

# Artificial Intelligence and the practice of investor-state arbitration

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In this blog post, I explain various ways in which artificial intelligence (AI) can be used in investor-state arbitration and the challenges it poses for practitioners and policymakers. I also give examples of specific AI tools, increasingly used by ISDS practitioners and policy-makers and highlight several data-driven studies conducted at the British Institute of International and Comparative Law.

## Artificial intelligence and its potential in international arbitration

According to the Cambridge Dictionary of English, intelligence means the ability to learn, understand, and make judgments or have opinions that are based on reason. Traditionally, intelligence is associated with people, but artificial intelligence involves computers and using data. So, artificial intelligence is the ability of computers to learn, understand, and make judgments or have opinions that are based on data. In addition, artificial intelligence is expected to present its outputs to humans.

Instead of asking people to analyse information, large amounts of data is given to computers, letting the data "speak for itself" as the software learns from this data and informs us humans. AI reasoning is able to adapt to new data and determine logical patterns.

AI is already pervasive in our daily lives, even when we do not fully understand it. For example, it helps to filter our spam emails. Social media applications such as Facebook, Instagram and YouTube display content and advertisements based on the data, they collect about us. Navigation apps help us to avoid traffic jams. Automated bots and helpers not only can annoy us but also give helpful and relevant information.

In international arbitration, as in law more generally, the use of AI is becoming more pervasive. The British Institute of International and Comparative Law has recently conducted a study on the [use of artificial intelligence by the legal profession](#).

**Natural Language Processing** tools such as [ChatGPT](#) can be successfully used for answering legal questions and as a search engine. Document automation tools such as [Genie AI](#) can help lawyers automate document review and generate legal documents. AI is also used by practitioners for predictive legal analysis, reviewing and summarising documents, supporting case management, legal advice and marketing.

In the area of international arbitration, AI can help discovery by analysing large quantities of documents, including technical documentation. AI also allows us to generate standard legal documents or suggest how to improve existing documents to minimise risks or improve their consistency. AI-powered tools can also help sort documents, coordinate calendar appointments, timekeeping and billing clients.

## Examples of how ISDS practitioners can use artificial intelligence

All the tools mentioned above can be deployed by ISDS practitioners. It must be noted that the use of AI in ISDS is nowhere near what we can observe in domestic law. For instance, the [Lex Machina](#) tool developed by LexisNexis allows to predict the results of domestic litigation based on analysing vast amounts of data from previous cases, including how a specific judge has behaved in similar cases and how this judge compares to other judges. However, slowly the use of artificial intelligence also penetrates ISDS.

Specialised databases such as International Arbitration Reporter include instruments such as the [Topic Tool](#), which indexes thousands of reports on ISDS decisions, awards and orders. Another service, [ISLG](#), allows its users to examine a particular decision has been considered by subsequent tribunals, isolate relevant passages and toggle between related decisions and awards

to cross-reference findings. It also allows its users to learn about how specific legal instruments have been interpreted or applied by tribunals, and most commonly cited provisions, and jump directly to relevant paragraphs and footnotes.

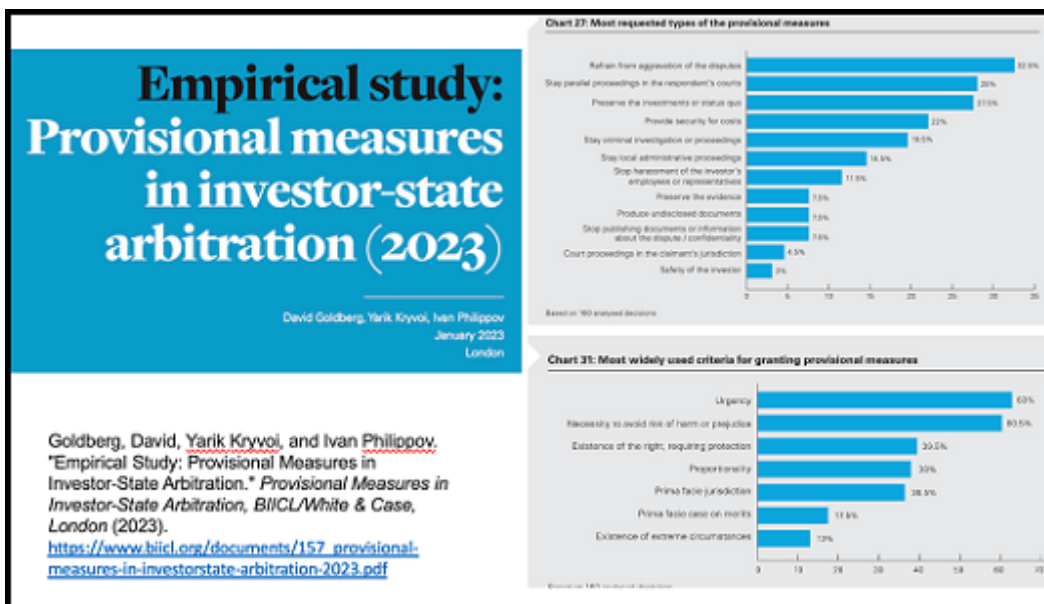
[Jus Mundi](#) offers a multilingual search engine powered by artificial intelligence and machine learning helping to conduct comprehensive legal research. The most relevant paragraphs of a case or a treaty are directly displayed on the result page eliminating the need to review each document in its entirety. It also has a **GPT-powered tool** which allows to identify critical information, evaluate document relevance and summarise long documents.

## Predictive legal analysis in ISDS

In my opinion, the biggest area of opportunity is predictive legal analysis. The analysis of past decisions of tribunals helps us understand how tribunals are likely to behave in the future. Determining the patterns of decision-making requires assembling datasets, which turn information from cases into information for datasets.

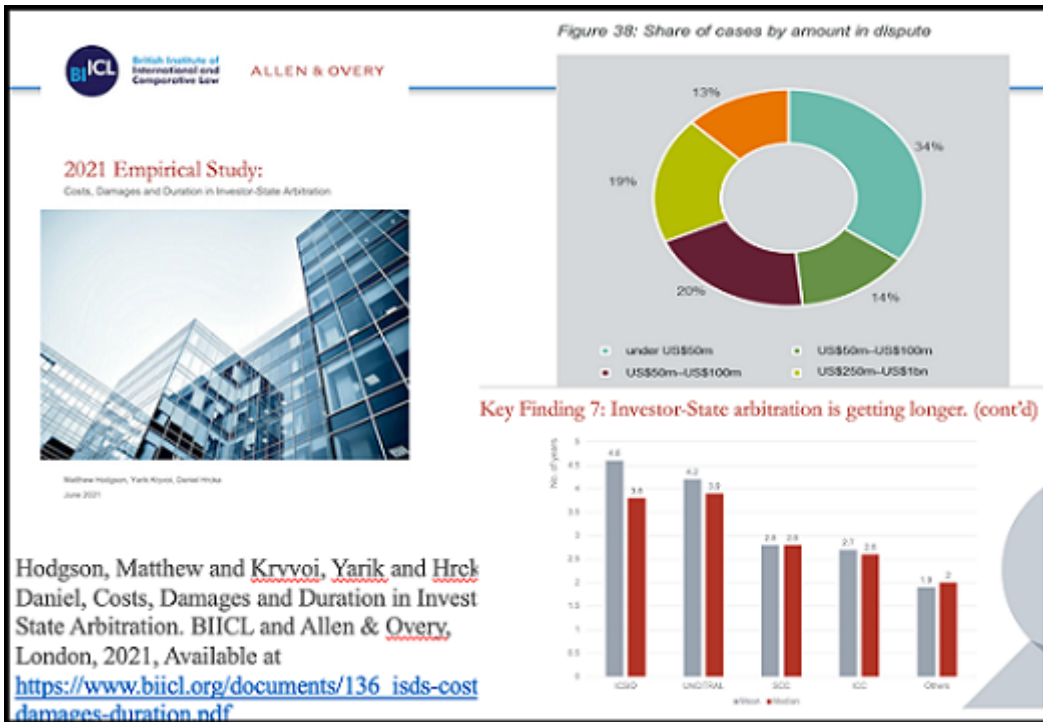
Let me give you a few examples from studies, which we have conducted at the [Investment Treaty Forum](#) of the British Institute of International and Comparative Law. As part of different projects with leading law firms in the field of ISDS, we analysed hundreds of cases to demonstrate patterns of decision-making.

The study on [corporate restructuring and ISDS](#) has analysed empirical data on how tribunals view corporate restructuring, primarily from the point of view of asserting jurisdiction or declining jurisdiction or declaring the restructuring was an abuse of process. It shows how facts such as the form of restructuring and its timing affect the decisions of tribunals.



In another study, we have analysed the decision-making patterns of proceedings related to [ICSID annulment process](#) and various factors, which affect the success or failure of annulment requests. It shows which grounds are more and less likely to succeed when annulment applications are made.

We have also conducted an in-depth analysis of decisions on [provisional measures in investor-state arbitration](#), which allows us to understand and to a significant extent predict how tribunals act on provisional measure applications, including the criteria used to grant such measures, the duration of proceedings and the most frequently requested types of provisional measures.



Finally, one of the most cited studies examines [costs, damages and duration in ISDS](#). Based on analysis of over 400 investor-state cases conducted under ICSID, UNCITRAL and other arbitration rules, over 70 ICSID annulment decisions, it offers a comprehensive account of how long ISDS proceedings last, how much they cost, how tribunals allocate those costs as well as the amounts of damages awarded.

These data-driven studies have already been cited not only by practising lawyers and tribunals but also by those who work on reforming the system of investor-state arbitration, including the UNCITRAL Working Group III: Investor-State Dispute Settlement Reform.

## Challenges related to the use of artificial intelligence

Despite the great potential of using AI in investor-state arbitration, its application has limitations. Machines learn through experience without taking into account considerations such as morals or fairness. AI may **lack human "common sense"**. This is why it may generate information, which is incorrect, out of date or its conclusions may follow the letter of the law but go against the spirit of the law. Moreover, the lack of human interaction could undermine the trust in AI outputs, it is more difficult to build long-lasting relationships based on empathy and understanding of the context.

As one interviewee in the already mentioned [BIICL study](#) on the use of artificial intelligence by the legal profession noted, AI tools should be treated like young associates, who might be a fantastic asset, but who require investment of time, supervision, verification and a little bit of scepticism.

Decisions in ISDS are often based on open-ended principles such as fair and equitable treatment. There is no typical ISDS case - each case has a unique factual and geopolitical context and applicable laws vary. Moreover, there is no court of appeal in ISDS, so tribunals can and actually do render inconsistent decisions.

Many view AI as a **"black box"**, with unknown and difficult-to-verify contents. The algorithms used may also lack transparency helping to understand how they work. Even where there is a degree of transparency for a lawyer who is not a technical expert, it could be a real challenge to understand it, which undermines the legitimacy of AI and trust.

AI can be **biased and** demonstrate inclination or prejudice for or against certain groups, in a way considered to be unfair. Because algorithms do not have moral values or a sense of fairness, they are more likely than humans to perpetuate biases present in training data. For example, if a dataset shows that a particular state is often on the losing side in investor-state disputes (e.g., because of a lack of resources to afford quality legal representation), the algorithm may conclude that this is the "norm" and predict that this state is more likely to lose in the future, undermining the principles of equality and social justice.

AI can lead to **job displacement** - more simple repetitive tasks can be outsourced to AI (reviewing documents, preparing standard documents, etc). That is likely to lead to less work required from junior lawyers, paralegals, translators, legal secretaries and other professionals.

Another concern is that AI can create **deep fakes** - imitating the style of emails, voices and even video. It can be a difficult task to distinguish between deep fakes and real evidence without being equipped with the right technical tools.

Despite these limitations and threats, artificial intelligence increasingly serves as an effective tool for lawyers practising not only domestic but also international law, making some areas such as investor-state disputes easier to grasp and more predictable.

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URL: <https://www.biicl.org/blog/71/artificial-intelligence-and-the-practice-of-investor-state-arbitration>