

Maud Piers, Of Counsel at Gantenberg Dispute Experts, delivered a keynote at the invitation of the Nagoya University Graduate School of Law during the **UNCITRAL AP Days 2025** on **17 December 2025**, entitled *“Mind the Gap: Overlooked Challenges in AI and Arbitration.”* Drawing on her earlier work and publications on artificial intelligence in dispute resolution, the keynote examined the current state of AI in international arbitration while deliberately focusing on risks that remain underexplored, with particular attention to deepfakes.

The keynote opened with a central and pressing question: where does international arbitration truly stand today in its engagement with AI, and which risks continue to escape sufficient scrutiny? Over the past years, AI has moved decisively from theoretical discussion into everyday practice. Survey data shows a marked increase in AI use across the arbitration community, particularly for high-efficiency, low-risk tasks such as legal research, document review, and data analytics. Generative AI has accelerated this evolution even further by dramatically lowering entry barriers.

The shift caused by AI, however, is not merely technological. It has fundamentally reshaped who uses AI and how it is embedded in arbitral practice. AI is no longer confined to counsel-side efficiency tools; arbitrators and arbitral institutions are increasingly exploring its supportive use, raising new questions about disclosure, delegation of decision-making, confidentiality, and responsibility. At the same time, the rise of so-called “shadow AI”—the informal and undisclosed use of generative tools outside official workflows—reveals a growing gap between perceived performance benefits and institutional trust.

While familiar concerns such as algorithmic bias, opacity, and hallucinations remain relevant, the keynote deliberately moved beyond these well-rehearsed debates to focus on newer and more disruptive risks. These include cognitive inertia, over-standardization of legal reasoning, the erosion of human judgment, and—most critically—the emergence of deepfakes as a challenge to evidentiary integrity.

Deepfakes pose a qualitatively different threat to arbitration. Unlike traditional forms of evidentiary fraud, they are easy to produce, highly realistic, psychologically persuasive, and exceptionally difficult to detect. Audio and video deepfakes exploit human truth-bias and can distort fact-finding long before their authenticity is questioned. Even more concerning is the rise of the “deepfake defense,” whereby mere allegations of manipulation are strategically deployed to sow doubt and increase the cost of proving authenticity—the so-called liar’s dividend.

Existing arbitral rules and procedural mechanisms—including obligations of procedural loyalty, due process safeguards, and sanctioning powers—provide an important foundation, yet leave critical questions unresolved. When does suspicion trigger a duty to verify authenticity? Who bears the burden of proof, and under which standard? And

how can tribunals avoid disadvantaging good-faith parties with limited technical or financial resources?

Rather than advocating stricter admissibility rules, the keynote argued for a pragmatic recalibration. A dynamic burden-shifting model was proposed, built on a presumption of authenticity for submitted evidence, a prima facie threshold for challenges, and a shift in the burden of proof only where substantiated doubt is demonstrated—combined with cost consequences to deter abusive or strategic objections. This approach seeks to preserve flexibility, proportionality, and procedural fairness while addressing the new asymmetries introduced by deepfakes.

The keynote concluded by returning to a broader reflection on the role of AI in arbitration. AI is both a facilitator and a disruptor: it can enhance efficiency and accessibility, but it also challenges foundational assumptions about evidence, trust, and truth-finding. The task ahead is neither to resist AI nor to embrace it uncritically, but to integrate it responsibly—remaining open to innovation while safeguarding the core values that underpin the legitimacy of international arbitration.