GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
RAILWAY BOARD  

No. 2015/W-I/Genl./Corr.GM/Pt  
New Delhi, dated: 29.11.2017

The General Managers,  
All Indian Railways.

Sub: Construction of 3rd and 4th Line.

3) SECRly’s letter No. SECR/HQ/Engg./TC-6/Mission Raftaar/321 dated 04.10.2017

Vide Railway Board’s letter under reference, additional policy guidelines for planning new 3rd and 4th line works were issued by Mobility Directorate. Letter seeking clarifications were received from various Railways executing 3rd and 4th line works. The issue was put up for consideration of Board.

Considering the fact that these Capacity enhancement works were sanctioned to remove bottlenecks/capacity constrains and they are funded through Extra Budgetary resources i.e. loan from LIC and debt servicing of EBR-IF (LIC Loan) shall commence from 2020 onwards, the following course of action has been decided by the Board:-

i. **EBR-IF funded project should be executed with existing railway standards without further delay**

ii. Directives of Mobility Directorate for even future projects shall be considered on case to case basis.

Railways are advised to follow the above instructions.

(B.K. Gupta),  
Exe. Director/Proj.M,  
Railway Board.
The General Manager  
All Indian Railways.

Sub: Construction of 3rd and 4th Line.

Ref: 1) Railway Board’s letter No. 98/W-I/Genl./0/30/Pt. I dtd. 01.08.2017  
2) RVNL’s letter No. CPM/DKI/MTJ-JHS/GC dtd. 06.09.2017.  

Vide Railway Board’s letter under reference, instructions were issued for 3rd and 4th line works. Letter seeking clarifications were received from various Railways and RVNL executing 3rd and 4th line works. Considering that the 3rd and 4th line works have been sanctioned, on the basis of existing congestion levels and required to be commissioned at the earliest to avoid further diversion of traffic, it is reasoned that incorporating DFC standards now in these works would not only delay the commissioning of the works but also substantially increase the overall estimate, the following course of action has been decided by the Board:

3rd/4th line projects will be developed as per normal railway standards.

Railways are advised to follow the above instructions.

(B.K. Gupta)  
Executive Director (Project Monitoring)  
Tel/Fax: 011- 2338 8236
The General Managers,
All Indian Railways

Sub: Construction of 3rd line & 4th line to DFC standard.
Ref: Minutes of the Board meeting held on 21.02.2017.

Railway Board has taken following decision with regard to construction of 3rd & 4th line projects.

"It was decided that wherever 3rd line has been sanctioned but work has not commenced, the same should be to DFC standard. It would be further desirable to sanction 4th line also on all these sections and construct both 3rd line as well as 4th line to DFC standard. Suitable material modification, if required, should be processed for sanction."

Accordingly, Zonal Railways are advised to do the needful and submit proposals.

(B.K. Gupta)
Executive Director (Project Monitoring)
Tel/Fax: 011- 2338 8236
The Executive Director/Project Monitoring,
Railway Board,
Rail Bhawan,
New Delhi.

Sub: Construction of 3rd line & 4th line to DFC standard.
Ref: Board’s Letter No. 98/W-1/Genl./0/30/Pt.I dated 01.08.2017.

Railway Board vide its Letter under reference, has communicated Railway Board’s decision with regard to construction of 3rd line & 4th line projects. In accordance with this decision, wherever 3rd line is sanctioned and work has not commenced, the same should be to DFC standard and it would be desirable to sanction fourth line also on all these sections and construct both 3rd line as well as 4th line to DFC standards.

Following issues needs clarification in implementation of above decision of Railway Board:

1. On projects such as Mathura-Jhansi 3rd line on NCR, the contract has been awarded for construction of important and Major bridges for 25 T Loading standards and work has commenced. For construction of Roadbed and Minor bridges for 25 T Loading standards, bids have already been opened and under finalization. In such cases, implementing Railway Board’s decision will lead to various contractual issues.

2. On North-South Route, DFC is already sanctioned and construction of 3rd line to DFC standard may not be desirable from Techno-Economic considerations.

3. Linking construction of sanctioned 3rd line with unsanctioned 4th line may delay the targeted capacity enhancement 3rd line projects.

(CPM/Delhi)

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Executive Director (Project Monitoring)

Railway Board, Rail Bhawan
New Delhi

Sub: Construction of 3rd line & 4th line to DFC standard
Ref: Railway Board letter No 98/MV-1/Genl./0/30/Pt.I dated 01-08-2017

In reference to above, the status of the projects of 3rd line/4th line in SEC Railway (Construction), in respect of the loading standard is given below.

<table>
<thead>
<tr>
<th>Projects</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champa-Jharsuguda 3rd line (152.38)</td>
<td>46.324 Km is commissioned and in balance stretch the work is in progress with 25 T loading standard for Formation and Bridges.</td>
</tr>
<tr>
<td>Durg-Rajnandgaon 3rd line (31 Km)</td>
<td>Out of 31 km 8 Km is commissioned and in balance stretch, work is in progress with 25 T loading standard for Formation and Bridges.</td>
</tr>
<tr>
<td>Rajnandgaon-Nagpur 3rd line (228 Km)</td>
<td>The work is in progress at 39.17 Km alongwith at important bridges and in balance stretch the tenders are under advance stage of finalisation with 25 T loading for formation and bridges.</td>
</tr>
<tr>
<td>Bilaspur-Jharsuguda 4th line (206 Km)</td>
<td>At 82 Km the work is in progress with completion of substructure of one important bridge and in balance stretch EPC tender is under finalisation with 25 T loading for formation and bridges.</td>
</tr>
</tbody>
</table>

Thus 25 T loading has been adopted for formation and bridges of 3rd line and 4th line on HDN east-west corridor (Jharsuguda-Bilaspur-Nagpur). In view of this, it is not feasible to adopt the DFC standard at this stage. However, the necessary instructions may be issued regarding the above subject.

(D. R. Tembhurney)
Chief Engineer/Con-1

The Executive Director
Railway Board: For kind information please.
EAST COAST RAILWAY

Office of the
Chief Administrative Officer (Construction)
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Fax/Tel: 0674-2300193
Date: 26th July 2017

No. CE/CON/II/BBS/BHC-NRG 3rd line/66 02 55

To
The Executive Director (Planning),
Railway Board,
Room No. 258, Raisina Marg,
New Delhi – 110 001

Sub: Proposal required for 3rd/4th line in place of New DFC Corridor.
Ref: Railway Board’s letter No. 2017/PL/14/1 dated 29.06.2017.

With reference to the above cited subject, Railway Board has advised to develop the 3rd/4th lines in East Coast Corridor from Vijayawada to Kharagpur as per DFC standard. It is pointed out that 3rd line from Bhadrak to Nergundi (80 km) (excl. Jakhapura–Haridaspur) has been sanctioned in the year 2012-13 with 25t Axle loading standard. The detailed estimate has been sanctioned in Oct’2016 & March’2017 (Pt). The status of the project is as under;

Bhadrak - Jakhapura (51.4km) : RFQ finalized RFP & MCA under approval of Railway Board. Agency is being finalized on annuity model.

Jakhapura-Haridaspur (23.5km) : Commissioned (RVNL) with HM loading standard.

Haridaspur – Byree (16.8km) : Tenders under finalization on annuity model.

Byree – kapilas (10.5km) : Work in progress.

Kapilas – Nergundi (4.2km) : Tender under finalization with conventional method.

The Bridges have been/are planned to be designed as per 25 T loading std. As per “Bridge rule 2.3.1 (a) & (b)” and “Substructure & Foundation code 5.81 table-3” the design parameters of 25t loading standard, HM loading standard and DFC loading standard differ as under;

<table>
<thead>
<tr>
<th>SN</th>
<th>Parameters</th>
<th>25T loading standard</th>
<th>HM Loading standard</th>
<th>DFC loading standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Axle load</td>
<td>25.00t</td>
<td>30.00t</td>
<td>32.50t</td>
</tr>
<tr>
<td>2.</td>
<td>Train load</td>
<td>9.33 t/m</td>
<td>12.00t/m</td>
<td>12.13t/m</td>
</tr>
<tr>
<td>3.</td>
<td>Earth pressure due to surcharge due to live load</td>
<td>13.70t/m</td>
<td>15.80t/m</td>
<td>16.30t/m</td>
</tr>
</tbody>
</table>

Similarly, as per para 17.1 of “Guidelines and Specifications for Design of Formation for Heavy Axle Load, GE-14” the parameters and specifications for formation design are different for 25t axle load and 32.5t (DFC) load. To construct the 3rd line with DFC standard the on-going works have to be stopped and tenders under process/finalization have to be cancelled /discharged. This will also need sanction of Material Modification. Thereafter, design/drawings for strengthening of existing and for balance bridges and formation have to be done before processing for tenders.

In view of the above, Railway Board is requested to kindly issue necessary instructions at the earliest. This has got the approval of CAO/C/BBS.

C/- ED/Works /Railway Board/New Delhi
C/- CTPM/ECOR

(N.S.Ulkey)
Chief Engineer (Con-II)
E/Co; Railway, Bhubaneswar

Reference has been received from ECo on 21st June. 2017

ED/Proj M.