सत्यमेव जयते
NITI Aayog

NATIONAL MONETISATION PIPELINE

VOLUME I: MONETISATION GUIDEBOOK

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NITI Aayog

GOVERNMENT OF INDIA
NEW DELHI

Preface

Infrastructure is critically linked to growth and economic performance. Benefits of higher investment in good quality Infrastructure manifest in the form of increased employment opportunities, access to market and materials, improved quality of life and empowerment of vulnerable sections. Recognizing the importance of infrastructure, the Government has continued its focus on sustaining and stepping up the pace of infrastructure investment. Investment led growth is therefore, central to the economic agenda of the Government and one of the pre-requisites of Investment led growth is capital and asset recycling. Asset recycling and monetization is the key to value creation in Infrastructure by serving two critical objectives, unlocking value from public investment in Infrastructure and tapping private sector efficiencies in operations and management of infrastructure.

Under the Union Budget 2021-22, Monetization of Assets has been identified as one of the three pillars for enhanced and sustainable infrastructure financing in the country. The Budget also envisioned preparation of a "National Monetisation Pipeline" (NMP) to provide a direction to the monetisation initiative and visibility of investors. In pursuance of the same, NITI Aayog was tasked with creation of the National Monetisation Pipeline (NMP) for brownfield core infrastructure assets.

The NMP has been created to be co-terminus with the balance NIP period, 4 year period from FY2022 to FY2025. The NMP has been prepared based on inputs and consultations from the respective line ministries and departments along with an assessment of the total asset base available. The NMP document has been developed and is structured as two volumes (Volume I & II) wherein the Volume I is being developed as a Guidebook comprising of conceptual overview, instruments, steps involved and key reform imperatives. Volume II comprises of the pipeline of Central Government ministries / sector wise citation of assets along with phasing and overview of assets. The NMP is meant to serve as an essential roadmap for the Asset monetisation of various brownfield infrastructure assets across roads, railways, shipping, aviation, power, telecom, oil & gas, and warehousing sectors.

Asset monetisation, based on the philosophy of 'Creation through Monetisation', will tap institutional investment and long term patient capital into stable mature assets in turn generating financial resources for new infrastructure asset creation . This will enable economic growth, generating employment opportunities and better prospects for country's youth.

Availability of a sustained and robust asset pipeline has been cited as a key concern by investors to the Government at various forums. A well laid out pipeline hence gives a comprehensive view to investors & developers of brown-field investment avenues in Infrastructure. The NMP will also form a baseline for the asset owning ministeries for monitoring and tracking performance of the potential assets. The NMP is aimed at creating a systematic and transparent mechanism for public authorities to monitor the initiative and for investors to plan their future activities. I hence consider the NMP document to be a critical step towards making India's Infrastructure truly world class.

The Government as part of a multi-layer institutional mechanism for overall implementation and monitoring of the Asset Monetization programme, has constituted an empowered Core Group of Secretaries on Asset Monetization (CGAM) under the chairmanship of Cabinet Secretary. Detailed deliberations with the line Ministries and Departments on the asset pipelines have been undertaken at the meetings of the CGAM chaired by the Cabinet Secretary.

The NMP is a culmination of insights, feedback and experiences consolidated through consultations with the concerned line Ministries and Departments, multi-stakeholder consultations and a series of one-to-one consultations with prominent global investors conducted over the last six months.

Asset Monetisation programme and the NMP took shape because of the vision and conviction of our Hon'ble Prime Minister who has always encouraged us to pursue excellence in delivering Infrastructure to common citizen of India. I am grateful to Hon'ble Finance Minister for the landmark Union Budget 2021, her inspiration and encouragement that made this report possible. In this endeavour, we owe our deepest gratitude to the Cabinet Secretary, under whose guidance, the Monetisation programme has and continues to gain momentum. I also thankfully acknowledge the support provided by the members of the CGAM, Secretary (DEA), Secretary (Revenue), Secretary (Expenditure), Secretary (DIPAM), Secretary (DPE), Secretary (Corporate Affairs), Secretary (Legal Affairs) and all the Secretaries of the relevant ministries and departments in development of the NMP.

None of this would have materialised without the unflinching support and guidance of the head of our institution, Dr. Rajiv Kumar, Vice Chairperson who inspired us in our endeavour to prepare and launch the NMP with a vision to serve as a roadmap for India's Asset Monetisation programme. Finally, a deep sense of gratitude to the Asset Monetisation team at NITI Aayog : Partha Sarathi Reddy, Alpna Jain, Arpana Bhatt and Sujit Jena, for their remarkable efforts in working relentlessly during the pandemic to research and create the NMP. Lastly, the support provided by CRISIL team towards our work on NMP needs a special mention.

We thank all the members for their support and contribution.

New Delhi
July, 2021

Amitabh Kant
CEO, NITI Aayog

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Acronym	Definition
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AAI	Airports Authority of India
BOO	Build-Own-Operate
BOQ	Bill Of Quantities
BOT	Build-Operate-Transfer
BPCL	Bharat Petroleum Corporation Ltd
BSE	Bombay Stock Exchange
BSNL	Bharat Sanchar Nigam Limited
CCO	Coal Controller's Organisation
CEO	Chief Executive Officer
CERC	Central Electricity Regulatory Commission
CIL	Coal India Limited
COD	Commercial Operations Date
CPSE	Central Public Sector Enterprise
CRWCL	Central Railside Warehouse Company Limited
CWC	Central Warehousing Corporation
DFCCIL	Dedicated Freight Corridor Corporation of India Limited
DFI	Development Finance Institution
DWT	Deadweight Tonnage
EPC	Engineering, Procurement and Construction
ESG	Environmental, Social and Governance
FBB	Fixed Broadband
FCI	Food Corporation of India

FDI	Foreign Direct Investment
GAIL	Gas Authority of India Limited
GIS	Geographic Information System
HAM	Hybrid Annuity Model
HPCL	Hindustan Petroleum Corporation Limited
IDBI	Industrial Development Bank of India
IOCL	Indian Oil Corporation Ltd.
IPA	Initial Portfolio of Asset
IRSDC	Indian Railway Stations Development Corporation Limited
JLN	Jawaharlal Nehru Stadium
JNPT	Jawaharlal Nehru Port Trust
LFP	Land Fall Point
LILO	Loop-In-Loop-Out
LMT	Lakh Metric Tonnes
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCA	Model Concession Agreement
MCLR	Marginal Cost of Funds-based Lending Rate
MDO	Mine Developer and Operator
MFC	Multi-functional Complexes
MIRA	Macquarie Infrastructure and Real Assets
MIV	Maritime India Vision
MMLH	Multi Modal Logistics Hub
MMTPA	Million Metric Tonnes Per Annum
MTNL	Mahanagar Telephone Nigam Limited
MTPA	Million Tonnes Per Annum
MVA	Mega Volt Amp
NBFID	National Bank for Financing Infrastructure and Development
NDCP	National Digital Communications Policy
NHAI	National Highways Authority of India
NHPC	National Hydroelectric Power Corporation
NIP	National Infrastructure Pipeline
NITI	National Institution for Transforming India
NLC	NLC India Limited (formerly Neyveli Lignite Corporation Limited)
NMP	National Monetisation Pipeline
NRP	National Rail Plan
NSE	National Stock Exchange

NSEC	Netaji Subhas Eastern Regional Centre
NSSC	Netaji Subhas Southern Centre
NSWC	Netaji Subhas Western Centre
NTPC	National Thermal Power Corporation Limited
OFC	Optical Fibre Communication
OHE	Over Head Equipment
OMDA	Operations, Management and Development Agreement
OMT	Operate Maintain and Transfer
ONGC	Oil and Natural Gas Corporation Limited
ORR	Outer Ring Road
PEG	Private Entrepreneurs Guarantee
PFC	Power Finance Corporation
PFT	Private Freight Terminal
PGCIL	Power Grid Corporation of India Limited
PNGRB	Petroleum and Natural Gas Regulatory Board
PPP	Public-Private Partnership
PUA	Pipeline Usage Agreement
REC	Rural Electrification Corporation
REIT	Real Estate Investment Trust
RFP	Request for Proposal
RFQ	Request for Qualification
ROW	Right of Way
RPO	Renewable Purchase Obligations
RTM	Regulated Tariff Mechanism
SAI	Sports Authority of India
SAROD	Society For Affordable Redressal Of Disputes
SEBI	Securities and Exchange Board of India
SECI	Solar Energy Corporation of India
SJVNL	Satluj Jal Vidyut Nigam Limited
SPV	Special Purpose Vehicle
STPS	Super Thermal Power Station
TBCB	Tariff Based Competitive Bidding
TEU	Twenty Feet Equivalent Unit
TOT	Toll-Operate-Transfer
TSA	Transmission Service Agreement
USD	United States Dollar
WPI	Wholesale Price Index

1

Infrastructure Imperative

1.1 INFRASTRUCTURE: AN ENABLER OF GROWTH

Investment in infrastructure is pivotal for accelerated and inclusive socio-economic development of a country. In the absence of adequate and robust infrastructure facilities, the economy operates at a sub-optimal level remaining distant from its potential and frontier growth trajectory.

With such imperative–to bridge the existing infrastructure gaps and cater to its future potential and needs–the Government of India (GoI) undertook a first-of-its-kind and a whole-of-government exercise in FY 2019-20, to lay the infrastructure vision for the country. Pursuant to which, the National Infrastructure Pipeline ('NIP'), detailing the infrastructure vision for the country, was released in December 2019. As per the Report of the Task Force for NIP:

> '..The vision, mission and strategic goals would be towards improving the ease of living or physical quality of life for each individual in the country. And investment in infrastructure would aim to achieve the aspirational standards in consonance with SDG -2030 for same..'

Imperativeness of such vision and large-scale infrastructure investment has only been more pronounced with the recent coronavirus (COVID) pandemic. With the crisis taking an unprecedented toll on the economic activity in the country, significantly enhanced level of infrastructure investment is critical for reviving growth. Furthermore, the crisis has emphasised the need for resilient, environmentally sustainable and technologically advanced infrastructure systems, which in turn necessitates targeted approach towards SDG based aspirational standards under NIP.

Figure 1: Infrastructure Vision 2025: Meeting aspirations and improving ease of living

1.2 INVESTMENT PLAN & FINANCING UNDER NIP

During the twelfth plan period, infrastructure investment in India aggregated to Rs 36 lakh crore, averaging at ~5.8% of GDP. Further, for FY 2018 and 2019 it has been estimated at ~Rs 10 lakh crore[1]. Going forward, the NIP envisions a significant step-up from the current levels. This is largely in view of recommended infrastructure investment levels of 7-8% of GDP[2], so as to ensure requisite capacity and quality of infrastructure within the country.

NIP envisages infrastructure investment of Rs. 111 lakh crores over five-year period from FY 2020 to FY 2025. With annual average investment of ~Rs. 22 lakh crore, this is a significant step-up (~2.5 times) vis-à-vis historical levels of spending on infrastructure.

Achievement of incremental annual investment of 2-3% of GDP[3], as envisaged under NIP, has the potential to enable double digit economic growth (for corresponding period) for the country. Which in turn will ensure enhanced economic activity and employment opportunities in a post-crisis economy. Successful and timely implementation of projects planned under NIP, hence, remains a key focus area for both Central and State Governments.

One of the major pre-requisites for this, however, is the availability of capital. Under NIP, traditional sources are expected to finance 83–85%[4] of the envisaged capital expenditure. This includes ~18-20% financing through Centre's budgetary resources and 24-26% through the States' budgetary resources. Another ~40% is proposed to be raised through extra-budgetary resources/ private sector investment (in form of debt from bond markets/ banks/ non-banking financial companies, by way of equity from private developers/ internal accruals of PSUs and external aid from multilateral/ bilateral agencies).

Further, as estimated by the NIP task force report, about 15-17% of the outlay is to be met through innovative and alternative initiatives viz. asset monetisation, funding through a new Development Finance Institution (DFI) etc. Of which asset monetisation has been suggested as a tool to monetise operational assets at both Central and State levels.

Budgetary Sources	Private or Extra Budgetary Sources	Innovative and alternative financing sources
Central Budget (18-20%)	**Financing by Banks** (8-10%)	**Innovative and alternative financing** (15-17%)
	Bond Markets (6-8%)	
State Budget (24-26%)	**Infrastructure NBFCs** (15-17%)	
	PSU Accruals, Equity and Others (8-15%)	

Figure 2: Sources of financing for NIP

1 Report of the Task Force for National Infrastructure Pipeline (DEA, Ministry of Finance)

2 Economic Survey 2018-19

3 Based on envisaged outlay, as percentage of GDP, vis-a'-vis previous period investment during FY 2013-19

4 Report of the Task Force for National Infrastructure Pipeline (DEA, Ministry of Finance)

1.3 INITIATIVES UNDER UNION BUDGET 2021-22

GoI's commitment towards realising the vision for country's infrastructure has been further put in motion via the Union Budget 2021-22. In line with the recommendations of NIP task force report, Budget 2021-22 has laid out a three-pronged strategy for enhanced and sustainable infrastructure financing in the country. This entails:

i. Creation of institutional structures;

ii. Thrust on monetisation of assets, and

iii. Enhanced share of capital expenditure in Central and State budgets.

~Rs 3.8 lakh crore has been allocated as capital outlay for various infrastructure projects under Union Budget 2021-22[5]. This is broadly in line with the recommended quantum of funding for the corresponding period, through Central budgetary resources, under NIP. Such enhanced budgetary outlay[6], in addition to accelerating projects envisaged under NIP, is aimed at inducing a multiplier impact[7] towards fulfilling the more immediate objective of reviving economy in a post COVID scenario.

From a medium to longer term perspective, the Budget proposes the following initiatives for creating a sustainable institutional framework for funding of infrastructure assets in the country:

Development Finance Institution (DFI)	Asset Monetisation
Professionally managed DFI to act as provider, enabler and catalyst for infrastructure financing	**Monetising operating public infrastructure assets for new infrastructure construction**
• National Bank for Financing Infrastructure and Development Bill (2021) passed in March 2021 • A body corporate with initial GoI holding of ~100% (more than 26% at all times) • Initial share capital of Rs 20,000 crore • Target Lending portfolio: Rs 5 lakh crore (3 years)	• National Monetisation Pipeline of potential brownfield infrastructure assets • Asset Monetisation dashboard for tracking progress and for providing visibility to investors • Various assets/ asset classes targeted for monetisation during FY 2021-22

Figure 3: Initiatives under Budget 2021-22[8]

1.4 ASSET MONETISATION – THE CONCEPT

Financing of infrastructure investments requires a diversified set of alternatives, especially so in emerging economies like India. And the scale at which it has been currently envisaged under NIP, it can only be made possible through a re-imagined approach, and a look

5 Union Budget 2021-22 – Expenditure Profile

6 2 times the Revised Estimates for FY 2020-21 as per Union Budget 2021-22 – Expenditure Profile

7 2X based on comparative assessment of countries by S&P Global ratings (2018);

8 Para 45 (DFI) and Para 47 (Asset Monetisation) under Budget 2021-22

beyond the traditional sources or models of financing. It is, therefore, that NIP has emphasized on innovative mechanisms–such as asset monetisation–for generating additional capital.

The need for adoption of such alternative mechanisms has only been further pronounced in the wake of COVID-19. On one hand, the budgetary imperatives of social sector priorities and economic stimuli limit fiscal headroom. While simultaneously, reduction in risk appetite of private developers/ equity investors and debt financiers. limit private investment in greenfield infrastructure. This invariably necessitates innovative mechanisms, structured around mature brownfield assets, for tapping of private sector investment.

> Monetizing operating public infrastructure assets is a very important financing option new infrastructure construction.
>
> —Union Budget 2021

A sizeable inventory of infrastructure assets has been created over the past decade through public investments. This can now be leveraged for tapping private sector investment and efficiencies.

The strategic objective of Asset Monetisation programme is to unlock the value of investments in public sector assets by tapping private sector capital and efficiencies. Which can thereafter be leveraged for augmentation/ greenfield infrastructure creation.

Asset monetisation, also commonly referred to as asset or capital recycling, is globally a widely used business practice. This consists of limited period transfer of performing assets (or disposing of non-strategic / underperforming assets) to unlock "idle" capital and reinvesting it in other assets or projects that deliver improved or additional benefits. Governments and public-sector organizations, which own and operate such assets and are primarily responsible for delivering infrastructure services, can adopt this concept to meet the ever-increasing needs of the population for improved quality of public assets and service. However, suitable structuring of such transactions is extremely critical from the perspective of public interest and service aspects.

Asset Monetisation, as envisaged here, entails a limited period license/ lease[9] of an asset, owned by the government or a public authority, to a private sector entity for an upfront or periodic consideration.

Transfer of such rights in lieu of an upfront/ periodic consideration is defined by a well-defined concession/ contractual framework. This enables a balanced risk sharing framework between the public authority and private party. The private sector entity is expected to operate and maintain the asset based on the terms of the contract/ concession, generating returns through higher operating efficiencies and enhanced user experience. Funds, so received by the public authority, are reinvested in new infrastructure or deployed for other public purposes. Such contracts include provision for transfer of asset back to the public authority at end of such contract.

9 Sale i.e. transfer of legal ownership of assets is only envisaged in cases such as disinvestment of stake etc.

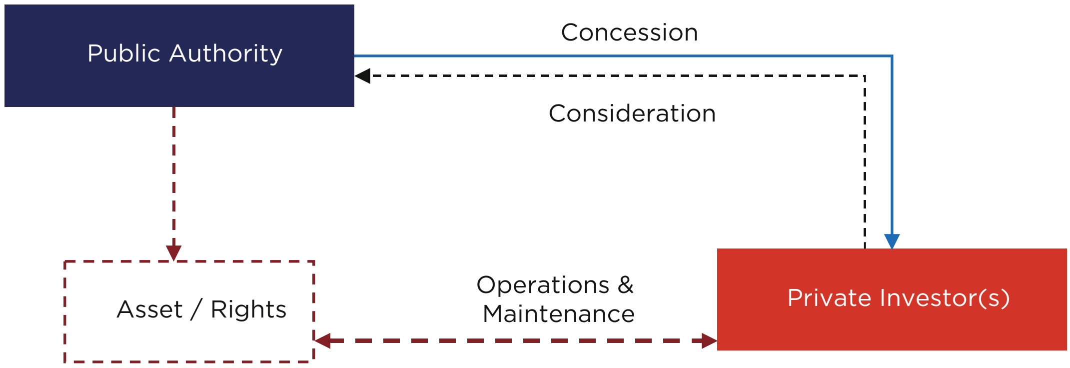


Figure 4: Asset Monetisation Structure

Asset Monetisation needs to be viewed not just as a funding mechanism, but as an overall strategy for bringing about a paradigm shift in infrastructure operations, augmentation and maintenance. This is especially considering the potential for resource and capital efficiencies as also the ability to dynamically adapt to the evolving global and economic reality.

It presents an opportunity for public asset owners to avail new financial structures[10] and vehicles for tapping capital from private sector investors (strategic, institutional, retail etc). In the process, it helps public sector authorities/ entities in easing fiscal constraints and freeing up the balance sheets for taking up more greenfield infrastructure creation. This enables deployment of resources by government towards social sector and other competing public priorities.

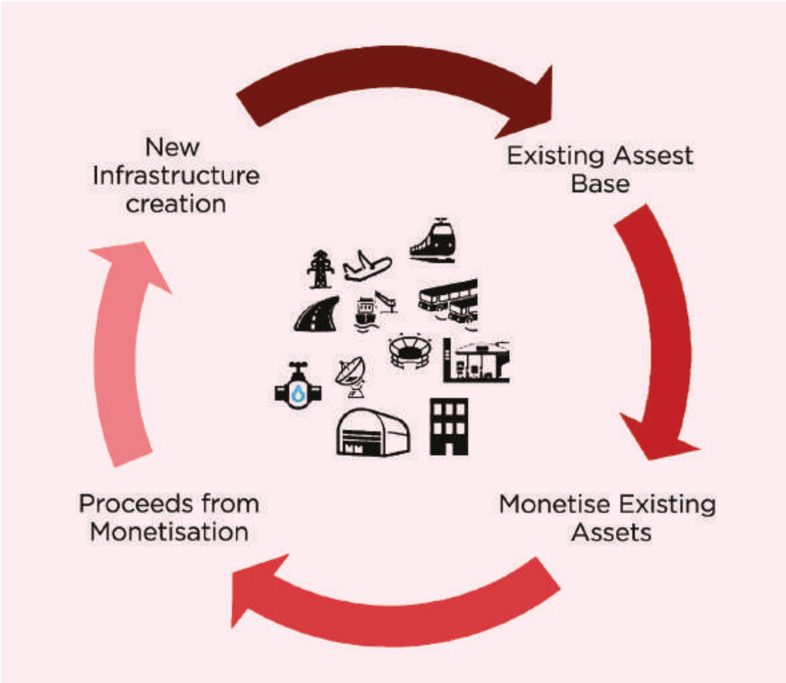


Figure 5: Infrastructure Asset Monetisation Cycle

10 Simplistic representation for purpose of conceptual understanding

1.5 NATIONAL MONETISATION PIPELINE

For Asset Monetisation initiative, to progress in the right direction, it is imperative that the Government makes available a strong pipeline of attractively structured, brownfield projects. Further, sustained flow of transactions and visibility on same, across asset classes, is a key pre-requisite of long-term investors. A robust asset pipeline, not only enables investors to plan their fund raisings and investment timelines, but also helps asset owners track and scan the performance of assets.

Within this context, National Monetisation Pipeline (NMP) was announced in the Union Budget 2021-22 and NITI Aayog has been entrusted with the mandate to develop National Monetisation Pipeline.

Asset Monetisation being inextricably linked to new infrastructure creation, NMP has been planned to be co-terminus with the remaining four-year period of the National Infrastructure Pipeline (NIP). NMP forms a baseline for the asset owning ministries for monitoring and tracking – investment, performance and data on potential assets, for the 4-year period from FY 22 to FY25. The Report on National Monetisation Pipeline has been structured as a (i) Guidance book for Asset Monetisation (Volume I) and (ii) Medium-term Roadmap including the pipeline of assets (Volume II). NIP and NMP, together, are envisaged to give a comprehensive view on greenfield and brownfield investment avenues in Infrastructure.

- Brings out clearly the scale of financing through asset monetization
- Phasing of the proposed monetization and the capital generated over the medium-term
- Guidance on asset/project profile and method of monetization
- Brief operational contours of the project/asset (Lane-kms of road, circuit km etc.)

Figure 6: Objectives of the National Monetisation Pipeline

NMP will prima-facie help in evolving a common framework for monetisation of core assets. It will critically clarify its distinction from privatization, eventually helping to create a virtuous cycle of 'develop, commission, monetise and invest'. It will also help in identifying potential "Monetisation-ready" projects, across various infrastructure sectors/ ministries and simultaneously provide visibility to investors.

A well strategized Asset Monetisation programme:

- **Is structured around:**
  - Monetising assets with high appetite among investors; and
  - Reinvesting proceeds into assets/services that citizens desire.
- **Helps new asset creation:**
  - Without necessarily increasing debt levels or taxes or through reallocation of resources from other public services/ welfare activities;
- **Targets efficiency gains, competition** *and improved performance monitoring*
- **Enhances investment opportunities, depth and liquidity in** *infrastructure as an asset class*
  - Effectively incentivizing specialized investor classes (viz. domestic and foreign pension funds, etc.)

1.6 ORGANIZATION OF THIS GUIDEBOOK

Volume I (Guidance book) is structured as a ready-reckoner for public authorities and investors while going about the asset monetisation process, particularly in the context of India. It presents guidance on the various models, global case studies, preparatory actions, the regulatory framework and asset monetisation process.

The Guidance book is divided into six sections aligned with the tasks to be carried out towards asset monetisation:

- **Section 1:** Infrastructure Imperative: Setting the context of the Asset Monetisation;
- **Section 2:** Asset Monetisation – Framework and Instruments: Categories, models and instruments for asset monetisation including examples for better understanding of structures;
- **Section 3:** Asset monetisation experience: India and beyond: Experiences on asset monetisation/ recycling from the developed and other emerging markets and key takeaways;
- **Section 4:** Preparatory Stage: Steps in identifying assets, selecting the right instruments etc. and approval and sanction process before initiating an asset monetisation transaction;
- **Section 5:** Transaction Stage: An overview of the regulatory framework for respective instruments;
- **Section 6:** Key imperatives for Monetisation: Imperatives for efficiency and efficacy of Asset Monetisation initiative.

2

Asset Monetisation—Framework and Instruments

This section provides an overview of the approach to core asset monetisation, in India's context. This includes key tools, instruments including their broad features, benefits and limitations etc.

2.1 CORE ASSET MONETISATION

The assets held by the government/ public sector entities/statutory bodies broadly include operational/ under-construction projects, land, buildings, investment in subsidiaries/ joint ventures etc . From amongst these,

Assets which are central to the business objectives of such entity and are used for delivering infrastructure services to the public/ users are considered as Core Assets for the purposes of monetisation herein.

Infrastructure[11] includes asset classes such as transport (roads, rail, ports, airports), power generation, transmission networks, pipelines, warehouses etc. The other assets, which generally include land parcels and buildings, can be categorised as non-core assets.

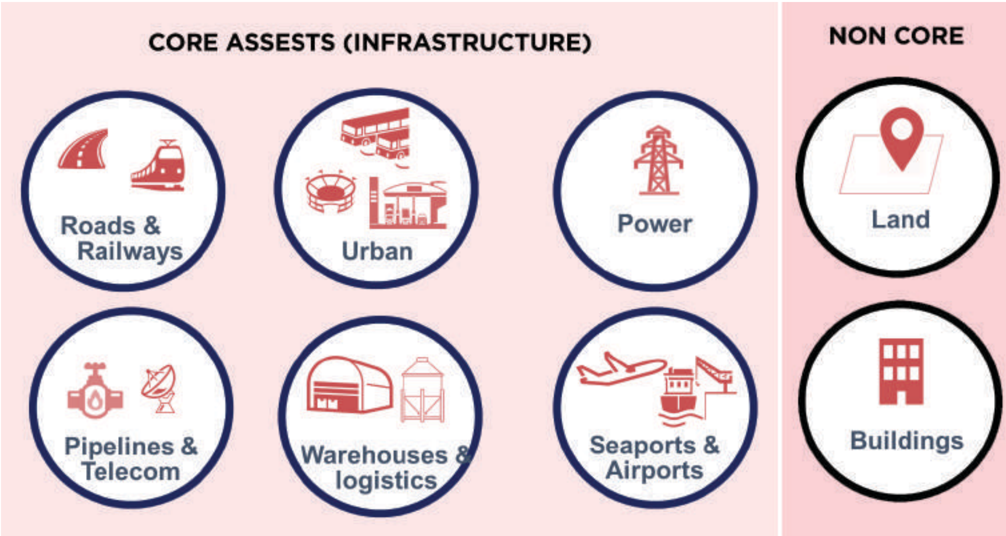


Figure 7: Core and Non-Core Asset Classes

Of the various Core Assets, assets which are currently generating revenue OR those which have substantially completed facilities and can be suitably augmented for future operations have been considered as potential Core Assets for monetisation herein.

2.1.1 Core Asset Base

Investment, as measured by Gross Fixed Capital Formation (GFCF), has on an average been 30% as a component of GDP in the previous 5-year period i.e. FY 2017 – FY 2021[12]. This capital formation has been led by mega public investment programmes such as Bharatmala, Sagarmala, Dedicated Freight Corridor, Jal Shakti and Pradhan Mantri Awas Yojana etc.

Owing to several years of such large-scale public investment programmes, a significant public infrastructure asset base has been created at the level of CPSEs, departments and

11 Based on the Harmonized Master list of Infrastructure sub-sectors published by Department of Economic Affairs

12 National Statistical Office (NSO), Ministry of Statistics and Programme Implementation

statutory entities, both within the Central as well as State government. A snapshot of the scale of core assets, managed across key Central Government entities and sectors, is provided in table below.

Table 1: Snapshot of Infrastructure asset base under key Central govt. public entities[13]

S.No.	Asset class	Ministry / entity	Key asset variable	Value
1	Roads	Ministry of Road Transport & Highways through National Highways Authority of India	Length of National Highway network	132,499 km[14]
2	Power transmission	Ministry of Power through Power Grid Corporation of India Ltd.	Transmission network and substations	171,950 km transmission lines, 262 sub-stations with 444,738 MVA transformation capacity[15]
3	Power generation	National Thermal Power Corporation (and its JVs & subsidiaries)	Thermal generation	60,224 MW[16]
4		National Hydroelectric Power Corporation National Thermal Power Corporation	Hydro & renewable generation (Solar)	4,912 MW (NTPC and its JVs & subsidiaries) 7,071 MW (NHPC)
5	Airports	Airport Authority of India	Number of AAI airports	137 airports[17]
6	Ports	12 Major Port Trusts	Handling capacity of major ports	1535 MMTPA[18]
7	Telecom Towers	Bharat Sanchar Nigam Ltd Mahanagar Telephone Nigam Ltd	Number of telecom towers	69,047 towers
8	Optical Fibre Cable	Bharat Broadband Network Limited	Length of optical fibre cable	5,25,706 km (laid under Bharatnet)[19]
9	Railway Stations	Indian Railways	Number of railway stations pan India	7,325 stations[20]

13 Asset base directly/indirectly owned or through private participation or otherwise

14 https://nhai.gov.in/nhai/sites/default/files/NationalHighwaySummary.pdf

15 https://www.powergridindia.com/company-overview-0

16 https://www.ntpc.co.in/en/power-generation/installed-capacity

17 https://www.aai.aero/en/corporate/organization

18 http://shipmin.gov.in/sites/default/files/BPS2020.pdf

19 http://bbnl.nic.in/

20 Indian Railways Annual Reports 2019-20

11	Railway Track	Indian Railways	Track network	1,26,366 track km (67,956 route length)[20]
12	Natural gas pipeline	Gas Authority of India Ltd, Indian Oil Corporation Ltd & others	Length of operational pipeline network	19,998 km[21]
13	Petroleum & products pipeline	IOCL, HPCL, BPCL, OIL	Length of pipeline network	14,623 km[21]
14	Warehouses	Food Corporation of India, Central Warehousing Corporation & other agencies	Warehousing capacity	818 lakh MT[22]
15	Sports stadium[23]	Sports Authority of India, Ministry of Youth Affairs & Sports	Number of Sports Stadia & regional centres	5 national stadia and various Regional centres[24]

2.2 CORE ASSET MONETISATION FRAMEWORK

Governments regularly invest in new infrastructure creation by way of budgetary allocations. Asset Monetisation approach for such assets, enables a whole lifecycle and system-wide perspective, combining monetisation and new infrastructure creation into a long-term view. It leverages the capital tied up in existing infrastructure assets and aims to reap potential benefits by monetising these assets and directly reinvesting capital proceeds for creation of new or improvement of existing infrastructure.

Asset monetisation has two inextricably linked facets;

- Lease or divestment of rights over existing assets; and
- Reinvesting in new infrastructure.

While in the past, divestment of rights over existing assets has been carried out by government and public-sector organizations, the proceeds from such divestment have not necessarily been invested in new infrastructure creation. Further, such divestment has largely been focussed on stakes in companies/ subsidiaries or occasionally in non-core assets such as land or building. Lease or long-term concession of core operational assets, in a manner which garners upfront funds and can thereafter be leveraged/ invested in other infrastructure assets, has rather been occasional/ sector-specific. Given however the benefits of this approach, agencies such as National Highways Authority of India have deployed such mechanisms for upfront fund raising and new infrastructure creation. There

21 https://www.pngrb.gov.in/eng-web/data-bank.html#ngpl-1

22 https://fci.gov.in/storages.php?view=35

23 Consists of stadium assets under Ministry of Youth Affairs & Sports, additional sports stadiums under other public entities such as Indian Railways are not included

24 Ministry of Youth and Sports Affairs Annual Report 2019-20

is now a need to systematically adopt these initiatives across varied asset classes and streamline the frameworks and modalities of such alternatives in a manner which can be readily absorbed, evaluated and replicated.

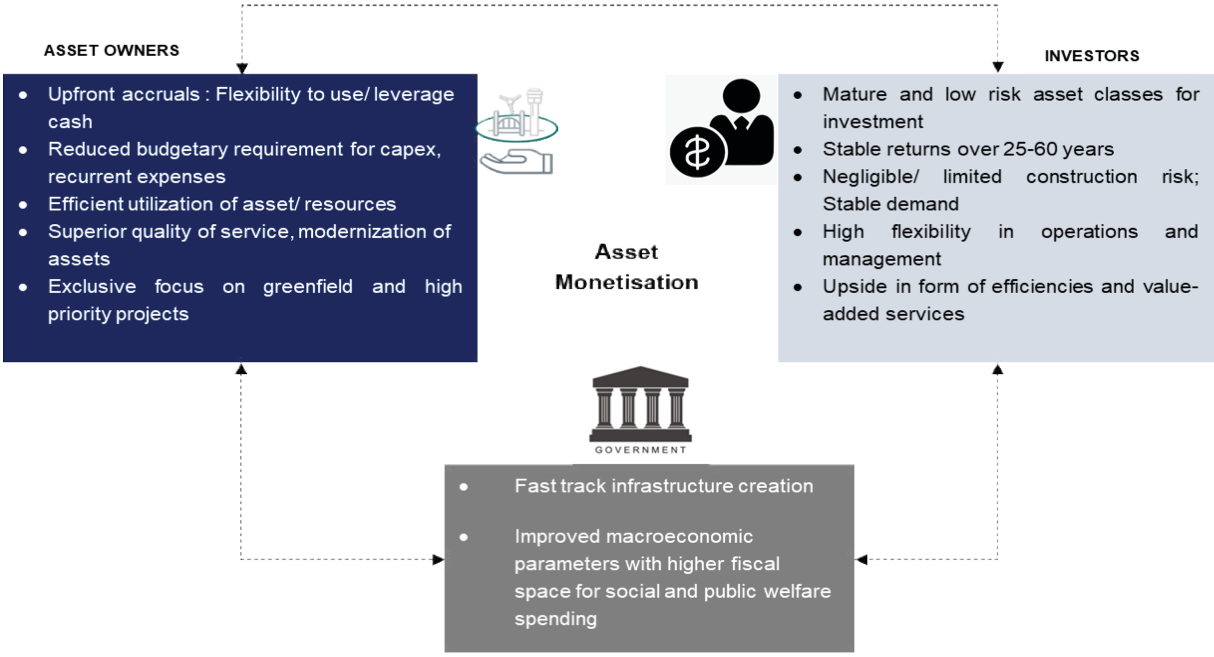


Figure 8: Asset Monetisation Eco-System and Benefits to Stakeholders

2.2.1 Framework features

The framework for monetisation of core assets has three key imperatives.

Figure 9: Framework features for Core Asset Monetisation

- Selection of de-risked and brownfield assets with stable revenue generation profile (or long-term revenue rights) that can be clearly ring-fenced, is of critical importance.
- Transaction should be structured around revenue rights as against transfer of full ownership. Towards this, hand back of assets to the original asset owner at the end of transaction life is a key requirement.

- Monetisation should be viewed as structured contractual partnerships and not privatization or slump sale of assets. Well-defined contractual frameworks should be adopted which allow government authorities to have clearly laid down KPIs (Key Performance Indicators) and standards for assets.
- Selection of private partner should be through a transparent mechanism and the utilization of proceeds received should be towards well-defined uses such as new infrastructure creation etc.

2.2.2 Considerations for contractual structuring

Infrastructure assets entail a clear need for the government to retain a degree of oversight and control by way of either contractual mechanisms or regulations. This is because the projects around these assets typically involve[25]:

i. Transfer of public assets including land;

ii. Delegation of governmental authority to collect and appropriate user charges that are levied by force of law and must therefore be 'reasonable'; Protection of user interests and the need to secure value for public money

iii. Provision of services to users in a monopoly or semi-monopoly situation, which imposes a special obligation on the government to ensure adequate service quality; and

iv. Sharing of risks and contingent liabilities by the government, as applicable.

Because of such pre-requisites and nature of risks, as also involvement of multiple parties – including project sponsors, lenders, government entities, public users and regulatory authorities etc – monetisation of infrastructure assets can be complex. This mandates detailed due diligence, legal and contractual agreements that clearly set forth the risks, rewards and obligations of various participants.

Monetisation of infrastructure assets should hence be structured with a careful consideration to protection of user interests and maximization of value to the public authority (similar to that in case of Public Private Partnerships projects).

2.3 MONETISATION MODELS

Asset Monetisation can be undertaken through a range of instruments/ tools. This section summarizes some of the few models, which have been utilized and have proven to be effective in monetising brownfield assets.[26] Monetisation models which are currently being explored/ availed may broadly be categorized into two approaches: (i) Direct Contractual Approach and (ii) Structured Financing models.

25 Features of Infrastructure projects as identified under Procedure for Approval of Public Private Partnership Projects

26 Models, included herein, are only some of the structures adopted/ with potential for adoption; The list is not comprehensive and will vary based on the features of the assets and the expectations of authority, investors and users.

'Direct Contractual' Approach	Structured financing models
Concession/ contract between a public entity and identified private sector developer(s)/ investor(s)	Structured instruments for long-term fund generation via capital markets or through a pool of investors

Figure 10: Core Asset Monetisation approaches

The aforementioned classification has solely been used, for the purpose of this Guidebook, to delineate the broad principles under various models/ structures. This is only one of the possible and indicative way to classify monetisation models and is not to be treated as prescribed/ formal categorization of monetisation models.

In practical application, adoption of one or the other category of models would depend upon various factors viz. asset profile, objectives for monetisation, expectations of sponsor and investors etc. The most optimal or selected model, could hence very well be one of the above or a hybrid structure (having features of both of the above categories) or possibly an entirely different model.

Table 2: Indicative features of Direct Contractual mode

Transaction	Asset OR rights over such asset–Transferred to a single or a consortium of developers and / or investors, by way of defined contractual frameworks
Consideration	Upfront and/or periodic payments
Target Investor Class	Generally, infrastructure developers, strategic investors with direct involvement / oversight in operations
Selection modes	Through a competitive bidding process and as per prescribed guidelines of Government
Contractual aspects	Key performance indicators and clearly defined performance regime with commensurate incentive or penalty mechanisms, suitable exit provisions, termination and force majeure provisions
Prevalent Structures	PPP concessions

Table 3: Indicative features of Structured Financing Instruments

Transaction	Partnership interest in the asset OR rights over such assets, granted to a pool of investors (under a capital market based instrument or otherwise)
Consideration	Generally Upfront
Target Investor Class	— Institutional investors such as sovereign wealth funds, global/domestic insurance funds, pension funds — Retail investors
Selection modes	Public listing or private placement or other such mechanisms
Prevalent Structures	Infrastructure Investment Trust (InvIT), Real Estate Investment Trust (REIT), Asset-back securitisation (ABS)

2.4 DIRECT CONTRACTUAL MODELS – BROWNFIELD PPP CONCESSIONS

In the past, brownfield models have largely been focussed as management contracts – where the obligation to provide service remains with the public authority, but the day-to-day management of the asset is vested with the private sector. These are contractual arrangements, with duration of typically 3-5 years – where the private sector entity is responsible for the O&M of a part or the whole of the asset/ facility or service.

Brownfield PPP models, on the other hand, aim at roping in private sector partner for end-to-end operation and maintenance (O&M), provision of service to users and augmentation of asset as necessary. Various potential models for such brownfield PPP of existing infrastructure assets owned by public sector entities/line ministries/ statutory authorities include:

Brownfield Public Private Partnership Concessions		
Model	**Operate Maintain Transfer (OMT)**	**Operate Maintain Develop (OMD)**
Adopted as	Toll Operate Transfer (TOT) in Roads	Operation Management Development Agreement (OMDA) in Airports

Figure 11: Brownfield PPP Models

2.4.1 Operate-Maintain-Transfer Concession

The fundamental principle under the model is to engage private sector partner for undertaking operations and maintenance of projects. This presupposes that construction works have been completed by the asset owner/ government and the project is amenable to immediate revenue collection. As the existing project has established demand/ traffic revenue streams the project structure does not suffer from volatility or unmanageable commercial risks.

From the perspective of bidders, hence, the future revenue potential can be assessed with a fair degree of certainty. Which enables the asset owner to be able to monetise the project for an upfront/ periodic consideration (in form of premium/ revenue share). This not just ensures cash inflows to the public asset owner, but also relieves it of the financial and capacity commitments towards operations and maintenance of the project, thereby reducing expenditure or budgetary support requirement. This is necessary for financial and operational bandwidth to public entities for implementation of greenfield projects, as also higher commercial and operational efficiency.

OMT contracts have seen strong impetus in road sector in India. OMT contracts are a combination of a tolling contract and a contract for operations & maintenance. Between

2009-10 and 2014-15, NHAI has awarded a total of around 2,400 km of National Highways to be maintained on OMT basis.[27]

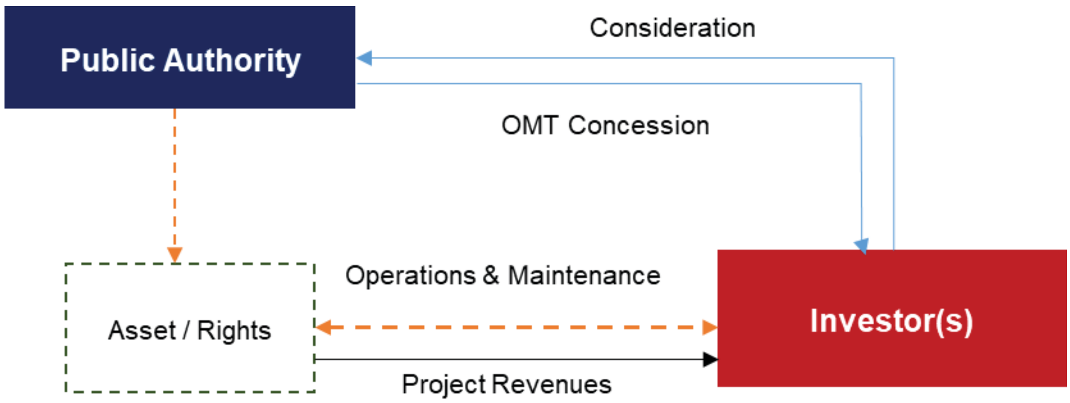


Figure 12: OMT Broad Structure

Table 4: Key Terms of an OMT Concession

Key Requirement	Operational asset, preferably with one complete cycle/ year of operations
Potential Projects	Projects newly constructed and commissioned by the public asset owner through its own funds (EPC etc.) OR Project originally tendered out through PPP modes and for which have concession period is complete or termination has occurred[28]
Primary Obligations	— Operations and Maintenance of assets; — Provide service to users against a pre-determined/ regulated or market-based fee;
Concession Period	10 years or more, however, depending on the asset category. *Longer concession periods with pre-defined terms of augmentation preferable*[29]
Consideration	Upfront or Annual Premium (Fixed OR in form of revenue share) *Variation of model where an upfront value is bid and paid by Concessionaire is TOT*[30]
Investor Class	Strategic investors or Infrastructure developer with direct involvement / oversight in operations
Selection	Through competitive bidding process and as per prescribed guidelines of Government
Other Terms	Standard terms as in case of PPP Projects

27 CRISIL report on 'Way forward for OMT contracts' 2016

28 Subject to asset being suitable for operations and resolution of ensuing legal conflict (if any)

29 Major augmentation or development obligations are usually not covered under these Projects. If, however, required, at a later stage the same may be under EPC mode and funded by the Authority. In case the same is pre-specified and is to be funded by the concessionaire, present value of such expenditure will be reduced from the upfront consideration to the Authority.

30 Toll Operate Transfer model has been discussed as a sub-type

2.4.1.1 Toll Operate Transfer

Toll Operate Transfer (TOT) is a variant of the OMT model, recently adopted in roads sector, where consideration paid to the Authority is in form of an upfront premium. This is one of the key models for monetisation successfully employed in the roads sector in India both by Central and State entities. Ministry of Road Transport and Highways (MoRTH) introduced the TOT concession framework in 2016 for monetisation of road assets portfolio by National Highways Authority of India (NHAI) to long-term investors.

Toll Operate Transfer (TOT) Model

*Ensures efficient management of public funded and operational national highway projects through **structured contractual partnerships with defined KPIs and O&M standards***

*Provides **upfront proceeds for ploughing back into greenfield national highway development***

The TOT model primarily entails securitization of the toll receivables by collecting an upfront concession fee from the selected bidder and determined through a transparent competitive bidding mechanism. The structure involves leasing out of operational national highways (NHs) (ideally constructed under the EPC model) with consideration paid upfront. The road assets are awarded to winning bidders who are granted concession to collect toll and to maintain the roads over the life of the concession which is 15-30 years. The structure also provides for toll rate escalations linked to inflation.

Till date, five rounds of TOT have been undertaken covering a stretch of 2395 km, out of which 3 rounds have been completed – Bundle 1, Bundle 3 and Bundle 5. NHAI has raised ~Rs. 17,000 crores across these three rounds of TOT entailing toll road assets of ~1400 km.

Table 5: TOT bundles bid out by NHAI till date

S.No	Bundle	Date	Length	Value
1	TOT Bundle 1	Aug 2018	682 km	Rs. 9,681 crores
2	TOT Bundle 2	Feb 2019	586 km	Bid cancelled
3	TOT Bundle 3	Nov 2019	566 km	Rs. 5,011 crores
4	TOT Bundle 4	Sep 2020	401 km	Bid cancelled
5	TOT Bundle 5A-1	Jan 2021	54 km	Rs. 1,011 crores[31]
6	TOT Bundle 5A-2	Jan 2021	106 km	Rs. 1,251 crores[24]

Certain state government entities have also adopted the TOT model for monetising state toll roads.

31 Bids undertaken with undisclosed IECV

In June 2020, Maharashtra State Road Development Corporation (MSRDC) awarded the tolling rights of Mumbai Pune Expressway and old Mumbai-Pune corridor (NH-48) to IRB Infrastructure Developers for a total consideration of Rs 8,262 crore comprising upfront payment of Rs 6,500 crore and the balance in staggered instalments over a period of three years.

CASE STUDY – TOT BUNDLE 1

The first TOT model was bid out in 2018, and comprised nine highway stretches aggregating to ~682 km in Andhra Pradesh and Gujarat, ensuring geographic diversification. Six of these were in AP and are part of the NH-5 of the Golden Quadrilateral connecting Kolkata and Chennai. They had a strong traffic potential given the presence of ports, industrial clusters and consumption centres in the project vicinity.

TOT-1 toll roads had a higher share of commercial traffic at 85% vis-à-vis corresponding national average of 75%. As against NHAI's Initial Estimated Concession Value (IECV) of Rs 6,258 crore, the winning bid was of Rs 9,682 crore. NHAI utilised the monetised proceeds for funding new road projects under Bharatmala program thus diversifying its conventional funding sources.

Issue size	Investor(s)	Total revenue and revenue growth
IECV: Rs. 6,258 crore *(Winning Bid: 1.5 times reserve price)*	Macquarie Infrastructure and Real Assets	Aggregate toll revenue: Rs. 664 crore (FY 19) against Rs. 513 crore (FY 18) - showing a growth of ~29%

Key takeaways

A. Diversified asset mix, quality of underlying road assets and tenor of the concession period are vital to attract investor interest

The location of the projects i.e. Andhra Pradesh and Gujarat, along with the overall project influence area, and potential traffic growth played a key role in getting a winning bid equal to almost 1.5 times the reserve price. Other contributing factors included long concession period of 30 years, transparency in availability of historical traffic data of project roads.

B. Adequate project preparation and key changes in the regulatory framework have enhanced investor appetite

Detailed study and consultation were undertaken prior to structuring and rolling out the first TOT transaction by NHAI. Also, before awarding the bundle of projects, authority had conducted robust due diligence of the bundled projects through drone videos and network survey vehicles for ascertaining asset condition of underlying road assets along with current traffic patterns

2.4.2 Operate–Maintain–Develop Concession

Under the *Operate Maintain and Develop* structure, an asset which is operational but due for augmentation is handed over to the private party for augmentation and O&M over the concession period. Usually, the operations of such asset remain uninterrupted with augmentation undertaken while the asset is operational.

The private sector raises finance on the strength of the existing assets and / or obtains project financing along with equity contribution for undertaking such augmentation. The private sector pays an upfront or an annual consideration (in form of a premium and / or revenue share) and earns its returns through revenues from upgraded asset.

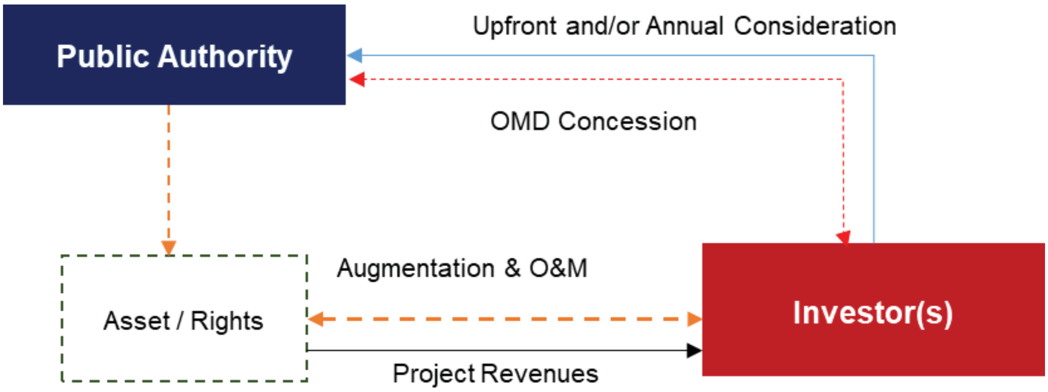


Figure 13: OMD Structure

Table 6: Key Terms of an OMD Concession

Key Requirement	Operational asset which is due for augmentation
Potential Projects	Projects constructed and completed by public asset owner through their own funds OR Project originally tendered out through PPP modes and for which concession period is complete[32]
Primary Obligations	— Augmentation along with ongoing and future Operations and Maintenance of assets; — Provide service to users against a pre-determined/ regulated or market-based fee;

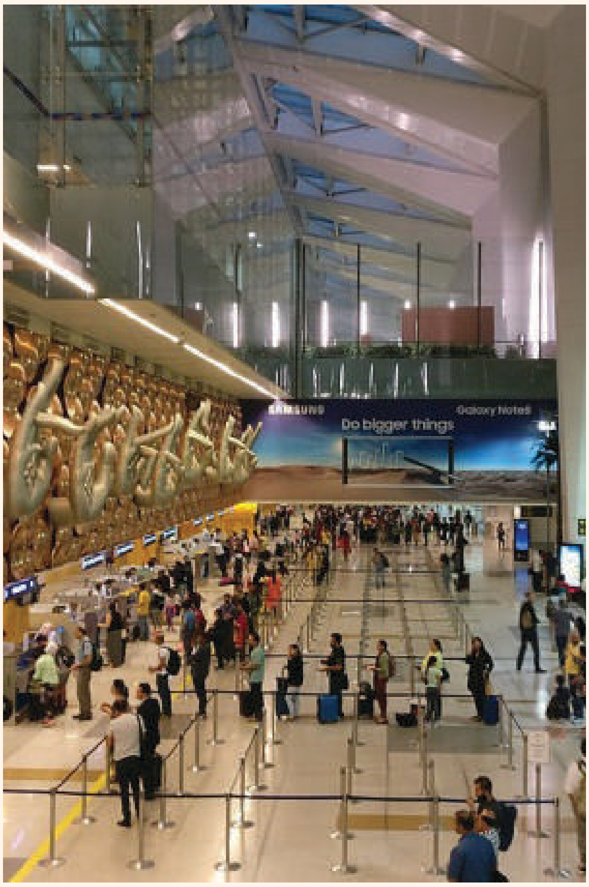
32 Terminated projects due for augmentation may also be considered subject to resolution of ensuing legal conflict (if any)

Concession Period	25 years or more, however, depending on the asset category.
Consideration	Annual Premium (Fixed or in form of revenue share) And/ OR Upfront Premium[33]
Investor Class	Strategic investors with direct or active involvement in operations
Selection	Through a competitive bidding process and as per prescribed guidelines of Government
Other Terms	Standard terms as in case of PPP Projects

A similar structure is the Rehabilitate-Operate-Maintain-Transfer (ROMT) where an existing asset ideally needs to be first upgraded/augmented before the operations and collection of the revenue can be resumed. Here as well, the concession terms are generally similar to OMD contracts with consideration for netting off the cost of rehabilitation to the Authority.

CASE STUDY: OMDA IN AIRPORT SECTOR

The development of airports through PPP mode started in 2006 with the Airports Authority of India (AAI) airports at Delhi and Mumbai. The contracts were structured as Operation, Management and Development Agreement which have helped create a world class airport infrastructure.



AAI tendered out the concession of Delhi International Airport for augmentation & O&M with revenue share as the bid parameter. In order to enhance the commercial attractiveness and viability of the project, city side real estate has been clubbed along with. The concession period is 30 years (renewal after 30 years) with transfer at end of period. The Project has been completed at a total cost of Rs 12,500 crore enabling augmentation and long-term operation of airport with no additional cost to AAI.

33 As consideration for value of assets received – This may be pre-determined as in case of recent leasing of six airports (2019) or be bid parameter (with pre-defined revenue share)

Leasing of Six Airports (2019)

Airports Authority of India (AAI) undertook development of 6 brownfield airports–Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangalore–under PPP mode in 2019.

The scope of work for the concessionaire entailed capacity expansion of the airports in a phased manner along with ongoing and future O&M. It also included development, operation and maintenance of city-side (creating infrastructure facilities adjacent to airports like hotels, restaurants, retail shops, etc.)[34]. The concession period of these airports was 50 years with no extension provision. Thereafter, the assets will be handed back to the Authority i.e. AAI. The concession also envisaged a State Support Agreement with respective state governments. The State Support Agreement is aimed at enabling support related to removing encroachments, security and protection of property, clearance, and utilities (like power, water supply services).

The bid parameter for the project was 'Per Passenger Fee' with the concessionaire required to pay monthly fee equivalent to the aggregate of domestic user fee (product of per passenger fee for domestic passenger and domestic passenger throughput) and international user fee (product of per passenger fee for international passenger[35] and international passenger throughput).

Various funds and strategic investors participated in the bid. The financial bids of the qualified bidders for Project were opened in February 2019. The bid process enabled receipt of approximately Rs 900 crore upfront to AAI with no expenditure and capacity commitment over the next 50 years.[36]

Assets	Bid response	AAI consideration
Ahmedabad, Lucknow, Jaipur, Guwahati, Thiruvananthapuram & Mangaluru	32 bids for 6 Airports	Rs ~ 900 crore as upfront consideration (Indicative Residual Asset Base) Average per passenger fee of Rs 150 for each airport

2.4.3 Other PPP models

The critical factor that defines an "asset monetisation" is the nature of the asset. If the underlying asset is an active revenue generating asset with potential for utilization in a manner which ensures higher accruals / grant savings to the authority then it may be considered under the category of asset monetisation.

A key example is the proposed private participation initiatives in railways where the railway station redevelopment projects (Design Build Finance Operate Transfer) are being rolled

34 The concessionaire has the right to lease/ sub-lease the land/ assets towards city-side development

35 Twice of domestic passenger fee as per terms of bidding

36 Additional quantum of funds received by AAI during FY 2021

out leveraging the existing infrastructure available with railways viz. track, signalling, stations etc. Such assets, on account of their brownfield nature and/ or existing traffic, allow reduced upfront investment for the concessionaire (in certain cases revenue potential from day one) thereby ensuring higher viability. This, in turn results in higher upfront or periodic consideration to the authority or saving of viability grant. Since such enhanced value/ accruals to authority is reflective of the value of capital invested in the existing asset, such transactions are considered under the asset monetisation framework.

2.5 LONG TERM LEASE

A lease is an agreement whereby the lessor confers to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments.

While principally akin to brownfield PPP models, the primary difference in case of long-term lease models lies in the nature of assets leased out and/or use of such assets. Long term lease models can be adopted in case of sectors such as telecom etc. where the license to provide an infrastructure service is already available with a private party and the unused/sub-optimally utilised asset of public sector entity is leased out to the such private sector party for providing service under its own license. Alternatively, such models can be adopted in cases where an infrastructure asset viz. mine etc. is allowed for captive usage by private sector players.

Such models can also be used for achieving asset light balance sheets or for innovative financing[37] by public sector entities. Where the infrastructure asset or right to operate, such assets are transferred to a private sector entity for a pre-determined period in lieu of an upfront consideration. The public sector entity then uses such assets for providing service to public against periodic payments. Such leases are executed on long-term basis usually in lieu of a fixed upfront consideration or fixed periodic consideration with annual escalation.

Long term Lease models may also be employed for urban land based assets such as hospitality assets or bus terminals. At times, this model may also be applied in combination with other PPP models such as Rehabilitate-Operate-Maintain–Transfer (ROMT). In such cases, however, the contract period may be longer, and the private sector may be required to make additional investments. The asset transfer under such a lease agreement may happen with or without restrictions on function or usage.

Scenarios	**A.** Assets of public entity leased out for providing service under its own license Right/ License to provide an infrastructure service already available with a private party;
	B. Leasing of assets for Captive Use
	C. Leasing for achieving asset light balance sheets

Figure 14: Long term Lease Models

37 Similar to sale and lease back, however, with no provision for sale of asset

Table 7: Key Features of Lease

Lease Period	10 years or more, however, depending on the asset category.
Consideration	Fixed upfront consideration OR Annual payments with escalation
Investor Class	Existing Licensees (Scenario A); Captive Users (Scenario B) Financial investors (Scenario C)
Potential Sectors	Power, Telecom, Pipeline, Ports, Mining etc.

Benefits of such leasing transaction to the public sector entity include upfront consideration against unused or sub-optimally utilised assets along with no liability towards regular maintenance. While for private sector it is largely the availability of an operational asset without any construction risks and faster roll-out of services.

Leasing – Tower assets in Telecom sector

Contracts between tower infrastructure companies and telecom operators (tenants), which clearly spell out the overall tower requirements of the tenants, the pricing terms, and other binding terms and conditions between the two parties. It is generally referred to as passive infrastructure sharing and includes elements like tower space for mounting antennas for a BTS and also associated passive equipment. BSNL and MTNL have been renting out towers and mobile sites, respectively, to private players against rentals.

2.6 INFRASTRUCTURE INVESTMENT TRUST

Infrastructure Investment Trust (InvIT) is an innovative trust-based financial instrument, which enables participation in infrastructure financing through a stable and liquid instrument. InvITs provide an opportunity to invest in infrastructure assets with predictable cash flows and dividends. InvITs have been introduced in India in 2014 and are employed by infrastructure asset owners to pool in money from a diverse set of investors against pay-out of cash flow generated by the assets on a periodic basis.

Under an InvIT transaction, infrastructure asset owners transfer multiple revenue generating asset[38] SPVs through holdco or otherwise to a trust which then issues units to investors for raising money. The upfront money so raised is utilized by the developers for creation of new greenfield assets as also for repayment of debt which enables availability of capital with lenders for investment/ lending to new projects. The investors, in lieu of invested money, receive a share of Net Distributable Cash Flows (NDCF – similar to the dividend pay-outs) on a periodic basis, commensurate with their unit holding in the Trust. Improved yields for the unit holders can be insured, by adding revenue-generating projects and expanding its portfolio.

The structure of a typical InvIT transaction and the fund flow across agencies is represented in the figure below.

38 Potential to add under construction assets in line with SEBI regulations

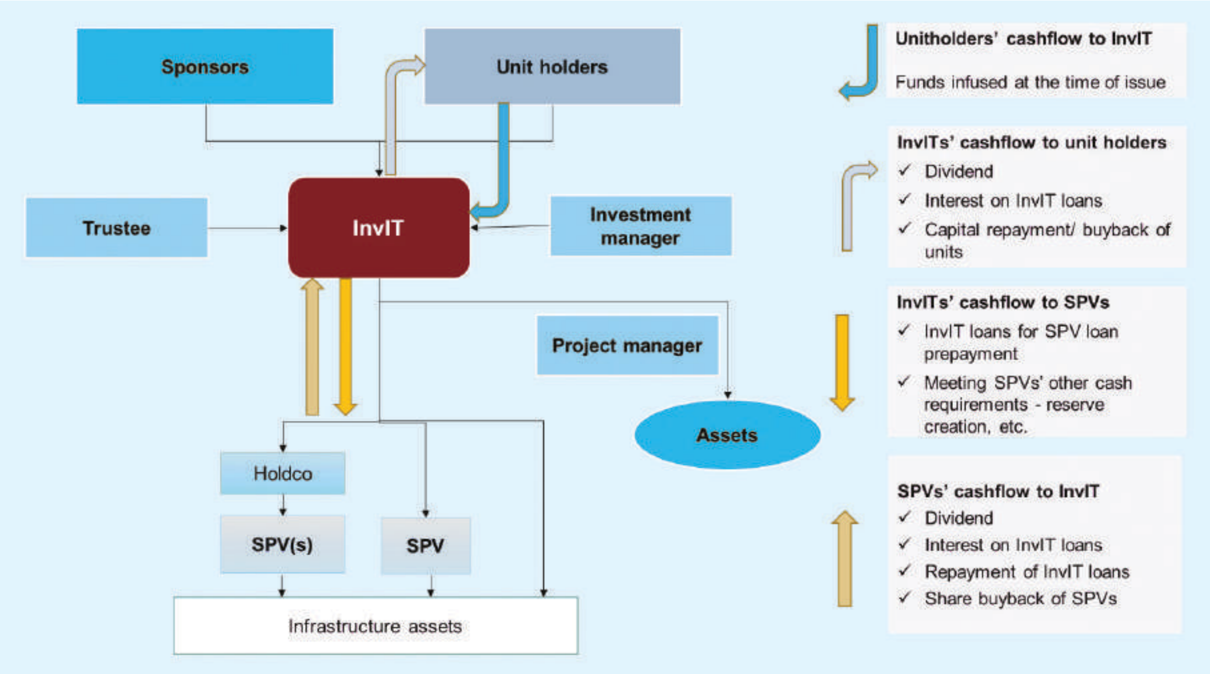


Figure 15: InvIT transaction – Illustrative structure

2.6.1 Key stakeholders

Under this structure, the public asset owner ('Sponsor') creates an independent trust and transfers the ownership/ rights of the public assets to the same. Investors ('Unit Holders') are the beneficiaries[39] of the trust.

The key stakeholders under the InvIT structure include:

- **The Sponsor** – The sponsor is the public asset owner (for public-owned assets) which sets up the InvIT with the objective to monetise its assets. In case of PPP projects, the sponsor is the infrastructure developer or a SPV holding the concession agreement.
- **The Trustee** – The trustee means a person who holds the InvIT assets in trust for the benefit of the unit holders, in accordance with extant regulations.
- **The Unit holders** – The unit holders are the investors who subscribe to the units of the InvIT. The unit holders are the eventual beneficiaries of the asset.
- **The Investment manager** – The investment manager is responsible for taking investment decisions in the interest of unit holders including addition of new assets / sale of existing assets, leverage etc.
- **The Project Manager** – The project manager brings in the operational expertise of managing the infrastructure assets as per the interest of the unit holders.

Other key stakeholders incidental to the InvIT registration and issuance process include valuer, auditor(s), merchant banker(s), registrar & transfer agent, banks, registrar to the issue, credit rating agencies, and depository participants.

39 As per the Indian Trust Act, 1882 – the person for whose benefit the confidence is accepted is called the "beneficiary"

Table 8: Key Requirements/ Terms of an InvIT

Key Requirement	— Operational Infrastructure assets, with at least one year of operations for Public InvIT[40] — Eligible sub-sectors as per Harmonised Master list of infrastructure sub-sectors of MoF
Types of InvIT	**Public**[41] Open for participation by all kinds of investors including retail; and **Private**: Restricted for participation by Qualified Institutional Buyers and bodies corporate
Minimum Value	Assets under InvIT: Rs. 500 crores (*Initial offer size: At least Rs 250 crore*)
Consideration	Upfront Consideration against subscription of InvIT units
Investor Class	Financial investors looking for stable yields; sovereign wealth funds and global pension funds, insurance funds, retail investors etc.
Investor Payment	Not less than 90% of the net distributable cash flows of the InvIT distributed to unit holders

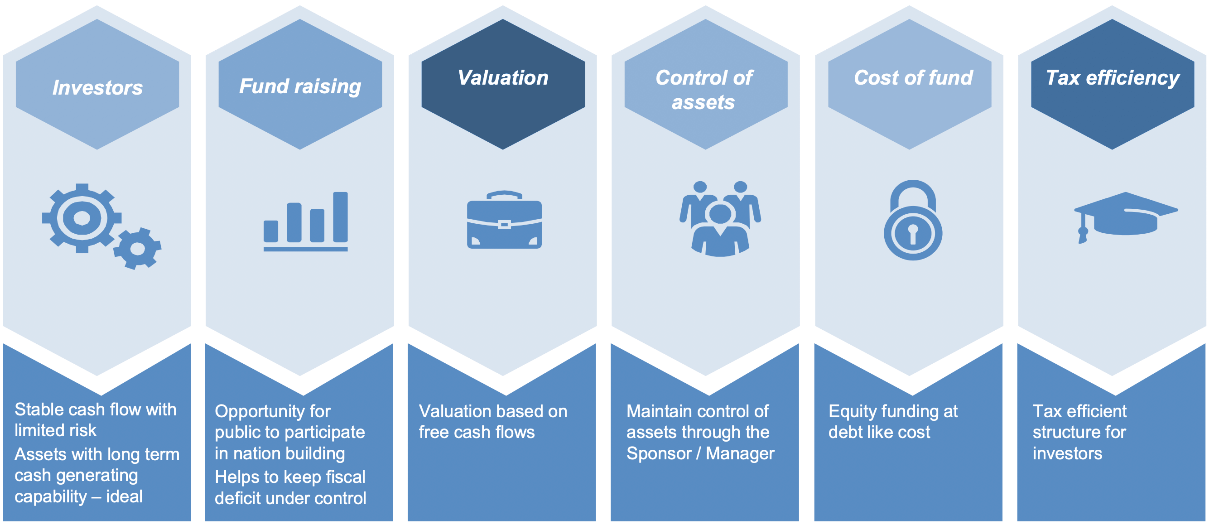


Figure 16: Key Benefits of InvIT

InvITs – Similar instruments globally[42]

Globally private institutional funds have complemented debt funds in financing infrastructure investment. There has been a global consensus on the potential for tapping large institutional investors (including pension funds, sovereign wealth funds etc.) as well as retail investors towards infrastructure asset class, especially with lower-risk levels (brownfield assets). Two specific instruments seen in the USA which have been fairly successful in tapping institutional investors into infrastructure assets are: Yieldcos and Master Limited Partnerships (MLPs).

40 Potential to add under construction assets in line with SEBI regulations; For private InvITs non-operational assets, subject to compliance with SEBI regulations may be considered

41 Minimum number of investors is 20; If number of participants is more than 1000, then automatically public issue

42 The Evolution of the YieldCos Structure in the United States, Mauricio Franco Mitidieri April 13, 2020; Sean T. Wheeler Latham & Watkins MLP Practice

2.6.2 InvIT Process

InvITs are established are trusts under the Indian Trust Act, 1882 and regulated under the SEBI (Infrastructure Investment Trusts) Regulations, 2014. Detailed regulations are discussed in Section 6.

The steps in a typical InvIT transaction are represented in the figure below.

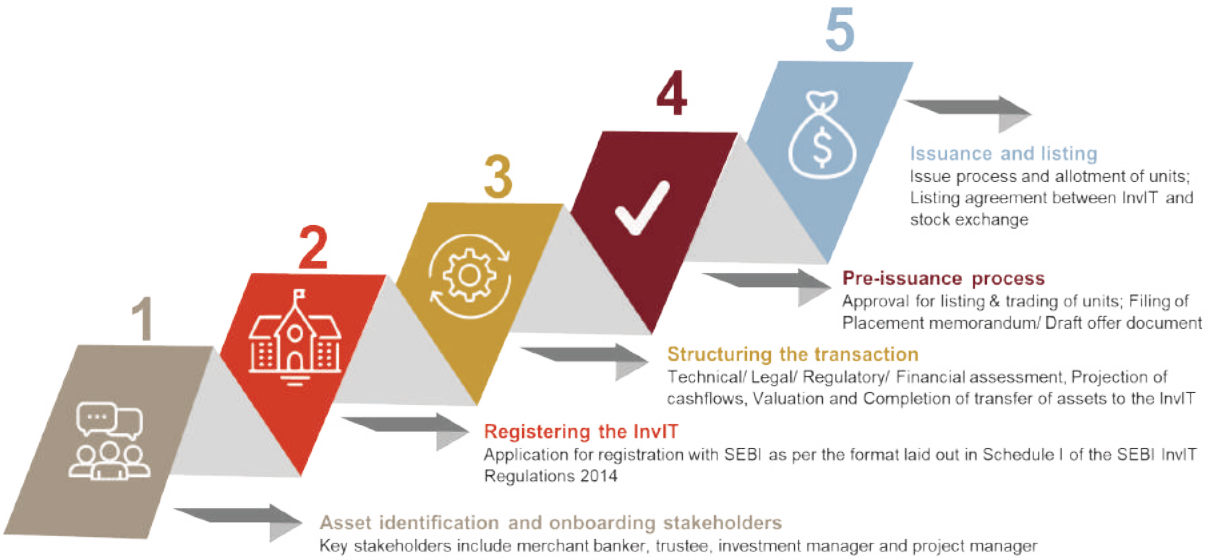


Figure 17: InvIT transaction – Illustrative steps

2.6.3 InvIT transactions in India

India has seen a number of InvIT transactions over the last 4-5 years. The total Assets Under Management (AUM) across the 8 active InvITs[43] is around Rs. ~1.4 lakh crore. Bulk of the assets are under toll roads (rs. 47,500 crore), followed by telecom (rs. 42,000 crore), gas pipeline (rs. 16,500 crore) and power transmission (rs. 14,000 crore).

Since the introduction of InvIT regulations, bulk of the InvIT's have been sponsored by private sector infrastructure developers. Recently, public sector asset owners such as Powergrid and NHAI have initiated greater adoption of the instrument. The table below provides the list of InvIT transactions since its introduction

Table 9: Key InvIT transactions

S.No.	InvIT	Sector	Public/ Private	Listing month	Assets under Management (Rs. crore)
1	IRB InvIT Fund – IRB Infrastructure Developers	Toll roads	Public	May 2017	6,500
2	India Grid Trust of Sterlite Power	Transmission	Public	June 2017	15,000

43 Excluding the first public sector InvIT of Powergrid.

S.No.	InvIT	Sector	Public/ Private	Listing month	Assets under Management (Rs. crore)
3	IndInfravit Trust – L&T IDPL	Roads	Private	June 2018	10,500
4	India Infrastructure Trust – Brookfield	Gas pipeline	Private	March 2019	14,500
5	Oriental Infra Trust – Oriental Structural Engineering Pvt. Ltd.	Toll roads	Private	June 2019	11,000
6	IRB Infrastructure Trust	Toll roads	Private	Feb 2020	22,500
7	Tower infrastructure Trust – Reliance & Brookfield	Telecom towers	Private	Sep 2020	42,000
8	Digital Fibre Infrastructure Trust	Fibre Optic	Private	Oct 2020	1,500
9	Powergrid InvIT	Power Transmission	Public	May 2021	7,800

The first InvIT of a public sector entity, PowerGrid has been recently launched in the market. The issue has monetised assets worth ~Rs 7,800 crore and Powergrid has divested 85% of its unit holding in the InvIT. The issue has been listed at premium. National Highways Authority of India is also in advanced stage of raising funds through an InvIT issue expected shortly.

CASE STUDY – INDIGRID INVIT[44]

IndiGrid InvIT was established in October 2016 by Sterlite Power Grid Ventures Ltd (SPGVL) to monetise two transmission assets – Bhopal Dhule Transmission Company Limited (BDTCL) and Jabalpur Transmission Company Limited (JTCL). The assets have established long term contracts, with low operating risks and stable cashflows.

IndiGrid raised around Rs. 1,012 crores from 19 anchor investors. This helped improve retail participation in the InvIT and also ensured stable price levels.

Issue size and assets	AUM and assets (as of Q3 FY 21)	Sponsor(s)	Key unit holders
Rs. 2,250 crore & 2 transmission assets	Rs. 15,000 crore & 12 transmission assets	Sterlite power (initial sponsor), KKR (new sponsor)	~23% KKR ~20% GIC ~12% Other FIIs ~18% Retail ~8% Insurance cos

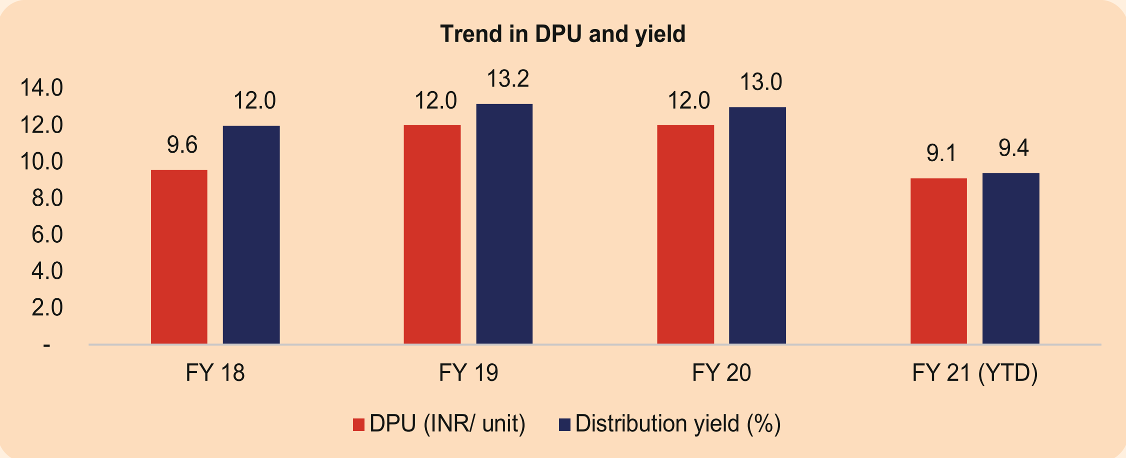
44 Information collated based on filings in the Stock Exchanges

Key takeaways

a. **Diversified Asset Mix:** The Trust has a diversified asset portfolio comprising 12 inter-state transmission assets across 15 states and 1 Union Territory. These assets have an availability-based payment mechanism, with a credible counterparty – PGCIL with average availability of greater than 99.5% (from COD till Dec 31, 2020).

b. **Addition of assets:** Starting with 2 project assets with an AUM of Rs. ~3,700 crores in 2017, the InvIT currently holds around 15 project assets with an aggregate AUM of Rs. ~15,000 crores as of Q3 2021. The increase in asset portfolio over time has ensured greater market interest and improved liquidity of InvIT. Active role of Investor and co-sponsor, KKR in management and Governance of InvIT and investment decisions has played a critical in growth journey of the InvIT and value appreciation.

c. Distribution per Unit (DPU) and Distribution yield over the period from FY 2018 to FY 2020 for InvIT is as shown below



2.7 REAL ESTATE INVESTMENT TRUST

Real estate assets are capital-intensive assets which require substantial up-fronting of investments by the developer. While the land and building based debt products have been available, this does not provide for effective risk-sharing and cost-effective financing for the developer. Real Estate Investment Trusts (REIT) are similar in structure to InvITs. As against InvIT which is unique to the Indian context, REIT structures have seen traction across the globe. The REIT's origin dates back to the 1960s in US. The objective of the REIT structure is to broad-base options for the developers towards expanding the sources of funds.

Only real estate projects[45] are eligible under this structure. The regulations also stipulate that 51% of the consolidated revenues of the REIT, holding company and SPV, should arise

45 "Real estate" or "property" means land and any permanently attached improvements to it, whether leasehold or freehold and includes buildings, sheds, garages, fences, fittings, fixtures, warehouses, car parks, etc. and any other assets incidental to the ownership of real estate but does not include mortgage.

from rental, leasing and letting real estate assets or any other income incidental to the leasing of such assets. However, exceptions have been made with respect to (i) hotels, hospitals and convention centres forming part of composite real estate projects, whether rent generating or income generating; and (ii) common infrastructure for composite real estate projects, industrial parks and SEZs.

The structure of a typical REIT transaction and the fund flow across agencies is represented in the figure below.

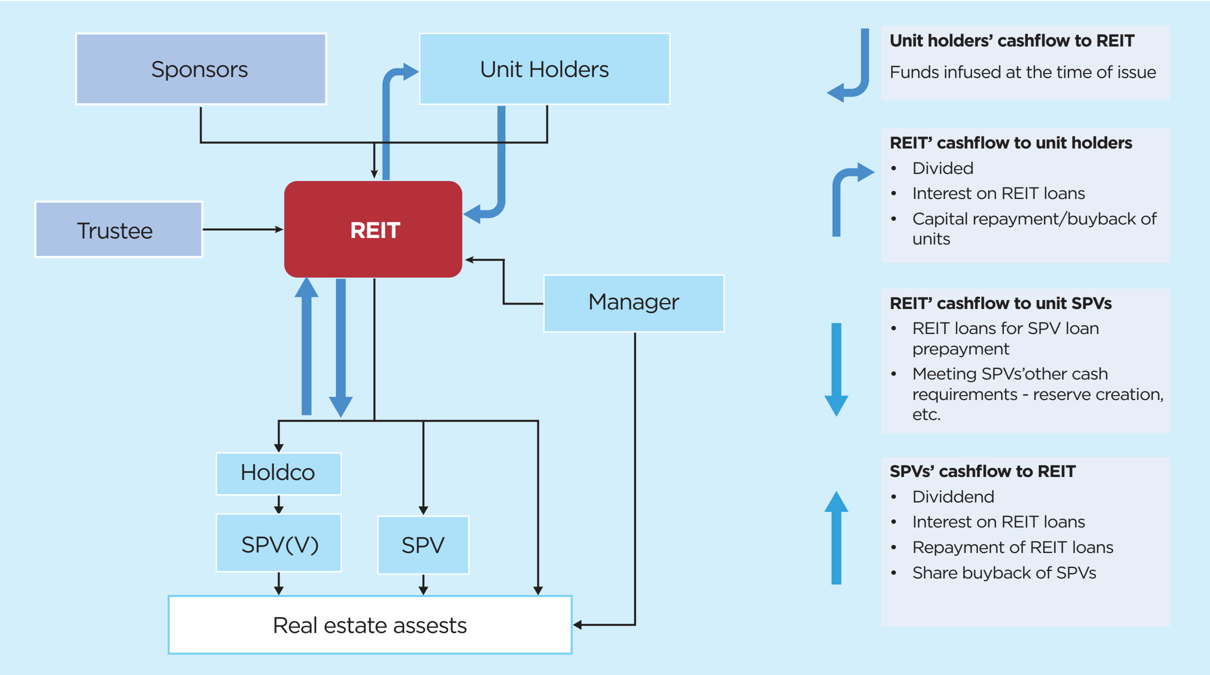


Figure 18: REIT transaction – Illustrative structure

Real Estate (Regulation and Development) Act has brought in sizeable level of accountability and transparency in the segment. In this context, REIT structure has been able to provide an effective and robust corporate governance framework with clearly delineated roles and responsibilities for key stakeholders such as sponsor, investment manager, etc. and the transparency on the revenue/ rent collections.

Table 10: Key Requirements/ Terms of an REIT

Key Requirement	• Revenues arise from rental, leasing and letting real estate assets or any other income incidental to the leasing of such assets • Mandatory Listing
Types of InvIT	Public (Open for participation by all kinds of investors including retail)
Consideration	Upfront Consideration against subscription of REIT units
Investor Class	Financial investors looking for stable yields; sovereign wealth funds and global pension funds, insurance funds, retail investors etc.
Investor Payment	Not less than 90% of the net distributable cash flows of the REIT distributed to unit holders

Potential Assets	• Railway warehouses/ good sheds • Multifunctional complexes • City-side development for Airports • Commercial development on Municipal land • Commercial development along the toll road stretches • Railway stations' commercial development etc.

Public sector entities in India sit on an inventory of under-utilised land assets in some of the high value real estate zones, which may be freehold land or underutilised land parcels. The REIT platform provides an opportunity to capture value from these assets by allowing commercial development. The instrument provides an opportunity for real estate asset owners to raise money upfront by transferring the revenue generating real estate assets to the trust. The investors receive the net distributable cash flows generated by the infrastructure assets.

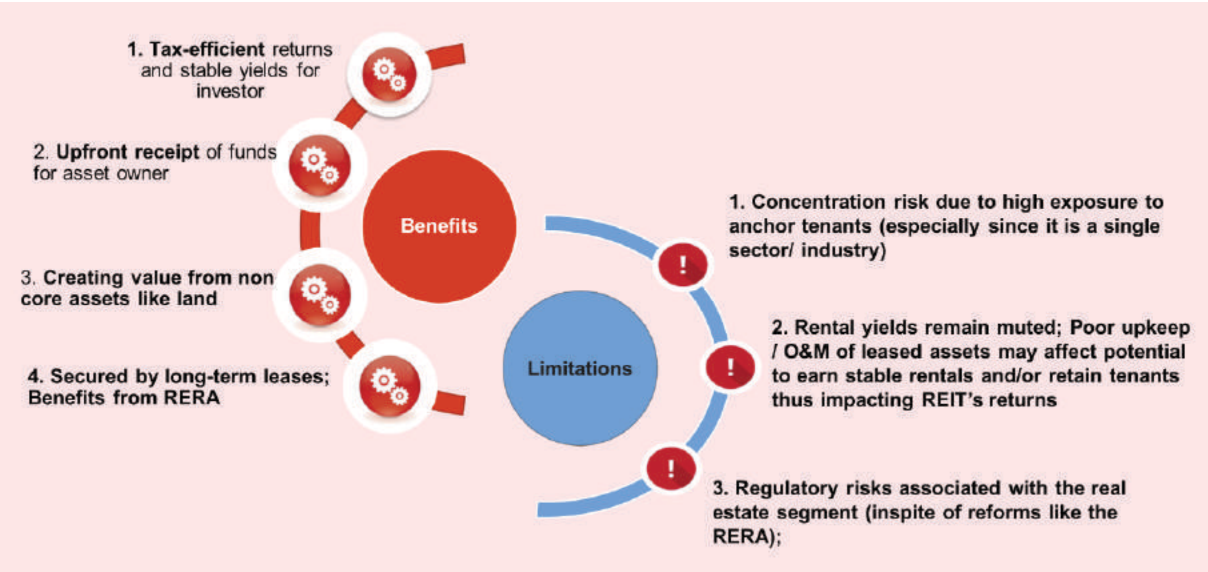


Figure 19: Benefits and Limitations of REIT

REITs are established as trusts under the Indian Trust Act, 1882 and regulated under the SEBI (Real Estate Investment Trusts) Regulations, 2014. Detailed regulations are discussed in Section 6.

Issuance process of a REIT is similar to an InvIT and is discussed in detail in Section 6.

REITs – Similar instruments globally

REITs have been active infrastructure instruments for real estate financing globally. They started in the USA in the early 1960s and currently is present across 40 countries across the world. REITs globally invest in the majority of real estate property types, including offices, apartment buildings, warehouses, retail centres, medical facilities, data centres, cell towers, infrastructure and hotels.

List of countries with REITs and the year of adoption[46]

Snapshot of the US REIT market:

It is estimated that there are more than 1100 REITs in US[47], out of which 225 REITs are public REITs registered with the SEC. As of December 2019, REITs in the US own more than $3.5 trillion of gross real estate assets and 5.16 lakh properties[48]. REITs may also be categorized as public REIT (in case of shares registered with Securities and Exchange Commission) or private REITs.

REITs in US can be categorized based on nature of risk exposure to the underlying asset as follows: Equity REITs and Mortgage REITs (mREITs). Equity REITs own and operate real estate assets while the mREITs invest in mortgages and mortgage-backed securities, providing financing for residential and commercial properties. REITs performance have largely been better than the overall stock market performance.

The market capitalization of REITs (and number of publicly traded REITs in bracket) in select countries is as follows[49]:

Jurisdiction	Value	Number
United States	US$ 1232 billion	194
Singapore	US$ 76 billion	44
Japan	US$ 148 billion	62
Hong Kong	US$ 35 billion	11
India	US$ 4 billion	1
Malaysia	US$ 9 billion	18

46 https://www.reit.com/investing/global-real-estate-investment

47 Based on tax return filings by Internal Revenue Service;

48 Only public REITs

49 https://www.crisil.com/content/dam/crisil/our-analysis/reports/Ratings/documents/2019/october/indias-reit-opportunity.PDF (Aug, 2019)

2.7.1 REIT transactions in India

India has seen 3 REIT transactions since the regulations were introduced. The transactions have been largely in the private sector space. With a significant inventory of real estate assets with strong development potential, REITs can play a major role in transforming public sector financing landscape. The table below provides the list of REIT transactions since its introduction.

Table 11: REIT transactions in India

S.No.	REIT	Sector	Public/ Private	Listing month	Assets under Management (Rs. crore)
1	Embassy REIT	Office parks	Public	April 2019	33,000
2	Mindspace REIT	Office parks	Public	Aug 2020	22,500
3	Brookfield India REIT	Office parks	Public	Feb 2021	11,000
Total					**66,500**

CASE STUDY – MINDSPACE REIT[50]

Mindspace REIT was established on November 18, 2019. The REIT holds 10 real estate assets through 8 SPVs. Mindspace Business Parks REIT owns office portfolio located in four key office markets of India – Mumbai (41%), Hyderabad (39%), Pune (17%) and Chennai (3%). Portfolio has total leasable area of 29.5 million square feet (msf) and is one of the largest grade-A office portfolios in India. Portfolio comprises 23.0 msf of completed area, 2.8 msf of under construction area and 3.6 msf of future dvelopment area, as of March 31, 2020.

Issue size	Market value (as of Q3 FY 21)	Sponsor(s)	Key unit holders
Rs. 3,800 crore	Rs. 24,008 crore	K Raheja Corp	~63% sponsor & group ~9% Blackstone group ~17% FPIs ~11% Others

Key takeaways

1. Counterparty profile for the REIT assets

The tenants are largely MNC firms from diversified sectors which helped bring in better realisations and lower volatility of cashflows. The average rent for the assets was around Rs. 60 per sq. ft. per month. Hence, the selection of the assets for REIT needs to be backed by adequate assessment of counterparty risks that the REIT assets might get exposed to and also needs to be backed by risk mitigation measures to ensure investor comfort.

50 Information based on fillings in the Stock Exchanges

2. Anchor investors and strategic investors during public issue;

Presence of an experienced real estate player i.e Blackstone group in this case, with experience in managing similar assets can potentially bring in large-scale investors like pension funds, insurance funds etc.

2.8 FACTORS DETERMINING CHOICE OF MODEL

The key decision-making criteria for monetisation include:

i. Extent of fund raised and potential for upfront receipt for the public sector agency

ii. Tax efficiency and liquidity for investors and target investor class

iii. Operational control for the public sector agency

iv. Valuation potential

It is seen that the capital market instruments have the potential to bring in better value considerations, while the PPP concession may be suitable in sectors where the private sector brings in improved standards for operation and maintenance with service to users under a defined framework.

3

Asset Monetisation Experience: India and Beyond

The section delves into the Asset Monetisation experience, globally and in India, its key features, guiding frameworks, factors for success and case studies

Infrastructure investment requirement, globally, has been estimated at USD 94 trillion during the period 2016 to 2040[51]. Of which, ~50% alone is required in Asia (with China, India and Japan being major contributors). While governments lead the initiative of meeting the massive infrastructure deficit, it is widely accepted that governments alone cannot fund this level of infrastructure investment requirement. In order to bridge this infrastructure deficit, globally public sector has explored various options including, but not limited to public funding, private partnerships/ private finance initiatives, value capture, debt financing and public asset recycling.

Asset recycling is considered as an alternative strategy where there is a considerable public asset base–comprising of mature brownfield or surplus or under-utilized assets–which is leveraged for raising upfront capital for investment in new assets or for revitalization of existing assets. Asset recycling is being increasingly recognized as a means of alleviating budget pressure and delivering new infrastructure and services.

It simultaneously enables private sector investors avoid risks associated with the construction phase. There is already an established track record of investment by institutional investors and funds in mature economic infrastructure projects such as toll roads, ports and airports in North America, Europe and Australia. More recently, such investments have been seen in Asia-Pacific region as well.

3.1 AUSTRALIA'S ASSET RECYCLING INITIATIVE (ARI)

The concept of asset recycling has been widely implemented in Australia through the Asset Recycling Initiative (ARI) of the federal government.

3.1.1 Need for Asset Recycling in Australia

Australian federal government in the year 2013, directed the Productivity Commission (PC) to commence a thorough examination of infrastructure costs and financing in Australia with focus on ways to improve decision-making and implementation processes. The objective was to facilitate cost reduction in public infrastructure projects and recommendations on policy measures including any non-legislative approaches, which would help ensure effective delivery of infrastructure services over both the short and long term.

The PC findings reported an increasing caution by private investors about investing in public infrastructure projects owing to factors such as long drawn procurement processes with 'patchy' deal flow. At the same time, owing to a federal structure, it is the states and local governments that had much of the planning, environmental and regulatory controls. In this backdrop, the government, during the 2014-15 budget, announced the Infrastructure Growth Package (IGP) which was s a ten-year vision of infrastructure investment in the country. IGP comprised of three key components, the Asset Recycling Initiative, new investments, and the Western Sydney Infrastructure Plan. The Asset Recycling Initiative (ARI, 2014) which was aimed at encouraging states to recycle assets and utilise the sale proceeds into new productivity-enhancing infrastructure by encouraging private companies to fund and run public infrastructure.

51 Global Infrastructure Outlook 2017 published by Oxford Economics

3.1.2 Key features of Asset Recycling Initiative (ARI)

The ARI provided monetary incentive for states to engage in asset recycling to boost infrastructure development. It envisaged a sum of 15 percent of the estimated proceeds from monetisation of an asset (through sale or lease) to be paid to a state by the federal government if the proceeds are reinvested in new infrastructure. The ARI was designed as a five-year program from 2014- 2019, and the funding was allocated to specific proposals on a first-come, first-serve basis.

States, in agreement with the federal government, decided on the specific assets to be monetised and on the additional infrastructure that money will be recycled into. The initiative also envisaged a definite timeline for completion of sale of the asset and commencement of construction of the additional infrastructure. The federal government's financial contribution was managed through the Asset Recycling Fund (ARF), which was used to make payments to states under the IGP.

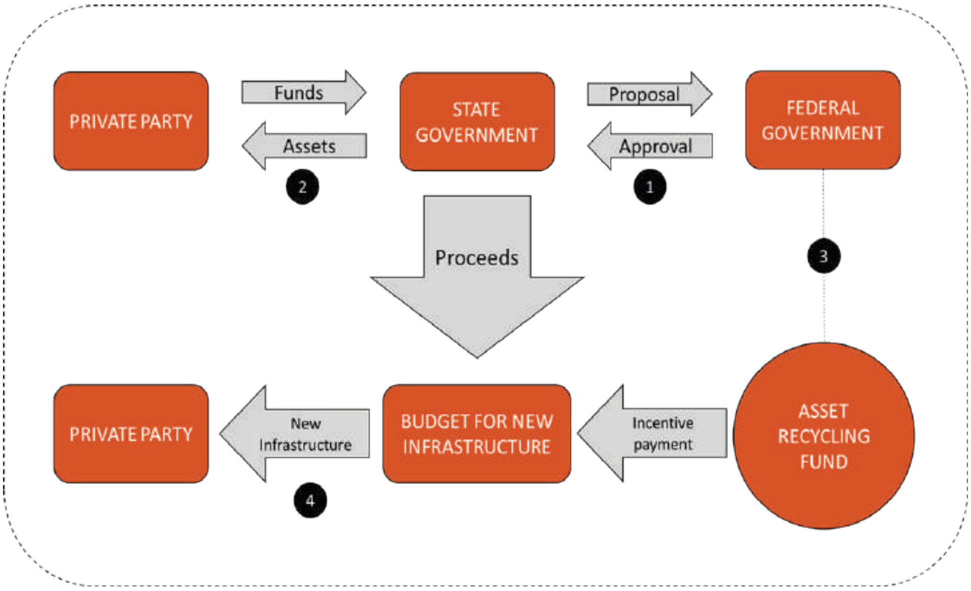


Figure 20: Illustrative ARI process

3.1.3 Assets covered under ARI and Investor response

Overall, three of Australia's eight states and territories participated in the scheme. By 2018, 12 major public assets were rolled out under ARI across New South Wales, Victoria, the Northern Territory, South Australia and the Australian Capital Territory. Approximately, AUD 3 billion in incentive payments were paid to participating states and territories over the life of the scheme. This helped in unlocking over USD 17 billion in new infrastructure development across Australia. The initiative helped in enhanced investments on new transportation infrastructure by states through sale or lease of assets. Asset classes such as ports, electricity generation, transmission and distribution and roads were leased / sold. Assets such as land title offices, lottery offices and dilapidated public housing were also taken up with governments, redeploying the money into new infrastructure in partnership with the private sector.

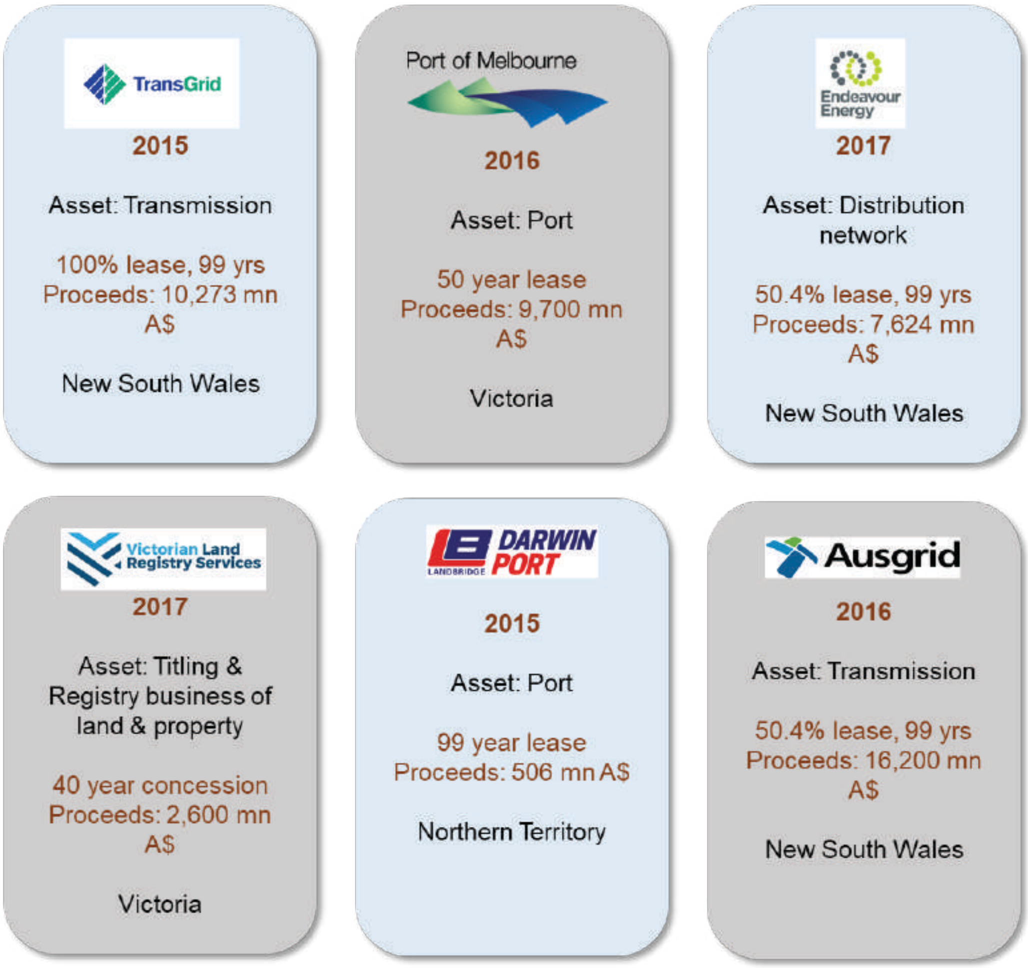


Figure 21: Major public assets monetised under the ARI[52]

Figure 22: Notable investors participating in Australia's Asset Recycling Initiative[53]

52 *Values in million Australian dollars – Source: Australian Asset Recycling Initiative website*

53 *Values in million Australian dollars – Source: Australian Asset Recycling Initiative website*

CASE STUDY – PORT OF MELBOURNE

The Port of Melbourne occupies 510 hectares of land to the west and south west of the Melbourne CBD, spanning both banks of the Yarra River from Bolte Bridge to the river mouth. It handles around one-third of Australia's container trade, with operations generating total economic benefits worth approximately AUD 7.5 billion to the national economy. During 2018-19, around 3 million twenty-foot-equivalent units (TEU) of containers were handled by the port (equivalent to 75 million revenue tonnes). According to Port of Melbourne's 2050 'Port Development Strategy' released in 2019 the total container trade volumes have been forecasted to grow by 3.5% per annum over the long term (from 3 million TEU in 2019 to around 8.9 million TEU by 2050).

The port, previously operated as a Victorian Government entity. However, in 2016, under the Asset Recycling Initiative, a 50-year lease of the port was awarded by the Victorian Government to a private consortium comprising Future Fund, QIC, OMERS and Global Infrastructure Partners (GIP), for around AUD 9.7 billion. One of the key considerations for the lease structure was maintaining and enhancing the Port of Melbourne's competitiveness and efficiency particularly given the critical role that the port plays in import and export markets.

Port of Melbourne operates within a landlord model and is responsible for asset maintenance, assessment and repair. Port operations are carried out by third party operators and service providers. These include stevedores, provedores, pilotage, towage and mooring services, and services relating to shipping operations. Additionally, in order to ensure alignment with growth projections, the port has undertaken investment in on-port rail infrastructure to reduce dependence on road transport in the freight supply chain. It has undertaken community engagement activities and comprehensive environmental compliance activities that protect and enhance land and marine zones within the port's surroundings.

Key Takeaways:

- Port's trade-based tariff increases set under a **stable, transparent regulatory regime** and monitored by an external independent body, provide high pricing certainty to the port and users;
- Port also **secured long-term lease agreements**, which provide unregulated and stable cash flow of around one-third of total revenue. Most leases entailed fixed increase at greater of CPI+1.5% or 4.0%; and
- Continued investment by state in **supporting transportation infrastructure** such as rail link help in improving the port's connectivity and competitiveness

3.1.4 Key takeaways from ARI

Consensus of state and federal government over asset sale/lease: *A formal consensus mechanism for sale/lease of assets under the ARI was ensured between the federal and state government.*

As per the framework of the ARI scheme, the state government recommends the assets to federal government and post approval, the asset can be brought under the ambit of the ARI scheme.

Timebound scheme for funding: In order to ensure timeliness and to encourage competition, the Asset Recycling Initiative window had been open for a limited period of two years and was operated on a first come, first serve basis. Further, the bonus was contingent upon states and territories selling and building at the same time.

Incentives to state governments: The federal government provided an additional incentive payment aggregating to 15% of the proceeds received by the state from sale/lease of assets. This further encouraged state government to participate in the scheme and ensure holistic development of the country as a whole.

Commitment to invest in new infrastructure projects: Even prior to inclusion of asset under ARI scheme, the state government is required to commit itself to invest the proceeds in development of new infrastructure thus ensuring transparency in transaction.

3.2 INDONESIA'S LIMITED CONCESSION SCHEME (LCS)

3.2.1 Background

Government of Indonesia has recently introduced a new form of concession, i.e. Limited Concession Scheme ("LCS") as an alternative to the existing Public-Private Partnership (PPP) scheme[54].

In order to improve connectivity between its vast regions and to ensure economic growth, Indonesia requires significant quantum of infrastructure financing. In February 2020, the Government of Indonesia enacted an enabling regulation (Presidential Regulation No. 32 of 2020) on Infrastructure Financing through Limited Concession Rights which introduced an alternative scheme for financing public infrastructure through utilization of existing assets, currently being operated by the central government and/or state-owned enterprises.

3.2.2 Features of the LCS scheme

Under the LCS scheme, the private sector is proposed to be invited to operate, maintain and expand existing assets in return for the private sector paying the government an upfront concession fee or instituting ongoing revenue sharing schemes with the government. These additional revenues are aimed at enabling the government to complete its massive infrastructure programme, in particular to fund economically important, but sub-financial

54 As stipulated under Presidential Regulation No. 32/2020 on Financing of Infrastructure through Limited Right of Utilization

projects, such as the Trans Sumatra Highway, as well as social infrastructure projects in less-developed regions of Indonesia.

Eligible Infracstructure Secors

- Transportation,
- Urban utility systems
- Telecommunication
- Electricity, Oil, Gas, Renewable Energy

Key Criterion for assets under LCS

- Commercial operations of 2+ years
- Requires an increase efficiency of operation
- Remaining life of assets for 10+ years

Key terms and conditions

- Payment of compensation/ Up-front payment
- Amount of up-front payment must be formulated as owner's estimate by the entity undertaking LCS
- Prior to transaction, to predetermine on how it will reinvest the up-front payment
- Strong emphasis on hand-back of assets

Figure 23: Key features of Indonesia's LCS initiative

Through this regulation, private sector (including, limited liability company and foreign business entity) will be allowed to manage and operate existing infrastructure assets, which consist of infrastructure, namely: transportation (seaports, airports, railways and bus terminals), toll roads, water resources, sewerage and waste management systems, telecommunications, power plants, renewable energy, oil & gas ("LCS Assets").

To qualify as LCS Assets, infrastructure should have been in operation for at least two years, and the remaining life of the assets must be at least ten years. LCS Assets will be put on list and announced to public by KPPIP, an ad-hoc committee set up by the government to accelerate development of priority infrastructure projects in Indonesia.

Aside from benefitting from the operation of a commercial asset, private sectors participating in LCS will also partake in the financing of new infrastructures. Private sectors will be required to pay a premium to compensate the state or state-owned enterprises for the grant of the limited concession. This way, the government or state-owned enterprises are able to deploy funding for development of new infrastructure assets.

3.2.3 Benefits to the public asset owners

The scheme is expected to become an alternative funding source for infrastructure development projects. With LCS model, the government can recycle existing operational infrastructure assets to capitalize new development or upgrade other assets, using the upfront money from private sector.

In return, the private sector is granted a concession to operate LCS Assets for certain period of time to guarantee its return of investment. Private sector partner is proposed to be selected through a prequalifying tender organized by the relevant authorized institution responsible for each asset. The tender is designed to be based on the estimated value of the upfront fee to be determined by the state's valuer or by a qualified asset valuation company.

The private sector granted with concession will be required to transfer the upfront fee within 6 months after the execution of LCS agreement. Upon transfer of the asset, private sector shall be fully responsible for the operation and maintenance of the asset, including paying applicable tax associated with the asset.

3.3 REITS IN NON-TRADITIONAL REAL ESTATE SECTORS

Globally REIT markets have seen immense growth in recent times. The cumulative market capitalization of REITs globally is believed to be around the USD 2 trillion level. While USA is the largest and the oldest REIT market, the market is increasingly becoming more global. Today, over 35 countries and regions around the world have a REIT regime in place. Globally, 15 of the 30 largest listed real estate companies in the world are REITs, which includes 13 U.S. REITs.

Most REITs globally operate along a straightforward business model that is by leasing space and earning rental / leasing income on the underlying real estate, which is then paid out to shareholders in the form of dividends. REITs typically must pay out at least 90 % of their taxable income to shareholders. The key value proposition of REITs is that they provide all investors the chance to own valuable real estate, with an opportunity to access dividend-based income and returns, without actually having to go out and buy, manage or finance property.

REITs invest in a wide scope of real estate property types, including offices, apartment buildings, warehouses, retail centres, medical facilities, data centres, cell towers, infrastructure and hotels. Most REITs focus on a particular property type, but some hold multiples types of properties in their portfolios. The U.S. REIT market has been fundamentally transformed over the last three decades on the back of growth of non-traditional real estate sectors. **Newer property types, such as self-storage, health care, cell towers, and data centres now comprise over half of the total U.S. REIT market capitalization.** These non-traditional sectors in the mature U.S. and European markets are expected to bring the next wave of growth and the emergence of listed real estate sectors in high-growth Asian markets.

Emerging non-traditional sectors are now being structured in the U.K. and Europe where so far, the listed market was dominated by traditional sectors.

Concept: Industrial REITs

Industrial real estate investment trusts are a specialised category of REITs that invest in industrial real estate properties which are occupied by facilities for manufacturing, production of goods and for storage, distribution such as warehouses etc. Such properties may either be standalone buildings or a cluster of same, whether in form of industrial parks or otherwise. Industrial REITs may also own the land on which these properties are developed. Industrial REITs, own and manage these properties, and lease it out to businesses/ industrial consumers.

Industrial REITs provide investors a stable and liquid way to invest in the real estate sector without building or purchasing industrial buildings on their own. Similar to other REITs, these are primarily trust based investment vehicles that pool capital from various financial investors including equity funds, institutional investors, retail investors. Capital pooled from the investors is deployed to fund and own the industrial real estate assets, which are then leased out to one or multiple tenants. income from tenancy of such assets is used to provide a stable return to the investors in the REITs. These returns are in form of dividend on holding/units which are periodically paid to investors. Further, the unit holders also receive return by way of capital appreciation on the underlying property.

As in case of REITs and InvITs in India, 90% of the income is expected to be paid to unit holders. Further, subject to compliance of stipulated requirements, profits from Industrial REITs are tax exempt.

Distribution centres and warehouses, which are collectively refers to as "logistics" real estate are some of the biggest industrial REITs on NYSE. Given the growth in e-commerce industry over the past few years, one of the biggest beneficiaries of the growth in investment and capital deployment of industrial REITs have been warehousing facilities, distribution and other storage facilities. Also, with demand for storage and logistics rising on account of e-commerce, investors are guaranteed of off-take and income in investments, thereby ensuring attractiveness of instruments to all kinds of investors.

Benefits of Industrial REITs:

1. Flexible structure

Industrial REITs are structurally and regulatorily flexible to meet the demands in an economic cycle. As against residential and commercial properties which are built specific to customer requirements, Industrial REITs, can be customized to different uses.

2. Lower Capital Expenditure

Industrial REITs are set up outside the heart of the cities and away from central business districts which is mostly due to the need to ensure ease of inter-city movements and accessibility of transportation. The acquisition costs for such properties are, hence, much lower thereby ensuring lower capital expenditure with stable return on investments.

Potential for investments in India

Given the availability of seasoned industrial parks and public sector assets of:

a. Warehousing corporations such as central warehousing corporation etc;
b. Industrial corporations;
c. Warehouses, silos and other such facilities etc

Concepts of Industrial REITs can be availed for leveraging private investment in such public sector assets for monetisation.

3.4 OTHER NOTABLE TRANSACTIONS

3.4.1 Indiana Toll Road concession

In 2005-06, 157-mile Indiana East West Toll Road connecting the Chicago Skyway to the Ohio Turnpike was monetised with a view to fund 10-year plan for building and fixing roads throughout the state. The project was structured as a 75-year concession for managing and operating the road and collecting tolls from motorists against an upfront consideration and the road remained owned by the state.

On June 29, 2006 the Indiana Toll Road Concession Company—a joint venture between Cintra, a Spanish construction firm, and Macquarie Atlas Roads, an Australian toll road company—was awarded the right to operate the road for 75 years. The consortium won the contract with a winning bid of USD 3.8 billion upfront payment. The concession helped in financing the entire Indiana state's road asset management plan for a period of 10 years.

- While project has been a windfall for the asset owners and the state of Indiana, the project's toll revenues suffered from 2008 recession impacting the project's debt serviceability in the medium term.
- During 2014, the concessionaire ITR Concession Co LLC filed for bankruptcy and the project subsequently inducted a new investor and management also allowing the creditors dues to be settled through the bankruptcy process. The toll road is since being operated by Australia's IFM Investors to operate the project for the next 66 years.

3.4.2 Transgrid

Australia has an established track record in privatising large state-owned infrastructure assets. In 2016, the New South Wales (NSW) government completed the asset recycling transaction involving 99 year lease of New South Wales electricity distribution company

TransGrid with the acquisition by a consortium of Pension and Infrastructure funds for a financing consideration of AUD 10.3 billion. The consortium members are Hastings Funds Management, the ASX-listed Spark Infrastructure, the Abu Dhabi Investment Authority, Canada's Caisse de Depot et Placement du Quebec (CDPQ), and Wren House, part of the Kuwait Investment Authority.

Hastings and its consortium partners reached financial close on the acquisition in December 2016, which comprised AUD 5.8 billion debt and AUD 4.4 billion equity. TransGrid remains a one of a kind since a number of factors led to the fierce competition during the bid. TransGrid is the most treasured of the three transmission and distribution companies to be privatised in New South Wales, probably helped push bids higher than the AUD 9 billion price tag that was estimated.

- TransGrid is an **example of monetisation of regulated assets** where network prices are set by the regulator under the applicable National Electricity Law and National Electricity Rules in the jurisdiction.
- TransGrid deal goes to show that the international bank market has sufficient depth to finance the acquisition of even the largest infrastructure projects in Australia showing an **appetite for well-structured deals in creditworthy jurisdictions.**
- National security implications were a critical consideration for the asset owners and hence **stringent safeguards were imposed on acquisitions citing Transgrid as critical infrastructure**. These include that Transgrid's operation and control be undertaken solely from Australia and that foreign consortium members retain an interest of no more than 50 per cent. Half of Transgrid's board–including an independent chair and director–must be Australian citizens and residents.

4

Preparatory Stage

The section provides an overview of the preparatory actions by public sector entities towards undertaking asset monetisation. It starts with a general guidance on the process towards asset identification and methods of monetisation, followed by internal administrative actions for formulation, appraisal, and approval process (Preparatory Stage).

Guidance and internal administrative framework for rolling out the transactions and completing the asset monetisation process (Transaction Stage) has been covered as part of the next Section.

4.1 OVERVIEW

The asset monetisation process needs to be seen as a sustainable strategy towards improving infrastructure delivery and strengthening the public sector balance sheet. Towards this, the public sector entity needs to institutionalise an efficient and effective framework for creating a marketable and sustainable asset monetisation plan. The public sector agencies need to follow a structured process along the following lines for the Preparatory stage:

1. Step 1 – Preparation of an asset monetisation and financing plan
2. Step 2 – Asset screening and packaging
3. Step 3 – Transaction preparation and structuring
4. Step 4 – Approval process

At the end of the Preparatory stage, the public sector agency would have a 'transaction-ready' asset for monetisation. An overview of the steps is shown in the figure below.

The preparatory actions identified herein are recommendatory in nature based on globally witnessed best practices in asset monetisation process. However, it is prudent that the public sector agency imbibes the learnings from each of the steps to ensure better service delivery, and improved realizations from asset monetisation.

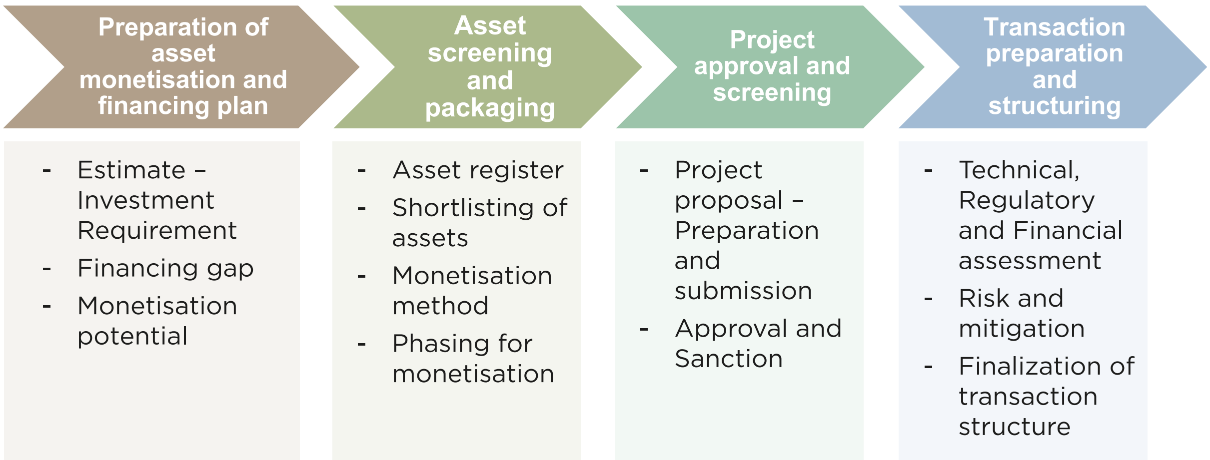


Figure 24: Process roadmap

4.2 STEP 1 – PREPARATION OF ASSET MONETISATION AND FINANCING PLAN

The investment and financing plan would serve as overall guidance factors for the public sector agency to determine the scale of asset monetisation to be embarked upon over the medium term.

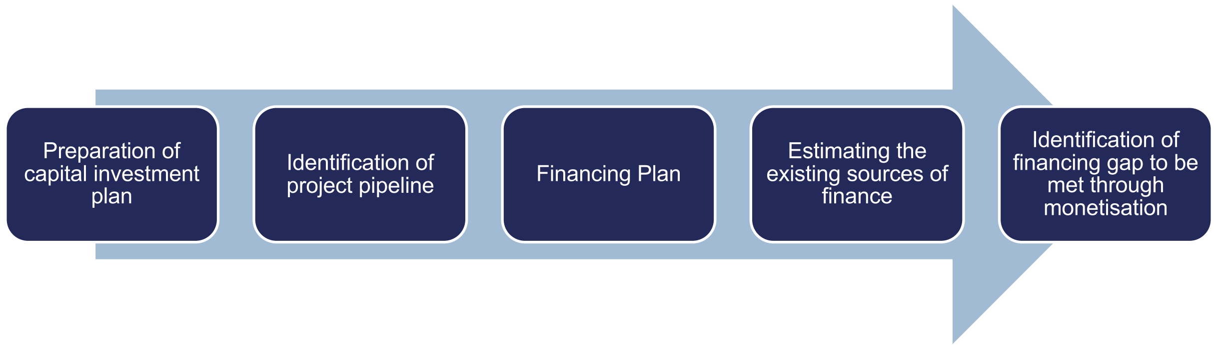


Figure 25: Sectorial investment and financing plan – Illustrative steps[55]

The proposed plan should ideally cover the following areas:

Capital investment plan and project pipeline – The infrastructure gap is estimated based on the gap between the existing infrastructure expenditure levels and expenditure envisaged under the overall vision. The ministry/sector shall prepare a medium-term capital investment plan aimed at bridging the gap while laying out the pipeline of projects required to achieve the same. The capex estimates for projects shall be estimated based on a normative approach. For the purposes of next four year period investment plan under NIP should be treated as the pipeline.

Financing plan and scale of asset monetisation – The public sector entity may prepare a financing plan for meeting the investment cost as laid out under the capital investment plan or even otherwise detail an asset monetisation plan to be self-sufficient and diversify its funding sources. The financing plan is to be prepared based on a review of the financial position of the public sector agency combined with a reasonable estimate on the central/ state grants over the medium-term. The gap in financing from the available sources of funds including grants/ debt (across multiple sources) and own funds, needs to be identified. The step helps quantify the scale of financing gap to be met through asset monetisation and help line ministries formulate a phasing plan for the same.

By end of this step, the public sector entity is expected to have a clear understanding of the scale of funds to be mobilized through asset monetisation over the medium term viz. over the next 5-10 years. Further, the monetisation plan of a public asset owner should be seen not just in light of its own funding gap, but of the overall ministry/ department.

4.3 STEP 2 – ASSET SCREENING AND PACKAGING

In this step the public sector entity will identify the assets to be monetised to meet the objectives identified in Step 1 above.

Identification of the right assets for monetisation is a multi-layered decision making task. It involves the perspectives of key stakeholders – Government/ public sector agency, investors, development and operation partners, private sector ecosystem including developers, operators, tertiary material suppliers, monitoring agency and users, etc. – to be imbibed into the asset identification process. As a near term measure, a compendium

55 To be undertaken at the overall ministry/sectoral level

of asset-level information reflecting key operating, financing and profitability parameters can be maintained for internal use by concerned line ministries.

4.4 STEP 3 – TRANSACTION STRUCTURING

The Steps 1 and 2 above represent prudent actions which may be initiated by the public sector agency for arriving at a shortlist of assets for monetisation and phasing. At the end of step 2, a prioritised list of assets for monetisation and the method of monetisation would be ready. This Step 3 starts with the selection of one of the assets from the prioritised list and initiating the preparatory actions towards transaction.

Before initiating the transaction process, the public entity may need to undertake feasibility studies for monetisation. This stage covers project preparation (including techno-economic feasibility, valuation analysis), project structuring, preparation of standard contractual documents and obtaining of project clearances etc. The typical steps in the project structuring are shown in figure below.

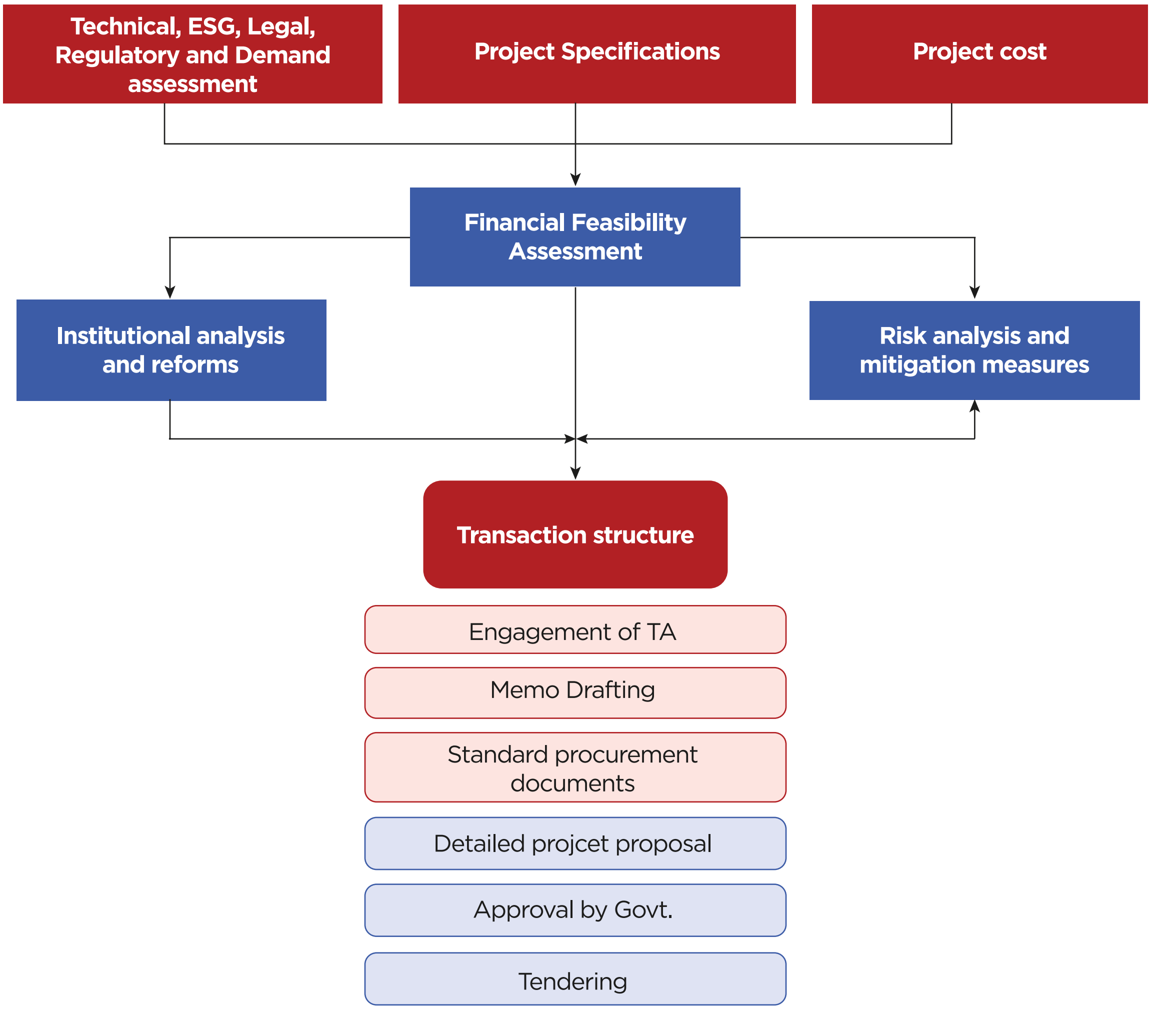


Figure 26: Steps in project structuring

The detailed studies are aimed at exploring the project boundaries, technical configuration and feasibility, demand projections and financial feasibility, review of policy/ legal/ regulatory environment, and the value-for-money and affordability considerations. The scale of the studies varies based on the complexity of the proposed transaction.

- In case of monetisation of existing brownfield assets with limited capex requirement, the studies may focus more on the financial assessment, followed by risk assessment and mitigation measures for effective O&M. This is typically useful in case of capital market instruments like InvIT and REIT models.
- In case of transactions which require substantial capex, detailed project preparation documents to ensure feasibility of the project proposal has to be done.

This will help structure the projects so that the risks are properly allocated between public and private sector. The project structuring and risk allocation is an important input to the preparation of contract documents.

The project structuring process needs to be supported by experienced transaction advisors with an established track record in undertaking project feasibility and structuring transactions.

Work that will be undertaken by the transaction advisors include cost and viability analysis, valuation analysis (of applicable), stakeholder consultation, etc. Further the consultants will submit a transaction advisory report based on which the public sector enterprises will internally decide on going ahead with the transaction.

At the end of this step, the public sector agency would have prepared all the project documents related to the transaction including the backup studies and bid documents etc. The public sector agency thereafter needs to prepare the "project proposal" in the appropriate format depending on the category and value of transaction. Guidance/ recommendation in this regard is as provided in following sub-section. The proposal will summarise the key observations and will be submitted to nodal authorities for approval.

Figure 27: End to End Process for Project Preparation

4.5 STEP 4 – APPROVAL/ SANCTION

Under this step, the public sector agency submits the project proposal to the competent/ nodal authority for approval/ sanction.

In case of central sector agencies, the approval process has been established under the "Guidelines for Formulation, Appraisal and Approval of Central Sector Public Private Partnership Projects, 2013". The appraisal/approval process is a two stage process with in-principle approval prior to issue of RFQ and final recommendation of PPPAC for approval of competent authority prior to receipt of financial bids. In cases where the PPP project is based on a duly approved Model Concession Agreement (MCA), 'in principle' clearance by the PPP Appraisal Committee (PPPAC) may not be necessary. In such cases, final approval of the PPP Appraisal Committee may be obtained before inviting financial bids

Further, some states like Gujarat and Tamil Nadu have established a separate agency towards handholding line ministries as well as grant the necessary approval for undertaking PPP projects. In other cases, it is largely under the purview of the line ministries.

Further, for non-PPP based monetisation models, Department of Investment and Public Asset Management (DIPAM) has laid down detailed procedures and mechanisms for Central Public Sector Enterprises (CPSEs) / Public Sector Undertakings (PSUs) / Other Government organizations etc.[56], however, this is primarily focused on non-core assets with provision for adoption for core assets through Competent Authority approval.

56 https://www.dipam.gov.in/dipam/dipam_docs/assetMonetisation/Asset%20Monetisation%20Procedure%20and%20Mechanism_0.pdf

5

Transaction Stage

The section provides an overview of the steps involved in the Transaction Stage and the regulatory and institutional structure covering each of the asset monetisation instruments

This section provides and overview of the asset monetisation processes across the key instruments identified. It covers the regulatory environment towards, the key institutional stakeholders, the documentations involved and the actual steps in the asset monetisation process for each instrument.

5.1 INVIT – REGULATORY FRAMEWORK AND PROCESS

5.1.1 Regulatory framework and Institutional stakeholders

Regulatory framework

InvITs are independent trusts registered under the Indian Trust Act, 1882. The regulatory framework for an InvIT issuance is guided by the **SEBI (Infrastructure Investment Trusts) Regulations, 2014 (**as updated/amended from time to time)[57].

As discussed in Section 2, the key stakeholders with respect to InvIT include the sponsor (usually the asset owner), unit holders (usually the private sector investors), the trustee (one who holds the InvIT assets in trust for the benefit of the unit holders), and project managers (usually developers/ asset managers and may be private sector/ public sector entities) and investment manager (responsible for adding assets to the InvIT / divesting assets from the InvIT / other financing decisions related to the InvIT). The SEBI (InvIT) Regulations, 2014 primarily provide for:

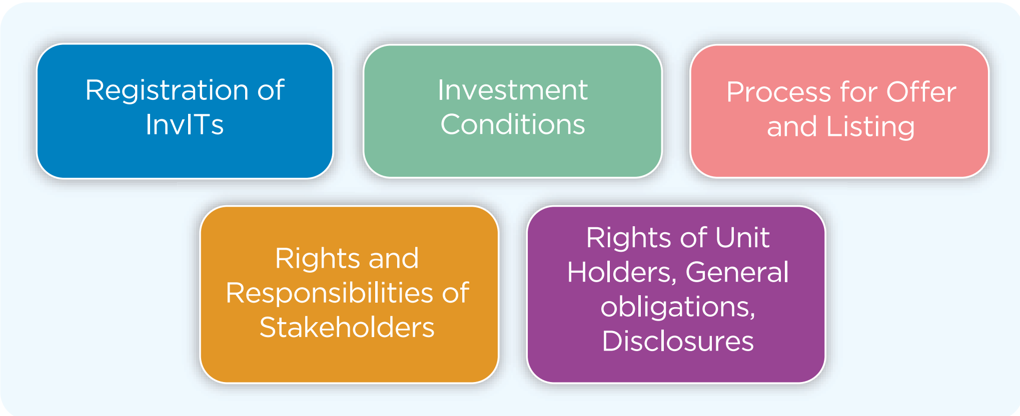


Figure 28: Elements of SEBI InvIT Regulations

Other sections covered include inspection process, procedures for action in case of default, and other miscellaneous actions.

Table 12: Salient features of SEBI InvIT Regulations 2014

Head	Remarks
Sponsor- Eligibility	• Minimum net worth: Rs. 100 crores; • At least 5 years of experience as developer and two projects completed
Mode of Placement	• Private Placement • Public Listing
SPV shareholding	• InvIT must hold at least 51% stake in the Project SPV

57 The consolidated amended regulations is as provided on SEBI website.

Investment	• Value of InvIT assets: Minimum Rs. 500 crores • Initial offer size of InvIT: At least ₹ 250 crore. • For Public Placement: » Not less than 80% of InvIT value to be invested in "completed and revenue generating projects" in eligible infrastructure projects (directly or through Holdco) • For Private Placement: » Not less than 80% in eligible projects[58]
Holding Period	• An InvIT shall hold an infrastructure asset for a period of not less than three years from the date of purchase of such asset by the InvIT
Payment to unit holders	• Not less than 90% of net distributable cash flows of the SPV distributed to the InvIT; • Not less than 90% of net distributable cash flows of the InvIT distributed to unit holders; • Distribution at least twice in a year
Borrowings	• A listed InvIT may issue debt securities as long as the consolidated borrowings and deferred payments (of InvIT, Holdco and SPV), net of cash and cash equivalents does not exceed 70% of the asset value • In case of aggregate borrowings and deferred payment exceeding 49%, the InvIT has to be rated AAA

Other guidelines, circulars, rules of SEBI, RBI related to InvIT are as provided in Annexure 1.

Institutional stakeholders

Sponsor	The sponsor is the entity that sets up the InvIT. In case of traditional procurement route, the public sector agency is usually designated as the sponsor and in case of PPP, the private sector developer/project SPV holding the concession agreement is the sponsor.
Trustee	A trustee is an entity holding the InvIT assets for the benefit of the unitholders and is registered with SEBI under the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993. The activities of the trustee are regulated under a formal "Trust deed" entered to between the Sponsor, InvIT and the trustee laying out the roles and responsibilities of each members of the trust
Investment Manager	This entity is responsible for the management of assets and investments of the InvIT. The role of the investment manager is detailed under Section 10 of the SEBI InvIT Regulations 2014. Key responsibilities include: (i) investment decisions with respect to the underlying assets or projects of the InvIT including any further investment or divestment of the assets (ii) oversee activities of the project manager with respect to compliance to the relevant agreements (iii) work with the merchant banker and the trustee in the issuance related documentations (iv) ensure investments of InvIT are in accordance with the guidelines. The investment manager needs to have a net worth of at least Rs. 10 crore and an experience in fund management and advisory services of at least 5 years to be eligible.

58 Eligible Projects means In non-PPP projects, the infrastructure project has received all requisite approvals for commencement of construction In PPP projects, the project has achieved commercial operations with one-year track record, or are in pre-COD stage

Project Manager	This entity brings in the necessary technical expertise for better management of assets. The project manager shall undertake operations and management of the InvIT assets including making arrangements for the appropriate maintenance, either directly or through the appointment and supervision of appropriate agents. The activities of the project manager are regulated under a "project implementation agreement" or "project management agreement". This agreement is between the project manager, the concessionaire SPV, and the trustee which sets out obligations of the project manager with respect to execution of the project.

Other key stakeholders incidental to the InvIT registration and issuance process include Valuer, Auditor(s), Merchant banker(s), Registrar & Transfer agent, Banks, Registrar to the issue, Credit rating agencies, and depository participants.

5.1.2 Issuance Process

The steps in issuance depends on the whether the sponsor envisages to undertake the InvIT issue through private placement or public issue (depending on the number of unit holders offered to). In case of public issue, the issue of units maybe through the following methods: initial public offer (IPO), or follow-on public offer (FPO) or any other issue made to the public as maybe specified. Brief description of the issuance process is as follows:

- Selection of assets to be put under InviT
- Establishment of Infrastructure Investment trust under the Investment trust act
- Engagement of merchant banker
- Finalisation of other key stakeholders including trustee, project manager
- Registration of InviT with Sebi
- Decision on private vs public issue - Depends on size of issuance etc.
- Structuring the transaction
- Completion of transfer of asset
- Completion of other transaction documentation including Investment management, project management agreement
- Pre- Issuance process
- Issuance process and allotment of units
- Listing process

Figure 29: Step by Step Issuance Process

5.2 REIT – REGULATORY FRAMEWORK AND MONETISATION PROCESS

5.2.1 Regulatory framework and Institutional stakeholders

Regulatory framework

The regulatory framework for an REIT issuance is guided by the **SEBI (Real Estate Investment Trusts) Regulations, 2014**. REITs, like InvITs, are registered are independent trusts under the Indian Trust Act, 1882.

The regulatory/ institutional structure is largely similar to that of InvITs except for key differentiations in – Class of assets, eligibility/investment conditions under SEBI (REIT) Regulations, 2014 and a common intermediary for management of assets and investment viz. Manager (as against separate investment and project manager under InvIT – among others.

Such key regulatory/institutional aspects (which are different from InvIT) are as highlighted herein

Table 13: Salient features of SEBI REIT Regulations 2014

Head	Remarks
Sponsor-Eligibility	• Each sponsor to hold not less than five per cent. of the number of units of REIT on post-initial offer basis • Minimum net worth of Rs. 100 crores, on a collective basis; — Each sponsor should have at least Rs. 20 crores of net worth • At least 5 years of experience as developer and two projects completed
Investment/ Asset	• Not less than 80% of REIT value has to be invested in "completed and rent/ income generating properties" (directly or through Holdco) • No more than 20% of REIT value may be invested in under-construction projects[59]/ debt securities/ equity investment in real estate companies/ government securities/ money-market instrument/ Transfer of Development rights acquired for utilization in a particular project/ unutilised Floor-Space-Index (FSI) • Not less than 51% of the consolidated revenues of the REIT, Holdco and SPV[60] shall be from rental, leasing and letting real estate assets or any other income incidental to the leasing of such assets.
Borrowings	• A listed REIT may issue debt securities as long as the consolidated borrowings and deferred payments [of REIT, Holdco and SPV], net of cash and cash equivalents does not exceed 49% of the asset value • In case of borrowings + deferred payment exceeding 25%, the REIT has to be rated AAA

59 Subject to conditions

60 Excluding gains arising from disposal of properties,

Other guidelines, circulars, rules of SEBI, RBI related to InvIT are as provided in the Annexure.

Institutional stakeholders

SPV is the entity which holds the controlling stake (51% or higher) either directly or indirectly (through a holding company). It may be registered as a company (under Companies Act, 2013) or as (LLPs). The SPV should hold at least 80% of its assets directly in properties.

Sponsor – The sponsor is the entity that sets up the REIT and transfers its assets to the same. The sponsor may choose to transfer the entire shareholding or interest/ rights to the SPV. The sponsor may also sell its stake in the units to another party, who will be "re-designated sponsor" for the REIT. However, such sales can happen only after a period of three years from the date of listing.

Manager is responsible for the management of assets and investments of the REIT. The role of the manager is detailed under Section 10 of the SEBI REIT Regulations 2014. Key responsibilities include: (i) investment decisions with respect to the underlying assets of the REIT including any further investment or divestment of the assets (ii) undertake management of REIT assets including lease management, maintenance of the asset, regular structural audits, regular safety audits etc. either directly or through the appointment and supervision of appropriate agents (iii) work with the merchant banker and the trustee in the issuance related documentations (iv) ensure investments of REIT are in accordance with the guidelines.

The manager needs to have a net worth of at least Rs. 10 crore and an experience in fund management and advisory services of at least 5 years[61] to be eligible. The activities of the manager are regulated under an *"investment management agreement"*. This agreement is between the trustee and the manager which lays down the roles and responsibilities of the investment manager towards the REIT.

5.2.2 Issuance Process

As detailed in Section 2, the public sector agencies shall identify the asset and get the necessary internal approvals for initiating asset monetisation. Brief description of the issuance process is as follows:

- *i.* *Selection of properties to be put under the REIT* – This step involves the sponsor to identify the key properties for asset monetisation. The contours of the properties need to be clearly defined so as to meet the objectives as laid out under the REIT regulations. At least 80 percent of the REIT assets need to be invested in "completed and rent/ income generating properties".
- *ii.* *Establishment of Real Estate Investment trust under the Indian Trust Act* – The sponsor shall establish the Real Estate Investment Trust as per the provisions of Indian Trust Act, 1882.

61 Further, at least 2 of the key personnel of the manager should have an experience of 5 years or above in fund management and advisory

iii. *Engagement of merchant banker* – The merchant banker plays a critical role as a financial intermediary in the REIT issuance. Merchant bankers are registered with SEBI and are regulated under the SEBI (Merchant Bankers) Regulations, 1992.

iv. *Finalization of other key stakeholders – Trustee, and Manager* – The next step in the issuance process is the finalization of the trustee, and the manager. The roles and responsibilities of the key stakeholders are discussed in section above. The hiring of trustee, and the manager shall be as per the procurement guidelines as applicable.

v. *Registration of REIT with SEBI* – The trust needs to be registered with SEBI as a Real Estate Investment Trust (REIT). Towards this, the sponsor shall put forward an application for registration with SEBI as per the format laid out in Schedule I of the SEBI REIT Regulations 2014. The key documentations include: (a) General information (b) Details of Trust (c) Details of Trustee (d) Details of Sponsor(s) (e) Details of Manager (f) Details of Business plan and investment strategy (g) Details of any regulatory actions and other declarations.

vi. *Completion of transfer of asset* – Based on the applicable rules/ guidelines, the sponsor(s) shall transfer or undertake to transfer to the REIT, its entire shareholding or interest [and rights] in the [holdco and/ or] SPV or ownership of the real estate properties, subject to a binding agreement.

vii. *Issue process and allotment of units* – REIT shall make an initial offer of its units by way of public issue only[62]. The issue process provides a window for the investors to participate in the bidding process for the REIT. The investors shall be allocated the proportional share in the number of units issued. The bidders shall submit their bids for the units within the bid/issue period to the lead manager. The registrar shall provide a schedule of bids received which shall indicate the bid amount received in respect of each bid. The allotment may be discretionary or based on some pre-determined criteria.

62 Any subsequent issue of units by the REIT may be by way of follow-on offer, preferential allotment, qualified institutional placement, rights issue, bonus issue, offer for sale or any other mechanism and in the manner as may be specified by the Board.

5.3 PPP CONCESSION BASED MODELS – FRAMEWORK AND PROCESS

5.3.1 Regulatory framework and Institutional stakeholders

Key Institutional initiatives for PPP based Projects by Government of India

In 2006, the Government took steps to create an ecosystem for mainstreaming PPPs. This has been helpful to stakeholders in the PPP space, including private developers, financial institutions and governments (at national, state and local levels). The key policy and institutional initiatives undertaken include:

- Setting up of the PPP Appraisal Committee (PPPAC)
- Extending financing support through the VGF (Viability Gap Funding) Scheme
- Preparation of PPP toolkits, guidelines and knowledge dissemination products
- Establishment of transparent and competitive bidding processes–through standardized procurement documents

At the central-level, the PPP Appraisal Committee (PPPAC) recommends project for approval of competent authority for central sector projects. Further, line ministries/ public sector agencies have adopted model concession agreements prepared by NITI Aayog (erstwhile Planning Commission). Alternatively, respective sector-specific MCAs have been developed to enable a transparent and streamlined process.

At the state-level, a few states in India have created the regulatory and institutional structure to aid public private partnership. Key states which have a clearly defined legal framework for private investment in public infrastructure are Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu, Uttar Pradesh, Madhya Pradesh, Rajasthan, Orissa, etc.

5.3.2 PPP procurement process

The project preparation activities of the project can be divided into three phases – project identification (covered under Section 3), project development and approval (feasibility studies, detailed technical studies and final approval) and project procurement.

The Project development and approval of PPP Projects has already been covered in the previous section.

The procurement process is the process of selection of private partner. **It is important that the process of selection of the private partner is transparent, non-discriminatory, and timely to ensure project success.** While competitive procurement processes have been the overarching theme for PPP procurement in India, the procurement steps and regulations covering the same vary across agencies.

The procedure for PPP procurement may be divided into the following four stages:

Request for qualification	Request for proposal	Bid evaluation and award	Commercial close
The objective of stage is to gather information on the capacities of Applicants and shortlisting based on requirements to deliver on project outcomes.	Financial bids from qualified applicants (after the RFQ stage) for undertaking the PPP project	Evaluation of the RFP submissions of the private sector bidder and selecting the best proposal based on a pre-determined criteria.	Last stage in procurement process where the private sector partner enters in to a formal contract with the public sector agency for the implementation/ management of the PPP project.

Figure 30: Procedure for Public Procurement

6

Key imperatives for Monetisation

This section provides an overview of the initiatives by Government and other key actions suggested for provision of fillip to asset monetisation

6.1 RECENT INITIATIVES BY GOVERNMENT OF INDIA

The Government, over the past few years, has consistently focused on reforms and initiatives for boosting private participation in infrastructure. And with this objective, have been the recent initiatives towards streamlining the process of capital recycling through asset monetisation, by public and private sector entities. Some of the key initiatives, under Budget 2021-22, aimed at increased adoption of financing instruments and for enabling assets monetisation by public sector entities include:

A. Increased adoption of Financing Instruments

Key amendments pertaining to InvIT/ REIT

- **Access to funds**

  In order to enable debt financing of InVITs and REITs by Foreign Portfolio Investors (FPIs), Finance Act 2021 has enabled amendments in the Securities Contracts (Regulation) Act, 1956 for recognising InvITs, REITs as "securities". Related amendments in SARFAESI Act and Recovery of Debts due to Banks and Financial Institutions Act have also been undertaken under the Finance Act 2021[63].

  This will enable InvITs and REITs to borrow money from FPIs and issue debt securities, thereby enabling replacement of expensive debt with cheaper funds.

- **Streamlining taxation**

  Budget 2021-22 has provided clarification with respect to dividend not being taxable at the trust level (dividend distribution tax) but in the hands of the unitholder (dividend withholding tax). Dividend payment to REIT and InVIT will hence be exempt from TDS.

B. Enabling Asset Monetisation by Public Sector Entities

GoI has undertaken several initiatives to address the operational/commercial challenges as also to incentivize State Governments and State level entities undertaking monetisation. The key initiatives include:

Incentive Mechanism for Capital Expenditure by State Governments

- Under the recently institutionalised Scheme for Special Assistance to States for capital expenditure for FY 2021-22, it has been decided that incentives be provided for asset monetisation and disinvestment by State government/ entities. As an incentive for asset monetisation, additional allocation equivalent to 33% of value of assets realised and deposited in State consolidated funds or in account of State public sector enterprises owning the assets. The allocation and disbursement is subject to the realised amount being necessarily used for capital expenditure by States.

63 Provisions under Part IV, Part IX and Part XI of Finance Act 2021

Stamp duty exemption on asset transfer from one Government-owned entity to another such entity

- At present, assets of key CPSEs reside in their respective balance sheets. However, monetisation may require transfer of such assets from the CPSEs' balance sheet to another entity or an SPV which typically may attract stamp duty implications, ranging between 5%-10% across states, thus significantly reducing monetisation proceeds / benefits accruing to selling CPSEs.
- To address this challenge, GoI through the Finance Act 2021 has provided for exemption of stamp duty towards transfer of asset between Government entities[64], subject to certain requirements. This is aimed at creating a level-playing field for asset monetisation (especially through the InvIT/ REIT route where stamp duty cost was a significant impediment to asset transfer and consequent asset monetisation).

Tax neutral provision for demerger

- The Finance Act 2021, has added an explanation to the Section 2 (19AA) of the Income Tax Act, 1961, stating that the reconstruction or splitting up of a public sector company into separate companies shall be deemed to be a demerger provided that the process involves transfer of asset to the resultant company, and the resultant company is a public sector company[65].
- The demerger of companies as defined under this Section 2 (19AA) is considered as tax neutral and hence avoids any capital gains tax implication. Besides, set off and carry forward of losses would be allowed if proposed conditions under section 72AA of the Income Tax Act, 1961 are complied with. Benefits of past losses, if any, are also available. In view of loss of carry forward losses, tax holiday benefits etc. no longer being impediments, these changes are expected to ease the asset monetisation process for public sector infra companies

Other Relevant Aspects

Amendments to Regulations for InvIT and REIT by SEBI

- **Increase in borrowing limits for InvIT and Reduction in minimum allotment and trading lot requirements for investors in publicly issued InvITs and REITs**

  The limit for consolidated borrowing and deferred payments under SEBI's regulations for Infrastructure Investment Trust has been enhanced to 70% (from 49%) of the InvIT value; subject to key requirements being fulfilled viz.

64 Excerpt from the Finance Act is as follows: "………any instrument for conveyance or transfer of a business or asset or right in any immovable property from a Government company, its subsidiary, unit or joint venture, by way of strategic sale or disinvestment or demerger or any other scheme of arrangement, to another Government company or to the Central Government or any State Government, or to the development finance institution by any law made by the……". , "Government company" shall have the same meaning as assigned to it in clause (45) of section 2 of the Companies Act, 2013

65 Section 3- Finance Act 2021

- Credit rating of AAA of the InvIT debt;
- Funds be utilized only for acquisition or development of infrastructure projects;
- Track record of at least six distributions on a continuous basis, post listing, in the year preceding the financial year in which the borrowings are proposed to be availed; and
- Prior approval of 75% unitholders

— Securities and Exchange Board of India recently made an amendment to InVITs/ REITs regulations for revision in minimum subscription and trading lot. Accordingly, for publicly issued REITs and InvITs, the revised minimum application value was brought down within the range of ₹10,000-15,000 and the trading lot to 1 unit. This is expected to provide a boost to retail participation in InvITs/ REITs. The decision to cut entry amount is significant, as it will allow small retail investors to take part in these products.

Amendments to TOT framework

Key reform initiatives to widen the investor base for TOT transactions include:

— ***Flexibility in concession period*** – The concession period of toll projects may now be between 15-30 years as against the fixed term of 30 years. This is expected to increase participation from Indian developers in addition to large pension funds, insurance companies, sovereign wealth funds.

— ***Reduced minimum operating history requirement*** –Minimum operating history of one year compared to two years of operations post commencement of tolling is expected to expand the eligible universe of operating toll roads to be considered under the TOT package

Model Concession Agreements (MCAs)

— MCAs developed by NITI Aayog have been adopted by various sector to enable an evolved contractual framework, enhanced clarity on loss protection to investors and lenders, clearly defined obligations of stakeholders, etc. while roads (for TOT, BOT (toll) and HAM road assets), airports (for OMDA), and ports have availed and evolved the model concession framework over time, recently MCAs have been developed across high potential sectors like Railways (Railway station development, passenger train operations) etc. There is a need to develop model PPP concession frameworks for various other brownfield asset classes identified under the NMP for quicker adoption by public asset owners.

6.2 KEY IMPERATIVES

Asset Monetisation initiative has three critical stakeholders, the Government (Centre or State) which monetises the asset, private investor taking on ownership/ management and the general public who are typically the users of the asset. There are considerations of each of these stakeholder groups which must be met in order to effectively roll out a successful asset monetisation programme.

The imperatives to give a thrust to asset monetisation are anchored across three themes – (1) Expansion of the investor base and scaling of monetisation instruments (2) Strengthening demand-side capacity, and (3) Creating effective frameworks to aid monetisation.

Figure 31: Imperatives for Asset Monetisation

Pillar 1: Expanding the investor base and scaling up instruments	
Streamlining investment guidelines	The long-term nature of infrastructure projects requires active participation from investors looking at a similar return profile from their investments. However, the existing investment guidelines for insurance and pension funds limit the exposure of such funds to InvIT/ REIT assets. The investment limit are as follows: (i) Insurance funds – Maximum exposure at lower of 3% of fund size of the Insurer/ 5% of the units issued by a single InvIT/ REIT (ii) Pension funds under EPFO are also regulated to invest up to maximum of 5% of the funds in REIT/ InvIT (iii) Mutual funds can invest up to 10% of their Assets under management in a single InvIT/ REIT. These need to be streamlined to ensure consistency. Moreover, there are also inconsistencies across categories on the level of exposures. For example: IRDA regulations do not permit investment of insurance funds in unlisted InvITs. Hence, a staggered approach for streamlining of investment guidelines and limits is envisaged to keep pace with the growth in the InvIT market starting with the allocation of insurance and pension funds towards unlisted InvITs.
Tax benefits	More tax-efficient and user-friendly mechanisms like allowing tax benefits in InvITs as eligible security to invest under Section 54EC of the Income-Tax Act, 1961, are important starting points for initiating retail participation in the instruments.

Recourse under Insolvency and Bankruptcy Code (IBC)	Since the trusts are not considered as 'legal person' under the extant regulations, the IBC regulations are not applicable for InvIT loans. Hence, the lenders do not have existing process for recourse to project assets. While the lenders are protected under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 ("SARFAESI Act") and the Recovery of Debts and Bankruptcy Act, 1993 (the "RDB Act"), the provision of recourse under IBC regulations will bring in added level of comfort for the investors.

Pillar 2: Strengthening demand-side actions	
Establish a transparent and independent process for setting cost-reflective user charges	Development of scalable models for asset monetisation requires a clear and transparent pricing framework for infrastructure services which is commensurate with the risks transferred. Simply put, the developer/ investor would envisage a risk-adjusted return that justifies the investments towards asset development/ maintenance.
Reforming the financial management and accounting practices to aid monetisation	The delineation of the revenue and expenditure specific to the assets is an important pre-requisite for asset monetisation transaction. The public sector agencies should increasingly move towards asset-level financial disclosures and earmarking of specific revenue streams across all the assets, which will help establish investor comfort.
Creating institutional structures for fast-tracking asset identification and monetisation transaction	The institutional backbone for scaling up asset monetisation may be anchored at the level of the relevant ministries. With the National Monetisation Pipeline (NMP), each ministry may establish suitably empowered working group with the sole mandate to identify assets, method of monetisation and handhold in the transactions/ procurement process. This pipeline will also form a baseline for the Ministry for monitoring and tracking performance and data on the potential assets.

Pillar 3: Creating effective frameworks to aid monetisation	
Standard agreements should be developed across sectors	Robust MCAs have been developed in roads, ports and airport sectors and investors have received these agreements well which has manifested itself through increased investor participation in projects from these sectors. There is a need to develop model PPP concession frameworks for various other brownfield asset classes identified under the NMP for quicker adoption by public asset owners.

Arrangements for monetisation backed by a robust incentive mechanism	Similar to the National Partnership Agreements on asset recycling in Australia, the Government of India may enter into formal working arrangements with each line ministry/ CPSE/ States to create medium-term road map for asset monetisation in line with the NMP. The agreements shall lay out the timelines, roles and responsibilities of each parties, preparatory actions and financing modalities (including technical assistance support) over a 4-5 year period. A Mechanism to plough back monetisation proceeds in form of incentives to the public sector agency (to the extent that the monetisation proceeds are utilized towards creation of new assets) has already been institutionalised as highlighted above.
Effective contract and dispute resolution mechanisms honoring of contracts	Contract management is a critical element in the monetisation jigsaw. Effective mechanisms for contract management, arbitration and conciliation are important to ensure success of monetisation. In order to boost investor confidence, it is crucial to maintain sanctity of contracts. The provisions should be legally enforceable, such that once parties duly enter into a contract, they must honour their obligations under that contract and, in case they don't honour, there should be adequate safeguards for other stakeholders. This should be applicable to both public and private sectors. Sensitising state governments and local bodies on honoring of contracts is crucial issue.

Annexure

ANNEXURE I : CIRCULARS, RULES AND GUIDELINES PERTAINING TO INVIT

The other circulars, rules and guidelines pertaining to InvIT are as follows:

- SEBI circular dated May 11, 2016 on Guidelines for **public issue** of units of InvITs
- SEBI circular dated October 20, 2016 on **Disclosure** of financial information in offer document/placement memorandum for InvITs
- SEBI circular dated November 29, 2016 on **Continuous disclosures and compliances** by InvITs
- SEBI circular dated January 18, 2018 on participation by **Strategic Investor(s)** in InvITs and REITs
- SEBI circular dated April 13, 2018 on Guidelines for issuance of debt securities by Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)
- SEBI circular dated April 23, 2019 on Guidelines for determination of **allotment and trading lot size** for Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)
- SEBI circular dated November 27, 2019 (amended on November 17, 2020) on Guidelines for **preferential issue of units and institutional placement of units** by a listed Infrastructure Investment Trust (InvIT)
- SEBI circular dated December 24, 2019 on Guidelines for **filing of placement memorandum**-InvITs proposed to be listed
- SEBI circular dated November 04, 2020 on Guidelines for **rights issue of units by an unlisted** Infrastructure Investment Trust (InvIT)

Loans to InvIT – RBI Regulations

As per an RBI circular dated October 14, 2019 (RBI/2019-20/83, DBR. No.BP. BC.20/08.12.014/2019-20), the central bank has now issued guidelines on bank lending to InvITs. Such bank lending to InvITs would be subject to the following conditions:

- Banks are required to formulate a board-approved policy on exposure to InvITs covering processes, such as appraisals, loan sanctions, exposure limits, and mechanisms for monitoring
- Banks are required to undertake thorough assessment of sufficiency of cash flows at the InvIT level to ensure timely debt servicing
- The overall leverage of InvIT and the underlying SPVs together should be within the permissible limits prescribed in the board approved policy of the bank
- Banks are required to monitor the performance of underlying SPVs, as the ability of an InvIT to meet debt obligation depends on the performance of the underlying SPVs

- Banks are required to lend to only those InvITs, where the underlying SPVs have existing debt and are not facing any financial difficulties
- Borrowing company should provide infrastructure facilities and should have satisfactory net worth
- Borrowing company or its directors/ promoters should not have defaulted on bank/FI loans
- Bank financing to be restricted to 50% of the finance required for acquiring the promoter's stake
- Tenor of bank loans should not be longer than seven years
- Bank financing acquisition of shares by promoters should be within the regulatory ceiling of 40% of their net worth as of March
- 31 of previous year
- Board should have approved the proposal for bank finance
- Compliance with statutory requirement as mentioned under Section 19(2) of the Banking Regulations Act, 1949

Source: RBI circular dated October 14, 2019 (RBI/2019-20/83, DBR. No.BP.BC.20/08.12.014/2019-20, National Infrastructure pipeline 2020

The other circulars, rules and guidelines pertaining to REIT are as follows:

- SEBI circular dated December 19, 2016 (amended on January 15, 2019) on Guidelines for **public issue** of units of REITs
- SEBI circular dated December 26, 2016 on **Disclosure** of financial information in offer documents for REITs
- SEBI circular dated December 29, 2016 on **Continuous disclosures and compliances** by REITs
- SEBI circular dated January 18, 2018 on participation by **Strategic Investor(s)** in InvITs and REITs
- SEBI circular dated April 13, 2018 on Guidelines for issuance of debt securities by Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)
- SEBI circular dated April 23, 2019 on Guidelines for determination of **allotment and trading lot size** for Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)
- SEBI circular dated November 27, 2019 (amended on September 28, 2020) on Guidelines for **preferential issue of units and institutional placement of units** by a listed Real Estate Investment Trust (REIT)
- SEBI circular dated January 17, 2020 (amended on March 13, 2020) on Guidelines for rights issue of units by a listed Real Estate Investment Trust (REIT)

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Designed by