

Consultancy Services for Institutional Strengthening Module of DFCCIL (ISMD)

TERMS OF REFERENCE (Indicative)

1. **BACKGROUND AND PROJECT INFORMATION:**

- 1.1 The Indian Railways network is spread over 65,000 route km and handles more than 1050 million tonnes of freight traffic. Indian Railways is poised to increase its business volume owing to the anticipated high growth in traffic due to accelerated economic growth. The normal delivery of the transport logistics business of IR are handled by Zonal Railways which control the Divisions; the main functional units of Indian Railways. The golden quadrilateral connecting the four metros viz Delhi, Mumbai, Chennai and Kolkata comprises only 16% of route length but moves more than 60% of total freight traffic transported by IR.
- 1.2 In 2007, GOI established the Dedicated Freight Corridors Corporation of India (DFCCIL) under the Companies Act of 1956, as a Special Purpose Vehicle, wholly owned by Ministry of Railways (MOR). DFCCIL has been mandated to build and operate the railway infrastructure for the Dedicated Freight Corridors (DFC). DFCs are being developed to augment rail transport capacity for meeting the rapidly growing freight transport demand of the country. Enhanced rail capacity and transportation performance shall help Railways in increasing modal share. The relationship between MOR and DFCCIL will be governed by a concession agreement and most of the traffic using the DFC will originate/ terminate from/to points on IR's network. The DFCCIL will offer improved freight performance – higher axle load of 25 tonne with capability for up-gradation to 32.5 tonne, 100 km/h speed, and absence of delays due to passenger train priority and saturated track capacity. More than 3000 km of feeder lines are being upgraded to handle heavier and longer trains.
- 1.3 The two dedicated freight corridors are Eastern and Western Corridors. Eastern Corridor extends from Sahnewal (Ludhiana) to Dankuni (Kolkata) and Western Corridor, extends from Dadri to Jawaharlal Nehru Port Terminal near Mumbai with total 3338 route kms.
- 1.4 The dedicated freight corridors projects entail construction of railway tracks capable of handling 25 tonne axle load initially and 32.5 tonne axle load eventually with provisions for longer trains and double stacking of containers. DFC routes will provide significant increase in rail transportation capacity. Presently Western DFC (WDFC) is being constructed to facilitate running of double stack containers trains. Upgraded technology for transportation, readiness for increase in productivity and minimization of unit transport costs remained the guiding principles for formulating this ambitious project of Indian Railways which will be transforming the entire transport infrastructure of India.
- 1.5 These two Dedicated Freight Corridors are planned to become part of a larger heavy haul transportation network, covering future dedicated freight corridors and their feeder routes. Indian Railways Policy Statement for long term development; Vision 2020 stresses the need to reinvent freight services so as to promote increase in modal share of railways. Indian Railway is a member of International Heavy- haul Association (IHHA), and can leverage that membership to transfer knowledge and experience from other countries involved in heavy haul operations.
- 1.6 Though most of the conventional traffic on DFC will originate and/or terminate at stations located on the IR network or production/consumption centres outside DFCs, marketing strategy for additional traffic originating/terminating on DFC is necessary for optimum utilization of capacity created on DFC and ultimately increasing rail share of freight traffic. Detailed traffic projections have been made by Indian Railways and DFCCIL through initial surveys. Traffic on the eastern corridor will be mainly coal & steel and on the western corridor mainly containers but there are many other opportunities. It is foreseen that new traffic generators will emerge with opening of new mines, setting up of ports and industrial corridors along the DFC.
- 1.7 To ensure that the traffic projections materialize on DFCs, timely commissioning of last mile/first mile rail connectivity is important. It is also necessary to assess the line capacity utilization of feeder routes at each five year time-frame to assess the need for capacity augmentation on such routes.

- 1.8 To coordinate and facilitate consultancy study for Institutional Strengthening Module of DFCCIL, a Multi-Disciplinary Committee, hereafter referred as Steering Committee, at the level of Group General Managers/General Managers of DFCCIL has been constituted. The committee will be convened by the GGM/Operations. The Steering Committee will interact with the consultant.

2.0 **Objectives of the Assignment**

The primary objective of this module is to review the management and organizational structure, control system, processes and procedures, HR system, MIS, and make recommendations for DFCCIL to make it an efficient, commercially oriented provider of infrastructure services. The module will therefore review and recommend, capacity building, skill development, process re-engineering and system improvement in areas such as organization and corporate governance of the company, including management and organization structure, human resource planning and development, staff training/study tours, financial management, social and environmental systems, governance systems etc.

3.0 **Scope of Work:**

To meet the objectives of the Program of Institutional Strengthening, the Consultant shall complete the following mutually dependent Tasks 3.1 to 3.10, closely coordinating and managing the tasks within and between for quality and consistency in methods, data and assumptions, recommendations and reporting standards.

- 3.1 **Inception Report:** Prepare and submit an Inception Report that confirms the Consultant's management and team organogram (including management of each task) as contained in the proposal; detailing of the entire assignment in tasks, sub-tasks and other elements. Present the approach and methodology to handle each task, sub-task and elements.

- 3.2 **operations and maintenance (O&M):** Preparation of Operating and Maintenance manuals of DFCCIL, on the basis of best International and Indian practices. Recommend O&M management and control organizational structure and processes to guide all aspects of O&M activity including but not necessarily limited to:

"train movement planning and timetabling; train dispatching; control and management; monitoring and measurement of indicators of infrastructure performance; monitoring and measurement of indicators of train operation performance; identification of factors causing a negative impact on operational performance; monitoring of hand over and take-over of trains at junctions with feeder lines; train safety procedures and monitoring; liaison with Zonal train operators; asset inventory and management; planning and execution of the maintenance of track, signaling, communications, catenary and power supply, and other assets; use of Information Technology; rapid response systems for accident relief, rescue and recovery; and accident investigation. The objective is to identify the most cost effective O&M regime, implementable in the most efficient way. This task should recommend organization for maximizing output through mechanized maintenance, multi skilling and training of staff, and cost-cutting approaches such as End Of Train Telemetry, Centralised Train Control etc."

- 3.4 **Safety Management:** Review the existing Safety, Health, Environment (SHE) and Disaster Management Manual of DFCCIL and recommend suitable changes for safety management focusing on "Steps" to integrate environment and social risk assessment into project preparation and implementation minimizing/mitigating adverse impacts.

- 3.5 **Human Resources Plan:** Review the existing HR Plan of DFCCIL and recommend a comprehensive long-term Human Resources Plan aligned with other institutional strengthening recommendations. The Plan will spell out job descriptions, skills and qualifications for staff at various levels from all the 40 disciplines in DFCCIL. Devise recruitment plans, staff development through training and study tours and preparation of training schedule.

- 3.6 Overall **strategy for DFCCIL institutional strengthening:** Collect, summarize and distill best relevant Indian and international practices in the organization and management of infrastructure companies in general and railway infrastructure companies in particular. Identify the specific organizational challenges for DFCCIL, and recommend changes in the management structure, business processes and service delivery.

- 3.7 **Draft Final Report:** Draft a Final Report covering the scope of work as defined above.. Provide a summary of recommendations and implementation methodology.
- 3.9 **Stakeholder workshop:** Organize and make presentation to and participate in a one-day DFCCIL Institutional Strengthening Workshop for stakeholders to discuss the conclusions and recommendations of the draft final Report and Technical Reports and expose them to professional scrutiny.
- 3.10 **Final Report:** Based on comment and feedback on the draft Final Report from DFCCIL and other national and internationally qualified peer reviewers to be determined, consolidate into a Final Report with an Executive Summary and Annexes.
- 3.11: The total duration of the consultancy is expected to be 12 months with reports delivered according to the following schedule.**

Report	Time (C=date of contract signing)
Inception Report	C + 1 month
Subject Reports: Operations and Maintenance Safety Management Human Resources Plan	C + 6 months Comments on these reports will be provided within one month
Strategy Report	C + 8 months Comments on this report will be provided within one month
Draft Final Report & Workshop	C + 11 months Comments on this report will be provided within two weeks
Final Report	C + 12 months

Skills and Composition of Consultancy Team

5. The consultant shall assemble a team for undertaking the scope of work and tasks described above. In responding to the Terms of Reference, consultancy organizations shall provide curriculum vitae, roles and responsibilities and a written assurance of the named staff that will be working on this assignment.

5.1 All the prospective Consultants shall have sufficient qualified personnel, sub-consultants, and resources to accomplish all the services described herein within the prescribed time. The Consultant shall be capable of providing all necessary professional, technical, and expert services as required to complete all the elements of the Scope of Work.

5.2 The proposed project team should consist of the following minimum personnel. The bidder may include additional experts in the team as considered appropriate. It is expected that each expert will spend at least 70 percent of his time in India and make two or more trips to India as considered necessary as per the agreed work plan.

Team Leader should possess a minimum of 15 years' international experience¹ in management of railway and other large, complex organizations. S/he should also have extensive experience of leading multi-disciplinary teams for railway sector studies related to two or more of the following areas: (i) rail operations and maintenance, (ii) Information systems, (iii) safety, (iv) human resources, or (v) training.

¹ International experience does not refer to nationality. Rather, it means experience in at least two countries outside India.

The Team Leader should have relevant professional education and training including a Post Graduate degree in organizational behaviour, business, economics or engineering.

Railway Operations Expert should have minimum 10 years' international experience in railway operations including in heavy haul railways. The Expert should possess the relevant professional education and training, including a BE or equivalent in engineering, operations research or similar field.

Railway Maintenance Expert should have minimum 10 years' international experience in railway infrastructure maintenance including in heavy haul railways. The Expert should possess relevant professional education and training, including a BE or equivalent in engineering or similar field.

Railway Safety Expert should have minimum 10 years' international experience in railway safety including in heavy haul railways. The Expert should possess relevant professional education and training, including a BE or equivalent in engineering or similar field.

Human Resources Expert should have minimum of 10 years' international experience² in management of human resources in railways and other large, complex organizations. The Human Resources Expert should have relevant professional education and training including a Post Graduate degree in organizational behaviour, human resources or similar field.

Client Support

The client will appoint a full time project coordinator who will assist the consultant in interaction with DFCCIL and Indian Railways. An office with internet connection to accommodate three consultants will be provided on the premises of DFCCIL to facilitate day to day coordination. The consultant will be responsible for providing office accommodation for other staff the consultant might deploy.

DFCCIL will furnish operational manuals, human resources and other information needed to carry out the study.

Suitable letters/assistance shall be provided for obtaining visas/work permits.

² International experience does not refer to nationality. Rather, it means experience in at least two countries outside India.