

# Gati Shakti Multi-Modal Cargo Terminal- An Introduction to Indian Railways' New Initiative in Freight Operations

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## Abstract

Indian Railways play a pivotal role in transporting goods along the length and breadth of India. Obviously, Indian Railways occupies a lion's share in the supply chain network nationwide. Private parties are allowed to construct their own terminals for loading freight onto goods trains. But, as per railway policy, they are required to bear the entire expenses for construction at the take-off point even if the land on which it is constructed is owned by railways. The private parties are also required to undertake the maintenance of such terminals. It becomes a cumbersome exercise for private parties both in financial and technical terms to run a private freight terminal. Recently, the prime minister announced a policy to bring together all infrastructure projects in a single frame. The railways have introduced the Gati Shakti Multi-Modal Terminal, whereby all the expenditures are borne by the railways and private parties are free from the burden of bearing the expenditure. Since the concept was introduced recently and is gaining popularity, an attempt to measure the outcome is too early. Nevertheless, this article throws light on the major aspects of the Gati Shakti Multi-Modal Terminal policy implemented by Indian Railways.

Keywords: Take Off Point, Rates Master Circular, Freight Operations Information System, Private Freight Terminal

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### Introduction:

Since 1990, the world economy has witnessed a widespread proliferation of liberalisation policy and advancement in the field of science and technology. Information technology and communication infrastructure sector developed in leaps and bounds which paved the way for transmitting messages and conversations at lightning speed. Obviously, competition among business entities gained momentum and attained pace within a short span of time.

In order to tide over the unsteady business environment incumbent with a large number of products with a few customers, commodity

suppliers and service providers needed to act on a real-time basis (D.K. Agarwal; 2017). Consequently, business entities were badly needed to have more systematized and integrated activities related to the movement and storage of goods so that they can be delivered to ultimate customers within a limited time frame.

The concept of Supply Chain Management emerged as a stalwart in meeting the requirements of ever-growing IT and marketing sectors. The concept of Supply Chain Management was to put into practice offering the best quality products at least price on a real-time basis and that too maintaining

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an adequate inventory level which will not lead to stock out situation.

The economic development of a nation depends upon the efficient system of transportation of both men and materials. From the point of procurement to the point of consumption, the materials need to be transported in a seamless manner. It, at any point, the chain of transportation is broken, the entire chain of supply gets hampered

(Bharadwaj, 2020). However, with the advent of effective channels of communication, artificial intelligence, information technology and trained manpower, the system of supply chain functions smoothly.

Traditionally the modes of transportation comprise of road, rail, air and sea routes. A table of comparison of different modes in terms of speed and economy is depicted below:

Table:1  
Comparison of Modes of Transportation

Mode of Transportation	Speed	Capacity	Economy
Road	Average	Low	Moderate
Rail	Moderate	High	Cheap
Air	High	Low	Costly
Sea	Slow	Very high	Cheap

Source: Logistics Management; Satish C. Ailawadi, Rakesh P. Singh

It is obvious that for an average supplier, road and rail routes are the cheapest as far as capacity and speed are concerned. However, with skyrocketing fuel prices and increased carbon foot print, the dependence on roads as medium to transport has become a costly affair. On the other hand, transportation through the railroad is greener with usage of electric locos and high-capacity wagons. One fully loaded goods train can keep approximately 100 trucks off the roads. (Saruchera, 2017)

In fact, trucks loaded on flat cars in railway terminology known as Ro-Ro (roll on roll of) services help to attain economy in fuel and is popular in European Union (K.P. Sharma & Sanjiv Malhotra; Indian Railway Commercial Management & Rules). This is only one among the numerous advantages for the carriage of goods through railways.

**Multi-modal transit hubs**

It has been long since the business entities identified the process of coordinated operations of all modes of transportation. The results will be synergistic if all the modes coordinate their efforts. And also, as a panacea

to avoid competition among different modes, Supply Chain Management came into being. The strategy behind the SCM was to combine the services of different modes and attain economy in providing the commodity to the end user on a real-time basis (D.K. Agarwal; 2017). The points at which commodity is exchanged from one mode to another is called as multi-modal transit hubs. For instance, if a commodity arrives at Cochin harbour in a freight liner, the same can be taken to the nearest goods siding or loading point in trucks. From the goods siding, the commodity starts its journey in wagons to its final destination, which may be far away in a remote village in Tamil Nādu or farther.

**Railway Terminal**

In terms of freight handling, a railway terminal is an end station at which goods are loaded or unloaded and gathered together to be carried to the end user. It has become inevitable for railways to increase the efficiency of terminals owing to growth in freight traffic and competition from other logistics service providers.

Railways promoted the participation of

private entities in setting up warehouses and goods shed either on land owned by railways or private land. Terminal Development Scheme, Kisan Vision Project, Automobile & Ancillary Hub and Private Freight Terminal are a few examples of railways' neo-liberal policies. (K.P. Sharma & Sanjiv Malhotra; Indian Railway Commercial Management & Rules)

### Types of railway terminals

#### Railway-owned Goods Sheds or railway siding on railway land-

These are the common goods sheds owned and operated by Indian Railways open to clients for carrying commodities wherein all the transactions are done and recorded by railway staff. Railways cherish all the rights to owning and operating such goods sheds or sidings.

#### Private sidings-

Private sidings are built on land owned by private parties or clients. Such sidings will be located within the manufacturing or mining area of the party concerned. Private sidings provide convenience for loading or unloading commodities within the premises under a special arrangement and approval from railways.

In order to augment freight carriage, railways, with the permission of the owner of private siding, allow the use of private sidings by parties other than the owner.

#### Privately owned container handling terminals-

Privately owned container handling terminals are also owned by private parties only difference is that such terminals deal with containers. The operations are done by Container Train Operators (CTOs) in accordance with the provision of the Master Concession Agreement.

#### Private freight terminals-

Private freight terminals are owned and operated by the terminal management company on land owned by private parties acquired through private investment. Such

terminals are operated in pursuance of PFT policy for handling of all types of traffic. (Concession Agreement)

### Prime Minister's Gati Shakti Scheme

Prime Minister's Gati Shakti Scheme is an ambitious scheme chalked out to bring together all the infrastructure projects of various industries and state governments.

The scheme eyes at the improvement of connectivity among economic zones. Enhanced connectivity leads to better transportation and coordination among logistic service providers and businesses, which enhance the competitiveness of Indian industries.

In line with Prime Minister's Gati Shakti Scheme, railways introduced a new policy for its cargo terminals christened 'Gati Shakti Multi-Modal Cargo Terminal' (GCT).

### Gati Shakti Multi-Modal Cargo Terminal

Gati Shakti Multi-Modal Cargo Terminals are introduced to promote the proliferation of new cargo terminals and to improve the facilities of existing terminals which will enhance the revenue from freight operations.

Gati Shakti Multi-Modal Cargo Terminals seek to cover all cargo terminals, whether new or under construction or those waiting for approval from the authority. This policy is liberal in nature since it provides an opportunity for existing cargo terminals to migrate to the new Gati Shakti Multi-Modal Cargo Terminal policy by submitting a request to Divisional Railway Manager, provided such terminals clear all pending dues and withdraw arbitrations if any.

### Parties eligible to establish Gati Shakti Multi-Modal Cargo Terminal:

The following category of applicants are permitted to establish Gati Shakti Multi-Modal Cargo Terminal:

1. Individual or sole proprietorship firms
2. Hindu Undivided Family
3. Partnership firm
4. Company registered under Companies

- Act, 2013
- 5. Limited Liability Partnership
- 6. Registered society or trust and
- 7. Joint Venture or consortium.

**Application and approval**

Nodal Officer

Divisional Railway Manager shall be the nodal officer for all issues regarding the setting up and/or operations of a Gati Shakti Multi-Modal Cargo Terminal.

Coordinating Officer

During the approval and construction stage- Senior Divisional Operations Manager

After commissioning- The senior Divisional Commercial Manager

Capital cost:

The initial capital expenditure at the time of setting up shall be entirely borne by the Gati Shakti Multi-Modal Cargo Terminal Operator itself.

The expenditure related to setting up of common user traffic facilities<sup>1</sup> like tracks, signalling equipment, and wagons is to be borne by railways. The railway shall also bear the cost of maintenance of tracks and equipment. If the connectivity to the Gati Shakti Multi-Modal Cargo Terminal from the existing station is not feasible, the construction of new block or station can be considered.

Table:2  
Bearing of Expenses between GCT and Railways

Nature of expenditure	Borne by
Initial capital expenditure	Gati Shakti Multi-Modal Cargo Terminal Operator
Work, ownership and cost of operations and maintenance	Indian Railways
Repayment of capital expenditure to Gati Shakti Multi-Modal Cargo Terminal Operator	If loading of 1 metric ton of goods is achieved within 2 years of establishment.

Source: FOIS Web portal 1.Facility available for common use for rail users without any discrimination including yards/additional lines/loop lines at the serving station, crossing station, patch doubling etc.

**Security of assets:**

The responsibility to upkeep the assets is described in the table below:

Table:3  
Fixation of Responsibility as to Location of Assets

Location of assets	Responsibility
Over railway land	Indian Railways
Outside railway land and on land licensed to Gati Shakti Multi-Modal Cargo Terminal Operator	Gati Shakti Multi-Modal Cargo Terminal Operator

Source: FOIS Web portal

In adverse circumstances, if theft of assets happens in non-railway land or railway-owned land licensed to Gati Shakti Multi-Modal Cargo Terminal Operator, the loss shall be borne as follows:

Table:4  
The bearing of Expenses Related to Restoration of Lost Assets

Restoration	Indian Railways
Expenditure for restoration	Gati Shakti Multi-Modal Cargo Terminal Operator

Source: FOIS Web portal

**Maintenance of assets:**

The assets, including tracks and signalling equipment installed on railway land but not land licensed to Gati Shakti Multi-Modal Cargo Terminal Operator, shall be maintained by railways at its own cost.

The overhead equipment (OHE) from the take-off point onwards shall be maintained by railways.

The Gati Shakti Multi-Modal Cargo Terminal Operator shall be responsible for the maintenance of all other infrastructure and equipment inside the Gati Shakti Multi-Modal Cargo Terminal, which are not used or accessed by railways’ rolling stock and also the infrastructure required for loading and unloading freight.

**Cost of electrification:**

- (1) New Gati Shakti Multi-Modal Cargo Terminal- The entire cost of electrification of the stretch of railway track between take-off point<sup>1</sup> and Gati Shakti Multi-Modal Cargo Terminal and also that of the premises shall be borne by the Gati Shakti Multi-Modal Cargo Terminal Operator.
- (2) Existing terminals- The railways shall bear the cost of electrification, including that of railway lines connecting the terminal.

**Handling of wagons:**

All equipment like tippers, and bulk handling systems used for loading and unloading of railway wagons shall be provided by Gati Shakti Multi-Modal Cargo Terminal Operator. Such equipment shall be commissioned provided they comply with specifications put forth by Research Designs & Standards Organisation.

Damage and deficiency charges shall be

slapped on Gati Shakti Multi-Modal Cargo Terminal Operator in case of any loss caused by way of damage, dents etc., to wagons from the side of Gati Shakti Multi-Modal Cargo Terminal Operator.

**Maintenance of wagons:**

Generally, maintenance facilities for wagons are not provided in the premises of the Gati Shakti Multi-Modal Cargo Terminal. However, circumstances demand so for the provision of maintenance facilities, it may be permitted. The expenses of which are to be borne by the Gati Shakti Multi-Modal Cargo Terminal Operator. But the operational cost for employing railway staff and costs related to the purchase of materials shall be borne by the railways.

**Freight charges:**

Freight transported from Gati Shakti Multi-Modal Cargo Terminal shall be charged at through distance<sup>1</sup> basis pertaining to the instructions laid down in Rates Master Circular w.e.f. 24<sup>th</sup> September 2014, subject to modification from time to time (Master Concession Agreement; Govt. of India, Ministry of Railways).

Engine on Load policy which is also modified from time to time, shall be applicable to the new Gati Shakti Multi-Modal Cargo Terminal.

Gati Shakti Multi-Modal Cargo Terminal Operator may forego Engine on Load policy subject to the approval of Divisional Railway Manager if the officer is satisfied that implementation of the same is not operationally feasible.

**Provision of weighbridge:**

It is required by all Gati Shakti Multi-Modal Cargo Terminals which have outward freight i.e., where goods are to be loaded onto wagons

to install Electronic In Motion Weighbridge (EIMWB). A Gati Shakti Multi-Modal Cargo Terminal without EIMWB may be allowed to operate by the Divisional Railway Manager. In such case, the Divisional Railway Manager in consultation with Chief Freight Transportation Manager may nominate an alternate railway weighbridge for a period of six months.

The Gati Shakti Multi-Modal Cargo Terminal Operator shall be liable to bear the cost related to procurement, installation, operation and annual maintenance contract.

The penalty shall be levied on Gati Shakti Multi-Modal Cargo Terminal Operator if a weighbridge goes out of service and not rectified within a period of three days. If it is found inevitable, the Divisional Railway Manager may permit a Gati Shakti Multi-Modal Cargo Terminal Operator to install EIMWB on land either partially or wholly owned by the railway.

**Installation of Freight Operations Information System (FOIS) and Terminal Management System (TMS):**

The Gati Shakti Multi-Modal Cargo Terminal Operator shall install FOIS and TMS with limited access as prescribed by the railway. The cost of installation shall be borne by Gati Shakti Multi-Modal Cargo Terminal Operator. Railway Receipts<sup>2</sup> related to freight loading will be made only through TMS. The

**The approval process of Gati Shakti Multi-Modal Cargo Terminal Operator located entirely on non-railway land:**

The standing committee to grant approval comprises of-

Table:5  
Composition of Standing Committee

Chairman of the Committee	Divisional Railway Manager
Convenor	Senior Divisional Operating Manager Senior Divisional Commercial Manager and Senior Divisional Engineer/Coordination.
Members	Senior Divisional Electrical Engineer/Traction Distribution and Senior Divisional Signaling and Telecommunication Engineer.

Source: FOIS Web portal

maintenance of both FOIS and TMS shall be undertaken by railways.

**Agreement, Dispute and Termination:**

Agreement- The agreement related to the establishment of the Gati Shakti Multi-Modal Cargo Terminal shall be signed by Senior Divisional Commercial Manager, who is the authorised signatory. It will be signed before the formal issue of commercial notification and operations.

Resolution of disputes- Disputes, if any arising during the course of operations, shall be heard and decided by Divisional Railway Manager whose decisions shall be final and binding.

Arbitration- Arbitrary proceedings shall be done as per the permission of Railway Conditions of Contract, 2020 as amended from time to time.

Termination of Agreement- The agreement with Gati Shakti Multi-Modal Cargo Terminal Operator shall be terminated if any serious irregularity is committed by Gati Shakti Multi-Modal Cargo Terminal Operator, which includes the following:

1. A grave breach of the terms and conditions of the agreement
2. Violation of Railways Act, 1989 and
3. Commission of any unlawful act.

**Submission of application:**

Details regarding filing of application fees is given below in a tabular form.

Table:6  
Details of Filing Application Fee

Mode of payment	Online or DD drawn in favour of Senior Divisional Finance Manager
Paid to	Divisional Railway Manager
Amount of application fee	INR 20,000/-
Nature of application fee	Non-refundable
Details to be furnished in the application form	1.Details of applicant- Name and designation 2.Concept plan-Location and sketch 3.Traffic projection- Commodities, expected volume and rakes, types of stocks

Source: FOIS Web portal

**Submission of details of project and Engineering Scale Plan:**

The applicant, on receipt of In-Principle Approval (IPA), the Gati Shakti Multi-Modal Cargo Terminal Operator shall submit details of the project and ESP to Divisional Railway Manager. The submission shall be done online. The details of the project shall consist of:

1. Details of the ownership of the land
2. Location and details of EIMWB if required
3. Details of the cargo handling mechanism inside the terminal
4. Standard layout chosen for the terminal
5. Alignment of connectivity line from take-off point to Gati Shakti Multi-Modal Cargo Terminal.

**Post approval proceedings:**

The applicant shall remit a security deposit of INR 10 lakhs. If the applicant is desirous of making any alterations in ESP, it shall be done only with the approval of Chief Engineer/ Planning and Development. Upon remitting the security deposit, the applicant shall be permitted to commence construction of the Gati Shakti Multi-Modal Cargo Terminal.

Once the construction work has been completed, the Divisional Railway Manager and Senior Divisional Operating Manager shall permit the preparation of and approve the Signaling Interlocking Plan and shall ensure that the processes are accomplished without any delay.

If the applicant fails to commence construction of the Gati Shakti Multi-Modal Cargo Terminal within six months or fails to complete the construction within a period of twenty-four months from the date of granting approval, the railways shall have the right to keep the approval in 'abeyance'.

**Terminal charges:**

Terminal charges<sup>1</sup> for each rake handled shall be levied on Gati Shakti Multi-Modal Cargo Terminal established on non-railway land. However, such terminal charges shall be reimbursed in future.

If the Gati Shakti Multi-Modal Cargo Terminal Operator happens to be the consignor and consignee of load, then no terminal charges shall be levied.

If the wagons operated are privately owned, then the Gati Shakti Multi-Modal Cargo Terminal Operator shall be freed from the payment of terminal charges.

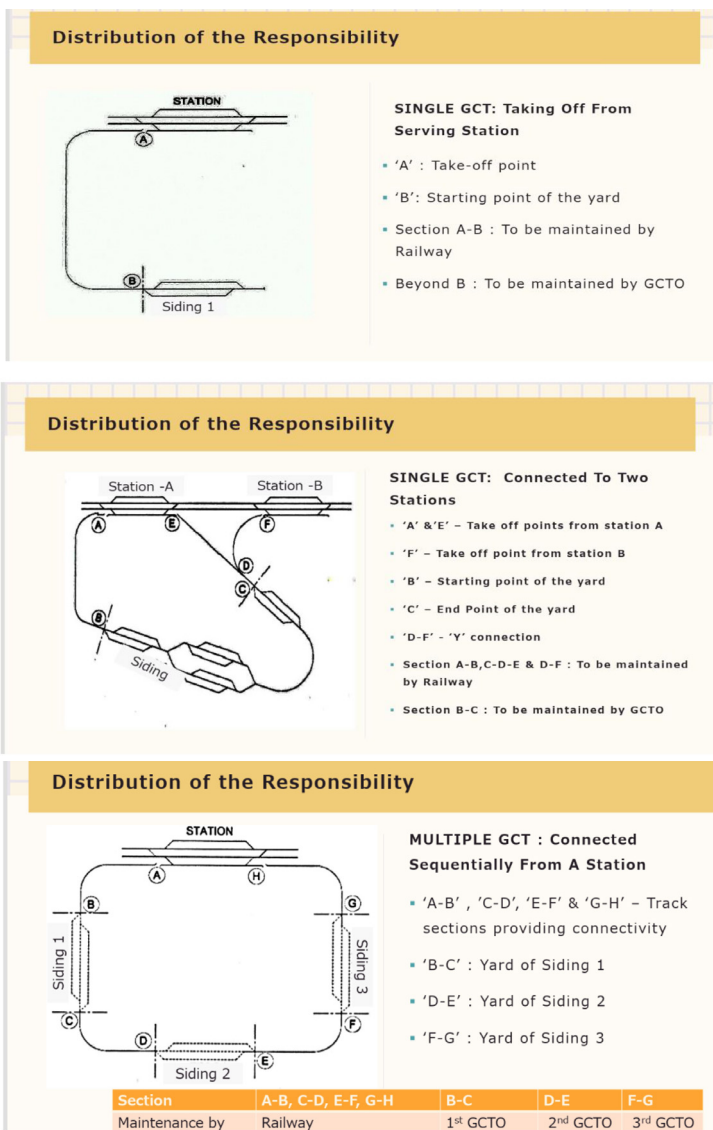


Figure 1 Source: FOIS Web Portal, Figure 2 Source: FOIS Web Portal, Figure 3 Source: FOIS Web Portal 1

**Expected Outcomes of GCT:**

Terminal operations are laborious tasks involving loading and unloading of freight, billing, weighing and dispatching of wagons. Moreover, the responsibilities of constructing and maintaining the terminals in the case of private freight terminals were solely placed upon private parties. With the implementation of the Gati Shakti Terminals, Private parties need not bother about installing equipment and assets, as the same will be done by the rail-

ways. Railways will undertake all the capital costs of common user facilities required for running the terminal. Moreover, the entire expenses incurred by the private parties on the building block section or dedicated track can get it reimbursed if the party plans to move more than 1 metric ton of freight annually.

The terminals under the scheme are expected to provide a single window operation wherein the freight dealers can meet their wants of transporting their cargo from rail to



road and from there to air or sea route. GCT operators are also open to establish facilities for value-added services like warehousing, processing, packaging etc. GCT have the potential to cater to the needs of the uniqueness of commodities being dealt like in the case of Petroleum Oil Lubricant (POL), milk and other perishable commodities and harvests of farmers which require its own equipment and machinery for procurement, storage and loading and unloading. GCT operators are required to maintain standards of services as the terminals are subject annual inspection by the railway administration. Consequently, the ultimate users are assured of quality products which meet their requirements.

Gati Shakti Multi-Modal Cargo Terminal will be a game changer in the near future as railways have recognised the need for customer-friendly operations, a green environment, protecting its customers from exploitation by road carriers and rising fuel prices.

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