In order to engage with our readers and simplify the legal complexities of the infrastructure sector, EPC World has partnered with Rajani Associates, a full-service law firm for a series of legal Q&As. Through this Legal Q&A column, **SHISHAM PRIYADARSHINI**, Partner, Rajani Associates and **AMISH SHROFF**, Associate Partner, Rajani Associates, will endeavour to address the queries and challenges faced by our readers.

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What is the Toll Operate Transfer (TOT) Model?

There are different types of Public Private Partnership (PPP) and new variations emerge continuously as each PPP contract responds to very precise needs, depending on the size of the project, the fund requirement by the Government, the risk allocation and such other factors. The prevailing PPP models are Built, Operate, and Transfer (BOT), Operate Manage and Transfer (OMT) Build, Own, and Operate (BOO), Build, Own, Operate and Transfer (BOOT), Design, Build, Finance and Operate (DBFO), Design, Build, Finance, Operate and Maintain (DBFOM) and Lease Operate and Transfer (LOT).

As far as the road projects in India are concerned, they are generally awarded under one of the three (3) formats, which being – BOT Toll, BOT (annuity), and Engineering Procurement and Construction (EPC). In an attempt to monetize the public funded national highways projects, a report by the Committee on Revisiting and Revitalizing Public Private Partnership Model of Infrastructure chaired by Dr. V. Kelkar recommended monetizing operational projects with a formidable record of revenue generation, which can then be doled out to private parties for operation and maintenance (O&M).

Moving further in this direction, in November 2016, the National Highways Authority of India (NHAI), under the aegis of Ministry of Road, Transport and Highways (MRTH), initiated the implementation of asset recycling in India. Under this new format, the private players (such as infrastructure developers, private equity, institutional investors like pension, wealth funds) are allowed to bid for certain operational road projects. This new model is called the toll-operate-transfer (TOT) model. This new format also received credence due to the outcome of a study done under the World Bank Technical Assistance Project.

Under the TOT model, toll highways operated by the NHAI for over two (2) years may be leased out to the winning bidders, who will then have the right to collect toll and operate the project for a fixed duration of thirty (30) years, against an upfront payment to be made by such winning bidders to the NHAI.

In August 2016, the Cabinet Committee on Economic Affairs authorized NHAI to lease up to 75 national highway projects which are earning toll for a minimum of two (2) years to various private players on the TOT basis. It is expected that the entities, including domestic roads companies and international funds, will participate in the bidding process. The proceeds from monetization through this route will be used to invest in developing more highways. It is estimated that the total value of these 75 projects can cover the construction cost of around 2,700 km of road in India. The TOT model is common and is adopted in the US, Europe and Australia where authorities have leveraged it to fund other projects. Notable projects like the Chicago Skyway, the Indiana Toll Road, Puerto Rico Highway PR-22 and the Penang Bridge have been successfully implemented under this model. While in India projects have been leased on TOT basis, in the State of Andhra Pradesh and Gujarat.

How will the TOT model prove beneficial for the road projects?

The TOT model creates an opportunity for the private players to invest in low risk operational assets without having an obligation to construct the project. This model will allow private parties to undertake long term O&M obligations on payment of a lump-sum concession fee.

The fund generated from such monetization can be utilized for development of other highway projects in the country, which would benefit the end users. As for the Government, this TOT model provides for efficient O&M of highways by the private sector. Further, the better O&M of public funded NH stretches will result in enhanced quality of service for highway users across the country. Monetization of national highway roads is also expected to create a framework for the long term institutional investors to participate in operational highway projects with stable toll revenue outlook.

What is Bharatmala Pariyojna?

An ambitious road and highways network project to cover the total road length of around 51,000 km comprising economic corridors, coastal roads and expressways is named as Bharatmala by the Government of India. The total project cost for Bharatmala is estimated to be ₹ 10 trillion crore and is the largest ever outlay for a government road construction scheme in India.

The project would connect India's vast west-to east land border of 2,933 km, from Gujarat to Mizoram. The proposed road network will be further linked to a road network in coastal states, from Maharashtra to West Bengal. The project aims to bring entire North-East in to the main stream of the country with all the remote hilly terrains getting connected via road network to the mainstream of the country. Bharat Mala is also designed to improve connectivity in border areas for the movement of troops, arms, ammunitions and other essential commodities during exigencies and war situations.

The Ministry of Road has also prepared a road map for the project. According to the plans, most of the project under Bharatmala will be implemented using engineering-procurement-construction (EPC) model and the National Highways Authority of India will be given full autonomy to implement the project. The Government has proposed to undertake the project in a phased manner with the first phase of 29,000 km to be developed with an aggregate amount of around ₹ 5.5 trillion.

Bharatmala will subsume the road projects under the National Highways Development Project (NHDP) launched in 1998 by the then prime minister Atal Bihari Vajpayee. After the Golden Quadrilateral project which is considered the largest highway project in India and the fifth longest in the world, Bharatmala has been another such large scale project being proposed by the current Government. The Public Investment Board (PIB) has signed off on the Bharatmala project and the clearance of the Union cabinet for the first phase has also been granted.

What is Sagarmala Pariyojna?

India is bound by sea from 3 directions which gives the country the biggest coastal area. India has 7,500 km long coastline and 14,500 km of potentially navigable waterways. While maritime sector in India has been the backbone of the country's trade and has grown manifold over the years, it has not yet reached its optimum utilisation. With the aim to harness strategic location on key maritime trade routes, the Government of India has proposed the flagship strategic, customer-oriented initiative called Sagarmala programme. Under Sagarmala Programme, approximately 415 projects, at an estimated investment of around USD120 billion have been identified to cover port modernization, new port development, port connectivity and enhancement, port-linked industrialization and coastal community development. The scheme is proposed to be implemented in a phase wise manner over a period twenty (20) years from 2015 to 2035. The six mega ports which are planned to be developed under Sagarmala are in West Bengal (Sagar Island), Odisha (Paradip Outer Harbour), Tamil Nadu (Sirkhazi and Enayam), Karnataka (Belikeri) and Maharashtra (Vadhavan).

The programme aims to promote port led economic development in the country by enhancing the connectivity of the ports to the hinterland, optimizing cost and time of cargo movement through multi-modal logistics solutions including domestic waterways (inland water transport and coastal shipping). One of the key objectives of the Sagarmala programme is to increase the share of coastal shipping and inland navigation in the multi-modal mix of different modes of transport. In order to equip ports for movement of coastal cargo, the scope of coastal berth scheme has been expanded and merged with Sagarmala Programme. Under the scheme, the financial assistance of 50% of project cost is proposed to be provided to major ports or State Governments, as the case may be for the construction of coastal berths, breakwater, mechanization of coastal berths and capital dredging. The initiative also envisages the growth of coastal and inland shipping as a major mode of transport for carriage of goods and people along the coastal and riverine economic centers. Besides promoting sustainable development of coastal communities (through skill development & livelihood generation activities, fisheries, coastal tourism etc.) the initiative also aims to de-bottleneck and enhance the capacity of existing ports and to encourage the development of new greenfield ports.

The Union Cabinet has approved the incorporation of Sagarmala Development Company (SDC) for the port-led economic development under its ambitious Sagarmala project. SDC will be incorporated under the Companies Act, 2013, with an initial authorized share capital of ₹ 1,000crores and an issued and subscribed share capital of ₹ 90 crores.

This is rightly being referred to as the "blue revolution" as it includes the port led development and coastal lines development for the growth of India. Sagarmala when integrated with the development of inland waterways will help to reduce cost and time for transporting goods, benefiting industries and export/import trade.The aims is to modernize the ports in India which will lead to an estimated saving up to ₹ 40,000 crore per year spent on logistics by key industries.

The prime objective of the Sagarmala project is to provide infrastructure to transport goods to and from ports quickly, efficiently and effectively and to provide intermodal solutions, enhanced connectivity with the main economic centres and beyond through expansion of rail, inland waterways, coastal and road services. EPC World