

No.25-10/28/2021-PG
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, the 03rd October, 2022

To,

1. The Chief Secretary / Secretary(Energy), All State Governments and UTs
2. The Chairperson, All State Transmission Companies /Utilities

Subject: Guiding Principles for Monetization of Transmission Assets in the Public Sector through Acquire, Operate, Maintain and Transfer (AOMT) based Public Private Partnership model – reg.

Sir,

I am directed to convey that the Government of India have been emphasizing the need for quality infrastructure creation, as it results in increased employment opportunities, access to market and materials, improved quality of life and empowerment of vulnerable sections. In order to fast-track quality infrastructure creation, the Government of India have identified asset monetization as an important financing option for creation of infrastructure, as it serves two critical objectives, unlocking value from public investment in infrastructure and tapping private sector flexibility in operations and management of infrastructure.

2. Monetization of assets unlocks their value, eliminates their holding cost and enables scarce public funds to be deployed to new projects, thus fast-tracking new infrastructure creation. India has developed a solid track record of attracting institutional investment in infrastructure assets utilizing innovative structures such as Infrastructure Investment Trusts (InvITs) and PPP based models [Toll Operate Transfer (TOT), Operation, Management and Development Agreement (OMDA) etc.] to monetize assets such as toll roads, transmission assets, pipelines and telecom.

3. In this regard, Power Grid Corporation of India Limited (POWERGRID), a Central Power Sector Enterprise under the Ministry of Power, had monetised more than Rs. 7700 crore in May 2021 by monetizing 5 of their transmission assets through Infrastructure Investment Trust (InvIT).

4 The States also have a significant potential for monetisation of their transmission assets, so that the much needed capital for creation of transmission assets in the States is available. With a view to evolve a common framework and approach for transmission companies desirous of undertaking monetisation of transmission assets, Ministry of Power has developed the “Guiding Principles for Monetization of Transmission Assets in the Public Sector” in consultation with relevant stakeholders. A copy of the same is enclosed.

5. Considering the need to retain a degree of oversight through contractual mechanisms, protection of user interests and maximization of value to the public authority, this document lays down the contours of monetisation of transmission assets through an Acquire, Operate, Maintain and Transfer (AOMT) based Public Private Partnership model. The model suggested comprises of a limited period transfer of ownership of a transmission service provider SPV along with a mandatory buy back to the asset owning public sector entity at the end of the transaction period.

Cont/...

6. It is requested that the States may consider the monetisation of transmission assets with the principles suggested in the Guiding Principles.

Encls: As above

Yours faithfully,



(Sanjeev Jain)

Under Secretary to the Govt. of India
Tele: 011- 23730264

Copy to:

1. The Chairperson, Central Electricity Authority, New Delhi
2. CMDs of all CPSEs under administrative control of Ministry of Power
3. CTUIL, Saudamini Plot 2 Sector 29 Gurugram, 122001
4. Vice Chairman, NITI Aayog, NITI Bhawan, Sansad Marg New Delhi 110001
5. In-Charge, NIC Cell, MoP with a request to upload the Draft Guideline on the website of Ministry of Power for wider publicity.

Guiding Principles for Monetization of Transmission assets in the Public Sector through Acquire, Operate, Maintain and Transfer (AOMT) based Public Private Partnership model

1. Preamble

- 1.1 Infrastructure is critically linked to growth and economic performance. The 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. Monetization is the key to value creation in infrastructure as it serves two critical objectives, unlocking value from public investment in infrastructure and tapping private sector flexibilities in operations and management of infrastructure.
- 1.2 Infrastructure assets could be appropriately monetized to create greater financial leverage and value for asset owners, be it in public sector or private sector. Monetization of assets unlocks their value, eliminates their holding cost and enables scarce public funds to be deployed in new projects, thus fast-tracking new infrastructure creation. India has developed a solid track record of attracting institutional investment in infrastructure assets utilizing innovative structures such as Infrastructure Investment Trusts (InvITs) and PPP based models (TOT, OMDA etc.) to monetize assets such as toll roads, transmission assets, pipelines and telecom. The Brownfield seasoned transmission assets in particular have demonstrated significant investor appetite from long-term institutional investors owing to underlying asset characteristics and availability-based business model as evidenced by successful InvIT based monetisation for Transmission assets in public as well as private sector.
- 1.3 The States have a significant potential for Asset Monetization by leveraging brown-field transmission assets and mobilizing much needed proceeds for new infrastructure investment which will have multiplier effects on the respective state economies.
- 1.4 India's electricity transmission sector is gearing up to face the challenges posed by a changing power demand and energy mix. In order to meet the future load growth and changing generation mix, huge investments are required to strengthen and ramp up the country's transmission system. The electricity transmission sector in India has witnessed an increased participation of both large domestic and institutional investors, owing to the stability of asset class and an availability-based business model. Revenue for electricity transmission is generated from transmission charges under long-term Transmission Service Agreements (TSAs), with a low level of operating risk and an availability-based payment mechanism.
- 1.5 Over the years, an extensive network of Transmission and Distribution infrastructure has been developed for evacuating power produced by different electricity generating stations and distributing the same to the consumers. These lines have been installed by Generation/ Transmission/ Distribution Utilities including Central Sector Organizations and State/UT Electricity Departments. As on March 31, 2020, India's total transmission line length network stood at around 7,13,400 circuit kms (66 kV

and above voltage)¹. The country's network is owned and operated by several public sector entities and private companies.

- 1.6 Sections 61 & 62 of the Electricity Act, 2003, provide for determination of tariff of generation, transmission, wheeling and retail sale of electricity by the Appropriate Commission. Such transmission assets are normally referred to as **Regulated Tariff Mechanism (RTM) assets**. With a view to facilitate competition in this sector through wider participation in providing transmission services and tariff determination through a process of tariff-based bidding, Section 63 of the Electricity Act, 2003 provides for adoption of the tariff determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. Such transmission assets are normally referred to as **Tariff Based Competitive Bidding (TBCB) assets**. While the TBCB assets are housed in a specifically created project level special purpose vehicles (SPVs), the RTM assets are typically housed in the balance sheet of the respective transmission undertakings.
- 1.7 The National Highways Authority of India (NHAI) has been employing a Toll Operate Transfer (TOT) based model to monetize public funded operational NH projects generating toll revenues. Under the TOT Model, the right of collection and appropriation of toll are assigned for a pre-determined concession period to concessionaires against an upfront consideration. A ToT concession like model however was not found to be commercially most efficient model for monetisation of transmission assets on account of its being a licensed activity and associated tax incidence apart from other regulatory challenges.
- 1.8 With a view to structure a framework with careful consideration towards the need to retain a degree of oversight through contractual mechanisms, protection of user interests and maximization of value to the public authority, this document lays down the contours of monetisation of transmission assets through an **Acquire, Operate, Maintain and Transfer (AOMT) based Public Private Partnership model**. This model comprises of a limited period transfer of ownership of a transmission service provider SPV along with a mandatory buy back at the end of transaction period to the asset owning public sector entity.
- 1.9 With a view to evolve a common framework and approach for national and state level transmission undertakings desirous of undertaking monetisation of transmission assets, Ministry of Power has developed this document containing the "**Guiding Principles for Monetization of Transmission Assets in the Public Sector**", in consultation with relevant stakeholders (hereinafter referred to as "**the Guiding Principles**"). The specific objectives of these guiding principles are as follows:
 - Make available efficient capital for new investment in the transmission sector through upfront payment received from the monetization process.
 - Facilitate transparency, consistent approach and efficiency in monetization processes to be undertaken by public sector transmission undertakings.
 - Enable proficient project preparation and planning activities under a guiding framework for running credible transaction processes that instill investor confidence.

¹Source: All India Electricity Statistics, General Review 2021, CEA, Ministry of Power, Govt of India

- Enable sharing of good practices and models for monetisation of infrastructure assets for value maximization and tapping private sector efficiencies.

2. Definitions

2.1. In these guiding principles, unless the context otherwise requires, -

- a) AOMT: Acquire, Operate, Maintain and Transfer model of asset monetization wherein the SPV owning the identified transmission assets is bought by the selected Investor Entity with responsibility to operate and maintain these assets for a certain duration of time with associated rights and duties against payment of upfront lumpsum amount.
- b) CTUIL: Central Transmission Utility of India Limited notified by the Central Government under Section 38 of the Electricity Act, 2003.
- c) Investor Entity: An eligible company or Trust selected through competitive bidding process to take over the SPV of the Sponsoring Transco for specified Transfer Transaction period on AOMT basis
- d) Infrastructure Sector: Infrastructure Sector shall mean such sectors notified by Department of Economic Affairs, in its Gazette Notification no. 13/1/2017-INF dated 14th November, 2017 and as amended from time to time
- e) Sponsoring Transco: A Transmission Company owned by the Central or State Government seeking to monetize assets under these guiding principles.
- f) SPV: A company incorporated under the Companies Act which will hold the identified assets of the Sponsoring Transco and will be taken over by the Investor Entity.
- g) STU: State Transmission Utility notified under Section 39 of the Electricity Act, 2003.
- h) Transfer Agreement: An Agreement governing the terms and conditions of transfer of assets of a Sponsoring Transco housed in a SPV to private entity for a specified period on BOMT basis
- i) TBCB asset: The transmission asset built through tariff based competitive bidding under Section 63 of the Electricity Act, 2003
- j) Transmission Service Provider (TSP): Once an Investor Entity takes over the SPV consequent to signing of Transfer Agreement, it shall be referred to as Transmission Service Provider (TSP)

k) Upfront Payment: A lumpsum payment to be paid by the selected bidder to acquire the asset

2.2. Words and expressions used and not defined herein but defined in the Act shall have the meaning respectively assigned to them in the Act.

3. Scope of the Guiding Principles

3.1. The guiding principles are intended to enable implementation of monetization program for identified transmission assets of the State Government owned transmission undertakings and CPSEs/PSUs/other Government Organizations in the Central Sector who may adopt this framework with the approval of the respective competent authority.

3.2. The aforementioned framework has been detailed under this document to delineate the broad principles and an approach for undertaking monetisation transaction for transmission assets.

3.3. The guiding principles detailed in this document are not mandatory and the respective asset owning entities may adopt any other approach and / or model based on necessary due diligence for appropriately structuring transactions, on a case-to-case basis and as necessitated by various respective regulatory and commercial considerations.

4. AOMT transaction structure contours and steps

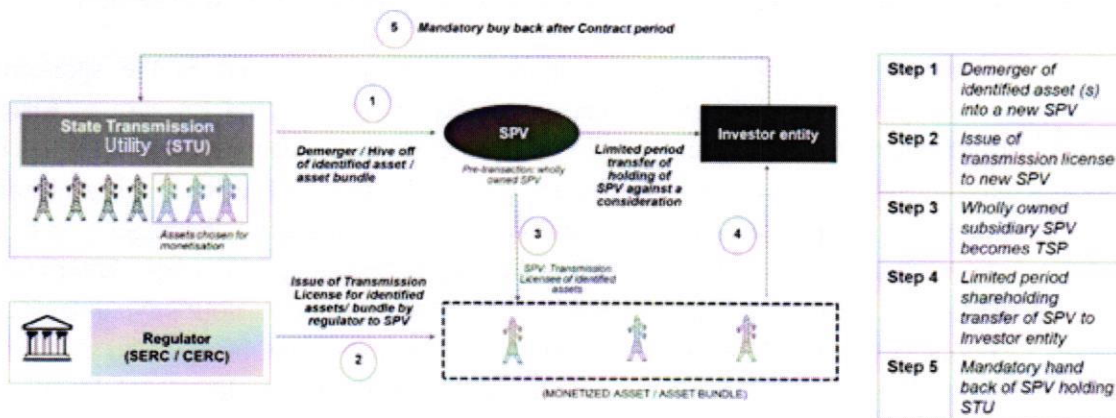
4.1. In order to enable monetisation, selection of de-risked and brown-field assets with a stable and ring-fenced revenue generation profile (or long-term revenue rights) is a *sine qua non*. Hence, as the first step, Sponsoring Transco or Energy Departments (hereinafter referred to as “**Sponsoring Transco**”), may take up monetization of its brown-field transmission assets through the model envisaged under this document by hiving off the transmission assets supposed to be monetised (either individual transmission lines or a bundle of transmission lines and substations) by way of a special demerger under a new specific Special Purpose Vehicle (hereinafter referred to as the “**SPV**”). The nature of such demerger and consequent process requirements will be guided by the constitution of asset owning Transco.

4.2. As the RTM assets are typically housed in the balance sheet of the Sponsoring Transcos / Power Department, a demerger into a SPV is necessitated as a first step towards undertaking monetisation. In case of TBCB assets, since such transmission assets are normally housed in a project specific SPVs, such a demerger may not be essential.

4.3. Under the AOMT model, the entire shareholding of the SPV would be transferred to an Investor Entity, as part of monetization and bought back at a nominal cost of INR 1.00 at the end of a stipulated transaction period. Such transaction period may be

specified in the Transfer Agreement and be coterminous with the residual economic life of the asset. For the stipulated transaction period, the Investor Entity will undertake O&M of the transmission network including the right to earn transmission charges subject to provisions of the Transmission Service Agreement. An indicative transaction structure and the key steps envisaged therein are depicted in the exhibit below.

Exhibit: Transaction structure and steps under AOMT model



- 4.4. The SPV formed under para 4.1 above shall apply to the respective regulatory commission (hereinafter referred to as “the Regulator”) for grant of separate Transmission License / (s) to operate and maintain the identified assets / asset bundle for a period up to the terminal date envisaged under the Transfer Agreement
- 4.5. The Investor Entity would be selected through a competitive bidding process to acquire the 100% shareholding of the SPV. As the shareholder of the SPV, it will own, operate and maintain the identified assets during the tenure of the Transfer Agreement
- 4.6. At the expiry of Transfer Agreement, the SPV along with the rights, title and interest in all the assets held by the SPV shall be mandatorily transferred back to the Sponsoring Transco at a nominal consideration of INR 1.00 and free from any encumbrance and liability.

5. Identification and Book Value of Assets for transfer to SPV

In case of RTM assets, the Sponsoring Transco shall identify assets which can be clearly ring-fenced, have identifiable revenue stream and clear from all litigations, preferably with vintage of upto 10 years from the date of commercial operation for the purpose of monetization. This is recommended in view of better monetization potential and investor attractiveness. The estimated book value of the assets identified for such transfer will preferably be determined or vetted, as the case may be by an independent auditor, space that may be appointed by the Sponsoring Transco. The key

considerations for identification of assets / asset bundle that need to be assessed at this stage by Sponsoring Transcos are as under:

- a) Vintage of the asset, availability factor and associated maintenance cost
- b) Future capex requirements
- c) Need to bring scale in the transaction to attract credible players and investor entities

6. Scheme for Transfer of identified assets of Sponsoring Transco to an SPV

As mentioned earlier, the RTM assets are normally housed in the sponsoring transmission entity's balance sheet or are departmentally held (in case of Energy Departments of certain States and UTs) and are not under separate SPVs (which is the case in TBCB assets). Monetisation for such RTM assets under the envisaged model hence may require a scheme of transfer by way of special demerger. With the amendments effected to Section 47 of the Income Tax Act, 1961 under The Finance Bill, 2021, transfer of capital assets by a PSU to another notified public sector company, Central Government or State Government may not be regarded as transfer subject to approval of scheme and certain requirements there under.

The identification of assets and demerger into separate SPVs shall be made taking into consideration the amount to be monetized over a long term (5 years) and in such a manner that multiple SPVs are created abinitio to reduce the impact of capital gains tax.

State Sector:

In case of RTM assets, the States may, in consultation with the Sponsoring Transco, formulate a scheme of transfer under Part XIII of the Electricity Act, 2003 and as provided in these guiding principles.

Alternatively, the Sponsoring Transco/STU may form an SPV by special demerger with the approval of the State Government and apply for a separate license to it.

Central Sector:

The identified RTM assets on balance sheet of the Sponsoring Transco owned or controlled by the Central Government may be hived off into a new SPV. The Sponsoring Transco may approach Ministry of Power for approval of the scheme so as to enable requisite notification by the Central Government in the Official Gazette.

7. Grant of Transmission License by respective regulatory commission to the SPV

The new SPV thus formed will be a wholly owned subsidiary of the Sponsoring Transco. The SPV shall apply to the respective regulatory commission (CERC or SERC, as the case maybe) for grant of a separate transmission license to operate and maintain the identified assets for a period in consonance with the Transfer Agreement.

8. Tenure of Transfer Agreement

The tenure of the Transfer Agreement shall be decided by the Sponsoring Transco on a case-to-case basis and may normally be coterminous with economic life of the asset in case of RTM assets or residual license period in case of TBCB assets. In case of bundle of assets under RTM that have been commissioned on different dates, the tenure may either be calculated based on effective date of COD, i.e the weighted average date of COD or be limited with the asset which was commissioned earliest.

9. Technical Due Diligence

The Sponsoring Transco will preferably appoint an independent technical consultant for carrying out technical due diligence of the assets. The technical report will preferably include asset profile, and latest line patrolling reports. The Asset Profile must contain relevant data regarding the line i.e. voltage level, line configuration i.e S/C or D/C, specifications of conductor etc. and specifications of the substations or converter stations (in case of HVDC line). The Asset Profile shall give the actual route with route length, type of terrain, maximum altitude, snow zones, wind zones, forest / wildlife infringement, infringement of endangered species habitat, vicinity to civil and defense Airports, major river/sea crossings & coal/ mineral mine areas likely to be encountered and location of substations or converter stations. The report shall also cover the environment, safety, Quality Control, operational and maintenance procedure/standards being followed, the historic availability of the assets, availability of spares parts, security, insurance and the risk analysis.

10. SPV Enterprise Value

The Sponsoring Transco will preferably appoint an independent valuer for carrying out financial valuation of the assets. The valuer shall submit a comprehensive valuation report to the Sponsoring Transco. Asset enterprise valuation will preferably be done based on Discounted Cash Flow (“DCF”) method. The Enterprise Value so determined may be reckoned as an undisclosed reserve value for bidding process by the Sponsoring Transco to enable an efficient price discovery of asset².

11. Key Agreements and salient features thereof

11.1 *Transfer Agreement*

The Sponsoring Transco may enter into a Transfer Agreement with the Investor Entity. This agreement shall inter-alia cover aspects related to transactions for purchase of shares by the Investor Entity at the beginning of the transaction as well as by the Sponsoring Transco at the end of tenure of Transfer Agreement, besides usual

²*There is precedence of this approach as the same has also been adopted by NHAI in case of bidding for TOT based projects and by AAI in case of leasing of brownfield airports through PPP.*

provisions of any agreement such as roles and responsibilities, risk allocation, dispute resolution etc.

11.2 *Transmission Service Agreement (TSA)*

In case of TBCB assets, the pre-existing TSA shall continue to apply to the SPV, after the latter has been taken over by the Investor Entity. In case of RTM assets, the Sponsoring Transco may enter into a tripartite agreement with the new SPV as well as Investor Entity for assignment of its rights under the existing Transmission Service Agreement/Bulk Power Transmission Agreement to the newly created SPV provided that the terms and conditions of existing Transmission Service Agreement/Bulk Power Transmission Agreement shall not be altered. In case of absence of existing Transmission Service Agreement/Bulk Power Transmission Agreement, the TSP on the date of acquisition of SPV may enter into a Transmission Service Agreement (TSA) with the CTUIL (in case of interstate projects) / the concerned utilities as advised by STU (in case of intra State projects).

- 11.3 The TSP shall enter into other agreement(s), if required, under Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) or any other agreements mandated through regulations framed by the Appropriate Commission, as amended from time to time, within fifteen (15) days from the date of acquisition of the SPV.
- 11.4 The TSP shall be responsible for operation and maintenance of all the transmission assets in accordance with best practices and relevant rules and regulations read in conjunction with guidelines thereof issued by the Central Electricity Authority and Appropriate Commission.
- 11.5 The TSP shall ensure that all the assets are kept free from encumbrances. The equipment shall be maintained with all safety aspects and as per the CEA (Measures related to Electric Safety and Supply), Regulations, 2010 as amended from time to time. The TSP shall maintain data and communication link with the State Load Dispatch Centre (SLDC) or Regional Load Dispatch Centre (RLDC) as the case may be and adhere to its directions for operation of the assets and any shutdown activity for planned maintenance, emergency should be done in concurrence with the SLDC/RLDC. On occurrence of any Force Majeure event necessitating the tripping of equipment, the TSP shall inform the SLDC/RLDC immediately and adhere to the instructions received from them.
- 11.6 The TSP shall ensure the availability of the transmission system to be at least or higher than normative availability (in accordance with TSA in case of TBCB assets or as specified by the Appropriate Commission in case of RTM assets) for the last 3 years of the tenure of the Transfer Agreement, failing which a penalty to be specified in the Transfer Agreement shall be imposed. The Transfer Agreement may mandate

the TSP to provide the required assistance to the Sponsoring Transco for smooth return of ownership.

12. Tariff

In case of TBCB assets, the tariff adopted by the Appropriate Commission, as applicable during the tenure of the Transfer Agreement, shall continue to be collected by the SPV, subject to the provisions of TSA. In case of RTM assets, the Appropriate Commission may specify a premium, which may be provided over and above the prevailing return on long term government securities (5 yr G-Sec) to arrive at the rate of return on equity applicable for the tenure of the Transfer Agreement. This shall be done prior to the process of monetization is undertaken by the Sponsoring Transco. Other parameters for determination of tariff for RTM assets shall be in accordance with the Tariff Regulations specified by the Appropriate Commission from time to time.

13. Bidding and evaluation

- 13.1. The Investor Entity shall be selected in accordance with these guiding principles, through a fair and transparent bid process which may be undertaken by the Sponsoring Transco with credible and professional transaction advisers.
- 13.2. The Sponsoring Transco may at its option either adopt a two-stage process featuring separate Request for Qualification (RfQ) and Request for Proposal (RfP) or adopt a single stage two envelope tender process combining the RfP and RfQ processes. The bidding process may preferably be conducted online through electronic medium. If desired, e-reverse auction may be adopted. In this context, while developing bidding documents, Model RfQ and Model RfP for PPP projects notified by the DoE, Ministry of Finance may be relied upon.
- 13.3. The bid documents so developed shall, interalia, include the technical report submitted by the technical consultant, the Transfer Agreement, the Transmission Service Agreement and minimum qualification criteria to be met by the bidders and any other standard bidding related requirements.
- 13.4. The technical criterion for eligibility may include companies and Investment Trusts, having experience in development and/or operation & maintenance of infrastructure projects. However, the Sponsoring Transco may opt for specific O&M experience in transmission sector also. The financial criterion may be a pre-specified net-worth in relation to a certain percentage of the estimated book value of assets (may be kept at 25% of such value).
- 13.5. The bidder may be given an opportunity to inspect the underlying asset base within a prescribed time window and in a manner specified in the bidding documents. Maintenance record of major equipment(s) for past three years or from the COD whichever is earlier, may be allowed to be inspected by the bidders.

- 13.6. The notice for RfP may be published in accordance with applicable procedures of the respective Sponsoring Transco suitably so as to accord it wide publicity. The bidding may preferably be done by way of International Competitive Bidding (ICB), subject to Government of India orders issued from time to time.
- 13.7. As is a normal practice in case of PPP projects, the Sponsoring Transco may undertake pre-bid interaction and may preferably provide written responses to pre-bid queries by prospective bidders / participants, and the same may be made available to all the other bidders.
- 13.8. The bidder quoting the highest Upfront Payment may be selected as Investor Entity.

14. Payment Security Mechanism

Collection and disbursement of transmission charges shall be done in accordance with relevant Regulations of the Appropriate Commission.

The payment security to TSP shall be as per relevant rules issued by the Ministry of Power from time to time.

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