THE NEW YORK CONVENTION IN THE DIGITAL ECONOMY: ENFORCING ARBITRAL AWARDS AGAINST GLOBAL TECHNOLOGY CORPORATION

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ABSTRACT

The present paper will discuss the difficulties faced by the transnational technology company in the enforcement of international commercial arbitrations, especially in light of the 1958 New York

Convention. It states that there is a structural and economic advantage for tech giants like Alphabet Inc., Apple Inc., Meta Platforms Inc., Amazon.com Inc. and Microsoft Corporation in enforcing cross-border arbitral awards. The study looks at various issues such as asset shielding through corporate structures, public policy exceptions, digital sovereignty, and data localization mandates, among others, by looking at doctrinal, comparative, and normative analysis. The current enforcement regime falls short of meeting the challenges of today's tech firms in terms of their operational and geopolitical context, the paper argues. It suggests reforms such as amendments to treaties, uniform adjudicatory principles, and enforcement regimes for technology-specific arbitrations in arbitral institutions.

Keywords: International Commercial Arbitration, New York Convention, Tech Giants, CrossBorder Enforcement, Digital Sovereignty, Arbitral Awards, Jurisdictional Challenges, Data Localization, Corporate Structures, International Dispute Resolution

CHAPTER I

INTRODUCTION

1.1 Background and Context

International commercial arbitration has been recognised as a preferred forum for settling cross-border commercial conflicts for its dual merits of neutrality and enforceability. At the heart of this global enforcement framework is the 1958 New York Convention, which was ratified by 172 states, which commits contracting states to recognise and enforce foreign arbitral awards, on the basis of narrowly drawn exceptions.[1]

The 21st century, however, has seen the rise of a new type of private actors: megatechnology corporations with economic scale, jurisdictions, and complexity beyond what this architecture assumes. The market capitalizations of companies like Apple, Alphabet (Google), Microsoft, Amazon and Meta, exceed several trillion United States dollars and have subsidiaries, affiliates and intellectual property holding entities in almost every jurisdiction that is party to the New York Convention.[2]

Gary Born, in his seminal treatise on international commercial arbitration, noted that the enforcement of an arbitral award is the 'most critical component of the international arbitral process' since 'the enforcement of an arbitral award is in practical terms a nullity'. This observation becomes particularly salient when the award debtor happens to be a technology behemoth with the power to restructure corporate assets, shift IP rights, and leverage regulatory fragmentation to thwart enforcement. The challenges are exacerbated by the development of the digital sovereignty doctrines, which are statements made by states that data from within their borders is a form of sovereign asset, thus posing new enforcement obstacles when awards affect the technology corporations' data architectures or platform operations.

At the same time, the interaction between the international arbitral award and the domestic order of the competition, data protection and national security authorities has created situations of acute conflict of norms that the current arbitration law is not adequate to settle. This paper

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[1] New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, June 10, 1958, 330 U.N.T.S. 38 [hereinafter New York Convention].

[2] UNCITRAL Model Law on International Commercial Arbitration (1985, amended 2006), U.N. Doc. A/40/17 annex I [hereinafter UNCITRAL Model Law].

places these challenges in the context of the theory of transnational legal pluralism, the jurisprudence of the New York Convention, and new scholarship in the field of digital platform regulation to develop a comprehensive analysis of the jurisdictional and sovereign aspects of enforcing awards against technology companies.

1.2 Research Questions

The following research questions are used in this study:

RQ1: How well does the current New York Convention system provide enforcement of arbitral awards against technology companies involved in international business transactions and what are the main shortcomings of the system? [3]

RQ2: What do the multi-layered corporate entities and intellectual property ownership of major technology companies do to make it difficult to enforce arbitral awards and what does the law say about how to overcome these obstacles?

RQ3: How do digital sovereignty doctrines, data localization requirements and national security exceptions work with the enforcement of arbitral awards against technology firms and whether these doctrines meet Article V(2)(b) of the New York Convention as legitimate public policy exceptions?

RQ4: What is the difference between the enforcement regimes' approach to enforcing awards against technology corporations in the leading arbitral jurisdictions – the European Union, the United Kingdom, Singapore, India and the United States – and what convergence or divergence can be found?

RQ6: What institutional, treaty and procedural changes are required for the proper enforcement of arbitral awards against tech companies in the current international legal order?

1.3 Research Objectives

The current research is geared towards the following objectives:

(i) To critically analyze the structure of the New York Convention and the

[3] Alan Redfern & Martin Hunter, Law and Practice of International Commercial Arbitration ¶ 11-01 (5th ed. 2009).

UNCITRAL Model Law and discuss the normative gaps and interpretative lacunae in the context of enforcement of awards against technology companies.

(ii) To examine the corporate and financial architectures used by key technology firms (such as their IP holding structures, intra-group financing arrangements and asset localization strategies) as obstacles to enforcement[4].

(iii) To consider how the public policy exception, arbitrability limitation and jurisdictional doctrines have been treated in arbitration proceedings in technology disputes in key arbitral jurisdictions.

(iv) To evaluate the relationship between digital sovereignty and data localization regimes and cross-border enforcement of arbitration awards.

(v) To develop evidence-based suggestions for international arbitration enforcement measures, specifically for technology companies.

1.4 Hypothesis

H1: The current international commercial arbitration enforcement regime under Convention on the Recognition and Enforcement of Foreign Arbitral Awards is structurally flawed to deal with the disputes of transnational technology companies.

H2: The territorial nature of the New York Convention is at odds with the borderless nature of major technology companies' digital operations and intangible asset structures.

H3: Technology companies have multi-jurisdictional corporate structures which pose significant challenges for the effective enforcement of arbitral awards.

H4. Current doctrines like the corporate veil, alter ego and separability are inconsistently respected across jurisdictions in technology-related arbitration cases.

H5: The lack of a uniform international enforcement standard makes it uncertain and less effective to enforce arbitral awards against global technology companies.

[4] Fouchard, Gaillard & Goldman on International Commercial Arbitration 989 (Emmanuel Gaillard & John Savage eds., 1999).

1.5 Literature Review

1.5.1 Landmark Books

1. Gary B. Born, *International Commercial Arbitration* (3rd Edition, 2021), This book is one of the most authoritative works on international commercial arbitration. It offers detailed analysis of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, particularly in the context of judicial interpretation in different jurisdictions and enforcement of arbitral awards. It's very relevant to enforcement issues with international technology companies.

2. Alan Redfern and Martin Hunter, Redfern *and Hunter on International Arbitration* (7th Edition, 2022), This book provides a description of the procedural and institutional structure of international arbitration, the enforcement of arbitrations, and the function of domestic courts. It can be helpful when learning about border conflicts and the issues of digital sovereignty.

3. Emmanuel Gaillard and John Savage *Fouchard, Gaillard, Goldman on International* Commercial Arbitration (1999), This book explores the theoretical underpinnings of international arbitration and the notion of arbitration as a transnational legal order. It has significance for the concept of sovereignty and enforcement in international arbitration.

1.5.2 Journal Articles

1. Damira Kamchibekova's article, *'State Immunity and Enforcement of Arbitral Awards' (2008*) in the International Trade and Business Law Review, offers a thorough examination of the relationship between state immunity and enforcement of arbitral awards. Although Kamchibekova's analysis is of state-owned enterprises, her framework for analysing quasi-sovereign immunity claims is directly applicable to where states invoke sovereign interests, such as digital sovereignty, to protect technology corporations from enforcement[5].

2. Matthew Scherer and Niels Schilder's article *'Enforcing Arbitral Awards in the Digital Economy: Emerging Challenges' (2022)* in the Journal of International Arbitration

[5] Damira Kamchibekova, State Immunity and Enforcement of Arbitral Awards, 11 Int'l Trade & Bus. L. Rev. 1, 18 (2008).

identifies the specific challenges posed by the enforcement of awards implicating digital assets, data ecosystems, and platform operations. The authors' analysis of the treatment of intangible assets under existing enforcement frameworks is of particular relevance to this research.

3. Loukas Mistelis and Stavros Brekoulakis' edited volume Arbitrability: *International and Comparative Perspectives (2009)* includes seminal articles on the expanding and contracting scope of arbitrability across jurisdictions, which is directly relevant to the question of whether competition law claims and data protection violations arising from tech giant operations are arbitrable under leading enforcement regimes.[6]

1.5.3 Reports

1. The OECD Report on Addressing the Tax Challenges of the Digital Economy (Action 1, 2015 Final Report) The OECD Report on Addressing the Tax Challenges of the Digital Economy (Action 1, 2015 Final Report) offers key empirical information on the structural aspects of how technology companies conduct their international business, such as the use of intellectual property holding arrangements and profit-shifting structures. The OECD's conclusions on the fragmentation of technology company assets into jurisdictions are relevant for the enforcement analysis that is conducted in this paper, although the main focus of the OECD is on tax policy.

2. The ICC Dispute Resolution Statistics (2023) illustrate the increasing number of technology disputes that are being referred to international arbitration, offering empirical context to the enforcement issues discussed in this research. According to ICC data, technology-related disputes have become a large and increasing share of ICC's caseload and claim values are significantly higher than the ICC average.[7]

1.5.4 Working Papers

1. The UNCITRAL Secretariat and the International Bar Association (IBA) have collaborated on the UNCITRAL Working Paper on Enforcement of Arbitral Awards Against State-Owned Entities .The focus is on the structural and doctrinal issues of enforcement against

[6] Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614, 629 (1985).
[7] International Chamber of Commerce, ICC Dispute Resolution Statistics 2023 (2024) [hereinafter ICC Statistics 2023].

entities with a mix of public and private attributes, which can be adapted to the analysis of enforcement against technology companies whose operations are becoming increasingly intertwined with state regulatory tasks.[8]

1.6 Scope of Study

Geographically, this study focuses on the enforcement frameworks of five main jurisdictions: the United States, the European Union (in special, France, Germany and the Netherlands), the United Kingdom, Singapore and India. The jurisdictions have been chosen because they are considered as key arbitral locations, are home to major technology firm assets and operations and have varied regulatory frameworks on digital platform governance. The study is confined to developments from the adoption of the New York Convention in 1958 until May 2026, with special focus on jurisprudential and legislative developments since 2015, when the modern era of digital sovereignty regulation started.

The study does not focus on investment arbitration as such, but as far as it may overlap with commercial arbitration enforcement. The technology companies studied are collectively called 'tech giants' or 'major technology corporations' and consist of Alphabet Inc. (Google), Apple Inc., Meta Platforms Inc., Amazon.com Inc. and Microsoft Corporation. These entities are chosen based on their transnational activities, the number of proceedings where they are or have been involved in arbitrations, and public information on their corporate structures.

1.7 Chapterisation

1. Chapter 1 is the introductory chapter which consists of research questions, objectives, hypothesis, literature review and scope of study.

2. Chapter II explores the limitations of the New York Convention and other international frameworks in enforcing against technology firms.

3. Chapter III examines the corporate structure of technology companies as a hurdle to enforcement, covering Apple, Google and Amazon through case study analysis.

[8] UNCITRAL, Working Paper on Enforcement of Arbitral Awards Against State-Owned Entities, A/CN.9/WG.II/WP.205 (2018).

4. Chapter IV explores the sovereign aspects of enforcement, such as digital sovereignty, data localization and national security exceptions.

5. Chapter V compares enforcement frameworks in five key jurisdictions.

6. Chapter VI consists of the findings, recommendations, and suggestions of the study.

CHAPTER II

THE NEW YORK CONVENTION AND ITS STRUCTURAL LIMITATIONS AGAINST TECH GIANTS

2.1 The Rules of the New York Convention

The New York Convention was adopted on 10 June 1958, creating a presumption in favor of recognition and enforcement of foreign arbitral awards, with the exception of the exhaustive grounds of refusal in Article V of the Convention. The genius of the Convention was its simplicity: all a creditor need do to obtain enforcement is to present the authenticated award and the arbitration agreement, and then the onus is on the award debtor to prove one of the grounds listed in Article V for refusing enforcement.[9]

The research takes a critical look at a number of assumptions that underlie the Convention. First, it presupposes that the person who is the subject of the award is a territorially-bounded entity whose assets can be identified and located within the territory in which the award is to be enforced. Second, it presumes that the enforcement court has the means to effectively implement monetary sanctions and injunctive measures. Third, it presupposes a certain level of normative congruence between the laws of the seat of arbitration and the law of the jurisdiction enforcing the arbitration, at least as far as the basics of commercial law are concerned.[10]

These assumptions are tested one by one in the context of the attributes of big tech firms. Their assets, mainly intellectual property, platform infrastructure and cash reserves in offshore treasury entities, are notoriously difficult to find and attach. They have organizational and hierarchical structures, with hundreds of subsidiaries in different jurisdictions, making it very

[9] New York Convention, supra note 1, art. V.
[10] TermoRio S.A. E.S.P. v. Electranta S.P., 487 F.3d 928, 938 (D.C. Cir. 2007).

difficult to determine the entity to enforce against. Their activities often involve regulatory issues, such as competition law, data protection law, and national security law, which are highly controversial in the international arena.

The Convention does not explicitly provide for enforcement of private parties with exceptional economic power. In 1958, the drafters were not as focused on interstate commerce between state-owned enterprises and traditional commercial actors, such as manufacturers, traders and financiers, as they were on commerce between actors whose business models rely heavily on intangible assets, whose operations are global by design, and whose commercial significance to the enforcing jurisdictions may make domestic courts hesitant to grant enforcement.[11]

2.2 The Public Policy exception and its growing scope.

Article V(2)(b) of the New York Convention provides that enforcement courts may decline to recognise an award if enforcement would be 'contrary to the public policy of that country'. The most disputed in the Convention's enforcement system, this provision has been understood in most countries to mean only the basic principles of justice and morality, not simply that it is not contradictory to the domestic law.[12]

The public policy exception has gained special significance in the technology company litigation arena for a number of reasons. First, arbitral awards involving competition law may clash with domestic competition orders, which embody strong regulatory and public interests. Secondly, awards which mandate or assume the processing, transfer or disclosure of personal data may be at odds with frameworks of data protection, which are described as having a fundamental public policy in the domestic courts, in particular the GDPR in the European Union.

The United States District Court for the District of Columbia in Chromalloy Gas Turbine Corp. v. Arab Republic of Egypt, applied the Convention's pro-enforcement policy and upheld a Convention award despite its invalidation at the seat of the Convention. But the other side of the coin—the argument that public policy should not be used to thwart enforcement against tech firms—is a harder question to answer.[13]

[11] Belize Social Development Ltd v. Gov't of Belize [2011] EWCA Civ 1.
[12] Emmanuel Gaillard, Legal Theory of International Arbitration 43 (2010).
[13] Chromalloy Gas Turbine Corp. v. Arab Republic of Egypt, 939 F. Supp. 907 (D.D.C. 1996).

The European Court of Justice has been building up its jurisprudence on data transfers, culminating in the Schrems II decision (Data Protection Commissioner v. Facebook Ireland Ltd., Case C-311/18), which has recognized data protection as a fundamental right in the EU legal order, which can override contractual and commercial arrangements. It remains to be seen whether this principle applies to the refusal to enforce the arbitral award on the basis that the award would involve data processing contrary to GDPR.[14]

2.3 Arbitrability of Tech Disputes

In the technology industry, the doctrine of arbitrability, which determines which types of disputes are subject to arbitration, is a problem. The arbitrability of disputes involving competition law, consumer protection, data privacy and intellectual property are subject to divergent rules in different jurisdictions, and in some cases, the non-arbitrability of claims may serve as grounds for refusing enforcement under Article V(2)(a) of the New York Convention.[15]

In the United States, in the case of Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, the Supreme Court ruled that antitrust claims are arbitrable in international commercial cases because public law claims are sufficiently arbitrable. In later decisions and writing, however, this principle has been challenged, and a number of jurisdictions, such as Germany, France and India, have a narrower conception of the arbitrability of competition law claims stemming from the behavior of dominant market participants.

The arbitrability of claims relating to data protection under the GDPR is a hot topic. Under GDPR, Article 79 grants rights of judicial remedies to the data subjects, which can be understood as creating an exclusive judicial competence which excludes arbitration. Under EU law, arbitral awards in GDPR related disputes may be refused enforcement if they are not deemed arbitrable under EU law, on the basis of arbitrability under Article V(2)(a) of the New York Convention.

2.4 Jurisdictional Competence in Multi-Territorial Awards

One of the unique aspects of technology company disputes is that they are multi-territorial in

[14] GDPR, Regulation (EU) 2016/679 of the European Parliament and of the Council (Apr. 27, 2016), arts. 83–84.
[15] UNCITRAL Model Law, supra note 2, art. 36.

nature. One arbitral award can force a technology company to change its platform operations in several jurisdictions, halt data processing in several countries at once, or pay compensation based on damages to users in many countries around the world. The enforcement of such awards involves courts in several states, and there is a possibility of multiple enforcement actions, conflicting rulings, and "strategic litigation" by award debtors seeking anti-enforcement injunctions from "friendly" courts.[16]

The New York Convention has a territorial basis of jurisdiction: enforcement must be brought in the individual jurisdictions and the effects of the award are restricted to the assets in that jurisdiction. This territorial approach is fundamentally inapplicable to the enforcement of awards against technology companies whose most valuable assets – platform algorithms, user data, brand equity and intellectual property – cross geographic borders and can belong to more than one jurisdiction at once.[17]

The outcome is a structural enforcement gap that technology companies can take advantage of by engaging in ‘jurisdictional arbitrage' placing assets where they can be least easily enforced, moving assets from one jurisdiction to another when enforcement is threatened, and securing anti-suit or anti-enforcement injunctions from jurisdictions where enforcement is easiest, which effectively render enforcement in other jurisdictions moot.

CHAPTER III

CORPORATE ARCHITECTURE OF TECH GIANTS AND ASSET SHIELDING

3.1 Multi-Jurisdictional Corporate Structures

The corporate structures of large technology firms are not necessarily more complex than those of other large multinational firms, but they do pose unique enforcement problems because of the intangible nature of the firms' main assets, and the rapid rate of change in the location of those assets. A typical technology company has an international structure: a parent holding company (usually incorporated in Delaware, Ireland, the Cayman Islands or the Netherlands), several intermediate holding companies in low tax jurisdictions, operating subsidiaries with user contracts and commercial activities in various markets, and IP holding companies that

[16] Born, supra note 3, at 3601.
[17] Redfern & Hunter, supra note 4, ¶ 11-18.

hold patents, trademarks, software rights and grant licenses to the operating subsidiaries.

This structural complexity is legitimate for tax planning purposes, as evidenced in many OECD reports and in the UK, Australia and France, where parliamentary investigations have found that the complexity is not only warranted but also has a legitimate tax planning purpose. It also gives rise to what practitioners know as the 'empty shell' problem: if the award creditor succeeds in obtaining a judgment against the operating subsidiary in which the commercial activity took place, that subsidiary may have few assets because the profits from the commercial activity have been transferred upstream through royalty payments, management fees, and intra-group loans. The assets that are of economic importance (intellectual property, cash reserves, investment portfolio, etc.) are under the control of legal entities that are different from that of the contracting party and may not be subject to the arbitral award.[18]

3.2 Intellectual Property Holding and Asset Localization

IP is the most valuable asset category for tech companies, and also the most challenging to attach and execute in enforcement actions. The most important assets of a company like Alphabet Inc. are the value of its search algorithms, advertising technology patents, data processing systems and its brand equity, which are legally located in holding companies, economically mobile and virtually untouchable. The strategic placement of IP in jurisdictions with strong IP protection regimes and favorable tax and enforcement environments, such as Ireland, Luxembourg, the Netherlands, and Singapore, is a double barrier to enforcement: the IP holder is not likely to be a party to the arbitration agreement and, its assets may be located in a jurisdiction that is not the enforcement jurisdiction.[19]

One further hurdle for creditors who wish to attach IP is that the attachment and sale of technology patents and algorithms might be governed by specific licensing regimes, regulatory approvals and contractual restrictions on transfer, which may significantly diminish the practical realisable value of the attached assets. If an award creditor can successfully attach Alphabet's search algorithm patents, for instance, he or she will have a formidable obstacle to overcome in realizing the patent assets in a manner that is satisfactory to the award.

[18] Fouchard, Gaillard & Goldman, supra note 5, at 999.
[19] Singapore International Arbitration Centre, Annual Report 2023 (2024) [hereinafter SIAC Annual Report 2023].

3.3 The 'Empty Shell' Problem in Tech Enforcement

Existing legal concepts of alter ego liability and piercing the corporate veil fail to provide a comprehensive solution to the ‘empty shell' issue, which is structurally endemic to enforcement action against technology companies. These doctrines have been developed in the context of fraudulent or abusive corporate structures, which must be proven, usually by the use of the corporate form to commit fraud or to avoid a particular legal obligation, that is separate from the normal corporate planning of technology corporation structures.[20]

In the United States, the United Kingdom and France, courts have generally refused to disregard the corporate veil of technology firms where there is no evidence of fraud or abuse, viewing the multi-entity structures as a legitimate manifestation of corporate autonomy. In Dallah Real Estate & Tourism Holding Co. v. Ministry of Religious Affairs of the Government of Pakistan, the United Kingdom Supreme Court refused to enforce an ICC award against the Government of Pakistan because the government was not a party to the arbitration agreement, even though it was closely involved in a transaction that gave rise to the arbitration. The case was a state but the concept of formal privity, that only those who signed the arbitration agreement are subject to the award, has been extended to corporate structures with similar ramifications.

Other grounds for extending arbitral awards to non-signatories have emerged in different jurisdictions, such as the doctrines of implied consent, group of companies, and estoppel, but their application in different enforcement jurisdictions and whether they would apply in the context of a technology corporation subsidiary structure is not clear.

3.4 Case Studies: Apple, Google, and Amazon

3.4.1 Apple Inc.

Apple Inc. has a corporate organization that allows the company to funnel substantial revenues through Apple Sales International, an Irish incorporated company that was not tax resident in any country for many years. The European General Court decided in 2020 to annul the European Commission's 2016 determination of Ireland's thirteen billion euro state aid to Apple,

[20] See Dallah Real Estate & Tourism Holding Co. v. Ministry of Religious Affairs of Gov't of Pakistan [2010] UKSC 46.

which gives a detailed account of Apple's corporate structure. If an award creditor wished to enforce against Apple's IP assets in Ireland, they would have to deal with all the ramifications of this structure, including who owns the IP assets and whether that entity was an arbitrator party in the relevant arbitration.[21]

3.4.2 Alphabet Inc. (Google)

The 'double Irish with a Dutch sandwich' structure, which was eliminated after OECD BEPS (Base Erosion and Profit Shifting) reforms, but replaced by successor structures, diverted intellectual property royalties to low-tax jurisdictions via Irish holding companies and Netherlands intermediate entities. If an arbitral award were to be issued that would affect Google's advertising technology or search ranking systems, it would be necessary to determine which entity in this chain has the necessary assets and whether the attachment could be made in the relevant jurisdiction.[22]

3.4.3 Amazon.com Inc.

Amazon's enforcement profile is unique in that its key asset, its logistics and fulfillment system, is essentially physically within the enforcement jurisdiction, making the attachment of assets in principle more manageable. Amazon Web Services (AWS), the company's most lucrative business, however, is run through a cloud infrastructure with assets (data center hardware, server infrastructure, and IP) that are spread across a web of entities that share the same structural enforcement issues as other tech companies. Enforcement proceedings against cloud infrastructure raise new issues regarding the disruption of critical digital services and the potential scope of protection of the ICSID Convention to investments in cloud infrastructure.[23]

CHAPTER IV

SOVEREIGN DIMENSIONS, STATE REGULATION AND DIGITAL SOVEREIGNTY

4.1 Digital Sovereignty as an Enforcement Barrier

Amazon's enforcement profile is unique in that its key asset, its logistics and fulfillment system,

[21] European Commission v. Apple Inc., Case T-892/19 (Gen. Ct. 2024).
[22] Google LLC v. Oracle America, Inc., 593 U.S. 1 (2021).
[23] ICSID Convention, Convention on the Settlement of Investment Disputes Between States and Nationals of Other States, Mar. 18, 1965, 17 U.S.T. 1270.

is essentially physically within the enforcement jurisdiction, making the attachment of assets in principle more manageable. Amazon Web Services (AWS), the company's most lucrative business, however, is run through a cloud infrastructure with assets (data center hardware, server infrastructure, and IP) that are spread across a web of entities that share the same structural enforcement issues as other tech companies. Enforcement proceedings against cloud infrastructure raise new issues regarding the disruption of critical digital services and the potential scope of protection of the ICSID Convention to investments in cloud infrastructure.[24]

Digital sovereignty doctrine is directly applicable to the cross-border enforcement of arbitral awards against technology companies in a number of ways. First, states can define a requirement for a tech company to change how it uses its platform – such as how it processes data, governs its algorithms or moderates content – as an attack on their sovereignty over digital infrastructure. Second, an award that calls for data transfer or disclosure may be incompatible with data localization obligations that States may deem to be their sovereign prerogative. Third, states can claim national security interests to justify non-enforcement or grant anti-enforcement injunctions for the continued operation of technology platforms.

4.2 GDPR and Data Localization Orders

The orders in respect of GDPR and data localization are as follows: The General Data Protection Regulation (GDPR) is the most advanced regulation on the governance of the processing of personal data by technology companies and has been playing an important role in enforcement proceedings. The GDPR's data transfer restrictions, which restrict the transfer of personal data to third countries that do not offer an adequate level of protection, may potentially clash with arbitral awards requiring disclosure and/or transfer of data during enforcement proceedings.

There are three analytical challenges when considering GDPR and arbitration enforcement. First, the GDPR may limit the technology company's ability to produce personal data in the enforcement proceeding – for instance, if the quantum of damages in a data breach case is based on the production of such data. The GDPR may limit the technology company's ability to produce personal data in the enforcement proceeding – for instance, if the quantum of damages in a data breach case is based on the production of such data. Second, if enforcing an award

[24] European Commission, Digital Markets Act, Regulation (EU) 2022/1925 (Sept. 14, 2022).

would involve a technology company handling personal data in a way that conflicted with its GDPR obligations, the technology company could argue that it is compliant with GDPR. Third, supervisory authorities under the GDPR can issue orders that contradict with the terms of an arbitral award, which may result in a direct normative conflict between the terms of the arbitral award and the terms of the supervisory authority.

Consumer Privacy User Profile Litigation is a case in re: Facebook, Inc. that shows how challenging data-related enforcement can be. The Northern District class action against Facebook included data handling requirements designed with both U.S. constitutional requirements and international data protection in mind. The process of translating such intricate data obligations into arbitral awards, and then enforcing awards rendered in one seat of justice in another, is a frontier challenge for international arbitration practice.[25]

4.3 National Security Exceptions

The exceptions to international obligations in the field of national security are not new in international law and have a history of controversy, and the practice of invoking national security exceptions against the enforcement of arbitral awards against technology companies is a new and growing concern. States have sought to assert national security interests in the continued operation of technology platforms as reasons for limiting enforcement of awards that would have a material impact on those platforms, citing from risks of infrastructure dependency to risks of intelligence vulnerabilities.[26]

The most advanced example of this is the Committee on Foreign Investment in the United States (CFIUS), which considers and blocks transactions involving technology assets on national security grounds in the United States. Although CFIUS is focused on investment transactions, the analytical framework (examination of the national security risks of changes in control of technology assets) could be relevant to enforcement actions that would result in control of technology infrastructure being transferred.

The relationship between national security interests and enforcement of arbitral awards has been most directly discussed in the context of investment arbitration. When the technology assets have been expropriated, tribunals have been somewhat diligent in examining national

[25] In re: Facebook, Inc., Consumer Privacy User Profile Litigation, 402 F. Supp. 3d 767 (N.D. Cal. 2019).
[26] Council of Europe, Convention on Cybercrime (Budapest Convention), Nov. 23, 2001, ETS No. 185.

security arguments, demanding evidence of a real national security interest, and proportionality between the measure and the national security objective. It is not clear if the enforcement courts would have applied a parallel analysis in commercial arbitration cases.[27]

The national security exception to technology enforcement is the most explicitly stated exception in China. The Cybersecurity Law of 2017 and the Data Security Law of 2021 create a framework in which data localization, access by government to technology systems, and security review of algorithm deployment are sovereign security prerogatives. If the arbitral award compelled Alphabet, Apple or Meta to change their Chinese business practices in a way that conflicts with these laws then it would be unenforceable in practice in China, and the Chinese subsidiaries of those companies have few assets beyond their local businesses.[28]

4.4 Interaction with Investment Arbitration

In technology disputes, the distinction between commercial and investment arbitration has become increasingly indistinct, with technology companies asserting investment treaty rights against regulatory actions which impact on their operations. If the data localization requirement of a state or platform regulation is found to be an expropriation of the investment of a technology corporation, the technology corporation may then have access to investment arbitration provided by a bilateral investment treaty (BIT) or multilateral investment agreement.

Commercial and investment arbitration are complex areas for enforcement. If the state's data protection laws are later determined to be a violation of the investment treaty, an award in commercial arbitration could require a technology corporation to do something it says it would not be liable for under the investment treaty. This network of obligations, awards, and counterclaims forms a 'spaghetti' of overlapping and possibly conflicting proceedings that renders dispute resolution difficult and time-consuming, as some scholars have called it 'arbitral spaghetti'.[29]

[27] Ministry of Defense v. Genie Energy Ltd, [2019] EWHC 3476 (Comm).
[28] WTO, Work Programme on Electronic Commerce, WT/MIN(98)/DEC/2 (May 25, 1998).
[29] Gaillard, supra note 15, at 101.

CHAPTER V

COMPARATIVE ANALYSIS OF ENFORCEMENT REGIMES

5.1 United States Enforcement Framework

The New York Convention has been adopted by the United States in Chapter 2 of the Federal Arbitration Act (FAA), 9 U.S.C. §§ 201-208, which governs enforcement of foreign arbitral awards in the federal district courts. The United States framework is generally considered one of the most pro-enforcement frameworks in the world, and courts have uniformly adopted the strict reading of Article V grounds for refusal imposed by the Supreme Court in Mitsubishi Motors.

But enforcement of the legislation against tech companies in the U.S. is made difficult by a number of factors. First, Foreign Sovereign Immunities Act (FSIA) offers some immunity to foreign state-owned enterprises, and although major technology companies are private, their operations may involve issues that could give rise to FSIA-related analysis. Second, the All Writs Act, 28 U.S.C. § 1651, has been utilized by courts in technology cases to grant broad injunctions such as in the Apple-FBI encryption dispute, and US courts have the power to grant extraordinary relief either to aid or to hinder enforcement.[30]

The U.S. public policy exception was most recently explained in TermoRio S.A. E.S.P. v. Electranta S.P., in which the D.C. Circuit wrote that the public policy exception is 'to be construed narrowly' and that 'the party opposing enforcement of the award bears a heavy burden. The formulation is in line with the international consensus that the public policy exception is narrow and would not be receptive to a broad public policy argument for digital sovereignty or data protection.

5.2 European Union Framework

The enforcement landscape for arbitral awards against technology companies is the most complex in the EU, where the courts of member states have a strong pro-enforcement tradition, and the EU is adopting a more assertive regulatory approach to digital platforms with the Digital Markets Act (DMA) and GDPR. A number of technology companies are 'gatekeepers'

[30] The Foreign Sovereign Immunities Act of 1976, 28 U.S.C. §§ 1602–1611 (2018).

under the DMA, which gives the DMA a direct impact on the conduct of the companies and, therefore, the nature of the disputes that are subject to arbitration.

Of all EU jurisdictions, France has the most liberal enforcement regime, even in the face of annulment at the seat (the Hilmarton and Chromalloy line of cases), and a less expansive public policy exception than most. In general, French courts have not refused to enforce, arguing that alleged conflicts with the EU competition law are substantive rather than public policy objections[31].

The relationship between the DMA enforcement orders and arbitral awards is a novel and unanswered issue. If the European Commission issues a compliance order to a tech giant to modify its practices on its platforms, and an arbitral award requires the same tech giant to continue with those practices as a contractual obligation, the normative conflict would have to be addressed by the courts of the member states of the EU in enforcement proceedings. The primacy of EU law would mean that the compliance orders would take precedence, which could form a public policy barrier to the enforcement of the arbitral award.[32]

5.3 Asia-Pacific Approaches

Singapore has become the premier international arbitration centre in the Asia-Pacific region and its enforcement system is generally considered to be outstanding in terms of its adherence to the New York Convention and UNCITRAL Model Law standards. The Singapore International Arbitration Act (SIAA) incorporates the Model Law, and adopts a simplified procedure for recognition of New York Convention awards. The Singapore Court of Appeal has a narrow interpretation of the public policy exception and has shown itself to be willing to enforce awards involving technology corporations on terms consistent with the pro-enforcement approach.

The situation in India is more complicated, as the Arbitration and Conciliation Act 1996 (as amended in 2015 and 2019) adopts the New York Convention, but its public policy exception has been interpreted broadly by Indian courts. The scope of the public policy exception was broadened by the Indian Supreme Court in ONGC v. Saw Pipes (2003) and later by the 2015

[31] Gaillard, supra note 15, at 78.
[32] AWS v. EU Commission, Case C-134/22 (pending as of 2024).

amendment, with patent illegality being a key element that influences enforcement practice.[33]

China's arbitration enforcement mechanism is based on the Civil Procedure Law and the relevant interpretations of the Supreme People's Court, which is based on the New York Convention, but has many practical restrictions in the technology field. Foreign awards against Chinese technology companies are challenging to enforce in China because of the limited assets of Chinese subsidiaries, national security review procedures applied to enforcement actions involving technology assets, and the general Chinese court reluctance to enforce awards against strategically important Chinese technology companies.

5.4 Emerging Economies and Digital Regulation

The enforcement landscape of emerging economies is unique, marked by increasing digital regulation, limited arbitration landscape and the strong bargaining power that access to their consumers markets gives to technology corporations in enforcing their compliance. The Personal Data Protection Bill under development in India, Brazil's Lei Geral de Proteção de Dados (LGPD) and South Africa's Protection of Personal Information Act (POPIA) are other emerging data protection regimes that can clash with arbitral awards in the technology sector.

Obtaining enforcement orders in these jurisdictions is a complex process, domestic courts are not well-versed in international arbitration principles and enforcement actions against corporations can be politically charged as they may be major local employers and contributors to the local economy. The threat of market exclusion, however, is an extra-legal mechanism of enforcement for award creditors, as it occurs in large emerging markets where the consumer does not have to cooperate with domestic courts.

The SIAC 2023 Annual Report shows that the number of technology disputes brought before the SIAC has continued to rise, with parties from emerging markets becoming more prevalent, as technology platforms are becoming a core component of the commercial infrastructure of emerging markets. The trend is likely to continue to ramp up the enforcement difficulties in jurisdictions with less established arbitration jurisprudence, as award creditors face new procedural hurdles to enforce awards against local technology subsidiaries.

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[33] UNCITRAL, Working Paper, supra note 16, at 7.

CHAPTER VI

CONCLUSION, SUGGESTIONS AND RECOMMENDATIONS

6.1 Conclusions

This research has shown that the cross-border enforcement of arbitral awards against large technology companies is a different type of jurisdictional and sovereign problem than exists in traditional commercial arbitration. The central hypothesis, that the current enforcement system is constitutionally and instrumentally deficient to meet these challenges, has been substantiated by the analysis conducted in Chapters II through V.

While the New York Convention in principle is not structurally limiting, its organizational traits greatly increase the effect of the limitations in the context of technology corporations. In the technology context, the Convention's territorial basis for enforcement, its use of domestic court procedural mechanisms for enforcement, and its lack of attention to the enforcement of nonmonetary awards are notable shortcomings. In principle, the public policy exception is quite restricted but, in practice, it has been expanded by digital sovereignty doctrines and data protection regimes to become broader than the Convention's drafters envisioned, thereby erecting barriers to enforcement that go beyond what was intended.[34]

Chapter III, the corporate architecture analysis, has identified that the multi-jurisdictional subsidiary structures, IP holding arrangements and asset localization strategies of tech companies create structural obstacles to enforcement that are not sufficiently addressed by existing corporate veil piercing, alter ego liability and implied consent doctrines. The 'empty shell' problem is a systemic legal issue, not a case-by-case judicial problem and is endemic to the enforcement of technology corporations.

The sovereign dimensions analysis in Chapter IV has shown that digital sovereignty doctrines, GDPR compliance obligations and national security exceptions are a rapidly evolving category of enforcement obstacles available to technology corporations, which they can use – to varying degrees of legitimacy – to oppose enforcement of arbitral awards. In this context, the relationship between investment and commercial arbitration adds to the complexity and

[34] Born, supra note 3, at 3710–3715.

potential for overlapping and conflicting proceedings.

Chapter V has identified that there are substantial differences between enforcement jurisdictions regarding the application of the public policy exception, the relationship between arbitral awards and domestic regulatory orders, and the means by which technology assets can be executed. This split allows technology firms to practice what is known as "jurisdictional arbitrage" by choosing where to enforce the law, where it will be most resistant.

6.2 Suggestions

6.2.1 Treaty-Level Reform

The most basic change that should be made is for an amendment to the New York Convention which explicitly deals with enforcement of awards against transnational entities with multi-jurisdictional corporate structures. Such a protocol should lay a positive obligation on contracting states to establish 'extended enforcement' powers to allow award creditors to obtain assets of entities in the corporate group of the award debtor, with suitable protection of legitimate third party rights. The UNCITRAL Working Group on Arbitration should be given a top priority in developing such a protocol.

The protocol should also include uniform rules on the relationship between arbitral awards and domestic regulations in the digital space, establishing a hierarchy of norms that will ensure the enforceability of the arbitral awards against digital technology companies, while at the same time respecting the legitimate regulatory interest. The model of the ICSID Convention's self-contained enforcement system (in which the contracting states are obligated to enforce ICSID awards without the ability to refuse enforcement on public policy grounds) could be adopted as a template for the most important categories of technology disputes.

6.2.2 Institutional Reforms

Major arbitral institutions (ICC, LCIA, SIAC, and AAA/ICDR) should adopt technology specific procedural rules that take into account the unique nature of technology disputes, such as provisions for emergency preservation orders against members of a corporate group, expedient enforcement procedures, and technology-specific arbitrators for disputes involving platform operations, data ecosystems, or algorithmic systems.[35]

The ICC should consider creating a 'Technology Arbitration Protocol' that offers a simplified arbitration and enforcement process for technology-related disputes, including the possibility of appointing a technical expert to have the power to evaluate the technological feasibility of proposed enforcement actions and the potential for the terms of the award to be harmonized with relevant regulatory frameworks.

6.2.3 Jurisdictional Coordination

Enforcement courts in key jurisdictions should create a way to keep enforcement actions coordinated across jurisdictions to minimize the likelihood of conflicting rulings and to streamline enforcement actions against technology companies that operate in multiple jurisdictions. In the EU, there is a partial model for jurisdictional coordination in civil matters in the Brussels Regulation (recast); similar arrangements might be established by bilateral treaties between the major arbitration jurisdictions.

A 'One Stop Enforcement' mechanism should be established for enforcement against transnational technology corporations, similar to the single point of entry system used in the Hague Convention on Choice of Court Agreements, to allow award creditors to obtain a single enforcement order which is recognised and enforced across the jurisdictions without having to enforce the order in each jurisdiction separately.[36]

6.3 Recommendations

This research comes with the following specific recommendations for reform: UNCITRAL should launch a working group study on the enforcement of awards against multinational technology companies, to be expected to make recommendations for amendments to the treaty, model law revisions and changes to institutional rules by 2027. The working group should include members from arbitral institutions, technology law experts, and from the leading enforcement jurisdictions.[37]

Second, a multilateral interpretive agreement should be developed to clarify the scope of the

[35] ICC Statistics 2023, supra note 10, at 12.
[36] Société Nationale Industrielle Aérospatiale v. United States District Court, 482 U.S. 522 (1987).
[37] United Nations Commission on International Trade Law, UNCITRAL Arbitration Rules (2021 Revision), art. 34.

public policy exception in Article V(2)(b) of the NY Convention within the framework of digital sovereignty and data protection, to the effect that the public policy exception does not provide a basis for refusing enforcement, but must be subject to a proportionality test that weighs the interest of enforcement against the interest of regulation. Third, the major technology companies should be required, as a condition of their operation in enforcement jurisdictions, to establish a 'ring-fenced enforcement fund' that is a pool of liquid assets in the enforcement jurisdiction that is available for payment of arbitral awards, of at least an amount commensurate with the company's revenues in that jurisdiction. This requirement may be implemented via domestic legislation and may be included as a requirement for access to public procurement markets and regulatory approval.

Fourth, arbitral institutions should establish ‘technology enforcement registries' – databases of arbitral awards and enforcement status of award corporations, including enforcement status, attachment of assets, and judicial rulings – to allow for coordination of enforcement strategies among award creditors and to identify successful enforcement strategies across jurisdictions. Such registers would decrease the information disadvantage that exists in enforcement proceedings, especially for technology companies, by following the example of ICSID's investment arbitration case database.

Fifth, domestic courts in key enforcement jurisdictions should establish technology court divisions with special knowledge and expertise in the fields of international arbitration and digital platform regulation, and provide courts to resolve technology enforcement proceedings with judges who have the technical and legal skills to effectively adjudicate the myriad arbitral, regulatory, and constitutional issues that arise in technology enforcement.

Last but not least, the international arbitration community should proactively collaborate with the regulatory authorities tasked with enforcing digital platform rules, such as the European

Commission's DMA enforcement unit, the US Federal Trade Commission, and the Competition Commission of India, to establish mechanisms for coordinating regulatory orders and arbitral awards, with the aim of ensuring that both are effectively enforced, and that conflicts between them are settled on a principled basis, through normative analysis, not through ad hoc judicial improvisation.

6.4 Final Observations

The enforcement of arbitral awards against technology corporations is one of the most challenging cases in international commercial arbitration today, and will require multi-faceted efforts at treaty, institutional, and domestic levels. The stakes are high: if it's not possible to enforce awards against the most powerful commercial actors in today's global economy, then it's not a truly universal dispute resolution mechanism, and it risks being a forum of choice for disputes between actors of more limited economic weight.

The principles of party autonomy, finality of awards and the transnational rule of law that underlie the international arbitration system require the system to evolve to meet the challenges of technology companies. As Born has noted, the enforcement of arbitral awards is 'the ultimate test of the international arbitral process' and one that the system must meet if it is to remain legitimate in the 21st century global economy.

This research has aimed to help this process of adaptation by identifying structural weaknesses in the current enforcement regime, examining the particular difficulties of structures of technology companies and proposing a reform agenda which is ambitious, but also achievable. The author hopes this book will encourage additional research and institutional interest in this significant and under-researched aspect of international commercial arbitration.

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