

All the remaining projects/works having higher financial implications can be processed through Works Programme in the Indian Railway Projects and Sanctions Management (IRPSM) system.

Some projects/works which are of huge financial implications which have long term benefits for the private party and also going to decongest the existing Railway lines and increase the mobility of the trains for the additional traffic offered can be processed in Public Private Partnership (PPP) as per the Memorandum of Understanding (MOU) signed at the Apex level of the respective organizations.

Traffic Survey

It is a detailed study of traffic conditions and prospects of an area with the object of determining the most promising routes for the railways in the area.

Traffic surveys are ordered and conducted to study the feasibility of major works like new lines, doubling/tripling/quadrupling, gauge conversion. It includes an assessment of Financial Internal Rate of Return to see if the project is economically viable. For certain strategic lines which are critical for country's defense, socio-economic development of a backward area etc., the sanctions are awarded by the government despite poor financial returns.

The traffic survey wing is headed by an experienced administrative officer of the traffic (Operating/Commercial) department. To ensure that the estimates of anticipated traffic, capital cost and recurring expenses etc. are realistic and the financial appraisal of the project including the phasing of investments and returns at each stage are worked out as correctly as possible and with great deal objectivity, an accounts officer of appropriate status is associated with the traffic survey officer. The traffic survey team is supplied with terms of reference containing instructions regarding the scope and nature of the investigation to be carried out.

The team should work closely with the HQ at various intervals both during the progress of the work in the field and during the period of recess in order to consult the General Manager and where necessary, have the original terms of reference modified by the competent authority. This enables the main line administration to determine the design of the new line under investigation.

The traffic survey team should also work in close collaboration with the engineering survey party if there is one in the field at the same time, and while collecting information should visit all the trade centers in the area, consult local authorities and prominent citizens freely both on regard to trade and industry and most suitable alignment for the proposed railway line.

Traffic survey is mainly of two types.

- (a) Reconnaissance / Preliminary Engineering cum Traffic survey (RET/PET)
- (b) Final Location Survey (FLS)

Reconnaissance (RET) / Preliminary (PET) survey

RET/PET surveys are also called as feasibility studies. They are undertaken to determine how a proposed line will fit in the general development of railway and what return is likely to yield on the estimated total cost. It is based on the careful study of the following...

1. Existing map
2. Trade and population
3. Financial and statistical data of the railway of similar area
4. Modes of transport available in the area

From this investigation, the railway administration decides whether final location survey should be under taken or not and what would be the standard of construction. All estimates for traffic survey require the sanction of the railway board and the cost of the survey is included in the budget.

DRMs/GMs are empowered to sanction feasibility studies for required projects in their Division/Zonal Railway considering coal, port connectivity, revenue potential for cargo loading, etc. subject to availability of funds. The feasibility study for projects lying exclusively within the Division can be approved by DRM. Similarly, feasibility study of inter-divisional projects within the Zonal railways jurisdiction can be approved by General Manager. Feasibility study of Inter Railway projects will be approved by the Railway Board.

Feasibility studies of projects are to be carried out by Gati Shakti units of Divisions in the Division and CAO/C for inter Division and inter Zonal Railway projects (for New Lines, Doubling, Gauge Conversions etc.) as per coverage of length and jurisdiction using resources & capability available on the "PM Gati Shakti" portal, designed/hosted by BISAG-N, and engagement of expert agency.

Gati Shakti units

Railways are one of the key drivers of the PM Gati Shakti National Master Plan. Ministry of Railways has set up a multi-disciplinary Gati Shakti Directorate in Railway Board. The Gati Shakti Units in all 68 divisions have been created to fast track all the important works from sanctioning to commissioning. These Gati-Shakti Units have been provided with enhanced sanctioning powers with necessary SOP changes and all these works required are to be processed in IRPSM with Gati-Shakti Tag, duly following the necessary policy guidelines issued by Railway Board. The PM Gati Shakti National Master Plan has helped in expeditious sanction of projects, monitoring of execution of works and co-ordination with other Ministries/State Governments.

The Railway projects costing above Rs. 500 Crore each are sanctioned by the Hon'ble MR/CCEA depending upon the value of the work after appraisal by NITI Aayog and Expanded Board for Railways (EBR). All such projects are required to be examined by Network Planning group (NPG).

Each Division and Zonal Railway Headquarter will have a Network Planning Group (NPG) for selecting feasible projects for the preparation of DPR to improve mobility, throughput/loading in the Railway. The constitution of NPG is as given below:

Zonal Level: PCOM/CTPM of Railway (PCOM/CTPM & SAG officers of Engineering, Electrical, S&T & Finance) as approved by GM.

Division Level: CPM/GS (Dy. CPM/GS/T or equivalent with SG/JAG officers of Engineering, Electrical, S&T, Operating, Mechanical & Finance) as approved by DRM.

On completion of the feasibility study and submission of its report, approval of the DRM/GM is obtained for preparation of DPR for feasible projects required to be executed by Zonal Railway for improving mobility, throughput and loading in the Railways. DRM/GM is empowered to sanction works for preparation of DPR for such projects (whose feasibility study was approved by them) that are found feasible.

Final Location Survey

Final location survey is done with the sanction of Railway Board. It is sanctioned for those approved feasibility studies after their scrutiny and acceptance as described above. It includes detailed assessment of various aspects like...

1. Acquisition of land
2. High flood level
3. Boundaries of village lands
4. State Govt. requirement
5. Position of canals, rivers, culverts etc.
6. Station site and junctions
7. Diversion of traffic
8. Protection work required
9. Road ways and gradients
10. Expected cooperation of local public
11. Requirement of military and civil authority
12. Requirement of clearance from ministry of environment and forestry
13. Demolition of sensitive structures like religious places and burial places