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PPP Cell, Infrastructure Directorate
Ministry of Railways, Government of India
Rail Bhavan, New Delhi-110001

December 2014

सत्यमेव जयते

Overview of Framework for Participative Models of Rail Connectivity and Domestic & Foreign Direct Investment

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Overview of Framework

for

Participative Models of Rail Connectivity

and

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C O N T E N T S

FOREWORD

Indian Railways require huge resources to augment its capacity and for modernization. Initiatives for building rail connectivity to ports and mines have been undertaken successfully by involving customers. A Participative Policy was launched in December, 2012 subsequent to approval of Cabinet for undertaking rail connectivity and capacity augmentation projects through five participative models. Financial commitments have already been made for 17 projects under this policy. The recent initiative of Government of India for opening up of Foreign Direct Investment (FDI) in rail sector will also open up large opportunities for investment.

The past experience shows that there is need for a transparent, balanced, fair and bankable framework under which customers/investors can make investments in the rail sector. Ministry of Railways on the basis of Participative Policy of December, 2012 has prepared Model Concession Agreements for different participative models. These agreements prepared by the Committee of Executive Directors at Railway Board in consultation with Legal Consultant and Ministry of Law provide a framework for rights and obligations of different parties and risk allocation between them in a fair manner thereby balancing risks and responsibilities. The agreements will be helpful to Government, customers/investors and financial institutions/bankers to give a push to building and strengthening rail infrastructure.

Sectoral guidelines for Domestic/Foreign Direct Investment have also been prepared by the EDs Committee in Railway Board after elaborate consultations with the various stakeholders including financial consultants, investment companies and Government agencies. These guidelines have identified certain projects in different permissible areas. Broad salient features under which each permitted activity can be undertaken are also provided for guidance.

The present booklet provides an overview of the framework for different Participative models, projects to be undertaken through EPC and sectoral guidelines for Domestic/ Foreign Direct Investment. The overview captures the essence of the detailed agreements and sectoral guidelines.

I compliment PPP Cell of Infrastructure Directorate, Ministry of Railways for preparing the agreements and sectoral guidelines. I am sure the document and the initiatives will enable Ministry of Railways in attracting investments in rail sector.

5th December 2014

Suresh Prabhakar Prabhu
Minister of Railways
Government of India

MESSAGE

Raising resources through Public Private Partnership for network strengthening and modernization is critical for Indian Railways which has to facilitate the economic growth of the country.

Lot of work has been done in last few months in providing a thrust to private investment. Launching of new Model Concession Agreements and sectoral guidelines for Domestic/Foreign Direct Investment are appreciable steps towards providing a good framework for attracting private investments.

I am happy to note that PPP Cell of Infrastructure Directorate, Railway Board has published this document on "Overview of framework for participative models for rail connectivity and Domestic/Foreign Direct Investment." This document will be a useful source of reference to investors/customers, consultants and financial institutions in explaining the key private investment policies of Ministry of Railways.

I hope the initiative will go a long way in attracting private investments in Railways.

5th December 2014

Manoj Sinha
Minister of State for Railways
Government of India

MESSAGE

Indian Railways, an engine of economic growth of the country requires continuous infusion of funds and technology for its infrastructure and modernization. The resource challenge facing the Railways has led to greater focus on alternative financing mechanisms. Globally, rail sector has found limited success with Public Private Partnership (PPP). However, the successful experimentation on Indian Railways in building last mile connectivities for ports and mines since 2002 has enabled us to prepare investor friendly Model Concession Agreements which balances the interest of Government and private sector in an equitable manner.

Investment companies and financial institutions have given a positive feedback on the model documents especially the agreement on BOT where Ministry of Railways had given comfort to the investors by covering part of the traffic risk.

Initiative of opening of Foreign Direct Investment in rail sector by the present Government is an important step to provide a framework for attracting investments which will also lead to modernization and technology infusion. Ministry of Railways has prepared sectoral guidelines for guidance of investors along with a basket of projects.

I compliment the PPP Cell of Infrastructure Directorate, Railway Board for the work done in last one year for building an appropriate policy framework through which Domestic/Foreign Direct Investment can be attracted.

This document providing an "Overview of the framework for participative models and Domestic/Foreign Direct Investment" will enable better understanding of policies and initiatives undertaken by Ministry of Railways for attracting private investments.

5th December 2014

Arunendra Kumar
Chairman, Railway Board
Ministry of Railways,
Government of India

INTRODUCTION

Indian Railways have successfully implemented certain port/ mine connectivity projects since 2002 involving its customers and users. A policy for participative models for rail connectivity and capacity augmentation projects was issued in December, 2012 with the aim of attracting private investments in building/construction of last mile connectivity's. The policy provides following five models for implementation of various types of rail-connectivity and capacity augmentation projects:

i. Non-Government Private Line Model

ii. Joint Venture (JV) model

iii. Build, Operate and Transfer (BOT) model

iv. Capacity augmentation with funding provided by customers

v. Capacity augmentation through annuity model

Three of these models (private line, JV and customer funded) involve participation of strategic investors/customers and two other (BOT and Annuity models) are pure PPP models. Subsequent to the policy, Model Concession Agreements have been prepared by the ED's Committee consisting of ED/Traffic/PPP, ED/Civil/Infra and ED/Finance/PPP for different models in consultations with legal consultant and other stakeholders. The approved MCAs have been uploaded on IR's website. These Agreements provide framework for balancing risks and responsibility. New concepts like Reserved Services, Role of Independent Engineer, Performance Guarantee, Escrow Account and Key Performance Indicators have been incorporated. In BOT Agreement concepts like Projected Revenue, Traffic Risk by Government and linking tariff with WPI have also been incorporated. In addition to the aforesaid model agreements, a model EPC contract document for Railway Projects has also been prepared.

To attract Foreign Investment in the rail sector required changes in the policy framework. Government of India, vide Notification No. S.O.2113(E), dated 22nd August, 2014, reviewed its policy for private investment in rail infrastructure and amended the list of industries reserved for public sector under item No. 8 of Schedule-I of the Notification No.S.O.477(E) dated 25th July, 1991. Accordingly it has been decided to permit FDI in the following activities of the Railway Transport sector:

Construction, operation and maintenance of the following:

(i) Suburban corridor projects through PPP,

(ii) High speed train projects,

(iii) Dedicated freight lines,

(iv) Rolling stock including train sets, and locomotives or coaches manufacturing and maintenance facilities,

(v) Railway Electrification,

(vi) Signaling systems,

(vii) Freight terminals,

(viii) Passenger terminals,

(ix) Infrastructure in industrial park pertaining to railway lines or sidings including electrified railway lines and connectivity's to main railway line; and

(x) Mass Rapid Transport Systems.

Ministry of Railways in November 2014 has also approved and notified sectoral guidelines for Domestic and Foreign Direct Investment based on the recommendations of the Committee of Executive Directors consisting of ED/Traffic/PPP, ED/Infra (Civil), ED/Finance/PPP,ED/EE/ Development, ED/Mechanical/Projects and ED/Signal Development.

The present compendium provides an Overview of the five Models of Participative Policy, framework of EPC contract and sectoral guidelines for Domestic and Foreign Direct Investment.

Non-Governmental Railway Private Line Model

Need for the framework

Sea ports, large mines, logistic parks, and other similar industries / industrial cluster which serve large number of customers require efficient rail connectivity. Such utilities are like Indian Railways, which serve various customers and are part of the logistic chain. For such facilities, provision of first/last- mile connectivity to the main railway line needs to be construed as an integral part of the main project.

The rail connectivity to such utilities/clusters could be developed by the owner/ concessionaire of the facility as private railway line by acquiring land and making investment in the line. This would be declared as Non-Government Railway for public carriage of mostly goods but also passengers, if needed. All the relevant rules and regulations of Railways provided in the Railway Act 1989 connected with the operational, commercial and maintenance aspects will be applicable to the Non-Government Railway. The owner/ developer of the Non-Government Railway will be a provider of fixed infrastructure. Funding, construction, maintenance and renewal of assets will be done by the owner of the facility. The infrastructure will be used by the Indian Railways for transport of goods including that of other customers, using their own freight wagons and locomotives. Indian Railways will pay to such Non Government Railways user fee for usage of the infrastructure.

The present model aims to encourage construction of private lines as multi user facilities as distinct from private sidings which are used by one or more pre-specified users. The framework agreement of the model permits maximum control of creating such facilities to project developer/ owner. While implementing this model Zonal Railway should try to minimize/optimize the cost of construction and fasten the pace of required approvals and avoid application of private siding rules on such lines unless the framework or guidelines explicitly provide for such application. Since the line will be a private infrastructure there is no concession period for transfer of assets to the Government.

NGR line to be Railway Administration

Under the framework agreement, Government recognizes that the line built by the developer on a private land is primarily a private infrastructure. Hence, there is no concession period for transfer of assets to the Government. However, since Ministry of Railways is required to pay user charges to the developer and since the line is to be utilized by multi users, it is treated as Railway Administration under the Railway Act, 1989. Treating project developer as Railway Administration will allow them to undertake construction and maintenance activity efficiently.

Construction, Monitoring and Supervision of Rail System

As the Rail System will be a private

infrastructure the developer at its own cost and expense design, engineer, procure, construct, operate and maintain the rail infrastructure in terms of the agreement. The developer has to undertake construction of rail system within the specifications and standards of MoR in a time bound manner.

For monitoring of construction, developer is required to appoint an Independent Engineer (IE) at its own cost. Any observation by Zonal Railways on drawings had to be communicated in a time bound manner. Zonal Railway is also bound to issue safety certificate and commercial service certificate within a time bound manner. D&G charges of 0.25% will be charged by concerned Zonal Railways from the developer in case construction of Rail System is being done by the developer. No additional charges as specified for private sidings should be charged.

Zonal railway shall inspect and certify the maintenance of the Rail System at least once a year on payment of inspection charges specified in the Agreement.

Technical Parameters

The Rail System will be built as per standards and specifications specified by Ministry of Railways.

Maintenance and Capacity Augmentation of Rail System

The maintenance of the Rail System has to be undertaken by the developer. Service standards as enshrined in the agreement will need to be observed. The developer will be responsible for safety on the Rail System. In case the average daily traffic exceeds 120% of the system charted capacity, the developer will undertake necessary modifications to augment capacity.

Operation & Commercial

Indian Railways will provide seamless operation on private line and IR network. However, station staff and station operation normally will be undertaken by the developer. The commercial activities related to freight handling at the terminal will be done by goods clerk posted by IR whose cost shall be borne by IR. Operations on the private line by Developer, if required, can be permitted.

Performance of Rail System

The developer has to maintain the Rail System so that it achieves a minimum average speed of freight trains on quarterly basis. This indicator captures the performance of the Rail System . In case Key Performance Indicator (KPI) is not achieved, damages at the rate of 1% of the user fee for particular quarter will be levied on the developer for every 10% shortfall subject to a maximum of 5% of the user fee. The damages are more in the nature of deterrent and not a revenue stream for MoR.

Safety

The responsibility for safety on the Rail System will be that of the developer. The safety requirements of railway shall apply to all phases of construction, operation and maintenance. The developer has to ensure adequate facilities for rescue operation on the Rail System. Zonal Railway shall arrange relief and evacuation at the cost of developer, if requested in writing by the developer.

Concession Fee

Ministry of Railways will provide land for inter connection in a time bound manner at a nominal lease fees of rupee one per annum.

Reserved Services to be provided by Railways

Railways under the agreement have undertaken to provide certain services which cannot be undertaken by the developer. Such services have been named as Reserved Services. These Reserved Services pertain to providing rolling stock, crew, locomotion, fixing of tariff, booking and delivery of consignment and safety examination of rolling stock. This means Railways will undertake operation of trains on the Rail System. The charges for such Reserved Services will be recovered as specified in the agreement. Station operation and management is expected to be handled by the developer although the Agreement provides an option of this to the developer.

The developer will have to pay for railway staff , hire charges of wagons, locomotives and cost of running repair of wagons not included in wagon hire charges, cost of fuel/energy, cost of crew. The overhead costs at best Zonal Railway average will also be charged only on the cost of crew, running repair of wagons and cost of railway staff. This has been provided so as to insulate the developer from the impact of the system inefficiencies of Railways.

Fare

The developer does not have the flexibility to charge their own tariff. IR tariff will be charged on the project line.

User Fee

MoR shall pay user fee as provided in the agreement. The developer will pay the cost of reserved services as specified in the agreement.

Sidings

Ministry of Railways is entitled to undertake construction of any new rail line or siding taking off from the rail system. However, developer will not bear any cost in relation to cost of such siding.

Passenger Services

MoR may undertake passenger services on the rail system with the consent of Developer. However, all costs of operating such passenger services shall be borne by MoR. Cost of construction of any additional facilities to facilitate passenger services shall be shared as mutually agreed by the developer and MoR.

Termination

Ministry of Railways (MoR) shall terminate the agreement in case of default as specified in the agreement. Upon termination, MoR shall be entitled to take control of the railway land and the assets built by the MoR. Developer is also required to pay all direct costs incurred by MoR as consequence of default. Similarly, developer can also terminate the agreement in case of default by MoR. MoR in such case will be required to pay all direct costs incurred by the developer.

Approval

Since no investments of MoR are required in building such lines, the proposal will be approved by Zonal Railways. The project developer will submit a Detailed Project Report (DPR) which establishes project cost, land requirement and other project component requirements to Zonal Railway. This report will be considered by Zonal Railway and approval granted. In case developer wants to obtain 'in-principle' approval in absence of Detailed Project Report (DPR), the same will be approved by Railway Board.

Joint Venture Model

Need for the framework

In some railway projects, sanctioned or proposed to be sanctioned, it may be possible to identify the interested stakeholders who may participate in funding to expedite execution. Such projects can be implemented through formation of a Joint Venture (JV) with equity participation by the strategic investors. Two initial projects (Surendranagar-Pipavav Gauge Conversion and Hassan-Mangalore Gauge Conversion) through this route were implemented by Ministry of Railways. Subsequently five New Line project for connecting various ports (Kandla, Dahej, Krishnapatnam, Paradip and Angul- Sukinda) have been undertaken through Rail Vikas Nigam Limited (RVNL). Under the Participative policy of 2012 issued by Ministry of Railways these JV's will now be formed as per the guidelines of Joint Venture issued by Department of Expenditure vide OM No: 24/PF.II /2009 dated 21st July 2009 with the two deviations. First, selection of private sector equity partners will be done through Expression of Interest (EOI) on the basis of pre-defined technical qualifications based on parameters like net worth, minimum threshold of equity participation etc. and second project can be assigned to the JV by Ministry of Railways on nomination basis.

Number of issues was raised by the joint venture companies formed by RVNL regarding the bankability of projects as per the existing agreements. Many of these issues were addressed in the participative model policy of December, 2012 which is the basis of the Model Concession agreement.

The new policy of 2012 permits any of the Railway PSUs to participate in the joint venture formed to implement the projects. Already Joint Ventures have been formed with participation of Konkan Railway Corporation (Jaigarh Port connectivity) and with IRCON (Coal projects in Chhattisgarh).

The participating railway PSU or Ministry of Railways can undertake project development. Railway PSU as far as possible should invest its own funds in the Joint Venture. The Railway PSUs should call for Expression of Interest (EOI) for selection of joint venture partners. The debt by joint ventures so formed should be raised without any guarantee from Government of India.

Since the model is based on the guidelines of the JV issued by the Department of Expenditure, the cap on return on equity as in some of the existing Agreements has been removed. To address the issue of windfall gains the Agreement provides a review of concession in terms of traffic materialization after a period of 25 years from signing of concession agreement. The concession period of 30 years will be reduced or extended symmetrically depending upon traffic exceeding/ going below a Projected NTKM threshold. For this purpose the traffic will be measured after a period of 25 years from signing of concession agreement. However, the concession period shall not be less than 25 years or extended beyond 35 years. There would be no termination payment in the event of natural expiry of the concession period or attainment of the said traffic.

The model provides flexibility to joint venture Company for entrusting construction and maintenance work.

Joint Venture line to be Railway Administration

Under the framework agreement, Government recognizes that the line built by the joint venture company will be a Railway Administration under the Railway Act, 1989. Such treatment on one hand grants certain rights to the joint venture company and also subjects them to certain obligations under the Railway Act. Treating joint venture as Railway Administration will allow them to undertake construction and maintenance activity efficiently.

Role of Joint Venture Company

The joint venture company has to acquire land in the name of Ministry of Railways for construction of rail system or Railway may acquire the land on behalf of JV, if so requested. The company will construct, maintain and operate rail system in terms of the agreement. The company has to ensure commitment from its concerned shareholders regarding having made 25% investment in target facilities. This will avoid creation of joint ventures with non-serious shareholders. The joint venture company has to raise finance required for implementation of the project, has to construct the rail system in a time bound manner, and can undertake maintenance either itself or through Ministry of Railways under a separate agreement.

Financial close

The Joint Venture Company has to achieve financial close within one year from the effective date. Extension of the same can be granted subject to payment of damages to Ministry of Railways at the rate of 0.1% of the performance security for each day of delay.

Construction, Monitoring and Supervision of Rail System

The JV has to undertake construction of rail system within the specifications and standards of MoR in a time bound manner. JV must ensure transparency in project procurement, however, it can entrust construction through IR or its agencies. For monitoring of construction, JV is required to appoint an Independent Engineer (IE). Any observation by Zonal Railways on drawings need to be communicated in a time bound manner. Zonal Railway is also bound to issue safety certificate and commercial service certificate within a time bound manner. D&G charges of 0.25% will only be charged from the developer in case construction of Rail System is being done by the JV.

Zonal Railway shall inspect and certify the maintenance of the Rail System at least once a quarter on payment of inspection charges specified in the Agreement.

Technical Parameters

The Rail System will be built as per standards and specifications specified by Ministry of Railways.

Maintenance and Capacity Augmentation of Rail System

The maintenance of the Rail System can be undertaken by the JV or can be entrusted to Ministry of Railways through a separate Agreement. Service standards as enshrined in the agreement will need to be observed. The costs of maintenance are not part of the Reserved Services and have to be separately borne by the JV. The JV will be responsible for safety on the Rail System. In case the average daily traffic exceeds 120% of the system charted capacity, the JV will undertake necessary modifications to augment capacity.

Operation

Indian Railways will provide seamless operation.

Performance of Rail System

The JV has to maintain the Rail System so that it achieves a minimum average speed of freight trains on quarterly basis. In case Key Performance Indicators (KPIs) are not achieved, damages at the rate of 1% of the user fee for particular quarter will be levied on the JV for every 10% shortfall. The damages are in the nature of deterrent to the JV and are not a revenue stream for MoR.

Safety

The responsibility for safety on the Rail System will be that of JV in case the maintenance is undertaken by them. The safety requirements of railway shall apply to all phases of construction, operation and maintenance. The JV has to ensure adequate facilities for rescue operation on the Rail System. Zonal Railway shall arrange relief and evacuation at the cost of JV, if requested in writing by the JV.

Concession Fee

Ministry of Railways will provide land for inter connection in a time bound manner at a nominal fee of rupee one per annum.

Reserved Services to be provided by Railways

Railways under the agreement have undertaken to provide certain services which cannot be undertaken by the JV. Such services have been named as Reserved Services. These Reserved Services pertain to providing rolling stock, crew, locomotion, station operation, fixing of tariff, booking and delivery of consignment and safety examination of rolling stock. This means Railways will undertake operation of trains on the Rail System. Zonal Railways will retain 50% of the apportioned revenue as a cost for providing such Reserved Services inclusive of overhead charges, central charges and any incidental charges. The cost of maintenance of Rail System is not part of the Reserved Services cost. The reason for not including cost of maintenance of the Rail System in the Reserved Services is to achieve efficiency in maintenance through JV.

Fare

The JV does not have the flexibility to charge their own tariff. IR tariff will be charged on the project line.

User Fee

MoR shall pay full apportionment of revenue as user fee after deducting the cost of Reserved Services. The apportioned earning for the rail system will be calculated based on proportionate distance but after setting aside the terminal charges as applicable at the time of signing of the agreement. In case the rail system involves a terminal, the applicable terminal charge would be paid to the JV company as part of user charges in addition to the apportioned earning as per the agreement.

In case the viability /bankability of the rail system to be built by the JV company involves provision of the inflated milage for the rail system, the entire additional earning on this account will be part of User fee to be paid to the JV company without any share to MoR. However MoR reserves the right to review the percentage of inflated milage on yearly basis depending upon the growth of traffic on the rail system and sensitivity of price to demand.

Sidings

Ministry of Railways is entitled to undertake construction of any new rail line or siding taking off from the rail system. However, JV will not bear any cost in relation to cost of such siding.

Escrow Account

The joint venture company has to open an escrow account. This account will receive all inflows of funds and withdrawals will have to be strictly as per the provisions of the agreement.

Concession period

Under this model, the normal concession period is 30 years. However, at the expiry of 25th year, the actual NTKM should be compared with the estimated NTKM for the concession period. In case there is shortfall/excess in the actual traffic, the concession period will be reduced or extended in terms of this agreement. However, the concession period shall not be less than 25 years and will not be more than 35 years.

Traffic Guarantees from Shareholders

The traffic guarantees are not mandatory under this model. This is because the equity holders take the risk in proportion of their investments. However, such guarantees can be taken to mitigate the demand risk. Wherever such guarantees are taken, MoR has also to provide counter guarantee for provision of assured rolling stock.

Compensation for Breach of Agreement

In case JV is responsible for any material default or breach of agreement, it shall pay to MoR all direct costs suffered by MoR. MoR has to pay all direct costs in case of its material default.

Passenger Services

MoR may undertake passenger services on the rail system with the consent of Concessionaire. However, all costs of operating such passenger services shall be borne by MoR. Cost of construction of any additional facilities to facilitate passenger services shall be shared as mutually agreed by the developer and MoR.

Termination

Ministry of Railways (MoR) shall terminate the agreement in case specified defaults are not cured within 60 days period. Similarly, JV can terminate the agreement if MoR fails to cure its default within 90 days. Ministry of

Railways in case of JV's default during the operation period shall pay to the JV an amount equal to 90% of the debt due less insurance cover and 70% of the amount representing Additional Termination Payment. In case termination is on account of MoR's default, JV will be paid an amount equal to full debt due plus 150% of the Adjusted Equity and 115% of the amount representing Additional Termination Payment.

Approval

The Railway PSUs participating in the joint venture will undertake project development to establish project costs, land requirement, project design, other project components and project bankability. Zonal Railway approval should be taken for the DPR and the same should be submitted to Railway Board along with bankability report. Inflated mileage should not normally be the basis for justifying unviable projects. The Railway PSU should ensure that requisite clearance of concerned agencies is available for the target facilities for which line is being constructed (in case of ports, mines, industrial cluster/logistics park etc.). The Railway PSU should structure the project so as to limit the equity of MoR. Railway PSU as far as possible should participate in the project by utilizing funds from their own reserves. Railway Board depending on the documents will either give 'in-principle' clearance in the first instance or will process for the approval of project. In case the project is already sanctioned, only approval of Railway Board is required, after necessary financial due diligence, for implementing the project through joint venture route.

Build Operate and Transfer (BOT) Model

Need for the framework

For the projects where it is not possible to identify any stakeholder, a BOT type model is suitable. Under this model the concession will be awarded through competitive bidding. The concessionaire will design, build, finance, construct and maintain the project line for a concession period of 25 years subject to variation based on actual traffic materialization vis-à-vis threshold traffic indicated at the time of bidding. Premium/grant (Viability Gap Funding) will be the bidding parameter. Demand risk, is shared between concessionaire and MoR. Since such railway systems will be mostly embedded systems, Indian Railways will operate the trains on the rail system for ensuring interoperability.

Concessionaire to be Railway Administration

Under the framework agreement, Government recognizes that the line built by the concessionaire will be a Railway Administration under the Railway Act, 1989. This facilitates construction and maintenance by the concessionaire.

Golden Share

The concessionaire shall allot one equity share in favour of MoR (Golden Share). The purpose of this clause is not to interfere into the day to day functioning of the concessionaire but to facilitate better communication between the concessionaire and MoR.

Conditions Precedent

The rights and obligations under the agreement are subject to fulfillment of conditions precedent specified in the agreement. MoR has to procure the right of way, approvals and permits etc to implement the project. The concessionaire needs to provide performance security and should execute escrow agreement, substitution agreement, financing agreement as conditions precedent. Delay in fulfillment of such conditions requires payment of damages to the tune of 0.1% of the performance security by MoR and 0.2% of the performance security by concessionaire subject to maximum of 20%.

Financial close

The Concessionaire has to achieve financial close within 180 days from the date of the agreement. Extension can be granted subject to payment of damages to Ministry of Railways at the rate specified in the agreement.

Utility shifting

The cost of utility shifting would be borne by MoR. The reason is that MoR will have better control on the costs of utility shifting through various government agencies than the concessionaire

Construction, Monitoring and Supervision of Rail System

The Concessionaire has to undertake construction of rail system within the specifications and standards of MoR in a time bound manner. The concessionaire is expected to complete the construction within a period of four years. For monitoring of construction, MoR shall appoint an Independent Engineer (IE). The cost of IE will be jointly shared. The purpose of appointment of IE and cost sharing is to ensure neutrality of IE. Any observation by Zonal Railways on drawings need to be communicated in a time bound manner. The clearance of drawings shall be deemed to be granted after the expiry of specified period. Zonal Railway is also bound to issue safety certificate and commercial service certificate within a time bound manner. D&G charges of 0.25% will only be charged from the concessionaire in case construction of Rail System is being done by the concessionaire.

Zonal railway shall inspect and certify the maintenance of the Rail System every month on payment of inspection charges specified in the Agreement.

Change of scope

While a change of scope is permissible if MoR feels necessary, the agreement provides that MoR shall have to make an advance payment of 20% towards the cost of change of scope as agreed. This advance payment ensures commitment of MoR towards change of scope. Also MoR cannot change the scope, if it results in cumulative costs exceeding 20% of the total project cost. Such a clause ensures that MoR does not change the scope of the project time and again so as to affect timely delivery of infrastructure thereby affecting the revenue stream to the concessionaire.

Technical Parameters

The Rail System will be built as per standards and specifications specified by Ministry of Railways.

Maintenance and Capacity Augmentation of Rail System

The maintenance of the Rail System shall be undertaken by the Concessionaire or can be entrusted to Zonal Railways on payment of costs. Maintenance requirements as enshrined in the agreement will need to be observed. Damages are paid to MoR in case concessionaire fails to rectify the defect within the period specified in the agreement. Such damages are not in the nature of revenue stream for MoR but more as a deterrent to the concessionaire.

Operation

Indian Railways will provide seamless operation.

Performance of Rail System

The concessionaire has to maintain the Rail System so that it achieves the Performance Indicators specified in the agreement. Failures to achieve these will result in damages to MoR. Key Performance Indicators (KPIs) are provided in the agreement. These indicators capture performance of the overall rail system through average speed and also capture safety of the rail system by ensuring performance on certain specified safety parameters.

Safety

The responsibility for safety on the Rail System will be that of concessionaire. The concessionaire has to ensure adequate facilities for rescue operation on the Rail System. Zonal Railway shall arrange relief and evacuation at the cost of concessionaire if requested in writing by the concessionaire. Safety audit at least once a quarter has to be carried out.

Concession Fee

Ministry of Railways will provide land at a nominal fees of rupee one per annum.

Reserved Services to be provided by Railways

Railways under the agreement have undertaken to provide certain services which cannot be undertaken by the concessionaire. Such services have been named as Reserved Services. These Reserved Services pertain to providing rolling stock, crew, locomotion, station operation and management, fixing of tariff, booking and delivery of consignment and safety examination of rolling stock. This means Railways will undertake operation of trains on the Rail System. Zonal Railways will retain 50% of the apportioned revenue for providing such Reserved Services inclusive of overhead charges, central charges and any incidental charges. The cost of maintenance of Rail System is not part of the Reserved Services cost.

Fare

IR tariff will be charged on the project line.

User Fee

A new concept of projected revenue has been introduced in this model instead of projected traffic as is conventionally done. A growth in projected traffic by itself may not get translated into corresponding revenue growth as Indian Railways operates different class of traffic with different freight rates. Provision of projected revenue will provide reasonable certainty and comfort to the concessionaire to manage its finances effectively throughout the concession period. To provide comfort to investor from any uncertain variation in freight rates the base tariff, i.e. the tariff applicable during the RFQ year is escalated annually at a rate linked with WPI.

MoR shall pay 50% of apportionment of freight revenue as user fee. MoR would guarantee 80% of the projected revenue during any year. In case actual user fee in a particular year is in excess of 120% or 150% of the projected revenue, 50% or 75% of the excess revenue respectively will be paid to MoR by the concessionaire. This system has inbuilt incentive for the concessionaire to make efforts to bring more traffic.

The apportioned earning for the rail system will be calculated based on proportionate distances after setting aside the terminal charges. In case the rail system to be built by the concessionaire serves a terminal, the terminal charge as notified by MoR from time to time will be paid to the concessionaire as a part of the User Fee.

The agreement provides for minimum escalation on projected revenue annually. In the eventuality that such growth does not fructify during the concession period, railway may decide to charge inflated mileage for the rail system. However, the additional earning on account of inflated mileage will not be part of the User Fee to be paid to the concessionaire in any way. This would facilitate management of down side traffic risk being undertaken by railways.

Escrow Account

The Concessionaire company has to open an escrow account. This account will receive all inflows of funds and withdrawals will have to be strictly as per the provisions of the agreement. MoR has to ensure that at the transfer date at least 5% of the total user fee for the preceding year should be available in the escrow account for meeting any liabilities after termination.

Concession period

Under this model, the normal concession period is 25 years. In case the user fee on expiry of 20th year is falling short / exceeding the projected revenue by 4%, the concession period will be increased / decreased by six months for every 2% shortfall/enhancement. However, the concession period shall not be less than 20 years and will not be more than 30 years. Normally MoR should start the process of reviewing the performance of the rail system in terms of revenue at the start of 19th year and should carry out such review annually after the end of 20 years to implement the provisions of the agreement.

Compensation for Breach of Agreement

In case concessionaire is responsible for any material default or breach of agreement, it shall pay to MoR all direct costs suffered by MoR. MoR has to pay all direct costs in case of its material default.

Termination

Ministry of Railways in case of concessionaire default during the operation period shall pay to the concessionaire an amount equal to 90% of the debt due less insurance cover and 70% of the amount representing Additional Termination Payment. In case termination is on account of MoR's default, Concessionaire will be paid an amount equal to full debt due plus 150% of the Adjusted Equity and 115% of the amount representing Additional Termination Payment.

Approval

The project development and preparation of DPR to establish financial viability and bankability will be done by Ministry of Railways. Once the financial viability is established with or without Viability Gap Funding (VGF), RFQ can be launched either through Railway Board or by Zonal Railway or through Railway PSU. PPP-AC route will need to be adopted for appraisal of such projects before final sanction of appropriate authority.

Customer Funded Model

Need for the framework

Some of the financially viable rail projects already sanctioned by MoR need to be fast-tracked to match with new capacities or expansions being planned by major customers. It is proposed to take project advance from such customers who may be willing to come forward to invest in augmentation of the capacity. In return, Railways will pay upto 7% of the amount invested through freight rebate on freight volumes moved on the project section every year till the funds provided by the project beneficiary is recovered with interest at a rate equal to the prevailing rate of dividend payable by Railways to General Exchequer at the time of signing of the agreement.

The project is to be treated as Railway Project

The project will be sanctioned as a railway project after necessary due diligence and after ensuring availability of fund on the basis of MOU/agreement entered into between Railways and customers wishing to fund the project in full or part.

Funding by the Customer

The customer shall arrange and deposit the amount in the escrow account in accordance with the disbursement schedule.

Obligations of Indian Railways

Indian Railways will spend the money so deposited for the sole purpose of the project and will undertake construction and operation of the rail system. Indian Railways will make payment to the customer in the form of rebate.

Construction, Monitoring and Supervision of Rail System

Indian Railways will undertake construction of the rail system. The completion certificate for the project will be issued by Chief Engineer of the Zonal Railway if the line is not constructed even within 180 days of the schedule completion date, IR will have to pay damages.

Rebate

Indian Railways shall pay the customer an annual maximum rebate equivalent to 7% of the disbursed amount along with interest. The rebate should not exceed the freight amount in any accounting year. The Zonal Railway on submission of annual claims from the customer will pay the amount of rebate within 30 days and will undertake post audit of payments subsequently.

Operation and Maintenance

Indian Railways will provide seamless operation and maintenance.

Escrow Account

An escrow account will be opened. This account will receive all inflows of funds and withdrawals will have to be strictly as per the provisions of the agreement.

Default and Termination

The failure to make disbursements of investment amount will be treated as customer's default. Similarly, IR will default in case construction, operation and maintenance is abandoned or rebate is not provided continuously. Upon termination on account of MoR's default, MoR shall pay to the customer an amount equal to 120% of the disbursed amount. Similarly in case of customer's default, IR shall be entitled to forfeit the disbursed amount.

Approval

The project will be approved as a Railway Project.

BOT Annuity Model

Need for the Framework

For projects where user charges cannot sustain the required private investment, an alternative to the user charge based BOT model is required, to execute various important projects of doubling, 3rd line, fourth line etc. The Annuity model provides the framework to execute such projects which may not be covered under BOT model. The Annuity model is also applicable to execute such projects where it may not be possible to find funding from any specific user. Under this model, the construction risks are allocated to the concessionaire and other risks such as traffic risk and all direct & indirect political risks are assigned to the Authority.

Project Development

Indian Railways will be responsible for project formulation, DPR, Survey , Scale Plans etc. The bidders will carry out their own due diligence.

Selection of Concessionaire

The Project will be appraised, approved and awarded as laid out for Government PPP project.

Land and Utility

Land and utility shifting will be done by MoR or its entity.

Nature of Concession

The Concessionaire will be responsible for financing and construction. Supervision and Certification of construction will be done by MoR.

Operations

Train Operations and Maintenance will be done by MoR. MoR will manage stations, signals, level crossing gates etc.

Revenue

Payment to concessionaire will be through annuity which is determined through competitive bidding.

Engineering Procurement Construction (EPC) Contract

Need for EPC contracts

Railways had hitherto been undertaking construction projects through the conventional item rate contracts where the Government provides the detailed design as well as the estimates of quantities for different items of work (Bill of Quantities). Payments to the contractor are made on the basis of measurements of the work done in respect of each item. Experience in railway projects shows that item rate contracts are prone to excessive time and cost overruns due to delays in design and drawing, variation in items and quantities and inadequate fund provisions as allocation of construction risks are largely to the Authority. Considerable time of Project Engineers is consumed in dealing with variations in quantities, introduction of Non-Schedule Items and variation in contract price.

The growing requirements of the economy will necessitate faster expansion of the freight network through new capacity creation. Considering that improved and modernised project execution capabilities would be critical for speedy capacity creation, it has been decided to adopt the Engineering, Procurement and Construction (EPC) mode of contracting for construction of railway projects.

On Indian Railways, EPC model has been used earlier in a limited way for constructing some bridges posing technological challenges on Jammu-Udhampur rail link. However, in railway sector, EPC model has been extensively and successfully used by Delhi Metro Rail Corporation (DMRC) over the years. Accordingly, the processes for design approval, supervision and monitoring etc. have been incorporated in the Model EPC Agreement as per the systems being followed in DMRC.

Model EPC Agreement

The aforesaid drawbacks of item rate contracting can be addressed by adopting the EPC approach that relies on assigning the responsibility for investigations, design and construction to the contractor for a lump sum price determined through competitive bidding. The objective is to ensure implementation of the project to specified standards with a fair degree of certainty relating to costs and time while transferring the construction risks to the contractor.

This Model EPC Agreement provides a contractual framework that specifies the allocation of risks and rewards, equity of obligations between Government and the Contractor, precision and predictability of costs, force majeure, termination and dispute resolution, apart from transparent and fair procedures.

The Contractor also has full freedom to plan the construction schedule for efficient use of its manpower, equipment and other resource while payments are linked to specified stages of construction as compared to payment for individual items/units under the item rate contract. Awarding contract for a lump sum price ensures predictability and financial discipline, both for the contractor and the Government. The contract price is subject to adjustment on account of price variation during the contract period as per specified formula.

Technical parameters

The Model EPC Agreement specifies the required design standards and allows the Contractor to design and construct the project using best practices to achieve quality, efficiency and economy as compared to the item rate contract that relies on a single design provided by the Government.

Only the core requirements of design and construction of the railway project that have a bearing on the quality and safety of assets are to be specified and enough room would be left for the contractor to add value. This would provide the requisite flexibility to the contractor in evolving and adopting the efficient designs without compromising on the quality and safety.

Contract period

The contract period is determined on a project-specific basis depending on the volume of construction work involved. The Contractor shall be liable to pay Damages at the rate of 0.05 per cent for each day of delay beyond the specified date of completion, subject to the total amount of Damages not exceeding 10 per cent of the Contract Price. However, the Contractor shall be entitled to time extension arising out of delays on account of change of scope and force majeure or delays caused by or attributable to the Authority.

Selection of contractor

Selection of the contractor will be based on open competitive bidding. All project parameters such as the contract period, price adjustments and technical parameters are to be clearly stated upfront, and short-listed bidders will be required to specify only the lump sum price for the railway project. The bidder who seeks the lowest payment should win the contract.

Risk allocation

Projects risks such as soil conditions and weather or commercial and technical risks relating to design and construction have been assigned to the Contractor. The Government accepts its liability to pay damages to the Contractor for any delays in handing over the land, approvals from road authorities for road over-bridges/under-bridges at level crossings, environment clearances, shifting of utilities and approvals in respect of engineering scale plan, signalling interlocking plan and route control chart.

Design and Construction

The EPC agreement specifies the dates on which different sections of the land will be handed over to the Contractor. It defines the scope of the railway project with precision and predictability to enable the Contractor to determine its costs and obligations. It also lays down a ceiling of 10 per cent of contract price to cater for any changes in the scope of project, the cost of which the Government will bear.

The Contractor shall carry out survey and investigations and also develop designs and drawings in conformity with the specifications and standards laid down in the Agreement. Government's engineer shall review the design and drawings to ensure that these conform to the scope of the project, design standards and specifications. The EPC agreement also stipulates provisions for quality control and quality assurance.

Monitoring and Supervision

Monitoring and supervision of construction are proposed to be undertaken through railway engineer to be designated as 'Authority's Engineer'. He would be assisted by requisite organizational support for day-to-day interaction between the Authority and the contractor. Typical organizational structure proposed to be followed for Authority's Engineer shall be in line with the organizational set up being followed by DMRC for monitoring and supervision of their EPC contracts. The Authority's Engineer will act as a single window for coordination with the contractor.

The Agreement provides for the schedule indicating the timeline within which Authority will ensure the clearances of design proposals submitted by the contractor. Any comment by the Authority on the design proposals submitted by the contractor will be communicated in totality once in a time-bound manner as indicated in the schedule. The clearance of drawings shall be deemed to be granted after the expiry of specified period in case no remarks/clearances are given by the Authority.

Milestone based payments

A simple and rational method for estimating interim payments to the Contractor has been provided in the Agreement. It ensures that payments are made for works conforming to the Agreement and commensurate with the stages of completion of works. Works have been broadly divided into three categories, namely, civil and track works, signaling and telecommunication works and electrification works, which could be taken together under a single project or separately under different projects. Each item of work has been further sub-divided into stages and payment will be made for each completed stage of work.

A provision has been made for damages which the Contractor shall pay to Government for not achieving the prescribed milestones. Government will pay bonus to the Contractor for completion of the project before the scheduled completion date.

Defects liability period

Though normally a defects liability period of one year is specified in most contracts, a defects liability period of two years has been specified in the Agreement in order to provide additional comfort to the Government.

Termination dispute resolution

In the event the Government terminates the Agreement on account of any of the specified defaults of the Contractor, the Agreement allows the Government to forfeit the performance security of the Contractor. Similarly, defaults by the Authority are proposed to qualify for adequate compensatory payments to the contractor. The Agreement also addresses issues relating to dispute resolution and provides a mechanism for the same.

Sectoral Guidelines for Domestic/Foreign Direct Investment (FDI) in Railways

Objective

To augment capacity, modernize and bring efficiency through technology up-gradation on Indian Railways network and to generate finances for undertaking these activities from both domestic and foreign investors.

General Guidelines

i. These sectoral guidelines pertaining to FDI complement the existing FDI guidelines issued by Department of Industrial Policy and Promotion.

ii. These sectoral guidelines pertaining to FDI do not override any laws/ /regulation/rules issued by other Government Departments regarding Rail projects unless expressly specified in these guidelines or in any of the Concession/Contract agreements pertaining to specific Rail Projects.

iii. Ministry of Railways (MoR) reserves the right to verify the antecedents of the foreign collaborators and domestic promoters including their financial standing and credentials in rail or related sector.

iv. Adequate safety and security procedures should be in place during project implementation and operation.

v. No unfair practices leading to unfair competition can be adopted by Investors.

vi. Holistic approach must be followed to ensure that the complete rail system all components rail, traction, rolling stock, signaling are compatible to ensure efficient and safe train operation and achieve the objective.

vii. Projects involving public carriage of passenger would require safety certification from Central government or its authorized entity before it is commissioned.

viii. For rolling stock operating on IR network, Inspection and Safety Certification will be done by MoR or its authorized entity.

ix. FDI beyond 49% of the equity of the investee company in sensitive areas (border areas) from security point of view, will be brought before the Cabinet Committee on Security (CCS) for consideration on a case to case basis.

x. Project proposals for Domestic/Foreign Direct Investment in Railways (except where no administrative approval is required) can be submitted to Adviser(Infrastructure), Railway Board by Investor/Customer/Zonal Railway along with a brief concept note including objective, scope, benefits, market potential, tentative project cost, probable financing options, pricing and economics for consideration of Railway Board.

xi. PPP Cell along with concerned Directorates will assess the technical and financial viability of the proposal, if felt necessary, with the help of consultants. If the proposal is found fit to proceed further, the concerned Zonal Railway/customer/ investor will be advised for further necessary action. For Projects under Joint Venture (JV) models of the Participative policy 2012, "In principle approval" will be granted by Railway Board.

xii. All Projects of rail connectivity's under NGR model of the participative policy 2012 will be granted "in-principle approval" by Railway Board. General Manager of concerned Zonal Railway will appraise and approve the project for rail connectivity with existing IR network under advice to Railway Board.

xiii. In case any project involves adoption of transparent bidding route, the Zonal Railway will get the Project Feasibility Report along with the Detailed Estimates of the Project prepared. Railway Board will undertake market survey, traffic forecasting and financial modeling including identification of risks and risk mitigation measures through an independent financial consultant.

xiv. Model documents [Request for Qualification (RFQ), Request for Proposal (RFP) and Concession Agreement (CA)] for each type of Project will be prepared by Railway Board. Project specific documents (RFQ, RFP & CA) would be prepared by Zonal Railway based on the model documents approved by Board.

xv. For Projects pertaining to building rail connectivity's through Non Governmental model (Private Line), through Joint Venture and through Customer Funding under the Participative Model Policy of December 2012, no bidding is required. For NGR and JV projects the project developer/JV will submit the Feasibility Report along with Bankability Report. Final Approvals for such projects will be based on such reports.

xvi. After necessary technical and financial due diligence the project would be appropriately structured (under various PPP models) by PPP Cell of Railway Board. Entire bid process management including issue and finalization of RFQ / RFP will be done by Zonal Railways.

xvii. If the project requires VGF, the approval of Ministry of Finance (Department of Economic Affairs) would be taken through PPP-AC procedure by PPP Cell of Railway Board.

xviii. The concessionaire selected would be free to establish SPVs and bring FDI.

xix. The monitoring of the approvals of the projects at different levels will be coordinated by Advisor (Infrastructure), Railway Board.

xx. FDI is not permitted in Rail Operation except in the activities listed in Annexure-I where it is specifically mentioned. Annexure-I provides the permissible activity under each potential area along with limits of FDI and salient features. Annexure-II provides a list of potential projects.

Annexure-I

List of Areas/Activity for Private/ Foreign Direct Investment

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
1.	Suburban corridor projects through PPP.	All new suburban corridor projects are permissible when launched through PPP route by MoR. The developer can construct, maintain and operate the corridor within the concession period.	• Project Development by MOR or its entity. • Land, clearances and utility shifting by MoR. • Design freedom to concessionaire • Model Concession Agreement for urban railways issued by Planning Commission will be adopted with project specific changes. • Revenue stream to be the tariff collected by the concessionaire along with revenue from real estate development, if any. • Concerned State Government to enter into a State Support Agreement.	100% investment permissible.
2.	High speed train projects.	Construction, maintenance and operation of any new high speed train projects which do not require any linkage with Indian railway Network and which are above 250 kmph including supply of rolling stock can be undertaken by the developer.	• Project Development by Developer. • MoR may on best effort basis, if required, acquire land for the project at the cost of developer and facilitate transfer of such land on long term lease • Design freedom to developer. • Tariff freedom to developer subject to maximum limit as specified by the Government or its entity.	100% investment permissible.
		Construction, maintenance and operation of all new high speed train projects above 250 kmph including supply of rolling stock can be undertaken by the	• Project Development by MOR or its entity. • Land, clearances and utility shifting by MoR or designated Authority. • Design freedom to concessionaire.	100% investment permissible.

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
		concessionaire in case the project is launched on PPP or under Government to Government Cooperation.	• Model Concession Agreement for urban railways issued by Planning Commission will be adopted with suitable customization. • Revenue stream to be the tariff collected by the concessionaire along with revenue from real estate development, if any. • Viablity Gap Funding from Government of India/Premium for PPP project if required.	
		Upgradation of the existing Indian Railway network for speed above 120 kmph or semi high speed.	• Project Development by MOR or its entity. • Operations and Maintenance by MOR or its entity. • Maintenance of IR owned rolling stock will be undertaken by MoR or its designated Authority. • Right of Way by MoR or designated Authority. • Upgradation of existing infrastructure by Concessionaire. • Concessionaire owned Rolling stock and its maintenance will be permissible with MOR approval. • Revenue stream through Annuity/predefined share of earning.	
3.	Dedicated freight lines.	Construction, maintenance and operation of freight lines under Non Government Railway model (Private Line) of Participative policy 2012.	• Project Report by Developer • In principle Approval by MOR • Revenue sharing and O&M cost as per NGR (Private Line) Model Agreement. • Train operations by private partners also permissible ,only on certain private lines ,with prior approval of MoR	100% investment permissible. However, in joint venture projects under Participative Policy 2012, 26% equity will continue to be held by Ministry of Railways or its PSUs.
		Construction and maintenance of freight lines/mixed traffic lines on the existing IR network.	Joint Venture/BOT Model Agreement will govern the conditions. Train Operations including maintenance of rolling stock will be undertaken by MoR or designated Authority.	

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
4.	Rolling stock including train sets and locomotives or coach manufacturing and maintenance facilities.	Construction, maintenance and operation of new locomotive/wagons/ coaches/train sets manufacturing facilities can be undertaken by Developer	• No Administrative approval of MOR required in cases where no procurement commitment is made by MOR and no land lease from IR is involved. • MOR may on best effort basis, if required, acquire land for the project at the cost of developer and facilitate transfer of such land on long term lease. • Land for rail connectivity in case required will be provided on lease. • Revenue from open market sales or from exports.	100% investment permissible.
		Construction, maintenance and operation of new locomotive/wagons/ coaches/train sets manufacturing facilities/ maintenance facilities (including POH/Mid-life rehabilitation of rolling stock facility) can be undertaken in case the project is launched on PPP	• Land by private/MoR. • Connectivity by MoR. • Bidding route to be adopted with bidding criteria being lowest bid price for identified quantity.	100% investment permissible.
		Renovation, maintenance and operation of any existing locomotives/ wagons/ coaches/train sets manufacturing/ maintenance facilities (including POH /Mid-life rehabilitation of rolling stock facility).	• BOT/Annuity	
		For rolling stock manufacturing facilities where MoR has invited bids, the technology shall be brought in India and manufacturing must be done in India with Transfer of Technology to MoR after predefined period.		

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
5.	Railway Electrification	Construction, maintenance and operation of power transmission lines and its ancillary facilities.	• Right of Way by Concessionaire. • Revenue stream will be annuity based on saving in electricity tariff as a result of power purchase from power generating companies.	100% investment permissible
		Construction and maintenance of railway electrification projects on the existing IR network or new network.	• BOT/Annuity • Operation of electric traction on IR owned network will continue to be done by MoR.	
6.	Signaling system	Construction, maintenance and operation of new rail signal component manufacturing facility.	• No Administrative approval of MoR is required in cases where no procurement commitment is made by MoR and no land lease from IR is involved • MoR may on best effort basis, if required, acquire land for the project at the cost of developer and facilitate transfer such land on long term lease • Revenue from open market sales, or in case such units are set up on request of MoR, competitive bidding route to be adopted with bidding criteria being lowest bid price for identified quantity.	100% investment permissible.
		Construction and maintenance of new signaling system on IR network or on any new network	• BOT/ Annuity	
		Upgradation of signaling system on IR network	• Annuity	
		Signal equipments should be based on fail-safe design and meet functional requirements. Software based vital signaling equipments/systems should be validated and certified by a reputed Independent Safety Assessor (ISA) company to comply to Safety Integrity Level 4 (SIL4).		

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
7.	Freight terminals/ Logistics Parks.	Construction/ upgradation, maintenance and operation of non-IR owned freight terminals.	• Complete private investment • MoR to facilitate rail connectivity under appropriate model • Train operation including maintenance of IR owned rolling stock will be undertaken by MoR. • Railway Land for connectivity at Re.1/- per annum. • Revenue sharing under Concession Agreement. • Rolling stock can be procured under extant policy of MoR.	100% investment permissible.
		Construction/ upgradation and maintenance of any new/existing freight terminal owned by MoR.	• Transfer of Assets at pre specified nominal value • Rail Connectivity by MoR • Revenue sharing under concession Agreement • Train operations and maintenance of IR owned Rolling Stock at such terminals will be the responsibility of MoR.	
8.	Passenger terminals	Construction/ Redevelopment, terminal management and maintenance of passenger terminals.	• Real estate development to be the revenue stream • Bidding Criteria to be the premium paid by the concessionaire • Train operation including maintenance of IR owned rolling stock will be undertaken by MoR.	100% investment permissible.
		Construction, maintenance, terminal management and train operation at passenger terminals on standalone private passenger corridors/suburban corridors/high speed lines under concession from MoR.	• BOT/Annuity	

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
9.	Railway Technical Training Institutes.	Investments in construction, maintenance and operation of any training/education facility either of MOR or outside MOR pertaining to training/providing education in areas pertaining to railways.	• Land by private/railway • Revenue stream on competitive bidding for identified number of trainees.	100% investment permissible.
10.	Testing facilities and laboratories.	Construction, maintenance and operation of any new testing facilities pertaining to railway activities including laboratories.	• Land by private/ railway • Revenue from open market sales, or in case such units are set up on request of MOR, competitive bidding route to be adopted with bidding criteria being lowest bid price for identified quantity.	100% investment permissible.
		Renovation, maintenance and operation of any existing testing facility pertaining to railway activities including laboratories.	• BOT/Annuity	
11.	Concessioning of standalone passenger corridors (branch lines, hill railways etc).	Renovation, operation and maintenance of standalone passenger corridors including branch lines, hill railways	• Transfer of Assets at pre specified nominal value • Right of Way by IR • Bidding criteria will be minimum grant / maximum premium/Track Access Charge offered. • Concession period will be 10-15 years.	100% investment permissible.
		Only operation by private operator on payment of Track Access Charge but maintenance including maintenance of IR owned rolling stock by MoR.		

Sl. No.	Area	Permitted activity	Salient features of Model	Limit of FDI
12.	Non-Conventional Sources of Energy.	Construction, maintenance and operation of facilities producing power through non-conventional sources of energy (solar, tidal or wind).	• Land lease by MoR at Re.1/- per annum if power is produced for use on IR or else at commercial rates in other cases • Revenue from open market sales, or in case such units are set up on request of MOR, competitive bidding route to be adopted with bidding criteria being lowest bid price for identified quantity. • Appropriate Power Purchase Agreement will be structured.	100% investment permissible.
		Construction, maintenance and operation of facilities producing biodiesel/Alternate Fuel.		
13.	Mechanized Laundry	Construction, maintenance and operation of facilities	• Land lease by MoR at Re.1/- per annum • Bidding criteria will be the lowest tariff for identified units	100% investment permissible.
14.	Rolling stock procurement	Purchase/leasing for use on IR network/private lines	• Extant policy of MoR to be applicable.	100% investment permissible.
15.	Bio-toilets	Installation and maintenance of Bio-toilets in passenger coaches	• Annuity	100% investment permissible.
16.	Technological solutions for manned and unmanned level crossings	• Construction and maintenance of ROB/RUB /Limited Height Subway • Installation and maintenance of Safety Systems for level Crossing gates.	• BOT/Annuity • For ROB / RUB revenue collection through Toll	100% investment permissible.
17.	Technological solutions to improve Safety and reduce accidents	• Installation and maintenance of Asset failure detection systems (Track/ OHE/ Rolling Stock/Signaling etc.) • Automatic self propelled Track/ OHE parameter recording cars.	• Annuity	100% investment permissible.

Annexure-II
Projects identified for domestic/foreign direct investments in Railways

The list of projects mentioned below is indicative and new projects can be added or listed projects can be deleted depending on the outcome of project specific detailed technical/financial due diligence by Ministry of Railways (MoR) after submission of the techno economic feasibility report and financial/revenue model. Similarly the models of execution indicated are also indicative and can be changed depending on assessment later. The projects will be implemented only when found to be financially viable and bankable with VGF admissible (20% of the cost of the project or as modified from time to time) as per current VGF policy of Ministry of Finance.

1. Suburban Corridor projects through PPP

Sl. No.	Project	Kms	Cost (Rs in Crore)	Probable Mode of Execution	Bidding Parameter
1.	CSTM-Panvel	49	14,000	DBFOT	Premium/Viability Gap Funding(VGF)

2. High speed train projects

Sl. No.	Project	Kms	Cost (Rs in Crore)	Probable Mode of Execution	Bidding Parameter
1.	Mumbai-Ahmedabad High Speed Corridor	534	63,180	DBFOT/ Government to Government cooperation.	Premium/VGF
2.	Chennai-Banglore-Mysore	-	-	DBFOT/ Government to Government cooperation.	Premium/Viability Gap Funding(VGF)

3. Freight lines

Sl. No.	Project	Kms	Cost (Rs in Crore)	Probable Mode of Execution	Bidding Parameter
	New Lines				
1	Dankuni-Gomoh	282	4500	BOT/Annuity	VGF/Annual premium.
2	Whitefield-Kolar (52.9 km)	52.9	353.45	BOT/Annuity	VGF/Annual premium.
3	North- South DFC	-	-	BOT/ Annuity	VGF/ Annual premium
	Doubling				
4	Ajmer-Bangurgram (48.43 km)	48.43	144.57	BOT/Annuity	VGF/Annual premium.
5	Durg-Rajnandgaon 3rd line	31	152.99	BOT/Annuity	VGF/Annual premium.
6	Wardha(Sewagram)-Nagpur 3rd line (76.3 km)	76.3	297.85	BOT/Annuity	VGF/Annual premium.
7	Kazipet-Vijaywada 3rd line with electrification (219.64 km)	219.6	1054.35	BOT/Annuity	VGF/Annual premium.
8	Bhadrak-Nergundi 3rd line (80 km)	80	837.33	BOT/Annuity	VGF/Annual premium.
9	Sambalpur-Talcher (174.11 km)	174.1	679.27	BOT/Annuity	VGF/Annual premium.
10	Manoharpur-Bondamanda 3rd line (30 km)	30	258.2	BOT/Annuity	VGF/Annual premium.
11	Rajkharswan-Chakradharpur 3rd line (20 km)	20	174.49	BOT/Annuity	VGF/Annual premium.

4. Rolling stock including train sets and locomotives or coach manufacturing and maintenance facilities

Sl. No.	Project	Quantity	Cost (Rs in Crores)	Probable Mode of Execution	Bidding Parameter
1.	Rail Coach Factory, for manufacture of modern 3 phase MEMU/EMU coaches equipped with IGBT technology at Kachrapara. *(Subject to confirmation of requirement)*	500 EMU/ MEMU coaches annually	1,200	BOT/BOO/JV/ Annuity	Lowest price per EMU/MEMU
2.	Rail coach factory for manufacturing of Aluminum coaches at Palakkad *(Subject to confirmation of requirement)*	400 coaches per annum	550	BOT/BOO/JV/ Annuity	Lowest price per coach
3.	Periodic overhauling of wagons at Sonpur	180 wagons per annum	300	BOT/BOO/JV/ Annuity	Lowest price of POH per wagon
4.	Midlife rehabilitation of coaches at Anara	250 coaches per annum	185	BOT/BOO/JV/ Annuity	Lowest price of rehabilitation per coach.

Sl. No.	Project	Quantity	Cost (Rs in Crores)	Probable Mode of Execution	Bidding Parameter
5.	Locomotive maintenance depots.	Barauni (ECR) Daund (CR) Mughal-sarai (ECR) Bonda-munda (SER)	Rs. 300 crore	BOT/BOO/ BOOT/Annuity	Lowest maintenance cost per locomotive.

5. Railway Electrification Projects

Sl. No.	Project	Kms	Cost (Rs Crores)	Probable Mode of Execution	Bidding Parameter
1.	Katwa-Azimganj-Nalhati & Azimganj-Tildanga/New Farakka	200	229.26	BOT/Annuity	VGF/Annual premium.

6. Signaling System

Sl. No.	Project	Kms	Cost (Rs in Crores)	Probable Mode of Execution	Bidding Parameter
1.	Agra-Gwalior, A route: provision of automatic signaling along with train protection system to enhance line capacity.	118	250 Cr.	BOT/Annuity	VGF/Annual premium.
2.	Gwalior Burhpura A route: Provision of automatic signaling along with train protection system to enhance line capacity	126	280 Cr.	BOT/Annuity	VGF/Annual premium.
3.	Burpura-Bina, A Route: Provision of automatic signaling along with train protection system to enhance line capacity.	126	270 Cr.	BOT/Annuity	VGF/Annual premium.

7. Passenger Terminals

Sl. No.	Project
1	Habibganj
2	Shivaji Nagar
3	Anand Vihar
4	Bijwasan
5	Chandigarh
6	Surat
7	Gandhinagar
8	Manglore
9	Ernakulam
10	Vijayawada
11	Nagpur
12	Byappanahalli
13	New Bhubneshwar

8. Railway Technical Training Institutes.

Sl. No.	Project	Quantity	Cost (Rs in Crores)	Probable Mode of Execution	Bidding Parameter
1.	Advanced Training Institute (ATI) for training of Technical staff and Loco Pilots	6 Training Centres – with Driving Simulators Mughalsarai (ECR) Kurla (CR) Asansol (ER) Vishakapatnam (ECoR) Kanpur (NCR) Avadi (SR)	1,200	BOT/BOO/JV/ Annuity	Lowest price per EMU/MEMU

9. Mechanized Laundry

Sl. No.	Project	Quantity	Cost (Rs in Crores)	Probable Mode of Execution	Bidding Parameter
1.	Mechanized laundries at identified locations of different capacities.	1T/2T/3T/5T per day	100	BOT/BOOT/BOO/ JV/Annuity	Lowest Cost for identified quantity.

Contact Persons

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