-to-justice mechanism in a technically asymmetric field. The study identifies a minimum package: 1) independence and conflict-of-interest controls for mediators and experts; 2) equality of arms through managed access to expertise (including neutral technical experts and the ability to contest expert input); 3) reasoned procedural determinations on admissibility, confidentiality designations, and participation modalities; 4) translation and accessibility supports where disputes affect non-specialist participants; and 5) a lightweight internal review channel for core procedural decisions (especially confidentiality and participation). While nuclear mediation is not adjudication, these safeguards are derived from widely recognized fair-process baselines and are necessary to prevent mediation from becoming a purely discretionary, insider-driven process in disputes that implicate public interests.[39]

37 UN, *Guidance for Effective Mediation* (n 12).

38 International Atomic Energy Agency, *The Structure and Content of Agreements* (n 2).

39 UN, *Guidance for Effective Mediation* (n 12).

Table 1. Core procedural outputs of the proposed mediation hub

Design output	Operational content	Interpretation (what the output achieves)
Multi-door access model	Separate tracks for a) state-state disputes (e.g., safeguards disagreements), b) regulator-operator disputes, and c) disputes with affected-person participation where legally appropriate	Avoids one-size-fits-all procedure; aligns process intensity with dispute type and sensitivity
Independent roster + vetted technical expertise	Standing panel of mediators plus a screened roster of technical experts; mandatory disclosure rules; challenge procedure	Reduces capture risks and addresses technical asymmetry without converting mediation into adjudication
Tiered confidentiality with public-interest exception	Information classified into levels with access controls; default protection for safeguards data; narrowly tailored disclosure where needed for legitimacy and participation	Makes confidentiality manageable and reviewable instead of absolute, enabling calibrated transparency
Participation and support measures	Participation modes (submission, consultation, representation) + translation/accessibility supports	Enables meaningful access-to-justice functions without collapsing into mass-claims litigation
Outcome formalization and compliance pathway	Standard settlement recording; choice of enforceability route depending on dispute type	Enhances implementation and reduces the «settlement without compliance» risk

The fourth finding is that tiered confidentiality is legally and practically feasible if structured as a reviewable protocol rather than a blanket rule. The hub's confidentiality design uses (a) strict protection for safeguards-sensitive information (reflecting safeguards practice), (b) secure handling for national-security and proprietary technical data, and (c) limited transparency for procedural legitimacy (e.g., publication of anonymized procedural summaries, aggregate reporting, or redacted settlement terms when public safety is implicated). As a comparative model, the UNCITRAL Transparency Rules demonstrate how procedural systems can incorporate transparency defaults and exceptions (including protections for confidential or protected information) while preserving process integrity-an

approach adaptable to nuclear mediation through more stringent security screening and narrower disclosure gateways.[40]

Finally, the study differentiates enforceability by dispute track. The article proposes that only certain Track B settlements, and those Track C settlements that remain international and commercial under Article 1 of the Singapore Convention, be drafted so as to benefit, where possible, from the Convention's enforcement mechanism. This is not proposed for Track A state-to-state or state-to-institution disputes, nor for settlements whose essential character remains public-law, regulatory, or rights-remedial. For those categories, implementation should rely on recorded settlements, monitoring clauses, agreed reporting timetables, escrow or insurance arrangements where relevant, and optional conversion into arbitration clauses, consent orders, or intergovernmental instruments.[41]

6 DISCUSSION AND IMPLICATIONS

The results support the working hypothesis that an international mediation hub for nuclear-related disputes can be normatively defensible and practically useful if it is designed as an independent, institutionally anchored, and procedurally robust international mechanism rather than as an informal settlement channel or a domestic court annex. Mediation is expressly recognized among the peaceful means of dispute settlement in the UN Charter, and the United Nations Guidance for Effective Mediation emphasizes consent, impartiality, inclusivity, coherence, and complementarity.[42] In this sense, the proposed hub operationalizes an existing peaceful-settlement tool for a domain in which fragmentation, secrecy, and technical asymmetry frequently obstruct workable dispute processing. Seen in this wider context, the proposed hub is not justified merely because mediation is less adversarial than adjudication. Its normative force depends on whether it can be designed to address the concerns identified in mediation and access-to-justice scholarship: procedural fairness, meaningful participation, institutional neutrality, and protections against information and power asymmetries. This is why the article links dispute classification, intake design, confidentiality controls, and expert governance into a single procedural model.[43]

Interpreted against prior nuclear law scholarship, the hub blueprint addresses a structural mismatch repeatedly noted in the field: the nuclear governance architecture is legally dense but lacks an integrated, user-facing pathway for disputes that fall between technical verification, regulatory cooperation, and domestic compensation schemes. OECD/NEA

40 International Atomic Energy Agency, *The Structure and Content of Agreements* (n 2).

41 UNCITRAL, *Model Law on International Commercial Mediation* (n 13).

42 UN Charter (n 1) art 33; UN, *Guidance for Effective Mediation* (n 12).

43 Carrie Menkel-Meadow, 'When Litigation Is Not the Only Way: Consensus Building and Mediation as Public Interest Lawyering' (2002) 10 Washington University Journal of Law & Policy 37.

and IAEA handbooks characterize international nuclear law as a composite of safeguards, safety, security, and liability regimes implemented through specialized institutions and domestic legislation rather than through a unified international forum.[44] The proposed hub complements this «regime complex» by providing a structured interface for disputes that involve multiple actors (states, regulators, operators, affected persons) and multiple legal registers (security, safety, environment, human rights), without displacing the foundational instruments of non-proliferation and safeguards practice.[45]

A central legitimacy question is whether confidentiality can be reconciled with the public interest in nuclear governance. The answer cannot be that secrecy always prevails. In disputes touching evacuation, environmental exposure, lifetime extension, incident management, or participation rights, affected communities require at least intelligible reasons, structured opportunities to be heard, and access to the maximum disclosure compatible with safety and security. The proposed model treats confidentiality as a reviewable, proportionate constraint, rather than a jurisdiction-wide default. This is the point at which nuclear mediation departs from purely private ADR: legitimacy depends not only on party consent, but also on whether the process preserves a minimum level of public accountability where community rights and transboundary risks are materially affected.

The access-to-justice implications of the findings are best understood through the 'waves' framework in access-to-justice scholarship, which emphasizes that effective remedies depend on procedural design, participation, and the capacity to overcome informational and resource asymmetries.[46] In environmental law, the Aarhus Convention crystallizes the idea that access to information, participation, and review mechanisms are mutually reinforcing components of accountability-an orientation that becomes salient where nuclear activities generate transboundary risk and public concern.[47] Due process norms in human rights law similarly highlight equality before tribunals and fair-hearing requirements, providing a principled basis for insisting that even non-adjudicative processes should incorporate baseline safeguards when legal interests and public welfare are materially affected.[48] The European Court of Human Rights has also illustrated, in sensitive contexts, how information asymmetries and non-disclosure can impair the practical ability of individuals to vindicate rights, reinforcing the need for procedurally managed access to relevant information (including through controlled disclosure techniques).[49]

The findings on enforceability align with established ADR instruments but also expose their limits in nuclear governance. The Singapore Convention and the UNCITRAL

44 Nick and Burns (n 5); Stoiber and others (n 5).
45 NPT (n 2); International Atomic Energy Agency, *The Structure and Content of Agreements* (n 2).
46 Cappelletti and Garth (n 7) 196.
47 Convention on Access to Information (n 9).
48 International Covenant on Civil and Political Rights (n 8); UN Human Rights Committee, *General Comment No 32 (n 8).*
49 *McGinley and Egan v United Kingdom (n 10).*

Model Law (as amended in 2018) strengthen cross-border reliance on mediated settlement agreements in *commercial* disputes, offering a meaningful compliance pathway where nuclear disputes have commercial characteristics (for example, certain operator-supplier or operator-insurer conflicts).[50] However, many nuclear-related disputes are predominantly public-law or state-to-state in character, falling outside the scope of these instruments and relying instead on political commitment, institutional follow-up, and (where parties consent) conversion pathways into other dispute-settlement formats. This constraint reinforces, rather than undermines, the hub concept: the hub's value proposition in public-law disputes lies in de-escalation, structured participation, and procedurally credible problem-solving, not in replicating adjudicatory enforcement through private-law analogs.

Contemporary practice also demonstrates that the need for an intermediate dispute-management mechanism is not hypothetical. The IAEA reports daily monitoring of nuclear safety, security, and safeguards in Ukraine, continued Agency presence at all five Ukrainian nuclear power plant sites, Russian armed forces control over the Zaporizhzhya Nuclear Power Plant, and the earlier control of the Chornobyl site in 2022. In March 2026, the Agency further reported deterioration of Ukraine's high-voltage transmission system and the need for locally negotiated ceasefires to repair a ZNPP back-up power line. These developments do not suggest that mediation can replace accountability, sanctions, or the law on the use of force. They do show, however, that there is a concrete operational space for structured third-party facilitation in matters such as inspector access, staff rotation, emergency coordination, protection of external power supply, and other risk-reduction arrangements.[51]

Several limitations should be acknowledged. First, this article grounds the proposal in illustrative disputes, but it still does not provide a full quantitative dataset of dispute incidence, duration, cost, or settlement performance across jurisdictions. Second, because the analysis relies primarily on public materials, it cannot fully model how classification rules and safeguards would, in practice, constrain evidentiary disclosure of sensitive information. Third, the proposal assumes a threshold level of political will and inter-institutional coordination that may be absent in highly coercive environments. Finally, the hub's legitimacy will depend on careful boundary-setting so as to avoid forum shopping, duplication, or perceived encroachment on existing institutional mandates.[52]

Future work should therefore build a coded dataset of publicly reported nuclear-related disputes, identifying dispute type, forum, parties, jurisdiction, confidentiality issues, and

50 UNCITRAL, *Model Law on International Commercial Mediation* (n 13) art 7; Singapore Convention on Mediation (n 13) art 5(1).

51 'Update 343 - IAEA Director General Statement on Situation in Ukraine' (*International Atomic Energy Agency - IAEA*, 6 March 2026) <https://www.iaea.org/newscenter/pressreleases/update-343-iaea-director-general-statement-on-situation-in-ukraine> accessed 12 March 2026.

52 Nick and Burns (n 5); Stoiber and others (n 5); NPT (n 2); International Atomic Energy Agency, *The Structure and Content of Agreements* (n 2).

outcome. Even an initial dataset covering 2001-2026 would allow the field to test whether certain jurisdictions or dispute clusters recur and whether mediation suitability varies systematically across them.[53]

7 CONCLUSION

The article has argued that nuclear-related disputes expose a persistent procedural deficit produced by fragmentation, secrecy, and the absence of an intermediate forum capable of combining technical sensitivity with fair-process guarantees. It therefore proposes an international mediation hub that is internationally administered, consent-based, and non-adjudicative. The hub is conceived as a complementary interface, not a substitute for adjudication, liability regimes, IAEA safeguards, or emergency conventions, and its feasibility is deliberately bounded to disputes where some zone of negotiated risk management remains.

The principal contribution of the article lies in specifying how such a hub could actually be designed: through a dispute typology tied to mediation-suitability criteria, a three-track intake model, an independent mediator or expert roster, a reviewable confidentiality-public-interest protocol, and differentiated enforcement paths. The principal conclusion is accordingly narrower and stronger than the draft previously suggested: a carefully delimited international mediation hub can be justified and practically useful for certain classes of nuclear-related disputes, but only if its institutional independence, ethical standards, public-interest safeguards, and relationship to existing forums are specified with precision.

The study's limitations are inherent to its design-oriented character. It does not provide an empirical dataset of dispute incidence or settlement performance, and it cannot fully anticipate how classification practices will operate across jurisdictions without a pilot framework and institutional trust-building. Future research should therefore a) compile and code publicly reported nuclear-related disputes to test the hub's scenario assumptions; b) refine expert-evidence and controlled disclosure protocols suitable for safeguards- and security-sensitive contexts; and c) assess feasible hosting models and inter-institutional coordination arrangements that preserve both independence and mandate compatibility. Even with these constraints, the article concludes that a procedurally fortified, confidentiality-capable mediation hub is a realistic and normatively defensible pathway to strengthen access to justice in nuclear governance without requiring wholesale redesign of substantive treaty obligations.

The current geopolitical context also calls for caution regarding institutional optimism. The proposed hub cannot substitute for criminal accountability, sanctions, or coercive

53 UNCITRAL, *Model Law on International Commercial Mediation* (n 13) art 7; Singapore Convention on Mediation (n 13) art 5(1).

enforcement, and it is least likely to function where one party seeks outright domination rather than risk management. Its realistic role is narrower but still valuable: facilitating technical access, safety arrangements, monitoring commitments, compensation frameworks, humanitarian risk reduction, and information-sharing in disputes where parties retain an operational need to cooperate despite deeper political conflict.

The principal conclusion is that a 'court-adjacent' mediation hub, equipped with robust procedural safeguards and carefully defined transparency exceptions, can complement existing nuclear regimes by lowering escalation risks, improving legitimacy, and widening practical access to remedies without requiring wholesale redesign of substantive treaty obligations.

REFERENCES

1. Cappelletti M and Garth B, 'Access to Justice: The Newest Wave in the Worldwide Movement to Make Rights Effective' (1978) 27 *Buffalo Law Review* 181
2. Duvic-Paoli LA and Lueger P, 'A Democratic Nuclear Energy Transition? Public Participation in Nuclear Activities' (2022) 31(1) RECIEL 199, doi:10.1111/reel.12433
3. Faure MG and Kindji K, *Cross-Border Nuclear Safety, Liability and Cooperation in the European Union: Study for the PETI committee* (European Parliament 2019)
4. Fisher MN and Mayhew NC, 'Safeguards Non-Compliance and the Utility of Arbitration under Safeguards Agreements: A Review of Arbitral Mechanisms and Reflections for Today' (*Vienna Center for Disarmament and Non-Proliferation*, May 2023)
5. Foote DH, '*Japan's ADR System for Resolving Nuclear Power-Related Damage Disputes*' (2017) 12 The University of Tokyo Law Review 102
6. Gorove S, 'Sanctions and the Settlement of Disputes: Focus on the IAEA' (1970) 16(2) The Catholic Lawyer 163
7. Handrlica J, 'A New Transnational Regime for Nuclear Liability and Compensation in Europe' (2022) 13 Czech Yearbook of Public and Private International Law 225
8. Menkel-Meadow C, 'When Litigation Is Not the Only Way: Consensus Building and Mediation as Public Interest Lawyering' (2002) 10 Washington University Journal of Law & Policy 37
9. Nick KS and Burns SG (eds), *Principles and Practice of International Nuclear Law* (OECD Publishing 2022) doi:10.1787/58b25dca-en
10. Noone MA and Ojelabi LA, 'Ensuring Access to Justice in Mediation within the Civil Justice System' (2014) 40(2) Monash University Law Review 528
11. Rockwood L, *Legal Framework for IAEA Safeguards* (IAEA 2013)

12. Schnabel T, 'The Singapore Convention on Mediation: A Framework for the Cross-Border Recognition and Enforcement of Mediated Settlements' (2019) 19(1) Pepperdine Dispute Resolution Law Journal 1

13. Silvestri E, 'The Singapore Convention on Mediated Settlement Agreements: A New String to the Bow of International Mediation?' (2019) 2(3) *Access to Justice in Eastern Europe* 5, doi:10.33327/ajee-18-2.4-a000016

14. Stoiber C and others, *Handbook on Nuclear Law: Implementing Legislation* (IAEA 2010)

15. Swartz N, 'The Impact of the Convention on Supplementary Compensation for Nuclear Damage' (2016) 12(2) University of Pennsylvania Asian Law Review 312

16. Welsh NA, 'Disputants' Decision Control in Court-Connected Mediation: A Hollow Promise without Procedural Justice' (2002) 1 Journal of Dispute Resolution 179

AUTHORS INFORMATION

Sholpan Saimova
PhD, School of law, Astana International University Center for public law and public administration, RSE on REM, Institute of Parliamentarism of the Department of Material and Technical Support, Republic of Kazakhstan
saimova@umto.kz
https://orcid.org/0000-0002-9000-6136
Co-author, data curation, conceptualization, visualization, project administration, writing, review, and editing.

Alibek Bolat*
Master of Laws, Faculty of Law and Economics, Zhetysu University named after Ilyas Zhansugurov, Republic of Kazakhstan
a.bolat.edu@gmail.com
https://orcid.org/0000-0002-7098-1305
Corresponding author, conceptualization, writing – original draft, data curation, software, supervision, and writing, reviewing and editing.

Alimzhan Irzhanov
Candidate of law, Center for public law and public administration, RSE on REM, Institute of Parliamentarism of the Department of Material and Technical Support, Republic of Kazakhstan
irzhanov@umto.kz
https://orcid.org/0009-0003-2311-8191
Co-author, resources, formal analysis, investigation, methodology.

Bakhtygul Chingayeva
Candidate of Law, Faculty of Law and Economics, Zhetysu University named after Ilyas Zhansugurov, Republic of Kazakhstan
b.chingaeva@zu.edu.kz
https://orcid.org/0009-0003-6379-8224
Co-author, data curation, investigation, formal analysis, and validation.

Competing interests: No competing interests were disclosed.

Disclaimer: The authors declare that their opinions and views expressed in this manuscript are free of any impact from any organizations.

RIGHTS AND PERMISSIONS

EDITORS

ABOUT THIS ARTICLE

Cite this article
Saimova S, Bolat A, Irzhanov A, and Chingayeva B, 'Designing an International Mediation Hub for Nuclear-Related Disputes: Procedural Guarantees and Access to Justice' (2026) 9(2) Access to Justice in Eastern Europe 435-60 <https://doi.org/10.33327/AJEE-18-9.2-a0001967>

DOI: https://doi.org/10.33327/AJEE-18-9.2-a0001967

Summary: 1. Introduction. – 2. Methodology. – 3. State of Play: Existing Procedures and Their Limitations. – 4. Scope, Jurisdiction, and Procedure of the Proposed Hub. – 5. Design Outputs. –6. Discussion and Implications. – 7. Conclusion.

***Keywords*:** *Nuclear governance; dispute settlement mechanisms; procedural legitimacy; confidentiality management; safeguards-related compliance; transboundary nuclear risk.*

FUNDING

This article was prepared as part of the scientific project by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan, grant number AP 26100031

DETAILS FOR PUBLICATION

Date of submission: 9 Jan 2026
Date of acceptance: 30 Mar 2026
Publication: 20 May 2026
Was the manuscript fast-tracked? - No
Number of reviewer reports submitted in first round: 3 reports
Number of revision rounds: 1 round with minor revisions

Technical tools were used in the editorial process

Plagiarism checks - Turnitin from iThenticate
https://www.turnitin.com/products/ithenticate/
Scholastica for Peer Review
https://scholasticahq.com/law-reviews

AI DISCLOSURE STATEMENT

During the preparation of this article, the author(s) used ChatGPT (GPT-5.4 Thinking, OpenAI; March 2026 release) for limited research support and editorial tasks, including search-string formulation, concordance checking, and language polishing. No AI system was used to autonomously select authorities, generate unverified citations, or determine the legal analysis or conclusions. All sources, case references, and doctrinal propositions were reviewed and verified by the author(s), who take full responsibility for the manuscript.

АНОТАЦІЯ УКРАЇНСЬКОЮ МОВОЮ

Дослідницька стаття

РОЗРОБКА МІЖНАРОДНОГО ЦЕНТРУ МЕДІАЦІЇ ДЛЯ ВИРІШЕННЯ СПОРІВ, ПОВ'ЯЗАНИХ З ЯДЕРНОЮ ЕНЕРГЕТИКОЮ: ПРОЦЕСУАЛЬНІ ГАРАНТІЇ ТА ДОСТУП ДО ПРАВОСУДДЯ

Шолпан Саїмова, Алібек Болат*, Алімжан Іржанов та Бахтигуль Чингаєва

АНОТАЦІЯ

Вступ. *Спори, пов'язані з ядерною енергетикою, що охоплюють дотримання гарантій, інциденти з безпеки та охорони, відповідальність за нанесення ядерної шкоди та транскордонне екологічне забруднення, свідчать про постійний дефіцит механізмів вирішення міжнародних спорів. Особи, які зазнають ядерних ризиків, часто не мають повноцінного доступу до засобів правового захисту, тоді як держави та оператори часто уникають судових процесів через чутливість питань суверенітету, фрагментовану юрисдикцію та необхідність захисту засекреченої або комерційно конфіденційної інформації. Наявні форуми та адміністративні процеси забезпечують лише часткове охоплення та рідко поєднують конфіденційність з мінімальними процесуальними гарантіями. Тому в цій статті ставиться питання про те, як можна створити міжнародний центр медіації для вирішення спорів, пов'язаних з ядерною енергетикою, щоб забезпечити надійний доступ до правосуддя, одночасно захищаючи інформацію, що стосується безпеки, та підтримуючи довіру між державами, операторами та постраждалими громадами.*

Методи. *У дослідженні використовується доктринальний та порівняльно-правовий аналіз. У ньому розглядаються договірні режими та загальні принципи, що стосуються управління ядерною енергетикою та розгляду спорів, зокрема стандарти належної правової процедури та участі, питання процесуальної правосуб'єктності та прийнятності, прозорості та конфіденційності, відповідальності держав, а також механізми визнання результатів медіації. Потім порівнюються процесуальні моделі усталених міжнародних систем медіації та арбітражу, щоб визначити конструктивні особливості, які можна адаптувати до чутливих питань у ядерній сфері. Серед проаналізованих джерел є договори, інституційні правила, судова практика, практика держав та рецензовані наукові дослідження.*

Результати та висновки. *У статті пропонується план створення спеціалізованого міжнародного центру медіації для вирішення спорів, пов'язаних з ядерною сферою: механізм, що базується на згоді та не виноситься на розгляд суду, який би адмініструвався незалежним міжнародним секретаріатом та підтримувався багатопрофільним списком медіаторів та перевірених технічних експертів. Замість того, щоб розширювати національне судочинство на міжнародному рівні, цей центр задуманий як додатковий*

міжнародний інструмент, здатний розглядати спори щодо координації гарантій, безпеки та захисту, змішані публічно-приватні експлуатаційні спори та спори, що стосуються участі різних сторін, згідно з диференційованими правилами допустимості. Оригінальний внесок статті полягає у чотирьох результатах розробки: типології спорів, пов'язаній з критеріями придатності для медіації; трирівневій моделі прийому; багаторівневому протоколі конфіденційності або врахування суспільних інтересів; та диференційованій моделі забезпечення виконання домовленостей. У випадках, коли угоди мають міжнародний та комерційний характер, пропонується структуроване використання Сінгапурської конвенції; коли ж спори мають державний або публічно-правовий характер, виконання забезпечується за допомогою зареєстрованих домовленостей, механізмів моніторингу та узгоджених методів переходу до інших процедур.

Ключові слова. *Управління ядерною енергетикою; механізми вирішення спорів; процесуальна легітимність; управління конфіденційністю; дотримання вимог щодо гарантій; транскордонний ядерний ризик.*