NAVIGATING THE MODEL CONCESSION AGREEMENT: GOVERNANCE AND RISK IN INDIA'S NATIONAL HIGHWAY PPPs

Abstract

Public–Private Partnerships (PPPs) drive India's infrastructure growth, especially in national highways. Central to this Public-Private Partnership is the Model Concession Agreement (MCA), a standardized contract defining duties, rights, and risk-sharing between government authorities and private concessionaires. This paper examines the MCA's application in highway projects, focusing on key clauses like conditions precedent, Right of Way (ROW) acquisition, financial closure, scope variations, force majeure, termination of the contract, and settlement of disputes. The analysis shows how the MCA improves transparency and financial discipline while balancing interests among the Authority, Concessionaire, and lenders. The article delves into roles of the Independent Engineer (IE) and the Society for Affordable Redressal of Disputes (SAROD), emphasizing their accountability. By evaluating MCA's operational effects, this paper argues the agreement acts not merely as a legal contract, but as a governance tool important for improving the investor trust and protect public value in India's highway sector.

CMA Sudhir Kumar Jaiswal
Adviser (Cost)
Indian Cost Accounts Service (ICoAS)
Ministry of Road Transport and Highways, New Delhi
skjaiswal_9@yahoo.co.in

Yerva Ajay
Assistant Director (Cost)
Indian Cost Accounts Service (ICoAS)
Ministry of Road Transport and Highways, New Delhi
yerva.ajay1@gmail.com

CMA Arun Padmanabhan
Assistant Director (Cost)
Indian Cost Accounts Service (ICoAS)
Ministry of Finance, Bengaluru
arunpadmanabhan111@gmail.com

Introduction

Healthy road infrastructure is fundamental to economic progress, and India's development goals rely heavily on upgrading transport and related logistics. Given the limitations on public funding, Public–Private Partnerships (PPPs) are a preferred route for leveraging private capital and

expertise.

National Highway construction in India generally follows four primary models: Engineering Procurement Construction (EPC), Build Operate Transfer-Toll (BOT-Toll), Build Operate Transfer (BOT-Annuity), and the Hybrid Annuity Model (HAM).

> A comprehensive examination of India's Model Concession Agreement governing national highway PPPs, balancing private investment with public accountability

EPC: Here, the contractor handles design, procurement, and construction. Private entities do not fund the project; they are paid a contract fee for services. Commercial risk is minimal for the private player, as the government retains ownership, toll collection rights, and maintenance activities. An example of EPC project is 6-lane Eastern Peripheral Expressway (NH No. NE-II) which decongests Delhi and boosts growth in Haryana & UP.

BOT (Toll): Private entities finance, build, operate, and maintain the road for a contracted duration. They bear 100% of the upfront and maintenance costs but recover investment through toll collection. Ownership reverts to the government after the concession period.

BOT (Annuity): Similar to BOT-Toll regarding construction and maintenance activities, but the private player cannot collect tolls. Instead, the government pays regular annuity payments spread across a defined period. An example of project under taken under on BOT (Annuity) basis is construction of bridge between Dhola and Sadia ghats along with connecting roads from near about Dhola to Islampur Tinali in Assam.

HAM: The government pays 40% of the project cost in milestones, while the private player arranges the remaining 60%. Toll rights remain with the government, and the private player receives annuity payments. An example of project wherein some packages were undertaken through HAM model is development of 6-lane Delhi-Meerut Expressway.

Given the scale and stakeholder complexity of these projects, a standardized framework is necessary. In the road sector, the Model Concession Agreement (MCA) acts as the primary reference document. It standardizes risk allocation, liabilities, performance guarantees, and monitoring activities of the project. Every project is administered by a separate Concession Agreement modified to suit the ground situations, but they are based on the MCA template.

One might compare the MCA to a guiding philosophy—offering principles and norms for the sector—whereas the specific Concession Agreement acts as the binding rulebook containing enforceable rules for a specific project. The MCA sets the sectoral standards, while the Concession Agreement operationalizes them.

Key Provisions

Scope and Conditions Precedent

The agreement initiates by specifying the project scope and the conditions precedent—mandatory steps required before the concession becomes active. The scope covers the construction site, facilities, and technical standards the Concessionaire must meet. Conditions precedent are time-bound rights and duties for both parties that unlock subsequent contractual rights.

- **Concessionaire Obligations:** Providing performance security, signing escrow and substitution agreements, securing financial closure, and submitting a financial model.
- **Authority Obligations:** Transferring Right of Way (ROW), securing necessary clearances, and to make the site free of encumbrances within agreed timelines.

This reciprocal structure mitigates early-stage execution risks in project execution by ensuring all parties meet initial commitments.

Right of Way (ROW)

The MCA details ROW requirements, including the handover of land and structures, management of archaeological finds, removal of encroachments, and acquisition of forest or environmental clearances. It also covers permissions for Rail Over Bridges

(ROBs) from relevant departments.

ROW acquisition is a common issue. The MCA places the primary burden on the Authority to protect the Concessionaire from delays caused by land issues outside their control.

Construction, Monitoring, and Certification

Construction obligations mandate compliance with design, safety standards, and maintenance during the construction phase. Accountability is enforced through:

- Monthly progress reports from the Concessionaire.
- Audit and physical site inspection by the Authority Engineer (AE) or Independent Engineer (IE).
- Mandatory testing and certification of works.

Project completion is certified through two stages:

1. **Provisional Certificate (PC):** Issued when the road is safe for traffic, subject to a "Punch List" of outstanding items (e.g., tree plantation, fencing, drain lining).
2. **Completion Certificate:** Issued once all punch list items are resolved.

Commercial Operations Date (COD)

COD triggers the start of tolling or annuity payments. It is determined by the earlier date of the PC or Completion Certificate. Delays in reaching COD attract penalties, enforcing timeline discipline.

Change of Scope

Unforeseen requirements during construction period need modifications. Works outside the original scope are treated as Change of Scope (CoS). The MCA establishes procedures for change of scope such as cost adjustment mechanisms, valuation methods for positive or negative CoS, and protocols for de-scoping work. This allows flexibility instead of affecting the project execution.

> "Explores risk allocation, financial structures, and dispute resolution mechanisms embedded within the Model Concession Agreement for highway projects"

Operation and Maintenance (O&M)

Post-construction, it is the Concessionaire (or an appointed O&M contractor) duty to ensure safe traffic flow, perform preventive maintenance, meet service level benchmarks, and reduce traffic disruption during repairs. Detailed schedules in the MCA provide measurable standards for these obligations.

Traffic Regulation and Public Services

Beyond revenue generation, the highway is a public utility. The Concessionaire must manage traffic, provide emergency medical aid, and conduct traffic censuses. These clauses reinforce the social obligation inherent in the project.

Role of the Independent Engineer (IE)

The IE (or Authority Engineer) is a third party appointed jointly to oversee execution. Though not a contract signatory, the IE approves designs, monitors quality, certifies milestones, and advises on disputes. This role is important for balancing the interests of the Authority and the Concessionaire.

Financial Closure

Financial Close occurs when all conditions for fund availability under Financing Agreements are met. The Concessionaire must achieve this within specific windows (e.g., 180 days for BOT-Toll, 150 days for HAM), with a possible 120-day extension subject to damages. Failure in Financial Close may lead to contract termination, ensuring only capable players bid.

Escrow Account Mechanism

Except in EPC modes, an Escrow Account is mandatory prior to the Appointed Date. Involving the Concessionaire, Authority, Escrow Bank, and Senior Lenders, this account channels project revenues. Withdrawals follow a strict waterfall:

1. Taxes and statutory dues.
2. O&M expenses.
3. Debt servicing.
4. Equity returns.

Upon termination, escrow balances are distributed according to MCA rules, securing lender interests.

> Highlights the MCA's evolution as a transparent, flexible, and investor-friendly governance tool for sustainable infrastructure development in India

Force Majeure and Change in Law

Force majeure is categorized into non-political events (such as natural disasters, strikes), indirect political events (war, terrorism), and political events (law changes).

"Change in Law" covers new enactments, repeals, or tax rate changes affecting the project. Taxes include excise, customs, VAT, sales tax, and local levies, but exclude interest, penalties, and Income Tax. The MCA details compensation and time extensions to maintain project viability against changes like GST rates.

Breach, Damages, and Termination

Breaches attract damages or termination. Termination triggers include:

- Concessionaire Default: Security failures, abandonment, or delays.
- Authority Default: ROW failures or political interference.
- Force Majeure.

Termination payments are linked to outstanding debt, protecting lenders and preserving confidence in future financing.

Dispute Resolution

High-value projects inevitably face disputes. The MCA employs a tiered approach:

1. Conciliation
2. Arbitration (under the Arbitration and Conciliation Act, 1996).
3. Mediation.

The Society for Affordable Redressal of Disputes (SAROD), promoted by NHAI and the National Highway Builders Federation (NHBF), facilitates arbitration for highway projects. SAROD aims for speedy, transparent, and cost-effective resolutions. Its awards are binding under the 1996 Act, offering a streamlined alternative to traditional litigation and supporting infrastructure sustainability.

Conclusion

The Model Concession Agreement remains the foundation of India's highway PPP framework. By clarifying roles, risks, and remedies, it creates a predictable environment for private investment while embedding accountability to protect public interest.

Challenges persist in land acquisition, traffic forecasting, and contract enforcement. However, the MCA adapts to changing conditions and lessons from previous projects. Ultimately, it serves as a framework designed to ensure efficient and sustainable infrastructure growth, functioning as more than a mere legal document. MA

References

1. *Ministry of Road Transport & Highways (MoRTH), Government of India. Model Concession Agreement for National Highways. (https://morth.gov.in/)*
2. *NITI Aayog. Public Private Partnership Framework in Infrastructure.*
3. *World Bank. Public-Private Partnerships Reference Guide.*
4. *Rangarajan, C. (2019). Financing Infrastructure: Challenges and Opportunities. Economic & Political Weekly.*
5. *Planning Commission of India (2011). Guidelines for PPP Projects in Infrastructure.*