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Artificial Intelligence in Cross-Border Dispute Resolution

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In recent years, various international institutions and nation-states have increasingly acknowledged both the transformative potential and the inherent risks of artificial intelligence (AI). The United Nations General Assembly's landmark 2024 resolution on AI highlights its relevance in achieving sustainable development goals and ensuring equitable global progress.[1] *At the same time, legal scholars and practitioners have begun to explore the integration of AI in alternative dispute resolution (ADR) mechanisms, particularly in mediation and arbitration processes. The efficiency, impartiality, and data-driven analysis offered by AI make it a valuable tool for addressing complex disputes with cross-border implications. This article revisits the India-Pakistan conflict of 2025, examining how AI-enhanced ADR mechanisms could have been employed to foster dialogue, reduce tensions, and work toward a peaceful resolution. By integrating advanced algorithms, predictive analytics, and natural language processing, AI can complement traditional diplomacy and international law in de-escalating conflicts, fostering trust, and promoting long-term stability in geopolitically sensitive regions.*

Keywords: *artificial intelligence, alternative dispute resolution, sustainable development.*

[1] 'General Assembly Adopts Landmark Resolution on Steering Artificial Intelligence towards Global Good, Faster Realization of Sustainable Development' (*United Nations*, 21 March 2024) <https://press.un.org/en/2024/ga12588.doc.htm> accessed 25 May 2025

INTRODUCTION

The conflict ignited on April 22, 2025, when a terrorist attack in Pahalgam, Jammu and Kashmir, resulted in 26 Indian civilian casualties. India attributed the attack to Pakistan-based militant groups, leading to the suspension of the Indus Waters Treaty and the launch of Operation Sindoor on May 7, targeting terrorist infrastructure in Pakistan. Pakistan retaliated with mortar shelling and drone strikes, marking the first drone warfare between the two nuclear-armed nations. This conflict shows the urgent need for innovative dispute resolution mechanisms and frameworks in international conflict management. In particular, it invites consideration of how Artificial Intelligence (AI)-enhanced Alternative Dispute Resolution (ADR) methods might offer scalable, neutral, and efficient platforms for de-escalating cross-border tensions. In March 2024, the UNGA unanimously adopted its first-ever AI resolution, "Seizing the opportunities of safe, secure and trustworthy AI systems for sustainable development," which calls for bridging digital divides and harnessing AI for the public good. The resolution, A/78/L.49 (2024), explicitly links AI to sustainable development and conflict prevention (endorsing early warning systems, for example). India participated actively in this process, along with over 120 states, crafting a consensus text.[2] This conflict shows that the previous conventional diplomacy and bilateral talks failed to preclude escalation. In short, could predictive analytics, AI-driven mediation platforms, or automated negotiation have dampened the conflict?

AI-ENHANCED ADR: A MODERN SOLUTION

AI has the potential to revolutionise ADR by offering scalable, efficient, and neutral platforms for dispute resolution. AI-driven systems can analyse vast amounts of data, predict outcomes, and facilitate negotiations, making them particularly suitable for cross-border disputes where human biases and diplomatic complexities often hinder resolution.

KEY COMPONENTS OF AI-DRIVEN ADR

Predictive Analytics: By mining historical data on similar disputes (contracts, case law, treaty outcomes), AI can predict likely settlement ranges and identify where parties have the most common ground. For example, in international arbitration, AI-driven legal research platforms like Jus Mundi (an "AI-powered global arbitration intelligence" service) now employ algorithms

[2] *Ibid*

to help lawyers find analogous awards and statutes rapidly. This enhances party autonomy and decision-making by making relevant precedents transparent.[3] Similarly, WTO analysts observe that AI and blockchain could "automate more complex trade processes (such as anti-dumping measures)" and resolve disputes more efficiently.[4]

Automated Mediation and Virtual Neutrals: In some low-stakes cases, AI can act as an impartial mediator. Using NLP and game-theoretic algorithms, it can propose compromises. For example, researchers designed AI chatbots that guide disputants through structured negotiation: identifying contention points from submitted positions, suggesting trade-offs aligned with legal frameworks, and dynamically adjusting proposals. One study describes an AI mediator that "could identify points of contention in real time and suggest solutions aligning with the parties' interests and legal frameworks," all while freeing human mediators to focus on complex issues. Pilot projects (often called Online Dispute Resolution, or ODR, platforms) already exist for e-commerce and small claims, where AI handles intake and preliminary offers.[5]

Blockchain Integration and Transparency: While not AI per se, distributed ledger (blockchain) technology is often paired with AI in dispute contexts to ensure enforceability. Smart contracts and tamper-proof records can log the progress of an ADR process (filing dates, agreements reached, etc.). This can increase trust: parties know the process is recorded and immutable. For example, scholars note that integrating blockchain can "ensure transparency and security in the ADR process" and make enforcement of international agreements more reliable.[6] These components illustrate how AI could augment human dispute resolution across borders. Critically, human oversight remains essential: each AI suggestion or prediction would be reviewed by human diplomats, lawyers or judges. The goal is to combine AI's computational power with human judgment and legitimacy. For example, AI can flag escalation risks (prompting diplomatic back-channel talks) or offer drafts of compromise clauses, but any final agreement must be signed by state actors. The efficiency gains, however, could be dramatic:

[3] 'Jus Mundi and ICSID Announce Collaboration for Investment Arbitration Library' (*Daily Jus*, 05 April 2024) <https://dailyjus.com/news/2024/03/jus-mundi-and-icsid-announce-collaboration-for-investment-arbitration-library> accessed 25 May 2025

[4] Mohammad Abualethem Nsour, 'The WTO and Using Digital Economy Technologies: Surviving the Race With Preferential Trade Agreements' (2023) 57(5) Journal of World Trade <https://doi.org/10.54648/trad2023031> accessed 25 May 2025

[5] *Ibid*

[6] *Ibid*

studies find that routine tasks like document review and scheduling can be cut from months to days, and settlement rates can improve with clear data-driven guidance.

THE ROLE OF AI IN RESOLVING THE INDIA–PAKISTAN CONFLICT

In the context of the 2025 conflict, AI-enhanced ADR could have played a crucial role in de-escalating tensions and facilitating dialogue between India and Pakistan.

Predictive Modelling for Early Intervention: AI systems could have analysed patterns from previous conflicts and current events to predict the likelihood of escalation. Such forecasts could have prompted early diplomatic interventions, potentially effective measures and the subsequent military actions.

Facilitating Communication Through NLP: Given the cultural diversity between India and Pakistan, AI-powered translation tools could have bridged communication gaps, ensuring that both parties fully understood each other's positions and concerns, thereby reducing the chances of misinterpretation.

Automated Mediation for Neutral Negotiation: AI-driven mediation platforms could have provided a neutral ground for both nations to discuss contentious issues, such as the Indus Waters Treaty and cross-border terrorism, proposing balanced solutions based on historical precedents and international law.

In sum, real-world trends show increasing AI use in international security and law. India is an active participant: IBM's 2023 AI Adoption Index found that about 59% of Indian enterprises deploy AI technologies (second only to China)[7]. The Government of India has launched initiatives (e.g. NITI Aayog's National AI Strategy and IndiaAI portal) to support AI in governance and justice. In multilateral fora, Indian delegates call for technology-led peacekeeping.[8] Internationally, bodies like UNCITRAL and the WTO are openly studying ODR and AI, and the UN Security Council and General Assembly have passed resolutions endorsing

[7] Yatharth Garg, 'AI and Alternative Dispute Resolution (ADR): Automating Arbitration and Mediation' (*INDIAai*, 02 December 2024) <https://indiaai.gov.in/article/ai-and-alternative-dispute-resolution-adr-automating-arbitration-and-mediation> accessed 25 May 2025

[8] 'Harness Digital Technology to Protect Peacekeepers, Civilians, Security Council Urges, Adopting Presidential Statement' (*United Nations*, 18 August 2021) <https://press.un.org/en/2021/sc14607.doc.htm> accessed 25 May 2025

tech use (e.g. Res. 2589 (2021) on digital peacekeeping infrastructure). These developments provide a foundation for integrating AI into cross-border ADR, subject to safeguards discussed below.

CHALLENGES AND CONCERNS

Despite its promise, AI-enhanced dispute resolution raises significant issues of fairness, legality, and sovereignty:

State Sovereignty and Trust: No nation will accept AI tools that implicitly bind it to decisions without human approval. In a bilateral dispute, if an AI mediator is perceived as imposed by an external power or corporation, the weaker party may rebuff its legitimacy. Thus, AI-ADR must be state-approved, with transparent governance. Internationally, this may require new treaty provisions. For example, parties might amend the New York Convention or UNCITRAL Model Law to explicitly recognise electronically mediated agreements or AI-assisted awards. Without such legal recognition, any AI-suggested settlement would lack enforceability.

Data Privacy: Cross-border ADR involves sharing sensitive information. If AI systems (often cloud-based) handle secret treaty terms or personal data, there is a risk of leaks. There is also the threat of cyberattack: an adversary might try to corrupt the AI model or its data feed to skew outcomes. Any AI-ADR platform would need robust encryption and cybersecurity. Nations will want assurances that their classified negotiation positions cannot be siphoned off by the AI provider or third parties. This concern is particularly acute given recent revelations about tech supply chains. For example, some states now restrict foreign hardware or mandate local hosting for sensitive data. In practice, a state-to-state AI-ADR system might have to operate on a secure government network or under UN supervision to mitigate espionage fears.

Bias in AI Algorithms: AI models learn from historical data; if that data reflects prejudices, the AI can replicate them. A UN peacekeeping analysis warned that "algorithmic bias" is a central risk: non-representative training data might cause AI to misinterpret a party's signals or overlook local nuances, potentially "exacerbating tensions".[9] For example, an AI trained on geopolitical data could incorrectly label Kashmiri protest patterns as "militant threats" if its

[9] Munkh-Orgil Tuvdendarjaa, 'Artificial Intelligence in Contemporary Peacekeeping Operations' (*DKI APCSS*, 08 May 2025) <https://dkiapcss.edu/nexus_articles/artificial-intelligence-in-contemporary-peacekeeping-operations/> accessed 25 May 2025

dataset was skewed. Ensuring fairness requires curating diverse conflict data and ongoing audits. Transparency is also a concern: opaque "black-box" AI could undermine the parties' trust. Many commentators stress that AI decisions should be explainable or subject to appeal. In India, for instance, debates around the Supreme Court's SUPACE AI assistant have emphasised that technology must assist judges, not replace human judgment (even if that example was domestic)[10]. Internationally, clear rules must govern which AI outputs are advisory and which are binding.

Legal Recognition: Currently, no international law explicitly governs AI-mediated mediation or binding resolution. Dispute resolution under treaties or conventions generally requires human arbitrators or negotiators. For an AI suggestion to have force, it would typically be formalised by a treaty modification or a contract clause (e.g. parties agree in advance to be bound by an AI's outcome). Without such provisions, an AI serves only as an aide. For instance, UNCITRAL's Technical Notes on ODR (2016) stress that ODR platforms supplement, not supplant, judicial processes.[11] Practically, parties would likely treat AI input as one factor among many. Over time, jurists might adapt. The ODR experiment of e-commerce (e.g. Alibaba's resolution service) shows that, even with AI, ultimate authority often remains with courts or human panels. As law journals note, a "humans-in-the-loop" approach is essential: AI can make proposals, but only a duly empowered human or tribunal can ratify a final agreement. International law may evolve (as it did in 1996 with the UNCITRAL Model Law on International Commercial Conciliation) to acknowledge automated tools. Until then, the enforceability of AI-assisted settlements will depend on existing dispute resolution mechanisms (courts or arbitrations) to formally validate them.

COMPARATIVE ANALYSIS: INDIA AND PAKISTAN'S APPROACH TO AI IN ADR

Aspect	India	Pakistan
AI Adoption	Emerging in sectors like agriculture and healthcare	Limited, with a focus on traditional methods

[10] Garg (n 7)
[11] 'Online Dispute Resolution' (*United Nations Commission On International Trade Law*) <https://uncitral.un.org/en/texts/onlinedispute> accessed 25 May 2025

Legal Framework	Progressive, with initiatives like the National AI Strategy	Developing, with emphasis on regulatory compliance
Public Perception	Growing acceptance of AI technologies	Cautious approach due to trust issues
Cross-Border Initiatives	Active participation in regional AI collaborations	Limited engagement in regional AI dialogues

RECOMMENDATIONS FOR IMPLEMENTING AI IN CROSS-BORDER DISPUTES

Based on the above analysis, the following measures could help reconcile efficiency and sovereignty in AI-based cross-border dispute resolution:

Develop Common Standards and Governance: States and international organisations should co-develop ethical and technical standards for AI in diplomacy, building on frameworks like the 2021 UNESCO Recommendation on the Ethics of AI. The recent UNGA resolution encourages multilateral cooperation on "trustworthy AI".[12] Policymakers could establish an intergovernmental body (or empower UNCITRAL) to craft model rules for AI in mediation and arbitration. Such rules would address consent (parties must agree to use AI), accountability (human ultimate control), data sharing protocols, and appeal procedures. For example, an amendment to the 1976 UNCITRAL Model Law on International Commercial Arbitration could clarify that digital algorithms may assist arbitrators, provided hearings and awards comply with existing due process requirements.

Invest in Digital Infrastructure: Successful AI-ADR relies on data and connectivity. National governments should ensure robust digital infrastructure in contested regions. In the India-Pak scenario, for instance, real-time hydrological data sensors and high-resolution satellite coverage (like the international SWOT mission)[13] could be jointly funded under a treaty to inform AI models. Countries might establish shared data lakes for neutral AI analysis (operated by a binational commission), preventing any single state from monopolising

[12] *Ibid*
[13] Amir Husain, 'How Pakistan Can Use AI to Defeat India's Weaponization of Water' (*Medium*, 07 June 2025) <https://medium.com/@amirhusain_tx/how-pakistan-can-use-ai-to-defeat-indias-weaponization-of-water-e206061532e5> accessed 25 May 2025

information. The Roadmap for Digital Cooperation encourages helping developing countries build capacity; similarly, AI-ADR will need capacity-building grants or loans to train mediators and IT staff.

Pilot AI-Assisted ODR Platforms: Drawing on UNCITRAL's ODR initiatives, states could create joint online negotiation portals for low-stakes transnational disputes (e.g. consular issues, minor trade claims)[14]. These platforms would incorporate AI tools (case triage, instant translation, suggested settlement terms), but they must be voluntary. If successful, they can build user trust and normalise AI usage. India's judicial system could pilot AI mediation in selected International Centre for Alternative Dispute Resolution (ICADR) cases with a foreign party, monitoring outcomes. The global arbitration community (such as the International Institute for Conflict Prevention & Resolution) should include AI in their next Model ADR Clauses.

Ensure Human Oversight and Explainability: Every AI system used in ADR should log its reasoning in a transparent form. If an AI proposes a settlement, it should accompany it with the data and logic behind that suggestion. This enables parties or a human judge to review and contest the AI's output. One approach is to use explainable AI (XAI) techniques in the mediation platform, as recommended in legal AI literature. Governments should mandate that AI-ADR tools be "certified" for fairness by independent auditors, much like medical devices. Legal and Treaty Reform: Existing treaties (like IWT, CEPA/FTA treaties, UNCLOS dispute clauses) could be reviewed to explicitly allow virtual or AI-assisted procedures. A new multilateral convention on "AI and Automated Treaty Implementation" could be envisaged, spelling out how treaty bodies use AI for monitoring compliance and resolving claims. During negotiations, states could insist on including an "AI clause" that permits shared use of AI for fact-finding (as is done in some UNCLOS provisions that allow neutral scientific collaboration).

International Collaboration on AI Research: Finally, states should collaborate on the research itself. The Jus Mundi–ICSID partnership shows how pooling legal data can benefit all parties. Similarly, an international consortium could fund AI tools for specific domains (water, cybersecurity, etc.). Open-access platforms for dispute data (redacting sensitive details) would allow academics to develop better AI models. Funding through organisations like the UN

[14] Online Dispute Resolution (n 11)

Technology Innovation Labs or multilateral development banks could reduce asymmetry between developed and developing countries. These steps would help balance efficiency with sovereignty. They echo many proposals in the literature: for example, the Journal of World Trade stresses that without infrastructure investment and regulatory calibration, AI cannot be integrated into the dispute system.[15] By addressing these key concerns now, international law can avoid a scenario where powerful states unilaterally deploy inscrutable AI tools to their advantage, undermining weaker states' confidence.

CONCLUSION

AI-enhanced ADR is no longer purely science fiction. Real-world developments from UN peacekeeping experiments to legal-tech ventures demonstrate that AI can aid conflict resolution, but only under human control and agreed-upon rules. The 2025 India–Pakistan conflict underscored the limitations of traditional dispute resolution mechanisms in addressing complex cross-border issues. AI-enhanced ADR presents a promising alternative, offering efficiency, neutrality, and scalability. However, for AI to play a significant role in future conflicts, challenges related to sovereignty, data privacy, and legal recognition must be addressed. If carefully implemented, AI could become a force multiplier for peace, enabling swifter, fairer resolution of disputes without trammelling states' sovereignty.

[15] Jus Mundi and ICSID Announce Collaboration for Investment Arbitration Library (n 3)