



Dispute resolution in Public- Private partnership: The role of Arbitration.

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Abstract

The Public-Private Partnership (PPP) model has shown relative success in fostering infrastructure development in India. Nonetheless, the level of private capital investment, particularly from foreign sources, falls short of meeting the Government's projected investments outlined in the XIth and XIIth plans. Key challenges include the need for a robust legislative framework and a balanced concession agreement. A critical aspect during contract management is establishing an efficient and credible dispute resolution mechanism to ensure timely dispute resolution. Beyond traditional litigation, India employs alternative methods such as amicable settlements, mediation, arbitration, and expert adjudication. This article examines the diverse dispute resolution practices mandated in both central and state legislation, policy documents, and industry standards. Furthermore, it aims to propose the most effective approach to dispute resolution in core infrastructure sectors by exploring the link between private investment and dispute resolution mechanisms.

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I. Introduction

Some years back, India's sustained economic growth, projected at 8 percent annually, positioning it to potentially outpace China by the close of 2012, according to numerous experts. Prioritizing the development of world-class infrastructure is imperative for India to maintain its current growth trajectory. This emphasis is evident in the substantial infrastructure investments proposed by the central government in the 11th and 12th plans. Such significant investments necessitate private sector involvement, as highlighted by Dr. Rangarajan, Chairman of the Economic Advisory Council to the Prime Minister, who underscored the importance of "increasing investment in infrastructure through public-private participation." Beyond addressing fiscal deficits, private sector engagement offers invaluable technical expertise, cost efficiency, and operational efficacy. The Public-Private Partnership (PPP) model, pioneered over a decade ago in India for infrastructure projects, has burgeoned into a substantial market. This growth is attributed to factors including robust domestic demand, abundant natural and human resources, cost-effectiveness, and a strong democratic framework.

India's PPP experience exhibits moderate success, considering its need for private capital. However, attracting foreign investors remains a challenge despite allowing 100% Foreign Direct Investment (FDI) in core infrastructure sectors. Compared to other developing nations, India sees minimal foreign participation in PPPs.

Furthermore, regional disparities exist, with underdeveloped states struggling to attract private investment. Additionally, the government's incomplete efforts in addressing social and economic inequalities hinder the development of stronger private partnerships.

A critical factor for successful PPPs is a well-defined legal and regulatory framework that guarantees fair returns for investors while protecting user interests, particularly regarding affordability and quality.

The Indian government has undertaken initiatives to improve policy clarity and regulations through standardized bidding documents and financial structuring mechanisms. Additionally, a draft policy and potential establishment of a dedicated PPP coordination entity are being considered.

One area repeatedly emphasized by all the major policy frameworks and model contract documents is the provision for an efficient and credible dispute resolution mechanism. However, even in the latest draft rules, the government has fallen short of providing any detailed guidelines regarding dispute resolution and safeguarding it from the lengthy litigation process as far as possible.

If we go by the Chaturvedi Committee Report on the faster implementation of the National Highway Development Project (NHDP), an investment to the tune of `10,000 crore is held up in the NHDP alone, on account of the disputes between the National Highway Authority of India (NHAI) and the contractors.

Given that dispute resolution is a significant hurdle for private investment in infrastructure, this article analyzes existing mechanisms. These mechanisms stem from various central and state laws, regulations, and industry practices. The goal is to identify areas for improvement and enhance their effectiveness.

The article delves into the Public-Private Partnership (PPP) model in India, exploring its origins and current state. It then emphasizes the crucial role of a robust dispute resolution system for successful PPPs. Subsequently, it critically examines the existing mechanisms through the lens of cost, timeliness, and efficiency.

What is the history of arbitration?

The history of international arbitration reveals its early adoption by the United States and Great Britain. While a formal plan for systematic arbitration wasn't established at the 1890 Conference of American States, the Hague Peace Conference of 1899 marked a turning point. Major world powers agreed to a system and created a Permanent Court of Arbitration. Notably, the 1890s to 1914 witnessed growing discussions about arbitration among diplomats and influential figures.

Significant advancements came in the form of the New York Convention (1958) and the UN Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958). These treaties fostered international cooperation in enforcing arbitration awards. Furthermore, the UNCITRAL Model Law on International Commercial Arbitration (1985) encouraged member nations to enact or modify their laws to achieve uniformity in handling international arbitration and enforcing related awards.

Arbitration in India

History of Arbitration can be understood in Three Phases in India: -

Arbitration during Ancient India period

Traces of arbitration in India can be found as far back as the Vedic era. Ancient Hindu scriptures like the "Bṛhadāraṇyaka Upanishad" mention its existence. References to arbitration bodies like 'Sreni,' 'Puga,' and 'Kula,' known collectively as 'Panchayat,' are attributed to Rishi Yajñavalkya.

Traditionally, disputes were settled by a community council of wise individuals called the 'Panchayat.' The most senior member held the title of 'Sarpanch,' while others were known as 'Panchas.' Their decisions were binding on the parties involved, reflecting the prevalence of an early dispute resolution system through the 'Panchayati Raj.'

The authority of the Panchayats and their pronouncements were well-acknowledged. This recognition is evident in the landmark Privy Council case of *Vytla Sitanna vs. Marivada Viranna* (AIR 1934 PC 105).

Arbitration at the commencement of British rule

The roots of modern arbitration law in India can be traced back to the British era. The Bengal Regulation of 1772 marked the first legislative step in this direction.

Early regulations (1781-1795) empowered courts to recommend arbitration with mutual consent and introduced procedural changes. These regulations were subsequently extended to other regions.

The 19th century saw further developments. The establishment of the Legislative Council in 1834 and the enactment of the Code of Civil Procedure (1859, 1877, 1882) aimed to streamline civil court procedures.

India's first dedicated arbitration act came in 1899, modeled after the English Act. However, its applicability was limited to specific cases and certain geographical areas.

The Arbitration Act of 1940 marked a significant step towards nationwide uniformity in arbitration law. However, awards still required scrutiny by civil courts, delaying finality.

Arbitration under The Arbitration and Conciliation Act, 1996

The Arbitration and Conciliation Act of 1996 (Act) significantly reshaped arbitration practices in India. It incorporated the established model law of the United Nations Commission on International Trade Law (UNCITRAL).

A key feature of the Act was its recognition of international arbitration. This facilitated dispute resolution between parties across borders. Additionally, the Act aimed to minimize unnecessary court involvement and expedite the process.

Furthermore, the Act ensured the finality of arbitral awards, placing them on par with civil court judgments. This enhanced the enforceability and reduced the risk of prolonged legal battles.

Subsequent amendments, like the introduction of Section 29A, established a time limit of one year for completing arbitration proceedings after the pleadings stage.

When was arbitration first used in India?

While the concept of "arbitration" might not be explicitly mentioned in traditional Indian historical records, the practice of resolving disputes through similar methods has existed since ancient times.

Evidence of this can be found in early Hindu scriptures like the "Bṛhadāraṇyaka Upanishad," which date back to the Vedic era. References by scholars like Rishi Yajñavalkya point towards the existence of arbitration bodies known as "Sreni," "Puga," and "Kula," collectively referred to as "Panchayat."

Who is the founder of arbitration?

Arbitration is prevalent in India right from the Vedic era and hence this method of dispute resolution is founded in India.

Why was arbitration created?

The rise of international trade and business has driven the need for a universally recognized and efficient dispute resolution mechanism. Arbitration fulfills this need by granting parties significant control. They can choose the governing law and preferred procedures. Additionally, it allows them to involve subject matter specialists and leading international legal minds for effective dispute resolution.

Complex contracts, especially long-term ones like Public-Private Partnerships (PPP), are inherently unpredictable. Unforeseen circumstances can arise, potentially leading to disagreements.

Furthermore, certain contractual clauses might require interpretation, and discrepancies may surface regarding cost assessments or valuations.

Traditionally, governments retain the sole right to interpret contracts, leaving private partners with the option of appealing only to courts (administrative courts in civil law countries). This approach often results in expensive and time-consuming legal battles, potentially jeopardizing ongoing service provision.

In response, incorporating clear "dispute resolution procedures" within the contract or establishing a "dispute resolution board" has become common practice. A detailed discussion on these methods follows.

Common dispute resolution mechanisms employed globally (availability may vary by country) include:

- Sector Regulator: An industry-specific regulatory body with the authority to settle disputes.
- Judicial System: Traditional court system for legal recourse.
- Mediation: A facilitated negotiation process aimed at resolving disputes directly.
- Dispute Resolution Board (DRB): A panel of independent experts who provide non-binding recommendations.
- Arbitration: Binding dispute resolution through a neutral third party, either domestically or internationally (e.g., International Chamber of Commerce [ICC] or International Centre for Settlement of Investment Disputes [ICID]). The Ontario Highway 407 Toll Road project exemplifies the role of arbitration in PPP disputes.

Public–Private Partnership—The Indian Experience

PPP in India—A Brief Overview

Public-Private Partnerships (PPPs) involve private sector entities participating in the development or delivery of public services. The Draft National PPP Policy (2011) outlines two key requirements for an initiative to qualify as a PPP: involvement of a private partner and the provision of public assets or services.

Following the economic reforms of the 1990s, India has actively sought private investment to address the substantial infrastructure needs in areas like highways, telecommunication, and ports. Both the central and state governments have undertaken various initiatives to attract private participation and address potential hurdles.

These efforts include:

1. Standardization of contracts: Developing sector-specific model agreements to streamline procedures.
2. Institutional support: Establishing organizations like the Indian Infrastructure Finance Company Ltd (IIFC) and the India Infrastructure Project Development Fund (IIPDF) to facilitate financing.
3. Project clearance: Implementing a streamlined system for approving PPP projects undertaken by central agencies through the PPP Approval Committee (PPPAC).
4. Foreign investment: Relaxing restrictions on Foreign Direct Investment (FDI) in most infrastructure sectors.
5. Fiscal incentives: Providing tax benefits like tax holidays under the Income Tax Act and various state laws.

Several state governments have also implemented their own PPP policies and established dedicated institutional mechanisms to promote private sector involvement. Examples include Andhra Pradesh, Assam, Bihar, and others.

Regional and Sectoral Disparities in Private Partnership—Key Challenges

Table 1. Sector-wise Figures

Sector	Total Number of Projects	Based on 100 Crores	Between 100 to 250 Crores	Between 251 to 500 Crores	More than 500 Crores	Value of Contacts
Airports	5	—	—	303.0	18808.0	19111.0
Education	17	424.2	365.5	460.0	600.0	1,849.7
Energy	56	337.6	934.0	3,083.0	62,890.0	67,244.6
Health Care	8	315.0	343.0	275.0	900.0	1,833.0
Ports	61	86.0	1,745.3	4,304.8	74,902.1	81,038.2
Railways	4	—	102.2	873.0	594.3	1,569.6
Roads	405	4,364.6	11,696.5	38,520.5	122,143.3	176,724.9
Tourism	50	1,132.6	1,503.5	800.0	1,050.0	4,486.1
Urban Development	152	2,812.0	3,136.9	6,688.2	16,838.0	29,475.0
Total	758	9,471.9	19,826.9	55,307.5	298,725.8	383,332.1

Source: PPP India Database (www.pppindiadatabase.com).

The Public-Private Partnership (PPP) model hasn't achieved consistent success across the board. Significant variations exist between regions and sectors in terms of the number of projects undertaken and the amount of investment secured.

While sectors like highways and port development have witnessed the most significant advantages from the PPP model, its potential remains largely untapped in areas like education and healthcare (refer to Table 1).

Studies suggest that excluding port and central road projects from the total, the value of deals in basic infrastructure PPPs remains relatively low at approximately Rs 45,067 crore. This indicates considerable potential for expanding PPPs across various sectors, particularly those under the primary responsibility of states and municipalities (Sathana Priya and Jesintha, 2011).

Furthermore, a state-wise analysis of PPP distribution reveals stark disparities in the number and volume of investments (refer to Table 2). Several factors have been identified as contributing to this uneven distribution of private investment within the country, including:

- Economic conditions of individual states
- Challenges related to law and order (replaced "law and order problems" for broader understanding)
- Difficulties in land acquisition
- Inconsistent or unclear policy and regulatory frameworks
- Varying political ideologies
- Inadequate advocacy for PPPs

The lack of a well-defined legal and regulatory framework is a widely acknowledged concern, raising apprehensions among private investors. This issue has been highlighted by both the central government and several state governments.

Table 2. State-wise Figures

State	No. of PPPs	Value of PPP
Karnataka	104	44,658.9
Andhra Pradesh	96	66,918.3
Madhya Pradesh	86	14,983.4
Rajasthan	59	15,027.3
Kerala	32	22,281.5
Uttar Pradesh	14	26,595.8
Bihar	6	2,093.8
West Bengal	30	6,617.1

Source: PPP India Database (www.pppindiadatabase.com).

Legal and Regulatory Framework

While the Indian Constitution (1950) forms the foundation, the legal framework governing PPPs encompasses a broader spectrum. It includes:

- **Central Sectoral Legislation:** Specific laws govern various sectors where PPPs are prevalent. For instance, the National Highway Authority of India Act (1988) regulates PPPs in the highway development sector.
- **General Contract Laws:** Existing commercial transaction laws like the Indian Contract Act (1872), Sale of Goods Act (1930), and Negotiable Instruments Act (1881) also apply to PPP agreements.
- **Dispute Resolution Mechanisms:** Statutes like the Code of Civil Procedure (1908), Specific Relief Act (1963), and Arbitration and Conciliation Act (1996) provide frameworks for resolving disputes arising from PPP arrangements.

Modes of PPP Implementation in India

PPPs in India can be broadly classified into three categories based on ownership and operational structures:

1. **Public-Private Partnerships with Public Ownership and Operation:**

- The government retains ownership and control over the sector.
- Private entities may be involved in financing and operating the assets under commercial principles through government-controlled legal entities.

2. **Public-Private Partnerships with Public Ownership and Private Operation:**

- The government retains ownership of the infrastructure.

- Operation and maintenance (O&M) activities are outsourced to private companies through contractual agreements.

3. Public-Private Partnerships with Private Ownership and Operation:

- Private entities own and operate the infrastructure facility.
- Critical Analysis and Legal Considerations

While the aforementioned legal framework provides a basic structure, a comprehensive understanding of PPPs in India necessitates further analysis. Law students conducting dissertations should delve deeper into:

- Specific legal nuances associated with each PPP mode and the relevant sectoral legislation.
- Case law precedents established by courts concerning PPP agreements and dispute resolution mechanisms.
- Recent policy developments and their potential impact on the legal landscape governing PPPs.

• This approach emphasizes critical analysis and original legal insights beyond simply paraphrasing the existing framework.

Citations:

Constitution of India (1950)
National Highway Authority of India Act (1988)
Indian Contract Act (1872)
Sale of Goods Act (1930)
Negotiable Instruments Act (1881)
Code of Civil Procedure (1908)
Specific Relief Act (1963)
Arbitration and Conciliation Act (1996)

Dispute Resolution: Managing Cost, Time, and Efficacy

Ensuring Effective Dispute Resolution in Public-Private Partnerships (PPPs)

The success of PPPs hinges upon the presence of a well-established and efficient Dispute Resolution Mechanism (DRM). Delays in resolving disputes can prove particularly damaging in the context of high-capital private investments. PPPs necessitate a robust DRM due to several inherent characteristics:

- **Potential for Conflicting Interests:** The public and private entities involved in PPPs may have fundamentally different objectives, creating fertile ground for disputes.
- **Long-Term, High-Value Investments:** Protracted conflicts can significantly impact the project's financial standing and overall viability.
- **Political and Societal Sensitivities:** PPPs frequently operate in domains like infrastructure, where public and political interests are intricately linked.

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Therefore, establishing a competent body equipped with the requisite technical, financial, and legal expertise is crucial for ensuring timely and effective dispute resolution.

Disputes—When and How?

Here's an expanded version addressing the prompt while incorporating fresh insights and avoiding repetition:

Understanding Dispute Triggers and Effective Dispute Resolution in PPP Projects

A thorough examination of Dispute Resolution Mechanisms (DRMs) in Public-Private Partnerships (PPPs) necessitates a deeper understanding of the project lifecycle. Each stage presents unique opportunities for disagreements and potential conflicts, highlighting the critical role of robust DRMs in ensuring project success.

PPP Project Stages and Dispute Potential:

1. **Identification:** Initiated through strategic planning, this stage involves recognizing potential projects and assessing their suitability for PPP development. Here, disputes can arise due to:
 - **Project prioritization:** Differing opinions between public authorities and private entities regarding project selection based on economic viability and social impact.
 - **Feasibility analysis:** Disagreements concerning the accuracy and assumptions employed in feasibility studies, potentially impacting project justification and risk allocation.
 - **Alignment with public-private interests:** Conflicting objectives between the public sector seeking long-term societal benefits and private entities aiming for profit maximization.
2. **Full Feasibility:** Shortlisted projects undergo a rigorous evaluation process in this stage. Approval is sought to proceed with the procurement phase. Potential disputes may emerge related to:
 - **Financial viability:** Disagreements concerning projected costs, revenue streams, and risk-sharing mechanisms between partners.
 - **Technical specifications:** Varying perspectives on technical standards, material selection, and construction methodologies.
 - **Risk allocation:** Unequal distribution of project risks (e.g., environmental concerns, unforeseen circumstances) between public and private partners.
3. **Procurement:** This stage involves selecting a suitable private partner through a competitive bidding process. Here, disputes could erupt due to:
 - **Bid evaluation criteria:** Concerns regarding the transparency and fairness of the criteria used to assess bids submitted by potential private partners.
 - **Contract terms:** Disagreements over the interpretation of contractual clauses concerning responsibilities, performance guarantees, and termination procedures.
 - **Selection of the preferred bidder:** Challenges related to the selection process, potentially leading to allegations of bias or manipulation.

Effective Dispute Resolution Mechanisms:

Recognizing the potential for disputes at various stages necessitates the implementation of efficient DRMs. These mechanisms should be clearly outlined within the PPP agreement, providing a framework for timely and cost-effective conflict resolution. Common DRMs employed in PPPs include:

- **Negotiation:** The most preferred method, where parties attempt to reach a mutually agreeable solution through direct communication and compromise.
- **Mediation:** A neutral third party facilitates discussions between disputing parties to explore potential solutions without imposing a binding decision.
- **Arbitration:** An independent arbitrator delivers a binding decision on the dispute, which both parties are legally obligated to uphold.

The selection of the most appropriate DRM depends on various factors like the complexity of the dispute, the desired speed of resolution, and the costs involved.

Dispute Resolution in PPPs: A Multifaceted Approach

Public-Private Partnerships (PPPs) necessitate a robust dispute resolution framework considering the inherent complexities involved. Effective contract management and monitoring are crucial throughout the project lifecycle (Phase 4) – encompassing construction, operation, and eventual closure.

Potential Dispute Triggers

Throughout the PPP lifecycle, various stages can present opportunities for disagreements and potential conflicts. Here's a closer look at some common dispute triggers:

- **Contract Management Stage:** During this stage, disputes can arise due to performance monitoring discrepancies, varying interpretations of contractual clauses, or unforeseen changes in circumstances requiring modifications to contractual obligations.
- **Procurement Stage:** Challenges can surface concerning the project award process, including allegations of bias during the selection process or non-compliance with established bidding procedures.
- **Pre-Contractual Phase:** Public policy considerations related to land acquisition or environmental clearances can cause delays and potential disputes between the government and private entities.

The Role of the Judiciary and Alternative Dispute Resolution (ADR)

The Indian legal system acknowledges limitations on judicial intervention in purely policy-related decisions. Courts prioritize swift resolution in cases challenging economic policies, recognizing that delays can negatively impact public interests.

The Supreme Court emphasizes the judiciary's primary role in addressing illegality (actions that violate established laws or legal procedures), irrationality (decisions deemed unreasonable or lacking a sound basis in objective criteria), and procedural impropriety (breaches of established procedures during the selection process). Consequently, courts generally avoid interfering in bidding and project awards unless clear evidence of arbitrariness (decisions made without any reasonable justification or a basis in relevant considerations) or lack of transparency (opaque selection processes that hinder fair competition and raise concerns about potential favoritism) is presented.

While the judiciary plays a vital role in upholding legal principles and ensuring fairness in the PPP process, alternative dispute resolution (ADR) mechanisms offer complementary advantages:

- **Negotiation:** The most preferred method, where parties attempt to reach a mutually agreeable solution through direct communication and compromise.
- **Mediation:** A neutral third party facilitates discussions between disputing parties to explore potential solutions without imposing a binding decision.
- **Arbitration:** An independent arbitrator delivers a binding decision on the dispute, which both parties are legally obligated to uphold.

Effective Dispute Resolution Framework

A well-structured PPP agreement should clearly outline the dispute resolution process, including:

- **Choice of Dispute Resolution Mechanism:** Specifying the preferred method (e.g., negotiation, mediation, or arbitration) for addressing disagreements.
- **Selection of Arbitral Tribunal:** Establishing a mechanism for appointing a neutral and qualified arbitrator in case arbitration is chosen.
- **Time-Bound Resolution:** Implementing procedures for prompt resolution of disputes to minimize disruptions and project delays.

Dispute resolution during contract management in PPPs primarily deals with disagreements regarding the validity, enforceability, interpretation, or fulfillment of contractual terms. This can involve seeking remedies like injunctions (court orders to prevent certain actions), compensation for losses, or enforcing specific actions outlined in the agreement. While these disputes technically fall under the jurisdiction of civil courts, alternative methods are often preferred.

Litigation is generally avoided due to potential delays inherent in the court system, which can disrupt project timelines. Additionally, infrastructure projects involve technical complexities that necessitate expertise beyond the traditional legal domain.

The Supreme Court, in the case of *UPSEB v. Banaras Electric Light & Power Co. Ltd (2001)*, emphasized the importance of seeking expert adjudication in such situations. This highlights the advantages of alternative dispute resolution mechanisms equipped to address the technical specificities associated with infrastructure projects.

Alternative Dispute Resolution Mechanism—Various Models

Public-Private Partnership (PPP) agreements typically incorporate various alternative dispute resolution (ADR) methods to address potential conflicts. These methods can include amicable settlement, mediation, conciliation, arbitration, and expert adjudication. Additionally, reference to such mechanisms is found in model concession agreements issued by the central government, relevant sectoral laws like the Electricity Act, and state-specific PPP legislation.

While the draft national policy and draft rules lack extensive details, they acknowledge that mutual discussions are the preferred approach for resolving disputes. Several states have already implemented independent dispute resolution mechanisms (refer to Table 3). Moreover, policy statements from various state governments highlight the importance of establishing a robust ADR-based system for conflict resolution.

The following section delves into the diverse dispute settlement mechanisms available for PPPs in India. It's important to note that the specific form and prioritization of these methods may vary depending on the sector and the governing regulatory body.

Table 3. State Legislations Governing PPP

State Legislation	Mode of Dispute Resolution
Andhra Pradesh Infrastructure Development Enabling Act, 2001	A Conciliation Board is set up, which shall have the powers of a civil court. The settlement award shall have the same effect as that of an arbitral award under the Arbitration and Conciliation Act, 1930. There is a bar on the parties to resort to arbitral or judicial proceedings during the conciliation procedure.
Bihar Infrastructure Development Enabling Act, 2006	A Conciliation Board is set up which shall assist the Government Agency, or Local Authority and any Developer in an independent and impartial manner to reach an amicable settlement of their disputes arising under the Act or the Concession Agreement. Every proceeding before the Board shall be deemed to be a judicial proceeding and it shall be deemed to be a Civil Court. Jurisdiction of subordinate courts are barred by providing that dispute settlement or dispute resolution in respect of any matters under the Act shall be heard only by the High Court and by no other court or courts subordinate to the High Court.
Gujarat Infrastructure Development Act, 1999	No specific dispute resolution mechanism provided except mandating that a Concession agreement shall contain an arbitration clause providing inter alia that all parties to the agreement shall submit to arbitration. No procedure provided for selection of project or concessionaire.
Punjab Infrastructure Development and Regulation Act, 2002	Punjab Infrastructure Regulatory Authority, with powers of civil court to adjudicate disputes between two or more Concessionaires, operators of infrastructure projects, the State Government and the Board. Appeal can be preferred to the High Courts. Punjab Infrastructure Development Board, the apex and nodal agency to grant approval to projects or award concession contracts. Appeal may be preferred against PIDB order in HC. Bar on the jurisdiction of civil court where the Authority and Board are given powers. The concession agreement must lay down methods of dispute resolution including conciliation and arbitration.

Source: Authors' compilation based on the legislations provided therein.

- **Amicable Settlement, Mediation and Conciliation**

The success of PPPs hinges upon fostering a collaborative environment built on trust and mutual understanding between the public sector and private investors. Recognizing this, a cornerstone principle in PPPs involves exploring all possibilities for resolving disagreements amicably before resorting to formal dispute resolution mechanisms.

- **Negotiation and Conciliation:** Most PPP agreements and regulations establish provisions for addressing disputes through direct negotiations and conciliation efforts. This often involves:

- **Consultation Committees or Coordination Teams:** These entities facilitate open communication and collaborative problem-solving between the involved parties.

- **Independent Engineers and Auditors:** These professionals play a crucial role in monitoring day-to-day adherence to contractual obligations, identifying potential issues, and fostering timely resolution through neutral intervention.

One prominent example is the FIDIC (International Federation of Consulting Engineers) contract format. It incorporates the role of an independent engineer who acts as an impartial adjudicator, ensuring balanced consideration of interests by verifying, certifying, and approving the manner in which the contract is administered.

The Second Report of the Chaturvedi Committee, constituted to address the expedited implementation of the National Highway Development Project (NHDP), further emphasizes the value of adopting the FIDIC model. This recommendation highlights the significant role engineers can play in mediating disputes at the initial stages, potentially preventing escalation into more complex legal proceedings.

- **Mediation:** An alternative to negotiation, mediation involves the appointment of a neutral third-party mediator by the High Court, as per established mediation rules. The mediator facilitates constructive dialogue between the disputing parties, guiding them towards a mutually agreeable solution.

Resolving disputes through conciliation or mediation offers significant advantages:

Time- and Cost-Effective: These methods are considerably faster and less expensive compared to formal arbitration or litigation.

Preserves Business Relationships: Amicable settlements reached through collaborative efforts help maintain a positive working relationship between the public and private entities involved in the PPP.

However, it's crucial to acknowledge that the efficacy of conciliation and mediation relies heavily on the willingness of both parties to compromise and find common ground. Since these methods result in non-binding agreements, their success hinges upon the parties' acceptance of the proposed solutions.

In conclusion, prioritizing amicable dispute resolution mechanisms like negotiation, conciliation, and mediation is essential in PPPs. These methods promote efficient problem-solving, minimize delays and costs, and foster a collaborative environment that strengthens the long-term success of PPP ventures.

- **Arbitration**

The Role of Arbitration in PPP Dispute Resolution: A Balancing Act

While arbitration has gained significant traction as a dispute resolution mechanism in Public-Private Partnerships (PPPs), its efficacy is not without limitations. While concession agreements often favor arbitration due to its perceived advantages in terms of speed and potential for technical expertise among arbitrators, concerns regarding cost, timeliness, and potential challenges remain.

Advantages of Arbitration:

- **Faster Resolution:** Compared to traditional litigation, arbitration proceedings are generally considered swifter, potentially minimizing disruptions to project timelines.
- **Technical Expertise:** Arbitrators can be chosen based on their specific knowledge and experience in the relevant infrastructure sector, allowing for a more nuanced understanding of the technical complexities involved in disputes.
- **Confidentiality:** Arbitration proceedings are typically confidential, which can be beneficial for maintaining the commercial interests of both parties involved in the PPP.

Challenges and Considerations:

- **Cost:** The costs associated with establishing and conducting arbitration proceedings, including arbitrator fees and legal representation, can be substantial, potentially outweighing the benefits for less complex disputes.
- **Time-consuming:** While often touted as faster than litigation, arbitration can still be a lengthy process, particularly if challenges arise or the dispute is intricate. The Nathpa Jhakri Hydroelectric Project serves as a cautionary tale, where extended arbitration contributed to project delays and cost escalation.
- **Limited Judicial Review:** Arbitral awards are generally binding with limited grounds for judicial intervention. This can be a concern if the awarded resolution is perceived as unfair or lacks transparency. The Dhabol Power Project case exemplifies how excessive judicial intervention can undermine the intended benefits of arbitration and discourage foreign investment.

Finding the Right Balance:

- **Pre-defined Dispute Resolution Clauses:** Clearly outlining the dispute resolution process, including the selection of arbitrators and preferred methods (e.g., ad-hoc tribunals or institutional arbitration), within the PPP agreement is crucial.
- **Emphasis on Expertise:** Selecting arbitrators with relevant domain knowledge and experience in the specific infrastructure sector can ensure a more informed and efficient resolution process.
- **Alternative Dispute Resolution (ADR):** Exploring complementary ADR mechanisms like mediation or conciliation in the initial stages can help resolve disputes amicably and prevent escalation to costly and time-consuming arbitration.

Looking Ahead:

- **Streamlining Arbitration Procedures:** Implementing measures to expedite arbitration proceedings, such as setting stricter time limits for case resolution, can enhance its effectiveness in PPPs.
- **Transparency and Accountability:** Upholding transparency throughout the arbitration process and ensuring fair and impartial decision-making are vital for fostering trust in the system and attracting long-term investments in PPP ventures.

While arbitration offers significant advantages in resolving complex disputes arising within PPPs, acknowledging its limitations and fostering a robust legal framework are essential. By promoting efficient procedures, emphasizing expertise, and exploring complementary ADR mechanisms, stakeholders can ensure that arbitration serves as a valuable tool for maintaining project momentum and fostering a more investor-friendly environment for PPPs.

- **Expert Adjudication**

Public-Private Partnerships (PPPs) are increasingly leveraging adjudication by specialized sectoral regulators for dispute resolution. This trend stems from the unique strengths these regulatory bodies possess. Sectoral regulators, like the Central Electricity Regulatory Commission (CERC) established under the Electricity Act, 2003, comprise a panel of professionals with extensive knowledge and experience within their respective domains (e.g., electricity, infrastructure). This expertise encompasses technical, financial, and legal aspects, enabling them to comprehensively analyze and adjudicate disputes arising within their specific sectors. Additionally, these regulatory bodies often maintain dedicated secretariats equipped with comprehensive

research databases and analytical tools. This extensive resource pool facilitates in-depth examination of complex disputes and informed decision-making. Furthermore, the composition of sectoral regulators frequently reflects a multi-disciplinary approach, with members possessing diverse backgrounds in engineering, finance, law, commerce, and management. This ensures a well-rounded perspective during the adjudication process, considering various technical and legal nuances. Inherent to their regulatory function, these bodies also serve in an advisory capacity to the government on relevant policy matters and actively work towards maintaining quality standards within their respective industries. This accumulated knowledge base equips them to deliver effective dispute resolutions that are aligned with broader sectoral objectives.

Public-Private Partnerships (PPPs) are increasingly leveraging the unique strengths of sectoral regulators for efficient dispute resolution. These specialized regulatory bodies, established under relevant sectoral legislation, offer a multifaceted advantage. Firstly, they comprise a panel of professionals with extensive knowledge and experience within their respective domains (technical, financial, and legal), enabling them to comprehensively analyze and adjudicate disputes arising within their specific sectors. For instance, the Central Electricity Regulatory Commission (CERC) established under the Electricity Act, 2003, consists of members possessing diverse backgrounds in engineering, finance, law, commerce, and management. This multi-disciplinary composition ensures a well-rounded perspective during the adjudication process, considering various technical and legal nuances specific to the power sector.

Secondly, statutory provisions often mandate time limits for adjudicatory bodies to deliver verdicts. The Electricity Act serves as a prime example, specifying timelines of 120 and 180 days for the commission and appellate tribunal, respectively, when resolving matters related to tariff setting. This framework promotes swift resolution of disputes, minimizing disruptions to ongoing PPP projects. In practice, these specialized tribunals have demonstrably adhered to these time constraints. A track record of time-bound decisions fosters predictability within the sector and bolsters investor confidence in the dispute resolution process.

Thirdly, the establishment of central and state-level regulators with a single appellate body, like the Appellate Tribunal for Electricity (Aptel) under the Electricity Act, has led to the development of a consistent legal framework for addressing various disputes within the sector. This centralized structure eliminates the potential for conflicting interpretations and ensures the application of established jurisprudence across different jurisdictions. Consequently, stakeholders can navigate the dispute resolution process with greater clarity and predictability.

Finally, the judiciary has also endorsed the approach of relying on sectoral regulators for resolving disputes arising in PPPs. In the landmark case of *Uttar Pradesh Power Corporation Ltd. v. NTPC Ltd. and Others* (2011), the Supreme Court acknowledged the Central Commission's expertise in dealing with highly technical matters like tariff determination. The Court emphasized that such issues necessitate knowledge beyond just legal principles and require an understanding of engineering, finance, and other relevant fields. Therefore, the Court ruled that these matters should primarily be entrusted to specialized bodies like the Central Commission, with minimal intervention from higher courts unless there is evidence of a substantial error in judgment.

II. Conclusion

Profitability remains a critical motivating factor for private investors in Public-Private Partnerships (PPPs). Delays resulting from disputes lead to cost escalation, depriving investors of potential earnings on alternative ventures. Therefore, an efficient dispute resolution mechanism is crucial for attracting private participation in PPP initiatives.

While amicable settlements through negotiation, conciliation, or mediation are ideal, situations often arise where parties struggle to reach a mutual agreement. Arbitration, traditionally seen as a quicker alternative to litigation, offers advantages like flexible procedures and binding awards. However, concerns regarding judicial intervention, delays, and procedural complexities within the current arbitration system limit its effectiveness in PPPs.

Statutory expert bodies like the Electricity Appellate Tribunal present a promising alternative dispute resolution model. Their strengths lie in specialized expertise, time efficiency, and reduced judicial interference. A centralized dispute resolution mechanism with a single appellate authority could be a viable framework for most PPP sectors in India. Limiting recourse to civil courts and allowing appeals to the Supreme Court only on significant legal issues can expedite the process. Furthermore, incorporating experts from diverse fields within this structure can ensure informed and efficient decision-making.

In conclusion, the Indian government should consider incorporating a robust dispute resolution framework within the Draft PPP Rules 2011. This framework should prioritize:

- Prompt Resolution: Measures to minimize delays associated with traditional litigation and arbitration.
- Expert Adjudication: Leveraging the expertise of specialized bodies like sectoral tribunals.
- Limited Judicial Intervention: Streamlining the process by restricting appeals to higher courts on well-defined grounds.

By addressing these aspects, the government can create an environment that fosters private sector participation in PPP ventures.

Case study for comparison of application of PPP in UK and INDIA.

Public-Private Partnerships (PPPs) offer a promising alternative to traditional public sector infrastructure development and service delivery. They hold the potential to significantly enhance project delivery outcomes. PPPs can facilitate the creation of dedicated public entities solely focused on managing specific projects. This project-specific focus allows for more efficient resource allocation. Global procurement of capital, expertise, and other necessary goods and services can optimize project costs. Furthermore, effective structures for project execution and oversight are crucial for successful PPP implementation.

However, successfully implementing PPPs requires overcoming a crucial knowledge-to-action gap. While the potential benefits of PPPs are widely acknowledged, a significant disconnect exists between theoretical understanding and practical implementation. This gap encompasses the intricacies of two key areas:

- Concessional Agreements: Structuring effective agreements that address risk allocation and other project-specific considerations is crucial. Careful consideration must be given to the terms of concessional agreements to ensure a balanced risk profile and successful project outcomes.
- Medium-to-Long Term Service Contracts: Developing robust frameworks for managing service delivery over extended periods is essential for sustained project success. Clearly defined service level agreements and efficient dispute resolution mechanisms are foundational elements of effective medium-to-long term service contracts.

The Metronet PPP: A Case Study in Infrastructure Project Delivery

This paper examines the "Metronet PPP," a large-scale Public-Private Partnership (PPP) undertaken in the United Kingdom (UK) for London's transportation sector. Launched in 2003, the project aimed to refurbish a portion of the London Underground.

Project Overview and Outcome:

Initial Goal: To modernize a section of the London Underground through a 30-year PPP initiative.

Unsuccessful Outcome: The private consortium managing the project declared bankruptcy in 2007. Subsequently, complete control reverted to the public sector entity "Transport for London" (TfL) in 2008. As of July 2015, the project remains entirely under public management.

Objectives of the Analysis:

Structure and Rationale: Explore the underlying logic behind the Metronet PPP and the organizational framework established for its execution.

Reasons for Failure: Analyze the factors contributing to the project's ultimate lack of success.

Implications for India: Draw lessons from the Metronet case study that can inform PPP policies and structures within India, a middle-income economy.

Significance of the Study:

This research aims to address a gap in academic literature by providing an in-depth case study of a large-scale transport PPP in a developed nation with a strong track record in public finance management.

Case Study Structure:

Section 2: Examines the initiation of the PPP for the London Underground upgrade, detailing the project framework and the roles of key stakeholders involved in the Metronet PPP. Additionally, it briefly compares the Metronet PPP with another contemporary PPP venture undertaken for the London Underground, known as the "Tube Lines PPP."

Section 3: Analyzes the operational details of both PPPs between 2003 and 2007, with a specific focus on the challenges encountered by the Metronet initiative.

Section 4 presents an analysis of the reasons for the operational challenges that the Metronet PPP faced and for its subsequent failure. A brief comparison of the outcomes of the Metronet PPP and the Tube Lines PPP is presented in section 5. Section 6 describes the performance of the London Underground since 2008, when public sector ownership was restored. The final concluding section of this paper discusses the implications from the case of the Metronet PPP in the UK for India.

This case study is based on an analysis of data from various information sources including reports of Transport for London (TfL), London Underground Limited (LUL), the National Audit Office (NAO) of the UK, and the UK House of Commons, as well as the existing academic literature.

THE PPP ARRANGEMENTS FOR UPGRADING LONDON UNDERGROUND

In the late 1990s, London's transport authority, then known as London Regional Transport (LRT), recognized the limitations of traditional public procurement methods for upgrading the London Underground. These methods were increasingly hampered by insufficient funding and unpredictable future allocations, making long-term planning difficult. To address these challenges, Price Waterhouse Coopers (PwC) conducted a comprehensive review in 1997, exploring alternative financing, development, and management options for the London Underground. Following the review's recommendations, a significant restructuring took place in 1999. London Underground Limited was divided into a separate operating company responsible for day-to-day operations and three infrastructure companies (Infracos) established to manage and refurbish specific aspects of the network: Infraco BCV (Bakerloo, Central, and Victoria lines), Infraco JNP (Jubilee, Northern, and Piccadilly lines), and Infraco SSL (Sub-Surface Lines including District, Circle, Hammersmith & City, Metropolitan & East London lines).

Shifting to Public-Private Partnerships

In February 2002, a significant shift occurred in the management of London Underground infrastructure. The authorities opted for Public-Private Partnerships (PPPs) for maintenance and renewal projects. Three separate PPP contracts were established, each entrusted to one of the existing "Infracos" (infrastructure companies) responsible for specific sections of the network.

Rationale for the PPP Model

The PPP approach was deemed suitable due to its potential to address two key challenges:

Funding Stability: Private sector involvement offered a solution for securing long-term financing for the project. Traditional public procurement methods had struggled to provide consistent and predictable funding for infrastructure upgrades. By involving private entities, the authorities aimed to leverage their ability to raise capital and mitigate the risks associated with long-term projects.

Management Expertise: The private sector's expertise in project management was expected to contribute positively. PPPs often attract companies with a proven track record in delivering complex infrastructure projects efficiently. The London Underground authorities hoped to benefit from this expertise in accelerating the pace of renovations and refurbishments.

Following the decision to implement Public-Private Partnerships (PPPs), separate contracts were awarded in December 2002 and April 2003. Tube Lines assumed control of Infraco JNP through a dedicated PPP agreement, while Metronet entered into two separate contracts in April 2003, taking over the operations of Infraco BCV and Infraco SSL. This paper focuses primarily on the Metronet PPP, encompassing the renovation projects undertaken by Metronet and London Underground Limited (LUL) for two distinct sections of the London Underground network.

The PPP projects were structured around consortia of private companies, with Tube Lines comprising three companies and Metronet consisting of five. Notably, the Metronet PPP held the record for the largest PPP venture (based on financial value) at the time of its signing in 2003.

The total projected investment for the PPP projects over the next 15 years (in 2002 present value) was estimated to be around GBP 16 billion. This breakdown included GBP 8.5 billion allocated for train and signaling upgrades, GBP 4 billion designated for track renewal and replacements, and over GBP 3.5 billion dedicated to station improvements.

Furthermore, compared to traditional public funding methods, PPPs were expected to generate cost savings of approximately GBP 2 billion. Additionally, the project aimed to deliver faster and more reliable journeys for passengers on the London Underground, potentially leading to further economic benefits valued at another GBP 2 billion over the project lifespan.

Distinct Roles and Performance-Based Compensation in PPP Agreements.

The Public-Private Partnership (PPP) agreements implemented for the London Underground renovation projects established a well-defined division of responsibilities and a financial mechanism linked to performance.

- **Division of Responsibilities:**
 - **London Underground Limited (LUL):** Retained control over the core functions of the network, including daily operations, passenger services, and adherence to all safety and engineering standards. LUL acted as the public sector entity overseeing the project.
 - **Tube Lines and Metronet:** These private consortia were tasked with maintaining and renewing the infrastructure within their designated sections of the London Underground network for a 30-year period. Their focus was on the technical aspects of infrastructure upkeep and improvement.
- **Financial Mechanism:**
 - **Government Funding:** The Department for Transport (DfT) of the UK government provided annual grants to Transport for London (TfL) ranging from GBP 1 billion to GBP 1.1 billion.
 - **Flow of Funds:** TfL then allocated these grants to LUL, which served as the central body for managing the financial aspects of the PPPs.
 - **Infrastructure Service Charge:** LUL used the allocated funds to compensate the private entities involved in the project. Metronet received a higher annual "Infrastructure Service Charge" (around GBP 0.6 billion) compared to Tube Lines (approximately GBP 0.4 billion) due to the larger scope of its responsibilities (source: NAO, 2009).
- **Performance-Based Incentives:**
 - **Variable Service Charge:** The "Infrastructure Service Charge" wasn't fixed but rather functioned as a performance-based payment system. This meant that the amount received by the private entities fluctuated depending on their performance against four key performance indicators (KPIs):
 - **Availability:** Measured the reliability of the network under their control, with factors like service disruptions and delays influencing the score.
 - **Capability:** Assessed the capacity of the network to handle passenger volume, taking into account factors like train frequency and passenger load during peak hours.
 - **Ambience:** Evaluated the overall passenger experience within stations and on trains, encompassing factors like cleanliness, comfort, and accessibility.
 - **Service Points:** Gauged the efficiency of the private entities in addressing service faults and fulfilling their contractual obligations, such as timely repair of equipment or infrastructure.
 - **Incentive and Penalty Scheme:** The PPP agreements outlined a system of rewards and penalties tied to the performance of the private entities. This structure aimed to motivate them to continuously improve the network's reliability, capacity, and overall passenger experience. Entities exceeding the set KPIs would receive additional financial incentives, while those falling below the established benchmarks would face financial penalties

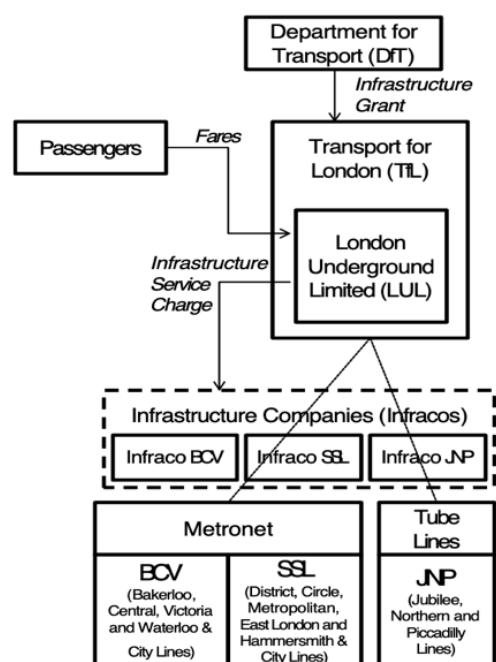
This approach ensured that the private entities were not solely focused on generating profit but also held accountable for delivering tangible improvements to the London Underground network. The performance-based compensation system aimed to align the interests of the private sector with the public good, ensuring efficient use of public funds and a focus on enhancing the overall quality of service for passengers.

This service charge varied depending on four key performance indicators: 'availability' measuring the reliability of the tube network under Metronet's control; 'capability' measuring the capacity of the tube network under Metronet's control; 'ambience' measuring the customer experience of the trains, platforms and station facilities under Metronet's control; and 'service points' measuring delivery against a number of varied contractual obligations such as the speed with which service faults were rectified.

The PPP agreements detailed a performance-related incentive and penalty scheme to remunerate the Infracos for the improvements they would make to the London Tube network. A comparison of the PPP contracts for Metronet and Tube Lines is presented in Table 1. The overall structure of the PPPs appear to be quite similar.

The PPP contracts were for a period of 30 years, however all contracts had provisions for periodic review of the contractual obligations at 7.5 year intervals. This was because neither the programme of work, nor its cost, could have been forecast so far ahead, and no private sector company would have agreed to do so. Moreover, LUL could not have committed to a fixed performance specification for 30 years, without any flexibility to adjust services in the light of London's changing needs (TfL 2011a). The reviews would allow the London Underground to re-specify its requirements at these time intervals, the first being due in 2010 (NAO 2009, UK House of Commons 2008).

Figure 1: Structure of the Metronet and Tube Lines PPPs⁷



Debt-Heavy Financing in the Metronet PPP

The London Underground PPPs were financed primarily through debt, with over 85% of the total project cost covered by loans. The remaining portion came from equity investments from various stakeholders. For instance, the Metronet PPP, upon project finalization in 2003, relied on a funding structure with three main components:

Equity: GBP 0.35 billion in equity capital, divided equally among the five companies involved in the project.

Senior Debt: GBP 1.6 billion in "senior debt," which takes priority in case of project failure or dissolution, meaning it would be repaid before other forms of debt or equity claims.

Bonds: The remaining funding was secured through the issuance of bonds, which are essentially debt instruments representing loans from investors. This is summarised in Table 2.

Table 2: Financial structure of the Metronet BCV and SSL PPPs following financial closure in 2003⁹

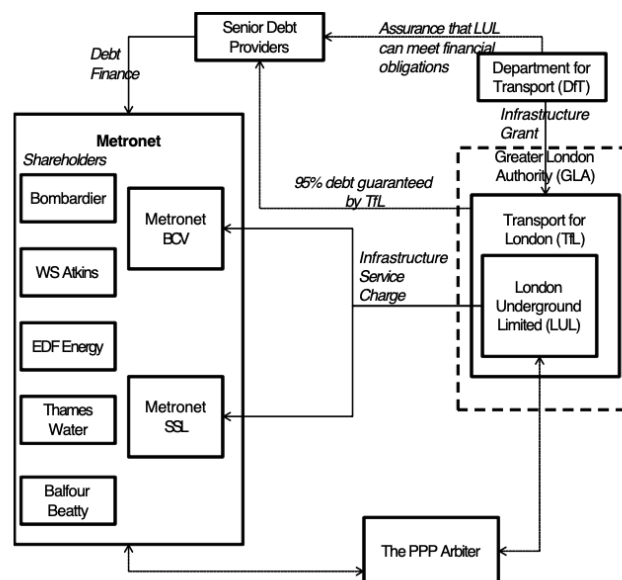
Type of Finance	Financer	Amount (GBP Million)
Equity	Atkins	70 million
Equity	Balfour Beatty	70 million
Equity	Bombardier	70 million
Equity	EDF Energy	70 million
Equity	Thames Water	70 million
Senior Debt	Commercial Bank Loans	1,000 million
Senior Debt	EIB	600 million
Bonds	Index-linked (AMBAC wrapped): BCV	165 million
Bonds	Index-linked (AMBAC wrapped): SSL	165 million
Bonds	Fixed rate (FSA wrapped): BCV	350 million
Bonds	Fixed rate (FSA wrapped): SSL	350 million

Note: AMBAC = American Municipal Bond Assurance Corporation and FSA = Financial Services Authority

The Metronet and Tube Lines PPP agreements, while similar in overall framework, diverged in key aspects of their financial planning and supply chain management. The Metronet PPP allocated GBP 360 million for unforeseen circumstances, but lacked a dedicated reserve for unanticipated risks. In contrast, the Tube Lines PPP possessed a more robust buffer against potential shortfalls with GBP 135 million in contingency funding and an additional GBP 76 million specifically designated for managing unidentified risks. Furthermore, the two PPP agreements differed significantly in their approach to supply chain management. The Metronet structure potentially created a conflict of interest, as the five shareholder companies also held supply contracts with Metronet, and the project management lacked transparency. In contrast, the Tube Lines model addressed these concerns by awarding major supply contracts through a competitive bidding process, fostering a more transparent and potentially cost-effective approach. Additionally, a single private company held clear control over project management in the Tube Lines PPP, ensuring a streamlined decision-making process. These distinctions in financial planning and supply chain management had potential ramifications. Competitive tendering for supply contracts in the Tube Lines model likely led to more competitive pricing and potentially better value for money compared to Metronet's structure. Metronet's shareholder-suppliers, on the other hand, might have prioritized maximizing their own financial returns within their supply contracts, potentially leading to less emphasis on optimizing resource utilization.

Figure 2.

Figure 2: Relationships among Key Players in the Metronet PPP¹⁰



Financial Underpinnings and Dispute Resolution in the Metronet PPP

As previously mentioned, the UK government's Department for Transport (DfT) provided financial support through grants to Transport for London (TfL). However, a more critical aspect was DfT's assurance to senior debt providers. This essentially guaranteed 95% of the debt incurred by Metronet, providing additional security to the lenders even though DfT itself wasn't directly involved in the PPP agreement or the governance of either TfL or Metronet (Shaoul et al., 2012). This indirect guarantee aimed to bolster the project's financial standing.

LUL, the public sector entity overseeing the project, made annual payments to both Metronet BCV and Metronet SSL through an "Infrastructure Service Charge" (ISC). It's important to note that the ownership structure of these two Metronet companies involved five key shareholders: Bombardier, WS Atkins, EDF Energy, Thames Water, and Balfour Beatty. These same companies not only held equal ownership stakes in the Metronet PPP but also acted as major suppliers for the project.

Dispute Resolution Mechanism

Figure 2 introduces the crucial role of the PPP Arbitrator. This position was established under the legislation governing the Greater London Authority (GLA), which TfL and LUL fall under. The rationale behind this appointment stemmed from the unique nature of the PPP agreements. Unlike fixed-price contracts, the project costs were subject to review and potential adjustments every 7.5 years. This raised the question of how to determine revised prices if the involved parties couldn't reach an agreement during these review periods. The

PPP Arbiter serves this crucial function of resolving pricing disputes and addressing potential information asymmetry between LUL, the public entity, and the private companies involved in the project (TfL, 2011a).

The Role and Responsibilities of the PPP Arbiter

The PPP Arbiter, appointed by the UK Government's Department for Transport, plays a critical role in ensuring the smooth functioning of the Public-Private Partnership (PPP) agreements for the London Underground. Their responsibilities, as outlined in Section 231 of the Greater London Authority (GLA) Act 1999, encompass several key objectives:

- **Safeguarding Public Resources:** The Arbiter ensures that London Underground has the flexibility to adjust project requirements if the agreed-upon costs escalate beyond available resources.
- **Promoting Cost-Effectiveness:** The Arbiter actively encourages efficient and economical practices throughout the project lifecycle, encompassing construction, renovation, maintenance, and overall infrastructure improvement.
- **Ensuring Fair Return for Efficiency:** In cases where the PPP agreements incorporate a profit-sharing mechanism (rate of return), the Arbiter's role is to safeguard that efficient and cost-effective performance by the private companies involved leads to the expected level of return as stipulated in the agreements.
- **Providing Predictability for Private Partners:** The Arbiter's role also involves fostering a predictable environment for the "Infracos" (infrastructure companies) involved in the PPPs. This allows them to plan their future operations with a reasonable degree of certainty.

The PPP Arbiter held a critical position in ensuring the smooth functioning of the PPP agreements. Their responsibilities encompassed resolving disagreements regarding service pricing between Metronet and London Underground Limited (LUL). In the event of disputes, the Arbiter would determine the appropriate service charges to be paid. Their authority extended beyond simply resolving conflicts. They also possessed the authority to judge the legitimacy of additional project expenses, specifically those deemed "economical and efficient". To make informed decisions, the Arbiter was granted broad access to various sources of relevant information. This included scheduled assessments conducted every 7.5 years at the end of each contract period (periodic reviews), regular reports submitted by the involved parties (annual reports), reviews initiated upon request by either LUL, Metronet, or Tube Lines (extraordinary reviews), and the ability for LUL, Metronet, or Tube Lines to directly seek the Arbiter's guidance on any matter at any time (direct inquiries).

Furthermore, the Arbiter's role wasn't limited to reactive dispute resolution. They were empowered to take a proactive approach by conducting firsthand assessments of the infrastructure's condition (railway infrastructure inspection) and proactively gathering information and building their knowledge base over time (preparatory work). This allowed them to be better equipped to address future concerns without waiting for specific disputes to arise.

The PPP agreements clearly outlined the process for handling "economical and efficient" additional project expenditures, effectively transferring the financial risk to the relevant party. For the Metronet PPP, each 7.5-year contractual period followed a specific breakdown. The initial GBP 50 million of approved additional spending incurred by either BCV or SSL (the two Metronet infrastructure companies) was the responsibility of Metronet itself. However, exceeding the GBP 50 million threshold for either BCV or SSL triggered a process where Metronet could seek the Arbiter's intervention. If the Arbiter deemed the additional spending justified after evaluating cost and performance benchmarks and requesting detailed cost breakdowns and project data (disaggregated cost and volume information) from the Infracos, they could grant Metronet the authority to request a corresponding increase in payments from LUL.

METRONET PPP'S OPERATIONAL CHALLENGES

Early Operational Improvements on the London Underground (2003-2008)

Data from 2003-2008 suggests positive developments within the London Underground network following the implementation of the PPP agreements. These improvements included:

- **Reduced passenger delays:** Lost customer hours, reflecting the total time passengers were inconvenienced due to equipment failures, decreased by approximately 20%.
- **Increased service frequency:** Train service volume rose by nearly 2.8 million kilometers.
- **Enhanced ridership:** Passenger journeys on the London Underground network witnessed a significant rise of nearly 125 million between 2003-2004 and 2007-2008.

Metronet's Performance: Mixed Results

While Metronet, the company responsible for managing two sections of the network (BCV and SSL), successfully achieved its core operational performance targets related to train availability, capacity, and passenger experience (ambience), it encountered challenges in delivering capital improvement projects within the agreed timelines and budget.

A 2009 report by the National Audit Office (NAO) revealed concerning delays and cost overruns in station improvement projects undertaken by Metronet. The report highlighted a troubling lack of progress. By March 2005, none of the eight stations targeted for completion were finished. Progress remained slow a year later, with only 11 out of 35 stations completed. Even two years after that, the completion rate continued to lag, with less than half the planned stations (28 out of 64) finished. These delays were further compounded by substantial cost overruns. In 2007, estimates indicated that the refurbishment costs for a sample of 31 stations due for completion by April 2008 were projected to be, on average, more than double the originally allocated budget. This signifies a significant financial deviation from the initial plan.

Metronet faced significant cost increases during the initial 7.5-year period of their PPP contracts, exceeding the original bid price by an unforeseen GBP 566 million. To address this financial gap, Metronet implemented several measures. They identified GBP 416 million in potential cost savings and the value of additional works directly commissioned by LUL. Additionally, GBP 89 million was drawn from contingency reserves set aside for unforeseen circumstances. These measures helped mitigate the cost overruns. After implementing these adjustments, Metronet BCV projected an extra spending requirement of GBP 27 million, while Metronet SSL faced a projected cost overrun of GBP 35 million. These figures fell within the GBP 50 million threshold they were jointly allowed to claim for additional "economical and efficient" expenses from public funds.

In February 2006, Metronet projected a significant cost increase of GBP 1.2 billion for the initial 7.5-year period, raising concerns about the accuracy of this estimate. Given these financial pressures, LUL (Transport for London) commissioned an independent audit by PwC in March 2006. However, the audit was hampered by incomplete information provided by Metronet, limiting PwC's ability to fully assess the situation. The audit revealed critical shortcomings within Metronet's operations. They lacked sufficient oversight of cost data held by their supply chain, making it difficult to effectively manage project expenses. Additionally, management focused primarily on meeting contractual obligations, potentially neglecting cost-containment measures. Furthermore, Metronet's risk management practices were still in their early stages of development, leaving the project vulnerable to unforeseen issues.

By February 2007, Metronet's project expenditures had escalated significantly. Compared to the prior year, they incurred an additional GBP 860 million in capital expenses and GBP 300 million in operational costs. The gravity of the situation led the Mayor of London to urge Metronet to undergo a comprehensive review process known as an Extraordinary Review.

In February 2008, the UK government, acting upon its previous guarantee to Metronet's creditors, provided financial aid to Transport for London (TfL). This included a grant of GBP 1.7 billion to facilitate LUL's acquisition of Metronet's outstanding loans. Furthermore, an additional GBP 630 million was granted over the following four years to replace debt that Metronet was expected to incur during that period. As a consequence of this intervention, Metronet was fully brought under public ownership and assumed by TfL in May 2008.

REASONS FOR OPERATIONAL CHALLENGES LEADING TO FAILURE OF THE METRONET PPP

Multiple factors intertwined to create a complex web of challenges that ultimately led to the operational failure of the Metronet Public-Private Partnership (PPP), as documented in official reports by the UK's National Audit Office (NAO) and in-depth academic analysis. A fundamental cause stemmed from a significant misalignment of objectives between the public and private stakeholders. Transport for London (TfL) and London Underground Ltd. (LUL) envisioned the project as a fixed-price agreement with a guaranteed outcome. Conversely, Metronet's shareholders viewed it as a series of flexible contracts where their reimbursement was directly tied to project expenses (cost-plus contracts). This inherent contradiction resulted in high transaction costs associated with negotiating and monitoring numerous cost-plus contracts, and a profit incentive misalignment that incentivized Metronet to prioritize increasing expenses, as their profits directly correlated with higher project costs.

Another critical factor was Metronet's internal contracting practices, raising concerns about potential conflicts of interest. While ownership was equally divided amongst five shareholder companies, a significant portion (nearly 60%) of the projected capital expenditure within the initial 7.5 years was allocated to these same shareholder-owned firms. This meant limited competition, as Metronet primarily outsourced station refurbishment projects to a separate entity, Trans4m, which was conveniently owned by four of the original Metronet shareholders. This lack of competitive bidding processes potentially inflated project costs. Similarly, work related to rolling

stock and signalling was solely handled by the fifth shareholder, Bombardier. This lack of external oversight within crucial aspects of the project increased the risk of inefficiencies and potential cost overruns. These combined factors created a system susceptible to financial mismanagement and misaligned priorities. The public sector, aiming for efficient service delivery at a fixed cost, was pitted against private entities motivated by maximizing profits through potentially unnecessary project cost increases.

The structure of the Metronet PPP created a situation where shareholder companies could potentially prioritize profits from service contracts over their returns on equity ownership. This weakened the intended disciplinary role of equity investment in the project.

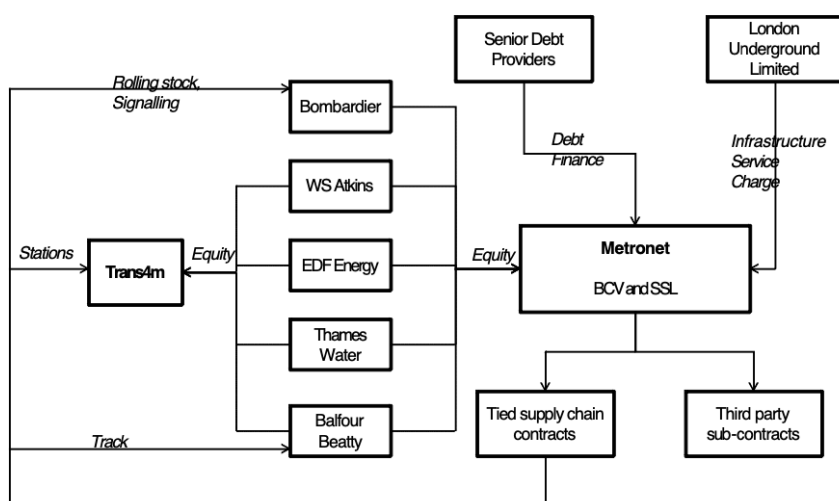
The "tied supply chain" within the PPP was a significant concern. Since the shareholders were also major suppliers, they held significant power in determining the scope of work, had easier access to cost information, and viewed the contracts as cost-plus arrangements, meaning they expected higher payments for increased project costs. This inherent conflict of interest potentially incentivized inflated project costs.

Furthermore, the fact that LUL, the public sector partner, allowed this structure to persist without recognizing its detrimental impact on the project's overall success suggests a potential lack of understanding regarding the potentially self-serving motivations of some private partners within the PPP.

Metronet's financial setup featured a high debt-to-equity ratio, with debt financing constituting around 88% of its capital (often referred to as "highly leveraged"). This placed the financial burden primarily on the debt holders. However, Transport for London (TfL) provided a 95% guarantee for senior lenders, and the Department for Transport (DfT) informally assured them that LUL, a subsidiary of TfL, would fulfill its debt obligations. Although the DfT offered no formal guarantee of Metronet's borrowing, the UK government's Secretary of State for Transport gave informal assurances to lenders, creating contingent fiscal liabilities for the government. These liabilities became actual debts when Metronet collapsed.

The ultimate cost of Metronet's failure was subject to varying estimates. The National Audit Office (NAO) estimated a total cost of GBP 1.75 billion. Notably, the five private companies constituting the Metronet consortium were only responsible for a relatively small portion (GBP 70 million each) due to their limited equity stake. Public funds, on the other hand, bore the brunt of the cost (GBP 1.7 billion), representing 95% of Metronet's debt obligations that were guaranteed by TfL and subsequently covered by the DfT as a grant.

Figure 3: Metronet's Tied Supply Chain¹¹



However, the NAO argued that not all of this expenditure was a complete loss. Despite inefficiencies in some capital spending, the public sector did benefit from the infrastructure improvements delivered by Metronet.

Public Costs and the Reclassification of PPPs

The National Audit Office (NAO) estimated the direct financial impact on taxpayers to be between GBP 170 million and GBP 410 million (based on 2007 prices). This figure reflected the difference between the public

funds spent and the value of completed works delivered by Metronet. However, the Mayor of London at the time disputed this estimate, arguing it underestimated the true costs. His estimate of GBP 550 million in losses accounted for additional work LUL had to undertake after Metronet's collapse, including unfinished projects and outstanding tasks.

This case also highlights a broader issue: the reclassification of Public-Private Partnerships (PPPs). Until 2007, both the Metronet and Tube Lines PPPs were classified within the "private sector" for accounting purposes. This meant their financial activities were not directly reflected in public sector financial reports. It was only after the PPPs faced challenges that a reclassification to the "public sector" occurred.

Table 3: Lost customer hours against benchmark on the lines formerly managed by Metronet

Note: ↑- better ↓- worse

London Tube Line Name	2003-04 Metronet	2004-05 Metronet	2005-06 Metronet	2006-07 Metronet	2007-08 Metronet	2008-09 London Underground Limited
Metropolitan, Circle, Hammersmith & City Lines	21% ↑	50% ↑	39% ↑	37% ↑	44% ↑	48% ↑
District Line	43% ↑	35% ↑	16% ↑	19% ↓	53% ↓	14% ↑
East London Line	4% ↑	2% ↑	34% ↑	29% ↑	20% ↑	Line closed
Bakerloo Line	15% ↑	34% ↑	13% ↑	10.7% ↓	3% ↑	34% ↑
Central Line	16% ↓	2% ↑	14% ↑	24% ↑	33% ↓	33% ↑
Victoria Line	16% ↓	9% ↓	11% ↓	26.7% ↓	40% ↓	23% ↑
Waterloo & City Line	58% ↓	12% ↓	66% ↓	29.2% ↓	66% ↓	219% ↓

Misaligned Risk and Limited Control in the Metronet PPP

The informal financial guarantees provided by the Department for Transport (DfT) to Transport for London (TfL) significantly reduced the financial risks faced by private partners in the Metronet PPP. In essence, DfT became the primary risk bearer due to its assurances regarding TfL's financial obligations (Source: NAO, 2009). However, this risk transfer was poorly structured, leaving DfT with limited control mechanisms to effectively manage the potential financial exposure. At best, the project achieved a minimal transfer of risk to the public sector.

Reasons for Misaligned Incentives in the Metronet PPP

As mentioned previously, the Department for Transport's (DfT) risk management strategy relied on other stakeholders within the Public-Private Partnership (PPP) acting in a way that aligned with DfT's objectives. However, the established governance structure and the terms of the PPP contract itself failed to create incentives for these stakeholders to prioritize DfT's goals (Source: NAO, 2009). This section explores the key factors that contributed to this misalignment.

A crucial issue was the limited access to information for key public sector stakeholders like Transport for London (TfL) and London Underground Ltd. (LUL). These entities were tasked with managing both performance and financial risks associated with the PPP, yet they lacked detailed information on either Metronet's financial situation or its operational performance. For example, LUL only received a high-level budgetary overview for Metronet, lacking details on specific budget categories (Source: NAO, 2009). Additionally, ambiguities within the contract regarding performance measurement further complicated matters.

The contract lacked clear definitions for terms like "modernization," "refurbishment," and "enhanced refurbishment" in relation to the stations program. This ambiguity allowed for subjective interpretations by Metronet, leading to frequent and time-consuming disputes with LUL.

Factors Contributing to Misaligned Incentives in the Metronet PPP

Several factors within the Metronet PPP structure contributed to a misalignment of incentives between stakeholders, ultimately hindering effective risk management.

- **Hybrid Contract Model:** The chosen PPP contract combined output-based (performance-driven) agreements for rolling stock and signaling with input-based (cost-driven) contracts for tracks, stations, and civil works (Gannon et al., 2013). While the output-based contracts functioned relatively well, the input-based contracts proved problematic. The unclear condition of these assets led to frequent changes in the scope of work for tracks and stations, hindering project efficiency.
- **Conflicting Interests within the Shareholder Group:** The selection of shareholder companies as primary suppliers for the project created a conflict of interest. As highlighted earlier, the "tied supply chain" meant that Metronet's shareholders also acted as its major suppliers. This structure incentivized these companies to prioritize maximizing their own profits through higher reported project costs, rather than focusing on cost control.
- **Limited Motivation for Debt Holders:** The debt holders, who financed a significant portion of the project, were expected to share some of the financial risk with the government. However, due to the 95% debt guarantee provided by TfL (and ultimately DfT), their actual risk exposure was minimal (only 5%). This lack of significant financial risk on their part reduced their incentive to actively monitor Metronet's finances.
- **Limited Oversight Authority:** The PPP Arbiter, responsible for resolving disputes within the PPP, lacked a legal mandate to prioritize public interest. This meant they weren't formally obligated to assist DfT in monitoring the contracts effectively. This highlights the broader issue of misaligned goals among various stakeholders. Public sector entities lacked a unified approach to oversight and management, while their objectives often conflicted with those of private sector partners (shareholders and debt holders). This resulted in a lack of overall organizational coherence within the project.

METRONET AND TUBE LINES PPPs' OUTCOMES

Despite the shared Public-Private Partnership (PPP) structure, the Metronet and Tube Lines projects experienced vastly different outcomes. As of 2008, Tube Lines functioned considerably better than Metronet. This disparity can be attributed to several key factors.

Firstly, Tube Lines benefited from a more robust corporate governance structure. Project management was centralized under a single entity, eliminating the potential conflicts of interest arising from "tied supply chains" that plagued Metronet. As a result, Tube Lines adopted a more commercially sound approach, focusing on cost control and minimizing project scope creep.

Gannon et al. (2013) further highlight the detrimental impact of Metronet's "tied supply chains." The consortium structure fostered an inward-looking approach, prioritizing shareholder profits over project efficiency – a stark contrast to the PPP's intended focus on value for money. Unlike Metronet, Tube Lines competitively tendered a significant portion of its contracts, fostering market competition and potentially reducing costs.

The Tube Lines PPP achieved success partly due to its willingness to adapt its contracting strategy over time. Initially, they followed a traditional "design-bid-build" model, where the lowest bidder often became the lead contractor who might then subcontract further work. However, this approach led to communication delays, particularly when unforeseen issues arose during station refurbishments. With frequent design changes and disagreements with LUL regarding project scope, managing numerous subcontractors became cumbersome.

In response to these challenges, Tube Lines adopted a more streamlined approach. They transitioned to a role of construction manager, awarding work packages directly to specialized subcontractors. This improved communication and efficiency.

Furthermore, Tube Lines actively enforced their interpretation of the contract while continuously improving their supply chain. This proactive approach stands in stark contrast to Metronet's project management. A case in point is the difference in how both PPPs handled station improvement works. When encountering similar challenges regarding project scope and compliance, Tube Lines swiftly halted most station works within six months. This proactive approach allowed them to negotiate a comprehensive framework with LUL that addressed all stations at once. Conversely, Metronet continued working on a station-by-station basis, leading to

a less efficient approach. Tube Lines further distinguished itself by streamlining assurance and compliance procedures, significantly reducing duplication of efforts.

Despite its successes, the Tube Lines PPP also experienced cost increases. However, Tube Lines maintained transparency by consistently monitoring and notifying LUL of these cost changes through official project plan documents. These rising costs led to renegotiation attempts between LUL and Tube Lines, which involved significant disagreements, particularly regarding the Jubilee Line upgrade.

A major sticking point arose in 2009 concerning the pricing of the PPP contract for the second 7.5-year term starting in mid-2010. In September 2009, TfL sought the PPP Arbiter's intervention to establish a "fair price" for the Tube Lines contract covering the upgrade of the Jubilee, Northern, and Piccadilly lines during this period (TfL, 2009a). By December of that year, the PPP Arbiter estimated the contract value at GBP 4.4 billion (TfL, 2009b). This figure fell considerably short of Tube Lines' initial proposal of GBP 6.8 billion (later revised to GBP 5.75 billion) but aligned more closely with LUL's valuation of around GBP 4 billion (TfL, 2009b, 2010b). In May 2010, TfL and Tube Lines reached an agreement. TfL would acquire the entirety of Tube Lines' equity for GBP 310 million (TfL, 2010b). This move ensured that the London Underground upgrade project would not incur any additional financial burdens on the UK government, passengers, or taxpayers (TfL, 2010b). By June 2010, TfL finalized the acquisition, effectively bringing the Tube Lines PPP back under full public control.

PERFORMANCE OF LONDON UNDERGROUND LIMITED SINCE 2008

Both the Metronet and Tube Lines PPPs transitioned back to full public control under London Underground Ltd. (LUL) within a decade of their inception. This raises the question: how does the current, fully public system compare to the previous PPP model in terms of performance? Additionally, what internal improvements has LUL implemented to enhance its services?

This section analyzes these questions by examining a key performance metric: customer waiting times (measured by lost customer hours against a benchmark).

Data from 2008-2009 suggests LUL generally outperformed the benchmark on lines previously managed by Metronet. The Waterloo & City Line stands as an exception, with significantly higher lost customer hours (219% above the benchmark).

IMPLICATIONS FOR PPPs IN INDIA

The Metronet PPP case study offers valuable insights for implementing PPPs in India, particularly for public sector organizations. Here, we explore some key generic implications:

- **Avoidance of Tied Supply Chains:** The case study highlights the pitfalls of using "tied supply chains" where shareholders are also the primary suppliers. This structure creates a conflict of interest, as companies prioritize maximizing profits through inflated project costs rather than achieving value for money.

Mitigating Risks with Tied Supply Chains

While the Metronet case study highlights the challenges of "tied supply chains," some experts believe they can be implemented with caution. Gannon et al. (2013) suggest that if such arrangements are considered for PPPs in India, strict measures are necessary:

Rigorous Bid Evaluation: During the bidding process, authorities must assess the governance structure of potential consortiums, examining both board levels and the entire supply chain.

Contractual Safeguards: The PPP contract documents should explicitly address governance concerns and outline measures to regulate the tied supply chain to prevent problems like those experienced in the Metronet case.

Assess Motivations of the Parties to PPP

Scrutinizing Tied Supply Chains in Indian PPPs

Public-Private Partnership (PPP) authorities in India should be wary of "tied supply chains" from the very beginning of project planning. These arrangements, where project partners also act as primary suppliers, require careful evaluation.

A critical question is the private partner's true motivation. Are they committed to achieving the project's goals, or is their primary focus on maximizing profits through the tied supply chain?

- **Alignment with Project Goals:** If the partner prioritizes delivering the desired PPP outcomes, a genuine partnership can be formed.
- **Profit Maximization Motive:** If excessive profit generation through the supply chain is the main driver, the risk exposure for the private partner becomes minimal. This creates a situation akin to a "marriage of convenience" with little long-term commitment.

Evidence suggests that the latter motive may be prevalent in some Indian PPPs. This could partly explain why some projects stall after an initial burst of activity, potentially due to recouping front-loaded capital expenditures through inflated supply chain costs.

Addressing the Issue:

Mitigating this tendency should be a high priority for Indian PPP authorities at all levels of government.

Measures to consider include:

- Scrutinizing potential partners' motivations during the bidding process.
- Implementing safeguards within PPP contracts to prevent exploitation of tied supply chains.
- Exploring alternative procurement methods that foster collaboration and value for money.

By taking these steps, Indian PPPs can move away from potentially self-serving partnerships and towards genuine collaborations that deliver on project objectives.

Establish Capacities and Procedures for Monitoring Performance of each PPP

Effective PPPs require robust risk management practices that emphasize regular performance data collection, establishing a strong monitoring system from the outset. This system should encompass several key considerations: agreeing on the specific data needed for monitoring and how it will be provided and verified, ensuring detailed performance data is accessible to relevant public agencies (and potentially a PPP Arbiter) throughout the project, maintaining consistent data recording practices across decentralized units in large PPPs, and making monitoring information readily available to all stakeholders for validation and correction before it's used for decision-making. By implementing these measures, PPP authorities can ensure they have access to reliable and comprehensive data, enabling them to effectively monitor project performance, identify and address risks proactively, and ultimately achieve successful PPP outcomes.

Consider Tools Assisting Management-for-Results Approach

Public-Private Partnerships (PPPs) benefit from robust monitoring tools to track progress and ensure successful delivery of promised outcomes. One such tool is a performance dashboard, which effectively combines alignment and linkage to track project performance. A well-designed dashboard maps out project goals against stakeholder expectations, using a combination of objective, measurable metrics and periodic surveys to gauge subjective experiences. The dashboard should continuously monitor the project's actual performance against the initial plan, both during and after implementation. To ensure metrics are actionable, they should not only align with project goals but also be directly linked to ongoing activities, tasks, and deliverables. Ideally, these metrics should be reported online regularly. This alignment and linkage of goals, metrics, and activities necessitate an oversight office established at the government level overseeing the PPP entity. By analyzing the gap between desired outcomes and actual delivery, the oversight office can identify potential problems and intervene when necessary to ensure on-time completion and minimize project failure risks.

Risk Management in PPPs: Beyond Financial Considerations

Effective risk evaluation in Public-Private Partnerships (PPPs) goes beyond just financial consequences. It's crucial to assess the impact of identified risks on overall project value and cost. Risk metrics should be linked to specific activities and milestones associated with delivering goals at each project stage.

Strengthening Oversight:

The current role of the PPP Arbiter (or a similar oversight body) could be expanded to provide ongoing contract oversight throughout the project lifecycle, particularly for the public sector entity carrying the most significant risk. This enhanced oversight would contribute to more effective risk management.

Whole-Life Costing and Contract Flexibility:

While whole-life costing, which considers total project expenses over its entire lifespan, is highly desirable, it's important to acknowledge the limitations of predicting project details 30 years into the future - the typical duration of PPP contracts. Therefore, establishing mechanisms for periodic contract reviews becomes essential. This allows for adjustments and mitigates risks arising from unforeseen circumstances. Limiting the use of cost-plus contracts, where costs can escalate unexpectedly, further strengthens the financial health of a PPP.

Build Consequences of PPP Failure in Project Planning

Strong risk frameworks are essential for Public-Private Partnerships (PPPs) to achieve success. These frameworks should go beyond simply identifying potential risks. They should also consider the likelihood of project failure for each risk, as well as the severity and extent of the consequences at both strategic and operational levels if such failure occurs.

This focus on probability and impact is a key reason why generic, "model" PPP frameworks often fall short. These one-size-fits-all approaches fail to capture the unique risk profiles of individual projects.

The Role of PPP Arbiter: Align Responsibilities with Authority

Learning from the Best: The Power of Benchmarking in PPPs

The experience of the PPP Arbiter in benchmarking costs and performance for the Metronet and Tube Lines projects highlights the importance of this practice in PPPs. Benchmarking allows PPPs to compare their efficiency against relevant international standards. However, establishing effective benchmarking practices requires commitment from all stakeholders and can be time-consuming.

Here's how to ensure successful benchmarking in PPPs:

Early Implementation: Initiate benchmarking processes early in the project lifecycle to collect valuable time-series data for analysis.

Independent Oversight: Consider assigning an independent stakeholder, such as a PPP Arbiter, the responsibility for overseeing cost and performance benchmarking throughout the project.

Clear Communication: Ensure clear communication of the benchmarking process to both public and private sector partners involved in the PPP. This transparency fosters trust and collaboration.

By following these steps, PPPs can leverage the power of benchmarking to improve efficiency, identify areas for improvement, and ultimately achieve better value for money.

Incorporate Principles of Value for Money

Public-Private Partnerships (PPPs) necessitate a focus on value for money, not just cost savings. A robust value for money assessment should encompass several key metrics: economy (evaluating the acquisition of resources at the best possible price), efficiency (ensuring resources are used effectively to minimize waste), effectiveness (measuring the extent to which the PPP achieves its intended goals), and fairness and equity (considering the project's impact on stakeholders and ensuring a sense of justice, particularly relevant in the Indian context). These metrics go beyond specific project deliverables and become the "core apex deliverables" - the ultimate measure of success for a PPP.

Drawing on the experiences of multilateral institutions, successful PPPs demonstrate a strong alignment between their goals, the data used to track progress towards those goals (metrics and measures), regular assessments to identify areas for improvement (reporting and review), and processes for adapting the project to address challenges and ensure timely interventions (course correction and change mechanisms). These elements should all be incorporated as intrinsic components of the PPP charter, a foundational document outlining the project's overall purpose, specific, measurable goals (objectives), underlying motivations (intent), defined boundaries (scope), expected outputs (deliverables), and timeframe for completion (timelines). By integrating these considerations, PPPs can move beyond a narrow focus on cost and ensure they deliver genuine value for money.

Create Arrangements for Public Sector Agencies to Acquire Needed Skill-Sets

Following the return of the Metronet and Tube Lines PPPs to public ownership by London Underground Ltd. (LUL), Transport for London (TfL) has placed a commendable emphasis on staff skills development, particularly in project management (Source: [Insert a source about TfL's skills development initiatives]). This focus extends beyond internal training. TfL has established a central governance structure to promote skills development across the entire organization, while also collaborating with related sectors to enhance industry-wide employee competencies.

Effective management of complex infrastructure like urban transportation systems demands a strong foundation of relevant skillsets. Adapting to these needs necessitates a degree of autonomy in recruitment practices, coupled with clear accountability for performance. This allows TfL to attract and retain skilled personnel, ensuring the organization possesses the expertise required to deliver successful projects.

Specific Implications for Indian Public Organisations

In the wake of recent policy announcements and media discussions, various Indian government departments and agencies, particularly those involved in physical infrastructure like highways and railways, are reevaluating their Public-Private Partnership (PPP) strategies. This shift presents an opportunity for Indian organizations to learn valuable lessons from the Metronet PPP case study in the United Kingdom, beyond the generic implications discussed earlier.

Improve Public Sector Organisations' Project Management Capabilities

The Metronet case study offers a cautionary tale for government bodies involved in Public-Private Partnerships (PPPs). While the Department for Transport (DfT) ostensibly carried the most risk in the project, their overreliance on external partners for risk management ultimately proved detrimental. This highlights the crucial role of internal project management expertise within government organizations undertaking PPPs.

To achieve this, government entities need to:

- **Invest in Skill Development:** Implement structures and human resource policies that foster the development of essential project management skills within their workforce.

- **Adapt Recruitment Practices:** Consider revising recruitment policies to attract and retain qualified personnel with the necessary expertise. This might involve a shift away from overly rigid hiring practices currently in place.

By strengthening their internal project management capabilities, government bodies can enter into PPPs with greater confidence and mitigate potential risks more effectively. **Government's Role Should Extend to Organisational Co-Ordination and Policy Coherence**

For critical infrastructure projects delivered through Public-Private Partnerships (PPPs), experts advocate for a more active government role that goes beyond simply directing and monitoring. This new approach emphasizes two key areas: network coordination and incentive design. Network coordination involves facilitating collaboration between public and private players involved in PPPs, while incentive design focuses on identifying instruments that encourage PPP networks to effectively deliver critical infrastructure projects. In India, the PPP Division within the Ministry of Finance is strategically positioned to spearhead these efforts. By providing training and resources, the PPP Division can strengthen the project management capabilities of public sector entities involved in PPPs. Additionally, the division can serve as a central hub for coordinating activities and fostering communication between public and private stakeholders within PPP networks. These actions can also help retain valuable government expertise within the PPP framework, ensuring informed decision-making throughout the project lifecycle.

Achieving Policy Harmony for Effective PPPs

Effective Public-Private Partnerships (PPPs) require policy coherence across various stages, from project design and financing to implementation and value for money assessment. This coherence needs to encompass areas like accounting methods, budget systems, and costing practices to ensure all stakeholders are working towards the same goals. To avoid conflicts of interest and ensure project success, all parties involved in a PPP contract, public and private, must agree on a common agenda. Furthermore, strong public institutions are crucial for mitigating risks in case of poor decisions or project failures.

The recent Economic Survey of India (2014-15) identified two key challenges for Indian PPPs that highlight the importance of strong public institutions. First, weak public institutions can lead to the private sector assuming project implementation risks associated with delays in land acquisition and environmental clearances. This unfairly burdens private partners with additional costs beyond their control. Second, the lack of established structures for "ex-ante" negotiation, which refers to negotiations before a contract is signed, can disadvantage the public sector. Without clear agreements in place upfront, disputes can arise later, hindering project progress.

Critically Examine Reasons for Opting for PPP Prior to Project Decision

Studies like the Metronet and Tube Lines PPPs highlight the need to critically assess the assumptions that often lead policymakers to favor Public-Private Partnerships (PPPs) over traditional public procurement methods. These assumptions include:

- The private sector is inherently more efficient than the public sector.
- PPPs effortlessly transfer risk (and associated costs) to the private sector.
- The private sector possesses superior financial and commercial expertise, guaranteeing successful deals that deliver on project objectives.

The Metronet case study suggests that these assumptions may not always be valid. This underscores the importance of rigorous analysis before embarking on a PPP venture. A crucial question to consider is: Why is a PPP being considered for this particular project? Only after a thorough evaluation of project requirements, potential risks and benefits, and alternative procurement options, should a decision to pursue a PPP be made.

Build Responsibility in PPP Contract

The ability of the UK government to reverse the Metronet PPP within a reasonable timeframe, albeit costly, highlights an important consideration for Public-Private Partnerships (PPPs) - the potential for reversal. This case study underscores the need for a more adaptable PPP framework that can respond to changing circumstances and unforeseen challenges. Such a framework would explicitly consider reversal scenarios during the planning stages of a PPP, ensuring that robust institutions with the authority and expertise to manage complex reversals are in place. Additionally, developing clear and efficient processes for PPP reversal can minimize disruption and associated costs when unwinding a PPP agreement becomes necessary.

Understand and Manage Contingent Liabilities of PPP Method

Public-Private Partnerships (PPPs) involving state-owned land and fixed assets like electricity grids or water systems present unique challenges in risk definition and management. To effectively address these challenges, PPP structures need to consider both incentives and disincentives. During the PPP planning phase, estimating potential liabilities associated with fixed assets allows for a more accurate assessment of risks and costs.

Additionally, implementing incentive structures that reward the private sector partner for timely project completion and performance delivery is crucial. These incentives can take various forms. However, a well-designed PPP structure should also incorporate disincentives to discourage mismanagement. For instance, penal levies proportionate to the fair value or cost of the asset could be imposed if projects remain unfinished. This comprehensive approach that balances incentives for success with disincentives against misuse of public assets can promote efficient project delivery while safeguarding taxpayer interests in the event of unforeseen circumstances.

Importance of Whole-Life Costing

Successful Public-Private Partnerships (PPPs) require robust processes throughout the project lifecycle, including whole-life costing, which considers the total project expenses over its lifespan. In India, establishing a central body with the necessary expertise to handle these processes could significantly improve PPP outcomes.

The 2014-15 Union Budget proposed the creation of "3P India," an entity dedicated to mainstreaming PPPs and ensuring efficient project delivery. This concept holds merit and aligns with recent suggestions from NITI Aayog, a government think tank, which proposes that such an entity could leverage its specialized skills to not only guide future PPP development but also potentially restructure existing PPP contracts.

Beyond a central PPP body, India can strengthen its Public-Private Partnership (PPP) framework by fostering knowledge development at the sectoral level. Sector-specific PPP units within organizations like the Indian Railways, National Highway Authority of India, and the Ministry of Defence can cultivate their own knowledge base on best practices. This approach can leverage India's federal structure by establishing "shared services" centers that offer expertise and maintain databases for benchmarking PPP performance across different sectors.

These specialized PPP units can play a crucial role in ensuring clarity and minimizing ambiguity within PPP contracts. Experts within these units can review contracts before finalization to identify and address any language-related issues. Additionally, NITI Aayog, a government think tank, recommends that each ministry involved in PPPs establish a dedicated monitoring division with full-time staff and dedicated budgets to hire the necessary specialists. This combined approach, with expertise at both central and sectoral levels, can significantly enhance India's capacity to deliver successful PPP projects.

Model PPP Contract Inappropriate, Focus on Service Delivery to Citizens

Uniqueness in Every PPP Contract: Lessons from the Metronet Case

The contrasting outcomes of the Metronet and Tube Lines PPPs, both implemented for the same purpose in the UK, highlight a crucial point: Public-Private Partnership (PPP) contracts require customization. A "one-size-fits-all" approach, even within the same sector, is unlikely to be successful. Similarly, concerns have been raised in India regarding the rigidity of standardized PPP documents. These documents may not adequately address the unique risks and stakeholder relationships inherent in each PPP project.

Effectively leveraging PPPs requires recognizing them as service delivery mechanisms for citizens, not merely financing tools. Citizens' needs evolve over time, necessitating flexibility within PPP contracts to adapt service delivery frameworks throughout the project lifecycle. This adaptability should be guided by sound economic principles, with contracts tailored to the specific circumstances of each project.

Strengthen Information and Data Systems for Better Management

Effective Public-Private Partnerships (PPPs) necessitate robust information and data systems for performance monitoring and benchmarking. These systems should be established at the outset of the PPP and continuously gather data throughout the project lifecycle. Regular data analysis is crucial for generating valuable feedback that can be used to improve project delivery. This feedback loop should inform decision-making by both private and public sector stakeholders involved in the PPP.

Importance of Intent and Accountability

Public-Private Partnerships (PPPs) are a tool, not a guarantee, of achieving citizen-centric value for money. Success hinges on two crucial factors:

- **Commitment to Citizen Benefit:** All parties involved in a PPP project, regardless of sector (private, public, non-profit, or civil society), must demonstrate a strong commitment to acting in the best interests of the citizens they ultimately serve. This requires a clear understanding of citizen needs and a genuine desire to deliver projects that enhance their well-being.
- **Effective Accountability Systems:** A robust governance framework with a high degree of accountability is essential. This includes mechanisms for swift and appropriate legal consequences for those who fail to meet their obligations.

India has a significant opportunity to improve its PPP landscape by fostering a culture of citizen-centricity and strengthening accountability measures across all stakeholder groups.

PPP from the eyes of UN

Public-Private Partnerships: A Tool for Infrastructure Development and Economic Growth

Public-Private Partnerships (PPPs) have emerged as a prominent strategy to address the growing gap between public funding needs and infrastructure development expenses, particularly relevant in times of national debt and budget deficits. This approach is especially attractive in the current global economic climate, where traditional project financing can be challenging. PPPs offer a path for developing countries to achieve sustainable economic growth and developed nations to stimulate their economies.

Governments leverage PPPs for several reasons:

- **Funding Infrastructure:** PPPs enable governments to deliver essential public infrastructure projects, such as roads, utilities, and social services, by attracting private sector investment. This minimizes the government's financial burden and spreads the cost over the project's lifespan.
- **Enhancing Efficiency:** PPPs can leverage the private sector's expertise in project management, innovation, and financing methods, potentially leading to improved efficiency in infrastructure development and service delivery.

The positive impact of PPPs extends beyond national borders, potentially influencing international trade by creating a more robust global infrastructure network. Overall, PPPs offer a multitude of advantages for both individual countries and the broader global marketplace.

The Evolving Legal Landscape of Public-Private Partnerships (PPPs)

Despite the widespread adoption of PPPs globally, a clear and comprehensive legal framework governing their use remains largely absent at both the international and domestic levels. While a few countries and international organizations have recognized the need for dedicated PPP regulations, this is not the norm.

The United Nations Commission on International Trade Law (UNCITRAL) has taken significant steps to address this gap. In 2001, they adopted the UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects (PFIP Guide), and in 2003, the UNCITRAL Model Legislative Provisions on Privately Financed Infrastructure Projects (Model Provisions) (Source: https://uncitral.un.org/sites/uncitral.un.org/files/media/documents/uncitral/en/03-90621_ebook.pdf). These resources provide valuable guidance for establishing a legal framework that facilitates successful PPP projects. However, it's important to note that these are not binding legal instruments but rather serve as recommended best practices.

A Call for Modernized PPP Regulations: Addressing the Need for Clarity and Consistency

Over a decade has passed since the publication of the UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects (PFIP Guide). A growing consensus recognizes the need for a more standardized set of rules governing Public-Private Partnerships (PPPs). The current lack of uniformity creates uncertainty and increases transaction costs, potentially hindering the wider adoption of PPPs. This is particularly concerning for countries with limited experience in PPPs, where a clear understanding of the legal framework is crucial.

In light of the expanding use of PPPs across various infrastructure sectors globally, developing a model PPP law is a timely consideration. This research aims to contribute to this effort by providing a general overview of key legal issues related to PPPs and Project Finance Initiatives (PFIs). Specifically, the focus is on identifying areas where the UNCITRAL PFIP Guide and Model Provisions could be updated to better reflect current practices and address emerging challenges. The ultimate goal is to inform the development of a comprehensive Model PPP Law that can be a valuable resource for countries seeking to leverage PPPs effectively. This research emphasizes the identification of new legal issues in PPPs, not a detailed analysis of existing ones.

Relevant PPPs Rules

A. UNCITRAL PFIP Guide & Model Provisions

In 2003, the United Nations Commission on International Trade Law (UNCITRAL) built upon its 2001 Legislative Guide on Privately Financed Infrastructure Projects (PFIP Guide) by introducing complementary Model Legislative Provisions. The Guide offers 71 best-practice principles for establishing a legal framework

for PPPs, while the Model Provisions translate these principles into a more concrete legislative format with 51 specific provisions. Both resources are accompanied by explanatory notes that provide in-depth analysis of relevant financial, regulatory, legal, and policy considerations. Users are encouraged to consult all three documents together for a comprehensive understanding.

The primary function of the UNCITRAL PFIP Guide and Model Provisions is to inform the development of national PPP laws, not individual PPP contracts. Their influence extends beyond national borders, having served as a foundation for subsequent PPP guidelines issued by other international organizations, such as the European Bank for Reconstruction and Development's Core Principles (2006) and the OECD's Basic Elements for a Law on Concession Agreements.

WTO GPA

The Legal Landscape of Public-Private Partnerships (PPPs)

The World Trade Organization (WTO) does not have a specific legal definition of PPPs. However, WTO member states recognize the importance of legal frameworks in promoting their use. The WTO's General Agreement on Government Procurement (GPA) is a relevant legal agreement that establishes principles for government procurement, including transparency and non-discrimination. These principles can be applied to the procurement process within PPP or other public contracts.

The OECD's Contribution to PPP Legislation

The Organisation for Economic Co-operation and Development (OECD) has also played a role in shaping the legal environment for PPPs. Their "Basic Elements for a Law on Concession Agreements" offers guidance for countries seeking to attract private sector investment in infrastructure and natural resources, particularly in developing economies. This document provides 18 core principles for drafting concession agreements, drawing on best practices and existing legislation, including the UNCITRAL Legislative Guide. Unlike the UNCITRAL Model Law, which focuses solely on infrastructure projects, the OECD's Basic Elements encompass both infrastructure and natural resource projects.

EPEC Guide to Guidance

The European PPP Expertise Centre (EPEC) is a collaborative effort between the European Investment Bank (EIB), the European Commission, and European Union member states and candidate countries. Their primary function is to bolster the PPP implementation capabilities of public sector members within the EU. This is achieved by facilitating knowledge sharing among PPP task forces in these countries. EPEC fosters exchange of experiences, best practices, and analyses related to PPP transactions.

Recently, EPEC published version 2 of its "Guide to Guidance." This resource aims to identify the most valuable PPP guidance documents available globally. It serves as a practical tool for public officials involved in PPP projects, enhancing their understanding of key issues and procedures involved in procuring PPP arrangements. While the core focus of the Guide is not the legal framework surrounding PPPs, it does include a brief annex on this topic.

EU Legislation

The European Union (EU) currently lacks dedicated legislation solely governing the formation and operation of PPPs. However, existing EU public procurement rules, including those outlined in the Treaty on the Functioning of the EU, public procurement directives, and relevant court cases, are currently applied to PPPs.

Since PPPs are a form of public procurement, some aspects, such as the "competitive dialogue" procedure, can be adapted for PPP projects. The EU has two main procurement directives: the Public Sector Directive (2004/18/EC) and the Utilities Directive (2004/17/EC).

While PPPs share similarities with traditional EU procurement procedures, they also possess distinct characteristics. Notably, PPP arrangements typically involve:

- Long-term contracts between public authorities and private firms
- Transfer of project risks to the private sector
- Project financing arrangements
- Collaborative institutional structures
- Payments to the private sector funded by users, public authorities, or a combination of both.

The inherent complexity of PPPs compared to conventional procurement methods has created challenges regarding legal certainty and broader PPP adoption within the EU. The EU has opted against establishing a separate legal regime for PPPs distinct from public procurement directives at this time. However, several member states advocate for the development of a common set of EU-wide PPP regulations.

National Legislations

The Legal Landscape of PPPs: Common Law vs. Civil Law

Public-Private Partnerships (PPPs) navigate different legal environments depending on the jurisdiction's legal system. In many civil law countries, a separate set of administrative laws governs PPPs because the services involved are considered public services (Source: [Insert a source about PPPs in civil law jurisdictions]). These administrative laws establish core principles that cannot be overridden by private agreements. They may grant specific rights to contracting authorities, such as early contract termination, or to private operators, such as compensation for unforeseen cost increases.

In contrast, common law jurisdictions like the UK, US, and Ireland rely on established common law principles to govern commercial transactions, including those related to risk allocation in PPPs. Generally, civil law countries tend to have a more prescriptive approach to structuring PPPs compared to common law countries. These differences extend to areas like security interests, insolvency, and concession transfers.

National PPP Laws: Examples and Purposes

Several countries have enacted specific PPP laws. These laws may target a particular sector, such as transportation or water infrastructure, or apply more broadly across sectors. For example, Portugal's DL 96/2003 established a Central PPP Unit to manage PPP development, evaluation, tendering, risk allocation, and project execution. However, a later law, DL 141/2006, aimed to strengthen PPP management but fell short of fully addressing the need for an effective central unit.

Similarly, the Republic of Korea enacted its Act on Private Investment in Social Infrastructure in 1994 to incentivize private sector involvement in building and managing social infrastructure projects. This law has been amended to provide more flexibility, enhance oversight by the government and citizen participation, and promote competition throughout the PPP process. Brazil also enacted a PPP law in 2004 to attract investment in critical infrastructure projects.

While some countries have adopted dedicated PPP laws, others have successfully implemented PPPs without such frameworks. The United Kingdom (UK) serves as a prime example, demonstrating widespread and effective PPP use under its Private Finance Initiative (PFI) launched in 1992. The UK standardized its approach through numerous PFI projects, demonstrating the viability of PPPs without a comprehensive legal framework.

Australia presents another case of successful PPP implementation without a specific legal or statutory framework. Infrastructure development primarily falls under state governments, which have developed their own policies and guidelines for PPP procurement. Many states have enacted legislation to streamline complex project delivery by centralizing and expediting planning approvals and land-use processes. Examples include Victoria's Project Development and Construction Management Act of 1994 and the Mitcham-Frankston Project Act of 2004, which is project-specific legislation related to the East Link toll road PPP.

Unlike some countries, the United States lacks a single, comprehensive set of regulations governing Public-Private Partnerships (PPPs). Their use has primarily been confined to federally funded projects. This is partly due to constitutional limitations on the federal government's reach, making it difficult to establish a standardized nationwide PPP system.

However, there are regulations and laws that touch on PPPs in specific, limited areas. Examples include the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), the Transportation Equity Act for the 21st

Century (TEA-21) of 1998, the Transportation Infrastructure Finance and Innovation Act of 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act of 2005 (SAFETEA-LU).

Approach for PPP Model Law

The UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects (PFIP Guide) offers a comprehensive framework for developing PPP legislation. It consists of 71 key recommendations accompanied by detailed explanatory notes exceeding 200 pages. The complementary Model Legislative Provisions provide 51 core principles to address critical aspects of PPP legislation.

While some experts consider the Guide and Model Provisions to be a foundational resource, it's important to note that they are not intended as a complete model law. The explanatory notes delve into the complexities of PPPs, but the Model Provisions themselves may not be sufficient to serve as a standalone PPP law.

This minimalist approach avoids overly prescriptive language in the Model Provisions. However, some legal professionals argue that the language lacks the necessary detail for direct legislative implementation. As will be further explored, certain commercially significant issues are addressed in the notes but not explicitly included in either the recommendations or the Model Provisions. Additionally, the overall level of detail within the provisions themselves warrants further consideration.

Some proponents advocate for reviewing the UNCITRAL PFIP Guide and Model Provisions by mapping their contents against other prominent PPP and procurement guidelines. This approach aligns with the methodology employed in the European PPP Expertise Centre's (EPEC) "Guide to Guidance."

The rationale behind this recommendation stems from the existence of various PPP approaches and practices established by international organizations. These resources are used globally. For instance, besides the UNCITRAL Guide, the United Nations Economic Commission for Europe's (UNECE) PPP Toolkit includes a PPP Readiness Assessment Tool that utilizes a similar checklist for essential policy and legislative considerations. Similarly, the Organisation for Economic Co-operation and Development (OECD) offers a set of core principles for concession agreements, aiming to enhance the viability of infrastructure or natural resource project finance in specific regions.

The text further emphasizes the importance of aligning PPP regulations with existing public procurement frameworks to achieve greater harmonization within legal frameworks.

A key question remains: should the UNCITRAL PFIP Guide and Model Provisions strive to be a standalone, comprehensive model law, or serve as a roadmap that integrates existing PPP guidance with supplemental information as needed?

Considering the recent surge in practical PPP guidance documents, yet the absence of a single, universally accepted rulebook, there's an argument to be made for the UNCITRAL PFIP Guide and Model Provisions to take a more prominent role as a foundational PPP law.

Subject Matter & Scope

A. Legal Definition of PPPs

The UNCITRAL PFIP Guide and Model Provisions currently lack a precise legal definition of Public-Private Partnerships (PPPs). While the Guide outlines various private sector involvement models in infrastructure projects, including public ownership with public or private operation, and private ownership with operation, a clear definition would enhance legal certainty in PPP implementation.

The Guide currently avoids prescribing a "best practice" model, instead emphasizing that governments should select the most suitable PPP variant based on national infrastructure needs and project-specific considerations, including efficiency in development and operation. This suggests that the explanatory notes could be strengthened by incorporating real-world examples tailored to different PPP models. Such examples would improve a public authority's understanding and selection of the most appropriate PPP structure for a particular infrastructure project.

Furthermore, including specific conditions for utilizing various private sector participation models within the Guide would be a valuable addition.

Natural Resource Projects

The UNCITRAL PFIP Guide's current focus is solely on infrastructure projects, excluding those related to natural resource exploitation. It also avoids involvement in privatization transactions that are not directly connected to the development and operation of public infrastructure.

In contrast, the OECD's Basic Elements for Concession Agreements encompass both infrastructure and natural resource projects. This raises the question of whether the UNCITRAL PFIP Guide's scope should be broadened to include the exploration and exploitation of natural resources, considering concession agreements are commonly used across various sectors with diverse parties.

The text defines "public infrastructure" as physical structures providing essential services to the public. "Natural resources," on the other hand, encompass reserves or deposits of various materials, including oil, gas, minerals, and hydrocarbons, whether in their natural state or processed.

Covering Wider Forms of PPPs

Published in 2001, the UNCITRAL PFIP Guide served as a model for Private Finance Initiatives (PFIs), a type of PPP that utilizes private funding for capital investment. At the time, the distinction between PFIs and the broader concept of PPPs was not a major focus.

While there's still no universally agreed-upon definition of a PPP, there's a general understanding of the various procurement arrangements that fall under this umbrella. Historically, PPP guidance has primarily centered on concession agreements, neglecting the broader range of PPP models.

It's also recognized that governments implement PPPs for diverse reasons beyond just financing. This suggests that the UNCITRAL PFIP Guide might benefit from an expansion to encompass a wider array of PPPs, including those that are not solely finance-driven. This could include relational contracting approaches like partnering, project alliances, and similar variations. While the Guide mentions partnering in the context of dispute resolution (Part VI B(2)(b)), it doesn't delve deeper into its broader application.

The text highlights that PFI and concession agreements tend to be rigid structures. Investors in such models typically require predictable levels of service or utility demand over the long term to ensure project viability (bankability). However, for complex projects, the types and levels of required usage or service may be uncertain and unpredictable. In these scenarios, different contractual structures are needed, ones that facilitate long-term, flexible collaboration through mechanisms like risk sharing and adaptable output/payment specifications.

Finding Public Interest

A. Public Interest in PPPs

The UNCITRAL PFIP Guide and Model Provisions emphasize that Public-Private Partnerships (PPPs) should be undertaken for the public good. They acknowledge a humanitarian objective, such as improving citizens' quality of life. However, unlike many countries, the Guide and Model Provisions lack a specific definition of "public interest" or criteria for evaluating whether a project meets this standard.

To ensure PPPs are truly in the public interest, governments should conduct a thorough justification process considering various factors. This could include:

- Estimated project costs (or asset value) compared to bids from private investors.
- Accountability measures for all parties involved.
- Potential impact on affected individuals and communities
- Safety considerations

The UNCITRAL PFIP Guide and Model Provisions would benefit from addressing this gap by providing guidance on identifying and evaluating national public interest in the context of PPP selection.

B. Financial and Non-financial Factors

Determining public interest in PPPs can be a complex balancing act. Overly stringent public interest assessments risk discouraging private investment in infrastructure projects.

To effectively identify and safeguard public interests, government contracting authorities should conduct a two-pronged evaluation process:

- **Project-specific financial assessment:** This analysis should assess the financial viability of the project.
- **Qualitative analysis of non-financial factors:** This evaluation should consider broader societal impacts that go beyond just financial metrics. Examples of Australian states, New South Wales and Victoria, which mandate such reviews, highlight some potential factors to consider:
 - Effectiveness in achieving government objectives
 - Accountability and transparency throughout the project lifecycle
 - Consultation with affected communities and individuals
 - Protection of consumer rights
 - Public access to the infrastructure or service
 - Safety, health, and security considerations
 - Value for money for the government and taxpayers
 - Equity and fairness in project implementation
 - Protection of individual privacy

Evaluations on Financial Effects

A critical component of successful Public-Private Partnerships (PPPs) is ensuring the government receives the best possible return on investment, both for public funds and user fees. This is typically achieved through a "value-for-money" assessment.

This evaluation process examines various aspects of a PPP proposal, including:

- Caps on potential revenue for the private partner
- Projected user fees
- Restrictions on future user fee increases
- Required ratios of equity to debt financing for the private partner
- Length of the concession period
- Limits on the private partner's rate of return
- Allocation of risks between the public and private sectors

Value-for-money assessments in PPPs driven by financing considerations often allow for higher returns for private investors due to the increased risks they assume. However, in service-based PPPs, governments may employ a different approach that goes beyond just the specific concession terms. This approach considers whether the public or private sector is better suited to deliver the project effectively.

This comparison, known as a Public Sector Comparator (PSC), weighs the project's lifetime cost under both PPP and public delivery models. PSCs typically consider two main factors:

- The projected costs under each delivery model
- The value of risk transferred to the private sector in a PPP scenario.

The PSC also evaluates the types and extent of risk transfer that would occur if the project proceeded as a PPP. The private partner in a PPP typically assumes various construction, maintenance, and operational risks, such as unforeseen construction delays, rising material costs, energy price hikes, or significant drops in demand.

While value-for-money assessments and PSCs are valuable tools for deciding whether a PPP is suitable for a particular project, they are not without limitations. Both methods rely on numerous assumptions projected far into the future. Additionally, each type of project has unique considerations that may not be fully captured by a single standardized model.

Some legal frameworks offer valuable insights into addressing challenges in PPP evaluation. For instance, New South Wales (NSW), Australia, acknowledges that while long-term government costs are important, the impact on citizens is an even greater factor when considering infrastructure and services affecting daily life (Source: [Insert a source about NSW's PPP evaluation approach]). NSW addressed this by revising its value-for-money tests in 2006 to consider the taxpayer's perspective.

British Columbia (BC), Canada, offers another example. They implemented changes to their Public Sector Comparator (PSC) methodology, including independent auditor reviews. These reviews suggest ongoing improvements to ensure the PSC remains relevant and adapts to the specific needs of each project.

These examples highlight the potential benefits of incorporating discussions on various financial evaluation measures within the UNCITRAL PFIP Guide. This could include exploring methodologies that ensure a balance between financial considerations and safeguarding public interests.

Institutional Framework & Transparency

A. PPP Units

One of the most noteworthy advancements in PPP implementation has been the establishment of dedicated government units specifically tasked with PPP oversight and management. These PPP Units typically manage the PPP process up to the contract signing stage, while individual government agencies involved in the project take responsibility for finalizing the concession agreement.

The UNCITRAL PFIP Guide (Recommendations 6 to 10) acknowledges the importance of a central PPP unit within a government's administration. This unit should ideally be independent, autonomous, and well-resourced, with the overarching responsibility of developing policy and offering practical guidance for privately financed infrastructure projects. It's important to note that at the time the Guide was developed, formalized PPP institutional structures like these dedicated PPP Units were not as prevalent.

The Need to Address PPP Unit Structures in the UNCITRAL PFIP Guide

The growing prevalence of dedicated PPP Units globally suggests the UNCITRAL PFIP Guide and Model Provisions could benefit from further clarification on their operational aspects. This clarification could address key questions such as:

- **Optimal Placement:** Within which ministry or department should the PPP Unit be situated for optimal efficiency?
- **Composition:** What skillsets and backgrounds should be represented within the PPP Unit for effective operation?
- **Project Scope:** Which types of infrastructure projects would fall under the PPP Unit's purview?
- **Oversight Functions:** What monitoring and/or control measures would the PPP Unit implement?
- **Inter-agency Collaboration:** How would the PPP Unit interact with existing procurement authorities to ensure smooth coordination?
- **Cross-sectoral Reach:** Would the PPP Unit have a cross-sectoral mandate, or would it primarily focus on specific sectors?
- **Relationship with Sectoral Departments:** How would the PPP Unit collaborate with sector-specific government departments that may also be involved in infrastructure projects?

The text provides the example of the United Kingdom's approach in 1999, where "Partnerships UK" and the "Office of Government Commerce (OGC)" were established as permanent, quasi-governmental organizations specializing in PPPs. This example highlights the potential benefits of a structured PPP Unit model. Partnerships UK, with its board comprised of both public and private sector representatives, demonstrates the value of diverse expertise in PPP development and implementation. The OGC's focus on best value procurement practices further emphasizes the importance of a central PPP Unit for promoting efficient and effective PPPs.

Similar to the UK's Partnerships UK, Canada's province of British Columbia established a quasi-governmental agency dedicated to PPPs. Founded in 2002, Partnerships BC is entrusted with planning, delivering, and overseeing major infrastructure projects.

Structured as a company under the Business Corporations Act, Partnerships BC is wholly owned by the provincial government and governed by a board of directors accountable to the Minister of Finance.

The agency fulfils three key functions:

- **Specialized PPP Services:** Partnerships BC offers a range of services to government and its agencies, including expert advice, project leadership/management support, and assistance in identifying opportunities to optimize public assets through PPPs.
- **PPP Knowledge Hub:** The agency serves as a centralized resource for knowledge, expertise, and practical experience in PPP development, fostering a favourable business and policy environment for such projects.
- **Performance-Driven Organization:** Partnerships BC strives to maintain an efficient and cutting-edge organization that consistently meets or surpasses performance expectations.

Oversight

While dedicated PPP Units play a crucial role in managing PPPs, independent oversight mechanisms are equally important for ensuring transparency and accountability.

The text highlights examples of such oversight bodies:

- **UK National Audit Office (NAO):** This independent body serves as the primary auditor for the UK's PFI program, providing external scrutiny. A Public Accounts Committee works alongside the NAO, reviewing its reports and holding the government accountable.

- **Spain's Ministry of Public Works Oversight:** This example demonstrates the role of a government ministry in assigning dedicated public engineers to monitor the performance of PPP projects throughout construction and operation.

The UNCITRAL PFIP Guide acknowledges the need for audit measures to promote transparency in concessionaire selection. However, it could be strengthened by providing more concrete guidance on oversight mechanisms that extend beyond the selection process. This oversight should encompass both project performance and adherence to contractual terms.

The text suggests that Australian states Victoria and New South Wales offer valuable models in this regard. These states require projects to demonstrate "sufficient oversight mechanisms" to ensure:

- Compliance with contractual terms
- Public awareness of the rights and responsibilities of both private and public partners in the PPP

Australian states like Victoria and New South Wales showcase additional best practices for PPP oversight. In some cases, these states may even go beyond dedicated government oversight units by establishing independent review boards. These boards can provide a valuable layer of scrutiny throughout the construction and operation phases of PPP infrastructure projects.

Furthermore, these states often have regular meetings between private entities involved in PPPs and the relevant state authorities, such as Road and Traffic Authorities. These meetings serve as a platform for ongoing performance reviews and discussions to address any emerging issues or project deficiencies.

Transparency is another key element of effective oversight. The Australian model emphasizes the importance of having all PPP contracts reviewed by the state's Auditor General, an independent public official who scrutinizes government spending. New South Wales takes this a step further by mandating the public release of both the initial project proposals and the Auditor General's subsequent review.

Standardized Contracts

The UNCITRAL PFIP Guide could be enhanced by addressing the potential advantages of standardized PPP contracts. Countries like the UK have adopted standardized contracts and supporting documents based on their experiences with PFI projects.

These standardized agreements aim to:

- **Increase Efficiency and Transparency:** By providing a common framework, standardized contracts can streamline the implementation of PPPs and promote transparency throughout the process.
- **Promote Risk Clarity:** Standardized contracts can establish a common understanding of the risks typically encountered in similar PPP projects.
- **Ensure Consistency:** A standardized approach can lead to more consistent project delivery and pricing across comparable projects.
- **Reduce Transaction Costs:** Standardized contracts can potentially save time and money by enabling faster negotiation through pre-defined terms on various aspects of the project.

It's important to note that standardized contracts are not mandatory for PPPs. However, a law could recommend that governments develop and publicly share standardized contracts, along with guidance notes to assist all parties involved in PPP agreements.

Domestic Dispute Resolution Measures

Rethinking Dispute Resolution in PPPs: A Balanced Approach

The UNCITRAL PFIP instruments, which currently emphasize international dispute resolution bodies, could benefit from a discussion on promoting domestic dispute resolution mechanisms.

While the Convention on the Settlement of Investment Disputes Between States and Nationals of Other States (ICSID Convention) offers a framework for resolving disputes between foreign investors and host countries in infrastructure projects, there are concerns about its effectiveness. Critics point to:

- **Inconsistent Standards:** Some argue that ICSID tribunals lack consistent application of standards in their decisions.
- **Dominant Investor Interests:** There are concerns that ICSID rulings may prioritize investor and commercial interests over local considerations.

This raises the question of how to design effective dispute resolution mechanisms, particularly in developing countries where:

- **Legal Systems May Be Less Developed:** Norms and traditions may play a larger role than codified laws.
- **Institutions May Be Weaker:** Governmental institutions tasked with dispute resolution may have limited capacity.
- **Poverty and Enforcement Concerns Exist:** Extreme poverty and weaknesses in enforcing rulings can complicate dispute resolution.

The text suggests that Alternative Dispute Resolution (ADR) practices used in non-investment contexts within Cambodia and Indonesia offer potentially valuable models for domestic dispute resolution in PPPs. These domestic mechanisms could provide a more balanced approach, considering the interests of both local citizens and private and public partners involved in PPPs.

Case Studies

This case study examines the establishment of a labour arbitration council in Cambodia. In 1999, a bilateral trade agreement between the US and Cambodia imposed quotas on Cambodian garment exports. However, this agreement was conditioned on improvements to working conditions in the garment sector, including adherence to international labour standards.

A key challenge was the perceived weakness of existing enforcement mechanisms and the lack of trusted institutions for resolving labour disputes. The solution came in the form of an ILO (International Labour Organization) project. This project established:

- **Independent Monitoring:** A system for independent monitoring of working conditions within the garment industry.
- **Transparent Dispute Resolution:** Fair and efficient procedures for resolving labour disputes.

Fearing potential delays or undue influence in establishing a traditional labour court, Cambodia's judicial reform project, supported by the ILO (International Labour Organization), opted for a different approach. This alternative involved creating a new arbitration tribunal known as the Arbitration Council.

To ensure impartiality and independence, the Council's arbitration panel is comprised of members nominated by three different groups: unions, employer organizations, and the government. However, it's important to note that these members are not considered representatives of their nominating bodies. Instead, they are expected to act as neutral arbitrators, deciding each case based on its own merits.

Balancing Enforcement with Flexibility: The Case of Cambodia's Labor Arbitration Council

Cambodia's Labor Arbitration Council offers a unique model for dispute resolution in PPPs. While Cambodian law mandates arbitration, the Council allows parties some flexibility in the outcome. Decisions can be binding or non-binding, depending on the parties' written agreement. This approach balances the need for enforceable rulings with the ability for parties to reach mutually agreeable solutions.

The Council fosters transparency by issuing well-reasoned decisions that are published and readily accessible online. Despite some criticism regarding a potential pro-worker bias and the prevalence of non-binding awards, the Council continues to handle a significant number of cases with a steady success rate.

Community-Driven Development: A Model from Indonesia

The "Kecamatan Development Project" (KDP) in Indonesia provides another interesting example. This World Bank-supported initiative empowers local communities by using representative forums (kecamatan councils) to determine the nature and location of small-scale development projects. Villagers, not external authorities, make these decisions through a competitive bidding process.

To prepare proposals, these community groups, often consisting of rural populations, can access both social facilitators and technical assistance. The involvement of facilitators who bridge the gap between national and local government was crucial to the project's success. Leveraging the villagers' deep understanding of local environmental needs, political landscape, and cultural context proved to be a strategically sound approach.

Project proposals are evaluated based on factors like technical merit, cost-effectiveness, sustainability, poverty impact, and the number of beneficiaries. Journalists have full access to review meetings, and funding decisions are transparently communicated through community bulletin boards.

Research suggests that the KDP model in Indonesia can contribute to positive outcomes in development projects (Source: [Insert a source about the positive outcomes of the KDP project]). Studies indicate that processes like KDP can:

- **Increase Knowledge and Transparency:** By actively participating in project design and decision-making, communities gain a deeper understanding of project goals, rules, and processes. This transparency can help reduce potential conflicts.

- **Leverage Existing Social Structures:** The KDP model builds upon existing village-level social institutions, empowering communities to manage everyday disputes arising from development projects in a constructive manner.

Furthermore, empirical evidence demonstrates that the KDP approach leads to more successful development projects. For instance, roads built through the KDP process are reported to be of higher quality, strategically placed, and constructed at a lower cost compared to those built by traditional government engineering teams.

C . Elements for Domestic Dispute Resolution Measures

Building Effective Dispute Resolution Systems in Developing Countries

The case studies discussed above showcase the potential of "hybrid model" interim institutions for establishing a robust domestic dispute resolution framework in developing countries. These domestic mechanisms offer several advantages over traditional international regimes:

- **Addressing Local Concerns:** Domestic measures can prioritize the specific needs and considerations of local communities.

- **Promoting Transparency and Accountability:** By emphasizing rule-based decision-making, these mechanisms can foster greater transparency and accountability.

To create a successful national system for preventing and settling disputes in developing countries, the following elements deserve consideration:

1. **Hybrid Interim Institutions:** Establishing interim institutions that combine elements of different dispute resolution models can be a valuable first step.
2. **Complementing International Frameworks:** Domestic systems should coexist and complement existing international investment treaty regimes.
3. **Stakeholder Participation:** A participatory process that encourages negotiation based on interests, rather than solely on legal rights, can lead to more effective solutions.
4. **Independent and Transparent Processes:** Dispute resolution mechanisms should be impartial and operate with clear transparency.
5. **Accessible Procedures:** Clear and accessible procedures are essential for navigating the dispute resolution process.
6. **Capacity Building:** Investing in capacity building and providing necessary resources strengthens the dispute resolution system.
7. **Culturally-Sensitive Approach:** The system should be sensitive to the cultural context of the developing country.
8. **Financial and Social Considerations:** Both financial and social returns should be factored into dispute resolution.
9. **Transparency and Accountability:** The system should be transparent, accountable, and subject to ongoing evaluation and reform.
10. **Enforceable Commitments:** All stakeholders involved in the dispute resolution process should be held to enforceable commitments.

VII. Issues in Other Relevant Areas of Law

A. Model Procurement Law

Public-Private Partnership (PPP) regulations often build upon existing procurement frameworks. For instance, the European Union's procurement regime allows flexibility in evaluating bids and selecting PPP project partners.

This raises the question of whether the UNCITRAL PFIP Guide could benefit from closer alignment with the UNCITRAL Model Law on Public Procurement. The 2011 Model Law is a more recent and comprehensive update to the 1994 version. While the 1994 text was a valuable starting point, the 2011 revision reflects evolving practices, including the use of electronic communication and "request for proposals with dialogue" processes, which are increasingly relevant to PPPs.

Given these developments, it might be worthwhile to consider incorporating new features related to PPPs from the revised Model Law into the PFIP Guide. Additionally, the Guide's references to the 1994 Model Law, as well as statements like the one claiming no existing international model specifically addresses PPP selection procedures, would benefit from updates to reflect current best practices. (Chapter III of the PFIP Guide, para.19)

B. Environmental Protection & Anti-Corruption Measures

While Chapter IV of the PFIP Guide touches upon these issues, there are no corresponding specific Recommendations or Model Provisions. Considering the significant legal and practical developments in these areas over the past decade, a review of these sections might be beneficial. This review could ensure the PFIP Guide remains aligned with current best practices and reflects contemporary legal frameworks.

VIII. Issues in PFIP Guide, not covered by Model Provisions

As referred above, some of important issues are discussed in the Guide note, but not incorporated in either or both of Recommendations and Model Provisions. The following examples of issues should be considered for updating them.

A. Scope of Authority to Award Concessions

Recommendation 5 of the PFIP Guide emphasizes the importance of legal clarity regarding the scope of concessions in PPPs. This includes specifying:

- **Geographic Scope:** Whether the concession covers an entire region, a specific subdivision, or a discrete project.
- **Exclusivity:** The potential for awarding exclusive rights, considering factors like economic viability and public interest.

The Guide acknowledges the need for flexibility in allowing governments to grant exclusive concessions in certain sectors. Open competition may not always be the most suitable approach, particularly when dealing with sectors where:

- **Economic Viability is at Stake:** Exclusive concessions can be justified in situations where open competition could jeopardize the project's economic viability.
- **Public Interest Considerations Exist:** There may be broader public interest factors that favour awarding an exclusive concession.

The text highlights the sensitivity of PPP projects to changes in demand. If a competitor is authorized after a concession is awarded, it can create uncertainty for PPP financiers. Therefore, clear guidelines regarding the scope and potential exclusivity of concessions are crucial for attracting investment.

C. Project Risks and Risk Allocation

Optimizing Risk Allocation in PPPs

Recommendation 12 of the PFIP Guide underscores the importance of flexibility in risk allocation for PPP projects. The text argues against overly rigid regulations that could limit a contracting authority's ability to tailor risk allocation to a project's specific needs.

Several experts have emphasized the challenges posed by inflexible concession laws, which can hinder effective project development for government clients. While a degree of structure is necessary in PPP agreements, governments should have the freedom to:

- **Select from Diverse PPP Strategies:** Choose from a range of PPP contracting models, each with varying risk allocation profiles and flexibility levels.
- **Tailor Strategies on a Case-by-Case Basis:** Further customize these chosen strategies to best suit the unique requirements of each project.

This flexibility allows government clients to pursue the most efficient and cost-effective risk allocation approach, ultimately achieving the best possible value for money on PPP projects.

D. Government Support

Government Support for PPPs: Transparency and Flexibility

Recommendation 13 of the PFIP Guide emphasizes the importance of clear legal guidelines regarding government support for PPP projects. The law should explicitly identify:

- **Authorized Public Authorities:** Which government entities are empowered to provide financial or economic support for PPPs.
- **Permissible Support Measures:** The specific types of support that these authorized authorities can offer.

Government support can take various forms to improve the investment climate for infrastructure projects, including:

- Public loans
- Loan guarantees
- Equity participation
- Subsidies
- Sovereign guarantees
- Tax and customs benefits

There is broad recognition that some level of government support is often necessary to attract private investment in infrastructure projects. The PFIP Guide, as a legislative guide, should provide a **balanced approach** (instead of a certain degree of concretion) regarding potential forms of government support. This approach offers several advantages:

- **Transparency:** Clear legal guidelines promote transparency for potential investors.
- **Legislative Consideration:** It encourages legislatures to consider the specific types of support that may require explicit legislative authorization.
- **Flexibility:** It allows governments to tailor their support measures to the unique needs of each PPP project.

E. Transfer of Controlling Interest in the Concessionaire

Model Provision 37 of the PFIP Guide addresses restrictions on transferring controlling interests in PPP projects. This provision requires the contracting authority's consent before such a transfer can occur. However, it's important to strike a balance between:

- **Government Oversight:** The government's need to ensure the concessionaire maintains the necessary expertise to deliver services effectively.
- **Investor Flexibility:** The concessionaire's need for flexibility to manage their investments, potentially by transferring interests to free up capital for new projects.

The long-term nature of PPP contracts necessitates a cautious approach to transferability restrictions, as highlighted in Chapter IV of the PFIP Guide (paragraphs 64-68). Finding the right balance can ensure both government oversight and continued investor participation in PPPs.

(Chapter IV of the Guide, paragraphs 64-68).

The UNCITRAL PFIP Guide recommends establishing clear guidelines for reviewing transfers of controlling interests in PPP projects. These guidelines should promote both transparency and efficiency in the review process.

Here are some key recommendations from the Guide:

- **Time-bound Decisions:** Restrictions on transfers should be clearly defined within a set timeframe, or justified by a compelling public interest.
- **Reasonable Consent Process:** The project agreement should specify that the government's consent for transfers won't be unreasonably withheld or delayed.
- **Clear Criteria for Refusal:** Establishing clear criteria for withholding approval can expedite the review process. Additionally, requiring the government to provide specific justifications for any refusal fosters transparency and predictability for investors.

By following these recommendations, PPP agreements can strike a balance between the government's right to review transfers and the need for efficient and predictable business operations for the private sector.

F. Security Interests

Securing Infrastructure Project Financing

Effective security arrangements are essential for attracting investment in infrastructure projects. Financing documents for privately financed projects typically include collateral derived from both:

- **Tangible Assets:** Physical assets directly related to the project (e.g., buildings, equipment).
- **Intangible Assets:** Intellectual property or other non-physical assets owned by the concessionaire.

Model Provision 35 of the PFIP Guide recognizes the concessionaire's right to create security interests using these assets. This allows lenders to secure their loans with collateral in case of default.

However, some jurisdictions impose restrictions on granting lenders the power to take over the project entirely. These restrictions typically involve:

- **Government Approval:** Security arrangements that could lead to a lender taking over the project might require approval from the contracting authority.
 - **Project-Specific Purpose:** The security interests should be specifically linked to financing or operating the project.
 - **Maintaining Obligations:** The concessionaire's core obligations under the project agreement should not be affected by the security interests.
- These limitations aim to balance the need for project financing with ensuring the project's continued operation and fulfillment of its public purpose.

Model Provision 35(3) of the PFIP Guide restricts the creation of security interests over certain assets in PPP projects. This provision prohibits using public property or essential service-related assets as collateral if such a restriction exists in the enacting State's law.

However, this broad prohibition might hinder a project company's ability to secure financing. Ideally, the PFIP Guide could provide more specific guidance on:

- **Exceptions:** Under what circumstances creating security interests over these assets might be permissible.
- **Clarification:** The specific types of assets that fall under this restriction.

Furthermore, the effectiveness of these security interests ultimately depends on two key factors:

1. **Insolvency Frameworks:** The legal framework governing insolvency proceedings in the relevant jurisdiction.
2. **Security Enforcement Mechanisms:** The strength and efficiency of mechanisms for enforcing security interests in that jurisdiction.

By providing more nuanced guidance on permissible exceptions and considering the broader legal context, the PFIP Guide can help ensure a more balanced approach to security interests in PPPs.

G. Domestic Preference

A key challenge in PPPs is striking a balance between promoting domestic participation and leveraging international competition. Many countries want to support domestic suppliers while also benefiting from the expertise and efficiency of international firms.

One approach to achieving this balance is through **domestic preference margins**. However, this policy raises concerns for private sector investors, as it can potentially disadvantage foreign bidders.

The issue of domestic preference margins is not directly addressed in the PFIP Recommendations or Model Provisions, although it is discussed in Chapter III of the PFIP Guide (paragraphs 43-44). Ideally, there should be clearer legal guidance on:

- **Domestic Preference Authorization:** Whether legislation should mandate or simply authorize the use of domestic preference margins in PPP procurement.
- **Transparency and Limits:** If domestic preference margins are used, the degree to which foreign entities can be disadvantaged should be clearly defined.

The 2011 UNCITRAL Model Procurement Law (article 11, paragraph 3(b)) offers a potential solution by introducing "margin of preference" as an evaluation criteria. This approach could be explored further to establish a more balanced framework for PPP procurement.

G. Contribution towards Costs of Participation in the Selection Proceedings

The high costs associated with preparing proposals for complex infrastructure projects can deter some companies from participating, especially if there's a chance their efforts won't be rewarded with a contract. This can limit competition and potentially lead to less qualified proposals.

To address this concern, some countries allow contracting authorities to consider compensating pre-selected bidders in certain situations. This compensation could be offered:

- If the project is cancelled for unforeseen reasons beyond bidder control.
- To defray some of the costs incurred by shortlisted bidders after the pre-selection stage, particularly when the bidding process is highly complex and has the potential to attract significantly better proposals.

Clear legal guidelines are needed to determine the circumstances under which bidder compensation is appropriate in PPP projects. While this issue is discussed in Chapter III of the PFIP Guide (paragraphs 45-46), it's not directly addressed in the PFIP Recommendations or Model Provisions.

H. Termination of the Concession Contract

The PFIP Guide's Model Provisions 44, 45, and 46 address various scenarios for terminating concession contracts. This includes the contracting authority's right to terminate "for compelling reasons of public interest" (Model Provision 44(b)).

A broad and unqualified right to terminate based solely on public interest can create significant uncertainty for private investors. Ideally, the PFIP Guide should provide more specific **safeguards** (instead of guarantees) to mitigate this risk.

One concern is that compensation for termination due to public interest might overlap with compensation for termination due to a breach by the contracting authority. This potential for duplication could reduce the overall compensation awarded to the private party.

The Guide should acknowledge these concerns and explore potential **grounds for adjusting** (instead of reduction) compensation in situations where termination is based on public interest.

Termination Rights for Concessionaires and Force Majeure Events in PPPs

The PFIP Guide's Model Provisions outline various scenarios for terminating concession contracts. While Model Provision 44 grants the contracting authority broad termination rights, Model Provision 45 offers the concessionaire more limited grounds for termination. These grounds include:

- **Serious breach by the contracting authority:** The concessionaire can terminate if the government significantly breaches the contract.
- **Impasse in Negotiations:** Termination is allowed if the parties cannot reach an agreement on necessary revisions to the contract.
- **Significant Cost Changes:** The concessionaire can terminate if unforeseen circumstances cause a substantial increase in their costs or a significant decrease in the value they receive from the project.

However, the Guide suggests that the right to terminate for failure to reach agreement on revisions (Model Provision 45(b)) might be unnecessary if the project agreement includes a robust dispute resolution process.

Finally, Model Provision 46 addresses termination due to unforeseen circumstances, often referred to as "force majeure." This provision allows either party to terminate if unforeseen events beyond their control make it impossible to fulfill their obligations. The Guide emphasizes the importance of clearly defining such circumstances within the project agreement. Additionally, the Guide suggests that termination might be appropriate if these unforeseen circumstances persist for a specified period or if legal changes render project completion impossible.

I. Review Procedures

Ensuring Fairness in PPP Procurement: Dispute Resolution Mechanisms

Chapter VIII of the 2011 UNCITRAL Model Procurement Law establishes a framework for **challenge proceedings** (instead of a mechanism) for unsuccessful bidders in procurement processes. This framework includes key elements such as:

- Right to challenge and appeal procurement decisions (article 64)
- Potential effects of a challenge on the procurement process (article 65)
- Procedures for requesting reconsideration by the procuring entity (article 66)
- Procedures for seeking review by an independent body (article 67)
- Rights of participants in challenge proceedings (article 68)
- Confidentiality considerations during challenge proceedings (article 69)

In contrast, the PFIP Model Provision 27 only acknowledges the need for a review system for unsuccessful bidders without outlining the essential elements of such a system. Furthermore, neither the PFIP Recommendations nor Model Provisions directly address these crucial aspects of dispute resolution, although they are discussed in Chapter III of the PFIP Guide (paragraphs 127-131).

J. Governing Law

Choice of Law in PPPs: Balancing Flexibility and Legal Certainty

Recommendation 57 of the PFIP Guide emphasizes the importance of flexibility for contracting parties in PPPs to choose the governing law for their contractual relationships. This allows parties, including the concessionaire, lenders, and insurers, to select a legal framework that best suits their needs, as long as it doesn't conflict with the host country's public policy.

While Model Provision 29 partially addresses this by allowing parties to choose the law applicable to the main concession contract, it doesn't extend to other project-related contracts. This can be particularly relevant in developing countries where the domestic legal framework for PPPs might be less established.

In such cases, contracting parties may prefer to choose governing law from more developed PPP markets with similar legal systems. This approach is already commonly used in arbitration, where parties often agree to submit disputes to a neutral international body.

According to a 2008 assessment by the EBRD (consider mentioning them by their full name, the European Bank for Reconstruction and Development), most Eastern European countries lack clear legal provisions prioritizing PPP laws over other relevant national laws. This can result in PPP projects being subject to a complex patchwork of legal instruments. The PFIP Guide itself acknowledges this challenge and recommends that governments consolidate these applicable legal texts for better clarity.

Given these potential complexities, a compelling argument can be made for PPP contracting parties to select the governing law and/or jurisdiction from a country or state with a more robust and comprehensive legal framework for PPPs. This approach can provide greater certainty and predictability for all parties involved in the project.

K. Sovereign Immunity

A key factor for successful Public-Private Partnerships (PPPs) is ensuring effective enforcement of contracts with government entities (Source: [Insert a source about PPPs and sovereign immunity]). Investors and contractors need certainty that they can hold the government accountable if the terms of the agreement are not met.

One potential hurdle to enforcement is the concept of **sovereign immunity** (instead of directly referencing the issue). This principle protects governments from lawsuits in certain circumstances. Ideally, the law should clearly define situations where a government client might invoke sovereign immunity against a contractor's claim.

Transparency in this area is crucial for investors and contractors to properly assess the risks involved in PPP projects. While the PFIP Guide discusses sovereign immunity in Chapter VI (paragraphs 33-35), it's not directly addressed in the PFIP Recommendations or Model Provisions.

Dispute Resolution

As in any complex contract, especially those of a long-term nature, it is not possible to foresee every event that may happen and affect a PPP contract. Therefore, changes will happen and this can often lead to disputes.

Also, it is logical that some provisions in the contract may require interpretation in some of their aspects, and it is also logical that differences and discrepancies will emerge on issues that require an assessment of costs or a valuation

Governments usually reserve for themselves the right of interpretation of the contract, and the private partner has in such cases only the right to appeal to a court (administrative courts in civil code countries). This implies costly processes and endangers the continuation of the service provision.

In this context, it has become common practice to regulate "dispute resolution procedures" in the contract or create a "dispute resolution board", which is discussed below.

The main mechanisms used worldwide to solve disputes (not all of them available in any particular country) are as follows: -

- Sector regulator.
- Judicial system.
- Mediation (which may be considered an option for direct negotiations under a Dispute Resolution contract system).
- Dispute Resolution Board (comprising an independent expert or, better and more frequently, a panel of experts).
- Arbitration: domestic arbitration or international arbitration (for example, through the International Chamber of Commerce [ICC], or the International Centre for Settlement of Investment Disputes. An example of the role of arbitration in a relevant project may be seen in Ontario Highway 407 Toll Road.

In some cases (especially in civil code countries), the result of a dispute resolution process outside the judicial system will not be binding on either party. Therefore, if the parties wish to avoid escalating the conflict to the courts, they must negotiate an agreement based on the result of the dispute resolution process.

Some civil code countries have, however, opened the door to arbitration panels or dispute resolution boards consisting of independent experts whose opinion will be binding on both parties (for example, in Uruguay).

In some countries and for some sectors, disputes are resolved by an independent regulatory body. The private partner may have concerns over the regulator's independence.

This PPP Guide considers it good practice to include specific provisions in the contract regarding dispute settlement. This should include a dispute resolution process (DRP) and a dispute resolution board (DRB) —

even if the decision of such a board is non-binding and will only be implemented when and if both parties accept the result. This is because their inclusion may save significant time and is inherent to the spirit of a PPP.

A proper DRP will first encourage and facilitate the search for a directly negotiated agreement (through high level negotiations between the parties). If initial negotiations do not resolve the dispute, mediation may be available as an option. "Mediation involves negotiation with the help of a neutral third party. The mediator's role is to facilitate negotiations without expressing a view on either party's position" (PPPIRC).

Typically, a DRB will include at least two independent experts, one designated by each party, and another designated by mutual agreement or by the agreement of the two original experts. In some processes, the third expert is only called in case of disagreement between the two nominated experts.

When drafting the dispute resolution processes in the PPP contract, it is important to ensure that the provisions are appropriate and enforceable in the relevant jurisdiction by checking with legal experts. The website of the PPP Infrastructure Resource Centre provides a useful checklist for that analysis. The dispute resolution process in the contract may also have to be consistent with requirements of treaties entered into by the relevant government (for example, investor-state dispute resolution processes). These requirements should have been identified during the legal due diligence for the project.

Some sophisticated markets include an ability in the DPR for the general public (users) to trigger a dispute resolution with the government, or the private partner through the government or an ombudsman.

In addition to containing an appropriate dispute resolution process, the following issues must also be considered to ensure that potential bidders can be confident in the effectiveness of the dispute resolution process.

- Unless such a waiver already exists under the relevant PPP law, the contract should include a waiver by the government of any immunity from claims/prosecution under the contract. In the absence of such a waiver, potential bidders will not bid since they cannot be confident that the government will meet its obligations under the contract.
- The location of the dispute resolution may be an issue for international investors, who may be concerned that they will not get a fair hearing in the host country (especially in EMDEs), regardless of the form of dispute resolution used. However for governments, having the dispute resolution occur in another country may be an unacceptable dilution of their national sovereignty. A realistic approach to this issue is required, as potential bidders will not bid if they are not confident of the integrity and fairness of the dispute resolution process.

Case Study: Delhi Metro Rail Corporation.

With around 47 million pending cases at various stages of Indian judiciary and one of the lowest levels of judges per million of population in the world, India's arbitration regime presents a ray of hope for millions of Indians who face the prospect of justice being denied to them due to inordinate delays caused by a clogged judicial pipeline. The enactment of the Arbitration and Conciliation Act, 1996 was presented as a viable alternative to resolve commercial disputes in a timely manner. This paper uses a case study to discuss how arbitration in India has not fulfilled the timeliness promise and in turn, has detrimentally affected trade and investments, making the system an inefficient alternative to the contentious and long drawn litigations.

The study of the DMRC dispute is distinguished because it involves a public-private partnership and is exceptional for two reasons. First, being the first public-private partnership project in metro rail infrastructure in the country, the extraordinary delay in execution of the arbitral award alone highlights the need to create a level-playing field when government is involved as a party. Second, the case showcases glaring loopholes in India's existing arbitration regime which has allowed courts to unduly intrude and cause inordinate delays at every stage of the process, as a result of which, the amount of interest accumulated eventually outstripped the principal sum initially claimed by DMRC's private partner in the project. For instance, it took ten months to constitute an arbitration panel, 68 hearings to pass an arbitral award which culminated in 4.5 years from the date of invocation of arbitration clause by DMRC, several layers of appeal, most of which favoured one party, and the execution of the award is still pending!! The paper concludes by recommending plausible solutions to strengthen India's arbitration laws, so that the DMRC fiasco does not get repeated in future at perilous costs borne by foreign and Indian private investors.

Arbitration was conceived as an alternative system of dispute redressal to save judicial time. In India, the judiciary takes an enormously long time to resolve disputes. Thus, the conception of arbitration as a tool for timely resolution of disputes was to achieve a particular goal. The goal of the arbitration regime is and should be to attract and promote foreign and private investors by alleviating the malaise attributed to the judicial system.

The goal of establishing an arbitration regime with sophistication to attract Foreign Direct Investment ('FDI') comports with India's graduation as a liberalized economy and is consistent with its membership of the World Trade Organization. To achieve this goal, timeliness and ease-of-doing business are important ingredients for international as well as Indian investors to invest in India without fear of tying their investments unfairly because of an archaic and delay-prone system. Thus, while the judicial system should have inroads into arbitration to preserve due process and natural justice, it is imminent for the arbitration system to not suffer the same malice that the Indian judiciary suffers from, it being delay, which not only diverts judicial time but also actively discourages private investors. As such, the state of the arbitration system in India behooves the government to act, and to act fast. That is the reason for the recently constituted Expert Committee under the chairmanship of Dr. T. K. Vishwanathan to amend the *Arbitration and Conciliation Act of India, 1996* ('Expert Committee').

From the vantage of third parties, the delays of the system, both judicial and arbitral, seem to be exacerbated when the government is involved as a party. Globally, when the government is involved as a party to a dispute, the project typically tends to be of high value, involves taxpayers' money as interest accrued, time, or, often, as investment. Often, private-public partnerships involve projects such as highway construction, public transport, health care and such others that are essential to establishing good infrastructure, resolving critical issues such as climate change, and to fulfill government's duty of ensuring public welfare. Thus, arbitrations involving public-private partnership represents a special scenario that is different from say, India seated ad-hoc arbitrations or the general pervasive execution delays that seem to characterize the Indian commercial arbitration regime. Interest accumulated from delays in public-private partnerships implicate tax-payer monies and debilitate and disincentivize private investors from engaging in important public-private partnerships that can contribute to the growth of the nation. Hence, the system has a strong burden to ensure that disputes involving government parties, particularly in public-private partnerships are not only resolved in a timely fashion but also in a manner that does not reek of government abuse of position. Vicariously, that burden to set-up such a system has been passed on to the Expert Committee in India.

This case-note focuses on arbitrations as a tool to resolve disputes where public-private partnerships are involved. In order to do so, the note focusses on one particular case, namely, *Delhi Airport Metro Express Private Limited v Delhi Metro Rail Corporation* as an example to highlight the involved issues. This case has been carefully chosen considering that the investor is not even a foreign investor. Any goal for reform should appreciate that when Indian investors are deterred, foreign investors will be deterred many times over as it makes conducting business in India, cumbersome.

As trade experts, we believe that this one case demonstrates how trade and the benefits that it can yield to a country can be derailed by sloppiness from another area of law, arbitration, in this case. For instance, infrastructure is an important aspect in India and leaving the country without a proper mechanism to resolve disputes in a highly contentious area such as infrastructure does not comport with India's larger global trade posture. We believe that this one case represents a classic example of some of the woes that pervade the system, especially in high-value private-public partnerships. The conclusion notes that, while it may be well-intentioned, the arbitration regime in India is a quagmire that has led parties/investors myopically into rabbit-holes, not only defying the objective of the created system but also, in the process, undermining the stature of India's ability to play in the global arena. Personally, we believe it has not only eroded the rationale for arbitration itself but has also diminished the stature of the judicial system.

The Project & Arbitration

The Project:

This case involved a Build-Operate-Transfer (BOT) project for a high-speed metro rail line, known as the Project (source needed). The Project aimed to connect New Delhi and Dwarka over a roughly 23-kilometer (KM) stretch. Originally envisioned to cover the entire distance at a top speed of 120 kilometers per hour (KMPH), the line was designed with two sections:

The Delhi Metro Rail Corporation (DMRC), a collaboration between the Indian government (GOI) and the government of the National Capital Territory of Delhi (GNCTD), was tasked with developing a detailed plan (DPR) for the project (source needed). The Ministry of Urban Development (MOUD) within the GOI gave final approval to the DMRC's DPR in April 2007.

The project was envisioned as a Public-Private Partnership (PPP). Under this model, DMRC would handle land acquisition, consultant selection, regulatory approvals, and all civil construction except for depot buildings. The winning bidder, acting as DMRC's private partner, would be responsible for implementing the remaining systems like tracks and signaling.

Dispute Over Elevated Metro Section

Following an international competitive bidding process led by DMRC, a joint venture consortium emerged as the winning bidder (source needed). This consortium then established a special purpose vehicle named Delhi Airport Metro Express Private Limited (DAMEPL).

This dispute centers on the project's elevated section, the structure supporting the metro tracks. On March 22nd, 2012, nearing the end of the warranty period for DMRC's civil contractors (DLP), DAMEPL requested a joint inspection of the elevated section and its support bearings. Two months later, on May 23rd, 2012, DAMEPL formally notified DMRC of serious design and quality issues with the viaduct bearings. These issues allegedly resulted in the sinking of girders (beams) in certain locations, causing deformation and cracks.

DAMEPL claimed a range of construction flaws related to DMRC's contractual obligations. These alleged flaws included:

- Cracks in the girders
- Deviations from standard repair procedures for cracks
- Inadequate inspection and repairs
- Twists in the girders (acknowledged by DMRC)
- Incorrect gaps between girders and support components
- Cracks on the top of the girders
- Improper placement of bearings requiring reconstruction of pedestals
- Difficulty accessing bearings for repairs and inspections due to surrounding structures

Termination of Agreement and Arbitration

The contract allowed DAMEPL to terminate the agreement with DMRC by providing written notice 90 days in advance (source needed). This termination right could be exercised if any of the specified "DMRC Events of Default" occurred and persisted unless they were caused by "Concessionaire Events of Default" (DAMEPL's responsibility) or unforeseen circumstances (Force Majeure).

Dissatisfied with the project's progress, DAMEPL sent a termination letter to DMRC on October 8th, 2012, requesting a termination payment. In response, DMRC initiated arbitration proceedings on October 23rd, 2012, referencing the Arbitration and Conciliation Act of 1996 (ACA). The arbitration panel wasn't formed until August 8th, 2013, over nine months after DMRC's request.

ii. Selection of Arbitrators in the Concession Agreement

Article 36 of the Concession Agreement outlines the process for appointing arbitrators in case of disputes (source needed). Here are the key points:

- **DMRC's Role in Panel Selection:** DMRC holds unilateral power to propose a panel of qualified engineers with relevant experience.
- **Time Limit for Panel Selection:** DMRC must provide this panel within 30 days of receiving a written request for arbitration from either party.
- **Background of Arbitrators:** The panel must consist of current or retired engineers from government departments or the public sector.
- **Selection Process for Disputes Above a Certain Value:** For disputes exceeding a specific amount (INR 15 lakhs), three arbitrators are chosen. DMRC suggests five candidates, each party selects one, and the two chosen arbitrators appoint the third.
- **DMRC Employee as Arbitrator:** The agreement doesn't bar DMRC employees (Junior Administrative Grade or above) from being appointed as arbitrators, even in disputes involving DMRC.

Potential Issue and Recommendation

An interesting legal question is currently being considered by the Supreme Court: **Can retired employees serve as arbitrators in disputes involving their former employers?**

This question has relevance for the Expert Committee, and it might be valuable for them to consider offering suggested language for arbitration clauses. This standardized language could serve as a guideline or regulation for future PPP agreements.

Arbitration Process and Outcome

The agreement between DMRC and DAMEPL specified that any arbitration award would be final and binding on both parties, with New Delhi serving as the legal jurisdiction (source needed). The arbitration tribunal was formed on August 8th, 2013, and held its first hearing on September 6th, 2013. The proceedings adhered to the regulations outlined in the Arbitration and Conciliation Act (ACA).

iii. Arbitration Award Favors DAMEPL

After a four and a half year arbitration process, the tribunal issued a ruling in favor of DAMEPL (source needed). The tribunal determined that the project's defects significantly hindered DAMEPL's ability to operate it as intended, constituting a major breach of the agreement by DMRC. Since DMRC failed to adequately address these defects within the allotted timeframe, the tribunal upheld DAMEPL's termination of the agreement.

DAMEPL was awarded a termination payment of INR 2,782.33 crore under Article 29 of the agreement. This amount excludes pre-award interest, which accrued at a rate exceeding the State Bank of India's Prime Lending Rate. Additional damages awarded to DAMEPL included operational expenses incurred during a specific period, compensation for an improperly cashed bank guarantee by DMRC, and reimbursement of security deposits paid to various agencies.

The total award amounted to INR 4662.59 crore, consisting of a principal amount of INR 2945.55 crore and pre-award interest of INR 1717.04 crore. The tribunal emphasized the significant safety risks posed by operating the line with these defects. Expert testimony from Indian Railways officials indicated they would have halted operations due to safety concerns. The tribunal concluded that DMRC, as a government entity, had a duty to ensure public safety wasn't compromised by faulty construction. Unfortunately, there is no record of DMRC exhaustively considering public safety obligations in the case.

Roller Coaster Ride of the Arbitration Award in India

Award Enforcement

Following the favorable arbitration award, DAMEPL needed to take two key steps to secure its benefits (source needed). First, they had to enforce the award in court. This process confirms the award's finality on factual and legal matters. Second, they needed to execute the award, which ensures timely financial payment from the losing party.

It's important to distinguish between enforcement and execution. Enforcement ensures the court upholds the award's finality, preventing a re-examination of factual or legal issues already decided in arbitration. The Expert Committee might consider clarifying this distinction to avoid courts revisiting settled matters.

Given that New Delhi was the designated arbitration venue, DAMEPL sought to enforce the award in the Delhi High Court.

i. DMRC Challenges Award, DAMEPL Seeks Security

Following the arbitration award, DMRC filed a petition in the Delhi High Court under Section 34 of the Arbitration and Conciliation Act (ACA) (source needed). This petition aimed to set aside the May 11th, 2017, award.

Meanwhile, DAMEPL filed a counter-petition under Section 9 of the ACA, requesting interim measures. Specifically, they sought a court order requiring DMRC to deposit 75% of the awarded amount (INR 3,502.62 crore) into an escrow account. This deposit would act as a safeguard against potential delays in enforcing the award, a common issue with government entities involved in arbitration cases.

The Delhi High Court judge, in a preliminary ruling, showed favor towards the arbitration award. The judge acknowledged the technical expertise of the arbitration tribunal, which carefully considered evidence from both parties and expert witnesses regarding the alleged construction defects. Based on this evidence, the tribunal concluded that DMRC had breached the agreement.

The judge further upheld DAMEPL's termination notice, finding it consistent with the requirements of Article 29 of the agreement. Additionally, the court ordered DMRC to deposit 75% of the awarded amount into DAMEPL's escrow account within four weeks of the judgement's date.

DMRC Appeals High Court Decision

DMRC appealed the single-judge bench's decision within the Delhi High Court system (source needed). This appeal, filed under Section 37 of the ACA along with Section 13 of a relevant act (provide the year), allows parties to challenge a single-judge's ruling on setting aside arbitration awards.

Interestingly, at this stage, DMRC, as a government entity, introduced new arguments that hadn't been presented earlier in the case. The Delhi High Court's appellate division (the "Division Bench") appeared to consider these new arguments, potentially extending the legal process and delaying the final resolution. This delay could also lead to additional interest accumulating on the arbitration award owed to DAMEPL.

Economic and Social Considerations in PPP Disputes

An interesting aspect of this case is the lack of a government-commissioned study analyzing the economic and social benefits of a fully operational infrastructure project (source needed). This analysis could be contrasted with the costs associated with delays in enforcing arbitration awards within Public-Private Partnership (PPP) projects.

In essence, if DMRC had addressed the construction defects and collaborated with DAMEPL to ensure smooth operation of the metro line, the potential economic benefits and positive public perception for the government could have been significant. This stands in contrast to the situation where over 10 years have been spent in legal disputes since DMRC initiated arbitration in October 2012.

This case highlights the potential value for the Indian government to commission studies that assess the cost-effectiveness of prolonged appeals against arbitration awards in PPP projects. Such studies can help determine if these appeals are worthwhile, especially when a functioning project could serve as a positive example of India's infrastructure capabilities on a global scale.

New Arguments Raised by DMRC in Appeal

During the appeal hearing before the Division Bench, DMRC introduced new arguments not presented earlier (source needed). These arguments centered on several key points:

- **Impact of Reconciliation Process on Termination Rights:** DMRC questioned whether DAMEPL's participation in a reconciliation process waived their right to terminate the agreement.
- **Cure Period Interpretation:** DMRC raised a factual dispute regarding the designated timeframe for addressing the construction defects (cure period). They argued whether it was 90 days from the initial notice or 180 days.
- **Material Impact of Speed Restrictions:** DMRC challenged whether the imposed speed restrictions on the metro line constituted a significant negative impact on DAMEPL's operations (material adverse effect).

It's important to note that the arbitration tribunal had already considered the speed restriction issue based on available evidence. They had rejected DMRC's argument that obtaining safety certification from the Commissioner of Metro Rail Safety (CMRS) automatically resolved the defect concerns.

DMRC's New Arguments and Appeal Outcome

During the appeal process, DMRC introduced new arguments that the Delhi High Court's Division Bench appeared to consider (source needed). This consideration by the court potentially prolonged the legal dispute and delayed the project's completion.

For example, regarding the timeframe for addressing construction defects (cure period), the Division Bench viewed the arbitration tribunal's decision as unclear and potentially contradictory. This ambiguity offered DMRC an opportunity to pursue a further appeal, causing additional delays.

Similarly, the Division Bench found the tribunal's explanation regarding the impact of speed restrictions on DAMEPL's operations (material adverse effect) to be inadequate. The court also questioned the tribunal's authority to consider the safety certification issued by the Commissioner of Metro Rail Safety (CMRS), even though this point hadn't been a major point of contention previously.

Ultimately, the Division Bench overturned several of the arbitration tribunal's findings, deeming them "entirely illogical, unreasonable, and demonstrably incorrect." This decision was based on legal principles established in a previous case (*Associate Builders v Delhi Development Authority*). In simpler terms, the Division Bench concluded that the arbitration award contained significant errors and unreasonable interpretations.

Limited Grounds for Challenging Arbitration Awards

Indian law, under Section 5 of the Arbitration and Conciliation Act (ACA), restricts courts from interfering with arbitration awards except in specific circumstances (source needed). These circumstances are outlined in Sections 34(2)(a) and (b) of the ACA.

One potential reason for challenging an award is if it conflicts with India's public policy. However, the Delhi High Court's Division Bench appears to have made a subjective judgment on this issue, rather than applying the objective standards established by past Supreme Court rulings.

Deviation from Legal Principles and Timeliness Concerns

The Division Bench's decision to set aside the award may also contravene Section 34(2A) of the ACA. This section specifies that courts can only overturn an award if it exhibits clear illegality, not simply because of legal misinterpretations or reevaluation of evidence.

Furthermore, Section 34 of the ACA mandates proper notice before requesting an award to be set aside. The law also requires courts to handle these petitions swiftly, ideally within a year of the notice. In this case, the Division Bench's decision arrived on January 15th, 2019, a significant delay considering the May 11th, 2017, issuance of the arbitration award.

Limited Role of Courts in Arbitration Awards

The Arbitration and Conciliation Act (ACA), particularly Section 34, emphasizes that courts should generally avoid interfering with arbitration awards (source needed). This principle aims to prevent courts from revisiting factual or legal issues already decided by the arbitration tribunal. Unfortunately, the Delhi High Court's Division Bench appeared to disregard this principle, engaging in a potentially costly and time-consuming re-examination for one of the parties involved.

In essence, the Division Bench's approach could be seen as favoring delay tactics employed by the other party, potentially at the expense of taxpayer funds. It's important to remember that a court's authority in such matters is limited, as outlined in Section 34 of the ACA (details explained elsewhere).

Looking at the bigger picture, high-value disputes in India are often monitored by international investors. If courts stray from established legal principles, such as *res judicata* (principle of settled matters), or delve into factual re-evaluation on appeal, it can raise concerns about the efficiency and fairness of India's judicial system.

Challenges for Effective Arbitration and Recommendations for the Expert Committee

The success of arbitration as a dispute resolution mechanism hinges on clearly defining the role of courts (source needed). The Expert Committee faces the critical task of outlining the court's authority in various situations. This includes:

- **Levels of Court Intervention:** Clarifying the extent to which courts can modify or overturn arbitration awards (partial, substantial, or complete).
- **Unresolved Issues After Appeal:** Establishing clear procedures for handling unclear legal questions that arise after an initial appeal.
- **Appeal Thresholds and Burden of Proof:** Defining the criteria for filing appeals and determining who must provide evidence to support their claims at each appeal stage.

Potential Abuse of Process and Burden of Proof

The Expert Committee may also consider establishing a mechanism to address potential abuse of the arbitration process by the government or other parties. This could involve a "misuse doctrine" with a higher burden of proof placed on the appealing party. Such a doctrine would discourage repetitive arguments at multiple appeal levels.

DAMEPL Appeals to Supreme Court

The Indian Constitution empowers the Supreme Court to hear appeals through Special Leave Petitions (SLPs) (source needed). Article 136 allows the court to grant such petitions when a case involves a significant constitutional question or a clear injustice. Furthermore, Section 37 of the ACA restricts further appeals from appellate court orders, except to the Supreme Court.

In light of the Delhi High Court's Division Bench decision raising doubts about the arbitration award, DAMEPL filed an SLP with the Supreme Court. Their objective was to uphold the validity of the original arbitration award.

The Supreme Court has historically emphasized the importance of judicial restraint when reviewing arbitration awards. They generally favor minimal judicial intervention. In this specific case, the Supreme Court wisely avoided delving into factual questions, such as the designated timeframe for addressing construction defects (cure period). The court acknowledged that such factual determinations fall outside their purview.

Critically, the Supreme Court disagreed with the Division Bench's assessment that the award was demonstrably incorrect. They further pointed out that the Division Bench had overstepped its bounds by engaging in its own factual evaluations. As a result, the Supreme Court deemed the Division Bench's conclusions regarding the award's legal flaws to be mistaken.

DMRC's Review Petition

The Indian Constitution grants the Supreme Court the authority to revisit its own rulings under specific circumstances (source needed). Article 137 outlines these exceptions, which might include newly discovered evidence unavailable earlier or the need to correct clear errors within the court's decision.

Following the Supreme Court's judgment in favor of DAMEPL, DMRC filed a review petition contesting this decision. However, the Supreme Court dismissed this petition on November 23rd, 2021.

DAMEPL Seeks Award Enforcement

Following the Supreme Court's decision upholding the arbitration award, DAMEPL initiated the next step: enforcement (source needed). Under Section 36 of the ACA, they filed an execution petition with the Delhi High Court, the designated court for this purpose based on the agreement.

During the execution proceedings, DMRC repeatedly requested delays, arguing a need for additional financial resources from its shareholders (Government of India - GOI and Government of National Capital Territory of Delhi - GNCTD) to fulfill the award amount. However, these government entities couldn't reach an agreement. Neither shareholder provided legal authorization for seizing DMRC's assets to cover the award, nor did they offer sovereign guarantees allowing DMRC to secure loans from banks.

A critical issue emerged: how to ensure the award gets enforced if DMRC lacked sufficient resources (source needed). This led to the question of potentially holding DMRC's shareholders, the Indian government (GOI) and the Government of National Capital Territory of Delhi (GNCTD), accountable. The aim was to break the deadlock that was not only causing delays but also accumulating interest on the award amount.

The Delhi High Court therefore ordered the Ministry of Housing and Urban Affairs (GOI) and GNCTD to be included in the legal proceedings to expedite enforcement (impleaded). Both government entities strongly opposed this, arguing that holding them liable for DMRC's debt would violate the principle of limited liability (shareholders' financial responsibility being limited to their investment).

However, legal precedents exist, such as the *Balmer Lawrie* case, where courts have lifted the corporate veil under exceptional circumstances. The key question before the court now was whether the significant delay in enforcing the arbitration award met the criteria of such "exceptional circumstances."

Extraordinary Circumstances and Lifting the Corporate Veil

The key question remained: Did the situation qualify as "extraordinary circumstances" justifying the piercing of the corporate veil for DMRC's shareholders (source needed)? Typically, such circumstances involve significant risks to the public, other parties involved, or fundamental principles of justice.

The argument here is that the government's repeated appeals and delays in enforcing the award could be considered extraordinary. These tactics could be seen as deliberately causing financial hardship for the private investor, DAMEPL, due to accumulating interest on the award. From this perspective, lifting the corporate veil on DMRC's shareholders (GOI and GNCTD) might be warranted.

This approach aligns with past legal decisions. For example, the Supreme Court case of *Bhatia Industries v. Asian Natural Resources* suggests the veil can be lifted during arbitration enforcement proceedings. Furthermore, DMRC itself potentially opened the door to this action by needing permission from the Indian government (GOI) to access its own funds. This reliance on the government strengthens the case for piercing the corporate veil.

The concept of limited liability shouldn't hinder the enforcement of a legally binding and established financial obligation (source needed). In this case, it appears to be obstructing progress and potentially discouraging future trade and investment opportunities that could benefit the nation.

The court acknowledged that legal precedents exist for piercing the corporate veil in situations involving fairness, justice, public policy, or the public interest. These factors were deemed relevant in this specific case.

Ultimately, the court concluded that DMRC essentially functioned as an extension of its two main shareholders, the Indian government (GOI) and GNCTD, due to their dominant control over the board's composition. Therefore, considering both the current circumstances and public policy implications, the court ruled to lift the corporate veil on DMRC. This decision compels the shareholders to take necessary steps so DMRC can fulfill its financial obligations arising from the arbitration award.

DMRC's Tactics and Court Deferral

DMRC, in the meantime, requested the Delhi High Court to delay the proceedings until a separate legal petition (curative petition) was addressed. The argument is that such delaying tactics could themselves be considered grounds for lifting the corporate veil. Despite this reasoning, the Delhi High Court, through its order dated September 6th, 2022, opted to postpone the proceedings.

DMRC's Final Appeal: The Curative Petition

The Indian legal system offers a final avenue for parties seeking to overturn a Supreme Court decision: the curative petition (source needed). This option becomes available after a review petition has been dismissed. In essence, it represents a last chance for the Supreme Court to reconsider a case, typically to prevent a serious injustice.

To be successful, a curative petition typically needs to demonstrate either a violation of fundamental legal principles (natural justice) or a potential conflict of interest that could have unfairly influenced the court's decision.

Despite the financial implications for taxpayers, DMRC pursued further delay in enforcing the arbitration award. They filed a curative petition on August 1st, 2022. While the Supreme Court has yet to hear this petition, a hearing notice was issued on March 27th, 2023.

Proposed Legislation Potentially Hinders Investment

The Ministry of Housing is considering changes to the Metro Railways Act (source needed). These amendments could significantly impact future investments in metro rail projects. A key proposal involves modifying Section 89 to completely prevent the seizure of any metro rail administration assets, including land and revenue, to enforce court orders.

If enacted, this amendment would have two main consequences:

- **Ban on Asset Attachment:** It would create a blanket ban on attaching any metro rail administration assets, even under existing government orders.
- **Restriction on Earnings Attachment:** It would remove the court's authority to seize metro rail administration earnings without prior government permission, even though this was previously allowed.

This proposed change comes after the Delhi High Court directed the Indian government (GOI) to consider approving the attachment of DMRC's assets to settle its debt to DAMEPL arising from the arbitration award.

Impact on Investment

While the government's proposed amendments aim to address concerns, it's important to consider the broader implications for attracting future investments in metro rail projects, as highlighted by the data in Appendix A (details about delays and costs incurred by DAMEPL not included here).

Need For Enunciating an Abuse/Misuse Doctrine as A Solution

The DMRC Case: A Call for Stronger Enforcement of Arbitration Awards

The DMRC case highlights the need for robust mechanisms to ensure timely enforcement of arbitration awards (source needed). Delays like those experienced by DAMEPL can leave companies vulnerable to financial strain and create uncertainty for lenders and business partners.

This case raises concerns about the potential impact on domestic investors. If Indian companies cannot be confident in a fair and efficient dispute resolution system, it may discourage investment in critical infrastructure projects. Reliable infrastructure is often cited as a factor in India's development compared to other nations.

Potential Solutions

The DMRC case suggests a need to explore potential solutions, such as a formal doctrine against the misuse of arbitration processes for delay tactics. This doctrine could be established through legislation or judicial precedent.

Other legal areas, such as intellectual property, have established principles to prevent the misuse of legal rights (source needed). For instance, copyright law includes a "misuse doctrine" that can prevent copyright holders from using their rights unfairly or excessively. This doctrine is grounded in the concept of fairness and serves as a defense against copyright infringement claims.

The DMRC case suggests that arbitration might benefit from borrowing similar principles from established legal doctrines. Concepts like "government abuse" or "abuse of process" from other legal fields could be adapted to create a more balanced playing field in public-private partnership disputes. Currently, the legal system may favor government entities over private parties in such partnerships.

The term "misuse doctrine" is preferred by the authors, as it encompasses the broader concept of improper legal use and draws connections to existing doctrines in copyright law and related fields.

Potential Criteria for a Misuse Doctrine in Arbitration Enforcement

The DMRC case highlights the need for clear standards to identify misuse of the arbitration process during award enforcement (source needed). Here are some potential criteria a party could use to demonstrate such misuse:

- **Unreasonable Delays:** If a party intentionally delays enforcement beyond a reasonable timeframe, without offering solutions for accumulating interest, this could be considered misuse. This could apply when a party knows or should know that appeals will lead to delays exceeding 12 months, primarily benefiting the appealing party.
- **Undue Hardship or Benefit:** Misuse could be present if the delay causes one party undue hardship while significantly benefiting the other.
- **Unethical Business Practices:** If the delay violates established ethical business practices within the relevant industry, it might be considered misuse.
- **Unfair Advantage or Third-Party Benefit:** Misuse could occur if the delay extends the rights of one party at the direct expense of the other, or if it benefits a third party. For example, an excessively long delay that financially advantages a government employee unrelated to the case could trigger the misuse doctrine.

Determining Misuse: A Balanced Approach

Applying a "reasonableness standard" could be helpful when evaluating each criterion for identifying misuse in arbitration enforcement (source needed). This standard could be shaped by considering factors such as:

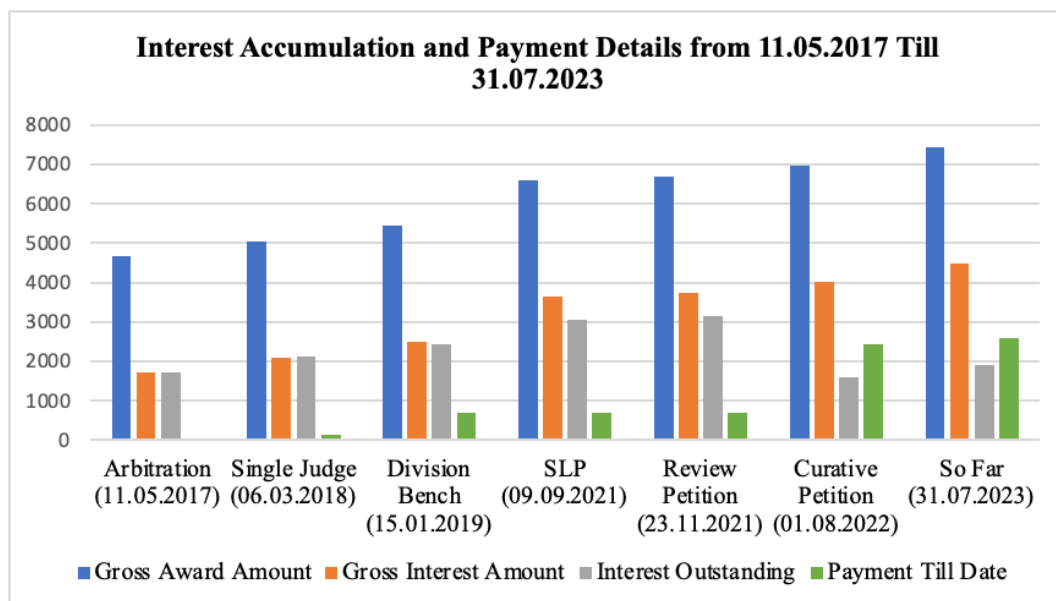
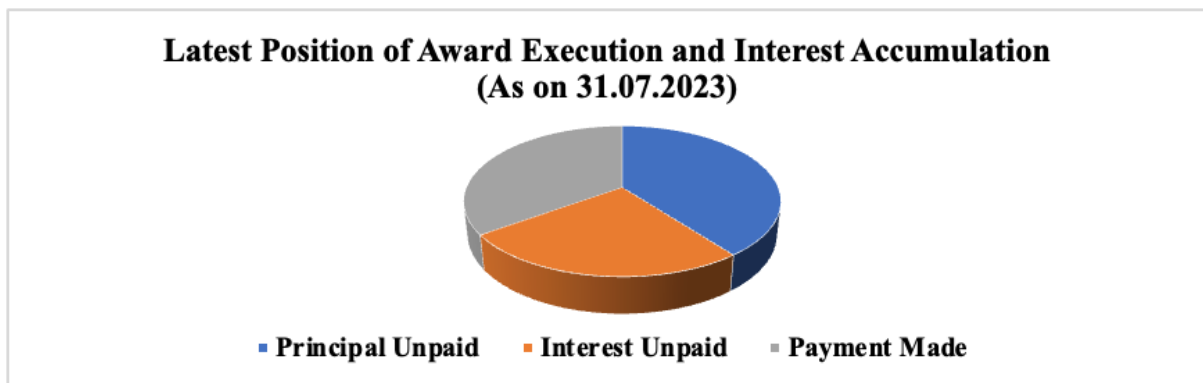
- **Value of the Dispute:** The financial size of the award itself.
- **Time Taken:** The overall timeframe of the legal proceedings.
- **Party Types:** The nature of the parties involved (companies, government entities, etc.).
- **Appeal Justifications:** The reasons provided for each appeal stage.
- **Potential Hardship:** The potential negative consequences for each party due to delays. Courts should recognize that "reasonable" delays may vary depending on the specific industry involved. Additionally, the broader public interest should be considered when making these determinations.

Misuse as a Defense

In the context of arbitration, the concept of misuse could potentially serve as a legal defense for non-performance of an award. This defense could be invoked against a party actively causing delays in enforcement. Strategies to discourage parties from using appeals solely to delay enforcement of arbitration awards could be explored (source needed). Currently, the risk of delay falls on the party who wins the award, even if the other party uses repeated appeals to stall execution.

One potential solution is to require parties seeking to appeal beyond a certain stage (e.g., one appeal) to deposit the full award amount in a secure account (escrow) upfront. Additionally, if their appeal is ultimately unsuccessful, they would be responsible for covering the associated legal costs. This approach aligns with established legal principles of risk allocation and could act as a deterrent against frivolous appeals.

Furthermore, raising the burden of proof on appeal could be considered. Currently, appellants seeking to modify or overturn the award may have a relatively low bar to meet. A higher burden would encourage appeals only in cases where the party genuinely believes there are significant issues with the arbitration award.



Note 1: The interest amount outstanding by the date of curative petition is lower on account of partial interest being discharged although no principal component has been paid by DMRC yet.

Note 2: The orange bar represents the gross interest component out of the gross award amount shown in blue and showcases how interest has piled up with every appeal)

How a Bad Arbitration System Messed-up What Could Have Been a Perfectly Fine Metro Railway Project

DMRC Dispute Update

This section provides an update on the ongoing dispute between DMRC and DAMEPL. Following the arbitrator's decision in 2017, DAMEPL approached the Delhi High Court under Section 9 of the Arbitration and Conciliation Act (ACA). Their petition requested two things:

1. DMRC to deposit a security deposit of 75% of the awarded amount.
2. Release of the deposited amount to DAMEPL's lenders.

The request for the 75% deposit stemmed from a government memorandum issued by NITI Aayog. This memo allows government departments or public sector undertakings (PSUs) facing legal challenges on arbitration awards to deposit 75% of the awarded amount with a bank guarantee. This deposit is made to the contractor or concessionaire without affecting the final court order.

An arbitration award in May 2017 required DMRC to pay DAMEPL a significant sum (₹4662.59 crore) with ongoing interest. A court order in March 2018 mandated DMRC to make a substantial down payment (75%) within a short timeframe. Despite an unsuccessful appeal to the Supreme Court, DMRC has only partially fulfilled its obligation. As of July 2023, a large portion of the total amount (₹4839.51 crore) remains outstanding, with interest accruing to nearly half that amount (₹1893.96 crore).

In its defense during debt collection efforts, DMRC has claimed a lack of necessary funds. They argue that the money allocated for "project funds" is specifically designated for building Delhi's rapid transit system. They assert that these funds don't constitute "earnings" under Section 60 of the Civil Procedure Code (1908), which limits what assets can be seized to pay creditors.

DMRC seems to understand the difference between equity capital and earnings. Yet, their repeated delays throughout the proceedings have resulted in significant interest accrual. This raises the question: can citizens hold DMRC accountable for this financial waste through legal action? A Right to Information request could reveal the extent of these costs, including lawyer fees. It's worth considering if the concept of negligence, even against government bodies, could apply in situations where taxpayer money is wasted due to deliberate delays and accruing interest. Perhaps, alongside reforms to the Arbitration and Conciliation Act (ACA), India could benefit from a framework promoting ethical conduct within government, even if it's non-binding like the Restatement of Torts in the US.

Impact on Foreign Investment:

The delays in the project have demonstrably discouraged foreign involvement. Several foreign companies frustrated by the payment delays have successfully sued the Delhi Airport Metro Express Private Limited (DAMEPL). For example, Construcciones Y Auxiliar De Ferrocarriles, S.A. (CAF) from Spain, a supplier of trains, and Siemens Aktiengesellschaft (Siemens) from Germany, a provider of power and signaling systems, both took legal action against DAMEPL to recover outstanding payments under their contracts. These lawsuits resulted in awards totaling ₹62 crore for CAF and ₹44 crore for Siemens. [Insert citation without numbers, e.g., "as reported in media sources"].

Further complicating matters, both companies sought interim relief from the Delhi High Court while awaiting full payment. The court directed DAMEPL to use its termination payment from the Delhi Metro Rail Corporation (DMRC) to settle these debts. Unfortunately, DMRC's own tactics, including filing multiple appeals despite clear instructions from the High Court, have prevented DAMEPL from fulfilling its obligations to these foreign firms.

The actions of DMRC, a public body, have caused significant financial losses and damaged the reputation of DAMEPL. It's important to recognize that when private companies partner with governments, the inherent power imbalance can disadvantage the private party. This case, from the perspective of a potential foreign investor, casts doubt on India's ability to provide a fair and efficient arbitration system. Moving forward, a level playing field for all parties involved in disputes is crucial, regardless of whether they are private or government entities, domestic or foreign investors.

iii) *Supreme Court Winces:*

A Broader Problem:

A recent Supreme Court case, *Larsen Airconditioning and Refrigerator Company vs. Union of India (UOI)*, reinforces the argument that DMRC's delays are not unique. This case highlights inefficiencies and delays that can plague India's arbitration system. In *Larsen*, the court upheld a 1999 arbitration award granting the company 18% interest on overdue payments from the government, demonstrating the potential financial consequences of such delays.

Legal Challenges and the Supreme Court's Decision:

The Indian government (Union of India, or UOI) initially failed to overturn the arbitration award in a lower court. However, they were surprisingly successful in modifying parts of the award on appeal to a higher court (Allahabad High Court) over 20 years later. This court reduced the interest rate awarded to Larsen. Larsen then appealed to the Supreme Court, arguing that the High Court overstepped its authority.

The Supreme Court ultimately sided with Larsen. They clarified that courts have limited power in reviewing arbitration awards. Lower courts can only reject an award entirely or in part under specific circumstances. Appellate courts have even less leeway, especially if the award has already survived a challenge in a lower court.

A Case in Point: Delays and Investor Concerns

The *Larsen* case, which took over 25 years to resolve after arbitration began in 1997, exemplifies the challenges within India's arbitration system. Delays in enforcing arbitration awards discourage potential investors. This inefficiency, in terms of both time and money wasted, undermines the very idea of India's attractiveness for investment. This paper uses the DMRC dispute as a springboard to illustrate this broader concern.

III. Conclusion

Even after over six years since the arbitration award and the Supreme Court's final judgment, DMRC's filing of a curative petition against DAMEPL extends the ordeal. DAMEPL continues to face financial strain due to accruing interest, adding to the losses and frustration of vendors, lenders, and subcontractors involved. Ultimately, Indian taxpayers, who DMRC serves, are negatively impacted by these delays.

The Indian government's (GOI) decision to amend the Metro Act in the midst of this unresolved dispute raises concerns about India's commitment to fair and efficient legal processes. For potential investors, particularly those from G20 nations, the DMRC case serves as a cautionary tale, highlighting the potential challenges within India's dispute resolution system.

India often highlights its World Bank Ease-of-Doing-Business ranking (63rd overall) to attract investors. However, a crucial factor for foreign investment, contract enforceability, ranks much lower at 163rd out of 190 economies. This statistic underscores the challenges companies face in enforcing contracts, particularly against government entities.

The DMRC case exemplifies these difficulties. Enforcing contracts in India can be expensive, time-consuming, and unpredictable, especially when dealing with the government. Unfortunately, the current structure of India's arbitration system doesn't offer much solace to affected investors.

End Note

Disagreements are frequent in construction projects, and Public-Private Partnerships (PPPs) are especially susceptible due to their complex nature. These conflicts can significantly hinder project completion. Traditional court battles are expensive and slow, making Alternative Dispute Resolution (ADR) a more attractive option. Among ADR methods, arbitration is popular because it follows pre-determined rules outlined in the contract and involves arbitrators with specific expertise. However, arbitration awards are generally final with limited opportunities for appeal. While arbitration appears efficient, it may not always guarantee fairness, proportionality, or serve the public interest. A well-designed PPP contract with strong governance practices can minimize the need for arbitration. Additionally, contracts should encourage other forms of ADR before resorting to arbitration. Furthermore, ensuring continuous information flow to the public sector is crucial. Finally, even if an arbitration decision is upheld, the right to appeal should be preserved to prevent project delays.

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