भारत सरकार / GOVERNMENT OF INDIA

रेल मंत्रालय / MINISTRY OF RAILWAYS

(रेलवे बोर्ड / RAILWAY BOARD)

No. 2025/W-I/Genl./Bridges (E-File No.3489910) **New Delhi, Dated: 10.01.2025**

The General Managers,
All Indian Railways.

Sub.: Improving the planning and construction of major/ Important bridges and opening thereof.

Ref.: (i) Rules for Opening for Public Carriage of Passengers-2000
(ii) Railway Board's L. No. 2022/19/CE-III/BR/Girder Inspection, E-3322338 dt. 18.10.2024.
(iii) Railway Board's letter No. 2023/19/CE-III/BR/RDSO/1, E-Office No. 3423738 dt. 06.08.2024.

In order to improve planning & construction of major & important bridges and to facilitate the process of opening, following measures need to be taken:

1. For important and special type of bridges, separate guidelines issued for formation of Technical Advisory Group (TAG) and getting the approval of DBR should be followed. Commissioner of Railway Safety (CRS) should be kept apprised about the special features/ innovative aspects of the Design Basis Report and the decisions taken by TAG thereon.

2. Planning & Design Cells should be strengthened at construction HQ level. Instructions issued, vide Ref (iii) above in this regard, shall be referred. Short training sessions should be organized at Zonal Railway Headquarter level to improve the skills & knowledge of officials with the assistance of CBE. Zonal Railways should engage 3rd party inspection wherever feasible for quality checks. For erection of girders also, third party inspections as per approved method statements/Safety precautions, can be carried out.

3. Instructions regarding supply of opening documents to Commissioner of Railway Safety (CRS) are given in Rule 4.1 of Chapter-II of the Opening Rules. In order to facilitate process of inspection and opening of major and important bridges, necessary application for minor sanction shall be submitted before start of construction. The application shall be submitted to the Commission of Railway safety in advance with details such as general arrangement drawings (GADs), calculations on adequacy of waterways, maximum anticipated scour depth, river training works and various other compliances to technical instructions.

This is issued with the approval of Board(MI).

10/01/25

(Vivek Kumar)
Executive Director/Gati Shakti (Civil)II
Railway Board

Copy to:

1. Chief Commissioner of Railway Safety.
2. Commissioner of Railway Safety - All Circles.

I/3102221/2024

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No.2023/19/CE-III/BR/RDSO/1(E-3423738) **New Delhi, Dated: 06.08.2024**

Principal Chief Engineers,
All Zonal Railways

Sub: Strengthening of Design cells & Bridge Line units
Ref: (i) Review meeting on 19.07.2024 at Mumbai.
(ii) Rly Bd. L. No. 2016/52/CE-III/BR/Safety dated 05-08-2024.
(iv) Rly Bd L. No. 2017/50/CE-III/BR/FOB dated 26.04.2024
(v) Rly Bd L. No. 2017/Trans/01/policy dated 27-11-2017.
(vi) 2024/10/CE-III/BR/Prof of Practice(E-3454464) dated 05-03-2024

Bridges are important structures related to public safety. Design and maintenance of these structures require careful consideration of actual needs of the user, material strength and it's deterioration with age & fatigue effects on structure under sustained dynamic loads etc. The FOB/ROBs are generally constructed in steel and adequate safety margins are to be kept in design for material degradation and future increase in loading. With faster pace of development, the population of bridges is constantly on increase. New types of designs are being adopted increasingly.

2.0 In order to maintain the bridges, the professional capabilities of maintenance units and design cells are to be improved. Some of steps which can be taken early are as under :-

(A) PLANNING & UP GRADATION OF FACILITIES:

(i) Strengthening of **Design cells & Bridge line units** by filling up vacant posts of SSE/JEs.

(ii) Creating **additional posts of Dy. CE/Br-Line, SSEs/JEs** in bridge line units & design cells to deal with the work of planning & design of bridges effectively. The posts rendered surplus in other categories may be got re-designated for the purpose.

(iii) **New Software for RSI analysis and design of bridge structures** etc. shall be procured.

(B) KNOWLEDGE SHARING & TRAINING:

(i) The **training facilities** for supervisors and artisans at **ZBTIs** shall be reviewed and deficiencies shall be made good. Additional works shall be got sanctioned for procurement of **computers, teaching aids, up-gradation of hostels** & other civil amenities.

(ii) Training needs of **Design & Drawing cadre** to be identified & special courses to be get conducted at ZBTI or IRICEN.

(iii) Nominating Bridge Engineers & SSEs in **technical seminars** organised by various bridge forums.

(iv) **In-house training/seminars** on issues of correct preparation of GADs, maintenance of ROBs/FOBs, inspection of bridge, case studies on failures etc. should be organised periodically in Divisions/ HQs. for knowledge sharing.

I/3102221/2024

(C) QUALITY CONTROL :

(i) **Bridge Work Shop** & **ZBTI** shall be under the administrative control of **CBEs.**

(ii) **List of working consultants** shall be maintained with their core competence in specific fields of design such as Steel FOBs, RCC Structures & ROB, preparation of General arrangement Drawings and TADs, waterway calculation for bridges, RSI studies, third party auditing etc.

(iii) **All new construction** should be maintenance friendly with control on quality of work. CBE shall have **check list** to scrutinise the GADs & quality of fabrication should be ensured through **third party inspection.**

(iv) The **professional competence** of the engineers involved in the fabrication inspection to be reviewed & got certified.

(D) REVIEW & MONITORING:

(i) One Sr. DEN/ DEN shall be made in-charge of bridge matters in divisions.

(ii) Adequate no. of SSE/JEs shall be posted in **Divisional Bridge Cell.** There should be centralised control of various correction slips issued to codes & manual and technical instructions issued by RDSO, railway Board etc. for effective implementation and regular updation on **Bridge Management System.** Adequate number of Data Entry Operator should be made available to Divional Bridge Cell for updation of above.

(iii) Sr. DEN/Co shall have **weekly meeting** to review the position of Bridge rehabilitation works and matters pertaining to inspection of bridges. Concept of predictive maintenance shall be followed.

(E) OTHERS:

(i) **Third party audits** shall be got conducted for **old & vulnerable ROBs/FOBs** and other bridges as per Railway Board instruction already issued.

(ii) Assistance of **RITES/IRCON/DMRC/IITs /NIITs/ VJTI, Mumbai /CRRI/ SERC /IISc, Banglore /CWPRS, Pune/ NIH, Roorkee /CSIR labs/PSUs** and other institutions of repute shall be taken in specific cases of planning, design, peer reviewof Designs & DPRs and structural audits etc. as per Rly. board instructions issued vide **ref- (iv)** above.

iii) **DPR for works** related with **improving the mobility** may be got sanctioned under **PH-32** to improve speed potential or to relax existing speed restrictions on bridges.

DA : As Above

(Ravindra Kumar Goel)
Principal Executive Director (Bridge)
Railway Board

Copy to:

GMs All zonal railways - for information.

DG/IRICEN – for information pl.

Signed by
Ravindra Kumar Goel
Date: 08-08-2024 14:39:14

Issued by hand on 28.10.2024

2020/17/CE-III/BR/GirderInspection

I/3108447/2024

भारतसरकार GOVERNMENT OF INDIA
रेलमंत्रालय MINISTRY OF RAILWAYS
(रेलवेबोर्ड RAILWAY BOARD)

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No. 2022/19/CE-III/BR/Girder Inspection (E-3322338) New DelhiDated 18-10-2024

General Manager/Const (NFR)
All CAO/C &PCEs,
Zonal Railways

Sub: Planning of non-standard spans of Open Web Girders for New line, Doubling and Multi tracking Works of Railways

Ref : (i) 2013/CE-III/BR/RDSO/Misc. dated 04-6-2014 and 11-08-2014
(ii) RDSO letter No. CBS/DOW dated 18.10.2024

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A case of rejection of Non-standard Open Web Girder has come to the notice of Railway Board wherein besides issue of insufficient camber, one of the bottom chords was found having been repairedfor the damagecaused during erection. It needs to be understood that the railway bridges are subject to heavy dynamic loads and stress concentration generated at such repaired locations will cause early fatigue failures. One of the IITs has approved the repairs without any technical examination of the likely adverse implications of the repairs done.

2.0 Several cases are reported where the Non-standard designs are being proposed with a small variation with respect to standard span. Design of Open Web Girders is a specialized job where camber & pre-stressing are provided in truss members and strict quality control is maintained at fabrication workshops to ensure that notches in fabricated parts are avoided and there are no locations of stress concentration except those provided in design.

3.0 In view of above, it has been hereby decided that the non-standard Open Web Girders shall only be planned when these are totally unavoidable. Prior approval of Railway Board shall be taken through PCE with complete justification. Detailed instructions in this regard are contained in the **Annexure-I** attached.

This is issued with the approval of Member Infra, Railway Board.

DA: As above

Signed by
Ravindra Kumar Goel
Date: 26-10-2024 12:41:18

(Ravindra Kumar Goel)
Principal Executive Director/Bridge
Railway Board

Copy to : (i) DG/IRICEN, Pune for information
(ii) PED/Infra-II, RDSO, Manak Nagar, Lucknow for information & necessary action.
(iii) MD/CMD, RITES, IRICON, RVNL, KRCL, MRVC & DFCCIL etc. for information

I/3108447/2024

Annexure-I

(Ref : Rly Bd L No. 2022/19/CE-III/BR/Girder Inspection (E-3322338)New Delhi Dated 18-10-24)

Use ofNon-standard spans of Open Web Girders (OWG)

1. Railway Bridges are vital links over rivers & roads etc. They are not only to be constructed but have to be maintained well for longer service life. The designs of standard spans are validated over a period of time and maintenance issues are understood well and methods for remedial attention are also standardized. Besides this quick replacement of standard girders is possible during emergency restoration as fabricated girders of similar type can be easily diverted from other ongoing works.

2. In view of above, it has been advised time to time that only standard span shall be adopted in all new line/doubling /multi tracking projects of railways. To overcome site constraints, pier caps may be suitably projected to meet the actual requirements of standard spans. In case new bridge is to be located close to existing bridge, staggering of pier arrangement with respect to existing piers may be considered. The scour control measures during the design of new foundations or protection of existing foundations from anticipated scour may be considered with requisite hydraulic studies.

3. Non-standard spans for OWG shall be adopted only in un-avoidable situations with prior approval of Railway Board. The proposal shall be submitted by PCE after examining the justification and professional capacity of the executing unit to get a good design and quality execution done.

4. If non-standard spans are adoptedcare shall be taken,while designing,to follow available RDSO standard drawings of nearest OWG span with minimum required changes made to meet the essential design requirements. Complete procedure of detailed design, however shall be followed as per DBN approved by RDSO. As per extant instructions, design of all non-standard spans of OWG shall be approved by Zonal Railways.

5. **Design Basis Notes (DBN)** of Non-standard spans of OWG in all bridges shall be approved by RDSO. Critical values of various design parameters such as loading, fatigue category, partial factor of safety, type and specifications of HSFG bolts etc. shall be specified in DBR/DBN. Connection design at every node shall be examined carefully with respect to member capacity and number of rivets/HSFG bolts required/ provided. RDSO shall also specify the check points of vital design stages so as to ensure that design process is followed correctly by DDC & PC. The stages of fabrication process to be inspected by DDC & PC and QAP shall be part of **DBN.**

6. Designs may either be done by in-house Design Cell of CAO/C or through outsourcing the work to competent Detail Design Consultants (DDC) duly proof checked by Proof Consultants (PC). In the later case also, the design cell shall be involved to verify that the design is being done as per the approved DBN and all vital design stages are completely satisfactorily.

7. The engagement of DDC and PC and quality of fabrication shall be regulated and monitored as under :

    a. Only competent DDC and PC of repute,having professionally trained designers, shall be awarded the consultancy works. DDC and PC shall be engaged from the very beginning of the project and they shall remain associated with the construction

of bridge till commissioning/defect liability period. During construction stage, same DDC and PC will provide necessary advice/ design modification as and when warranted.

b. While engaging Proof Consultants, any conflict of interest with DDC or Contractor shall be avoided. IIT/NIT may be associated for technical guidance & opinion only in exceptional cases.

c. Same DDC and PC shall be involved in the design of foundation, substructure, super structure, launching & erection schemes, temporary works, formwork etc. to safeguard against any mismatch in designs, proper estimation of various loads or damage during the final erection on sub-structure.

d. Professional Liability clause of sufficient duration shall be added in the contract of DDC and PC. The responsibility of these Consultants in case of any failure shall be clearly laid down in tender conditions. Necessary certificates from DDC & PC shall be taken on design documents and drawings before release of drawings for fabrication & construction.

e. Based on design drawings and approved DBN submitted, the PC shall check the adequacy of design based on **independent analysis** performed on separate software *(other than that used by Design Consultant)* as per load parameters & codal provisions given in **DBN.** PC will also check detailing of all the load bearing connections and bearings in his independent report.

f. Fabrication workshop shall be selected carefully after ensuring its past experience & capacity to deliver the span of girder. During fabrication of steel girders, the DDC & PC shall associate with Field engineers/PMC and inspect the work of fabrication at different stages to ensure that the quality of work is achieved as per specifications, design assumptions made and precautions required from fatigue consideration etc. All the requirement of RDSO specification (B-1: 2000) and approved QAP shall be met with to the full satisfaction of DDC & PC. The fabrication stages shall be mentioned in the DBN and approved by RDSO. Based upon their certified technical report, project executing authority shall raise the inspection call to RDSO/TPI.

g. Erection methodology given by the construction agency duly approved by Field engineers /PMC, shall be scrutinized by the DDC and PC to check for any unwanted erection stresses coming up at different stages. Sufficient factor of safety at every stage shall be ensured. Structural adequacy of members and joints to withstand the erection and launching forces, wind forces etc. shall be certified by these consultants. Deficiencies, if any, shall be pointed out clearly in the technical report and the certificate of satisfactory completion shall be given for that stage of erection and launching. Detailed technical report from DDC & PC must be ensured before undertaking next stage of erection/ launching.

8. These are minimum instructions for guidance and do not restrict project execution authority or CAO(C) to implement other necessary instructions for better quality control on thedesign activities and related fabrication & erection work as per actual requirements.

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GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No. 2013/CE-III/BR/RDSO/Misc. **New Delhi, dt. 04.06.2014**

1. **Principal Chief Engineers,**
   All Indian Railways.

2. **Chief Administrative Officer (Con.)**
   All Indian Railways.

Sub.: Use of Standard drawings on railway system.

The task of developing standard drawings for the zonal railways has been entrusted to RDSO to get the benefit of better designs. However, it has been noted that sometimes zonal railways are not willing to use standard drawings and insist on developing drawings for situations where standard drawings are available. This entails unnecessary duplication of work and goes against the spirit in which RDSO has been entrusted the task of standardization of drawings.

2.0 In view of the above, it is advised that henceforth standard drawings available with RDSO may be used as far as feasible while planning of any work. In case non-standard drawings are required to be used, specific approval from RDSO may be obtained, giving detailed reasons / justification for not using the standard drawings.

V. Jain 4/6/14.

(V.K. Jain)
Director Civil Engg (B&S)
Railway Board

Copy to:

1. **Chief Bridge Engineers, All Indian Railways** for information and necessary action.
2. **CMD, Rail Vikas Nigam Ltd., New Delhi – 110006,** for information & necessary action.
3. **Executive Director/B&S/RDSO,** for information & necessary action.
4. **Executive Director/Structure/RDSO,** for information & necessary action.

Issued by bmcell on 26.12.2024

2021/21/CE-III/BR/1/TAG

I/3113032/2024

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)
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No. 2021/21/CE-III/BR/TAG/Br.47 (E-3352673) New Delhi dated 16.12.2024

General Manager,
All Zonal Railways.

Sub:- Design Basis Report (DBR) and Technical Advisory Group (TAG) for new important bridges.

Ref:- Board's letters no. 2014/CE-III/BR/Bridge dated 10.03.2017, 12.02.2020.
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The existing policy of approval of Design Basis Report (DBR) and Technical Advisory Group (TAG) has been reviewed and it has been decided to withdraw the powers delegated to Zonal Railways.

Accordingly, Board's letter No. 2014/CE-III/BR/Bridge Policy dated 20.04.2023 stands withdrawn. The instructions on TAG as available prior to issue of above letter dated 20.04.2023 shall be adhered to.

This has the approval of Member/Infra.

DA: As above

Signed by
Abhimanyu Lamba
Date: 26-12-2024 13:15:33

(Abhimanyu Lamba)
Director Civil Engg./B&S-I
Phone No. 011-478-45459

Copy to: PCEs, All Zonal Railways for information and necessary action please.

Issued by: Email on 20.04.23

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)
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No. 2014/CE-III/BR/Bridge Policy **New Delhi, dated 20.04.2023**

Principal Chief Engineer,
All Zonal Railways.

Chief Administrative Officer (Cons.),
All Zonal Railways.

Sub: Constitution of Technical Advisory Group (TAG) / Technical Advisory Committee (TAC) for new important bridges / Rebuilding – Rehabilitation - retro fitment of Major & Important Bridges.

Ref: Railway Board's letters of even number dated 09.03.2017 & 12.02.2020.

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With a view to simplify and empower Zonal Railways in quicker decision making, the following consolidated guidelines may be followed in supersession of instructions issued in respect of formation of TAG/TAC for new important bridges and rebuilding - rehabilitation - retro fitment of major/important Bridges specially in cases where use of special type of span/use of new technology/unconventional solution is envisaged and which warrants expert advice/input or warrants use of codes other than Indian Railway Codes due to peculiarity of each case:

1. **For new important bridges & rebuilding of important/ major bridge**:

1.1 DBR should be prepared (as per BS-122) for important bridges by the executing agency (e.g., CAO/C unit or PSU or any other) and should be approved by CBE.

1.2 DBR should be submitted to RDSO, if RDSO's association is required as per Railway Board letter under reference above. In cases, where requirement of opinion from outside experts is felt, RDSO will recommend formation of TAG/TAC to Zonal Railway.

1.3 CAO/C or PCE (for PSUs or any other organization/ unit) of the concerned Zonal Railway will approve formation of TAG/TAC, its members and Terms of reference, keeping ED/B&S/RDSO and CBE of concerned Zonal Railways as standing members of the TAG/TAC.

1.4 Modified DBR including final TAG/TAC recommendations shall be further examined by PCE/ CAO (executing agency) and forwarded to RDSO with their concluding recommendations.

1.5 Modified DBR including final TAG/TAC recommendations duly recommended/ modified by PCE (for PSUs or any other organization/ unit) /CAO-C (executing agency) shall be examined & accepted/modified/approved by PED/Infra/II/RDSO (looking after B&S Dte.). This should be informed to Railway Board on conclusion.

2. **For Rehabilitation/ retrofitment of Important/ Major bridges**:

2.1 Proposal including design concept, technical challenge/ justification including other details and also DBR (if required) should be prepared by the executing agency (e.g., CAO/C unit or PSU or any other) and should be approved by CBE.

2.2 Steps **1.2** to **1.5** as above should be followed in all cases, where RDSO association is required.

2.2.1 In all other cases not requiring RDSO's association following shall be adopted;

2.2.2 Proposal by executing agency should be submitted to CBE, who will recommend the formation of TAC/TAG to Executing agency.

2.2.3 CAO/C or PCE (for PSUs or any other organization/ unit) of the concerned Zonal Railway will approve formation of TAG/TAC, its members and Terms of reference, keeping CBE of concerned Zonal Railways as standing member of the TAG/TAC.

2.2.4 Final TAG/TAC recommendations alongwith final recommendations of executing agency (CAO/C, CBE for others) shall be accepted/approved/modified by PCE. This should be informed to RDSO, Railway Board on conclusion.

This issues with the approval of the Board (M/Infra).

20.04.23

(L. L. Meena)
Director/Civil Engg./B&S
Ph. No. 011-478-45455

Copy to following for information and necessary action please:

1. PED (Infra-II)/RDSO for kind information and necessary action please.
2. ED/B&S/RDSO for information please.
3. Managing Director, Konkan Railway Corporation Ltd, (KRCL), Post Box No:-9, Belapur Bhawan, Sector-11, CBD Belapur, Navi Mumbai-400614, Maharashtra.
4. Chairman & Managing Director, IRCON, C-4, District Centre, Saket, New Delhi-100017.
5. Chairman & Managing Director, RITES, RITES Bhavan, Plot No-1, Sector-29, Gurgaon, Haryana-122001.
6. Chairman, DMRC, Metro Bhawan, 13, Fire Bridge Lane, Barakhamba Road, New Delhi - 110001.
7. Chairman & Managing Director, CONCOR, CONCOR Bhawan, C-3, Mathura Road, Opp. Apollo Hospital, New Delhi-110076.
8. Chairman & Managing Director, RVNL, 1st Floor, August Kranti Bhavan, Bhikaji Cama Place, R.K. Puram, New Delhi.
9. Chairman, DFCCIL, 5th Floor, Pragati Maidan, Metro Station Building Complex, New Delhi-110001.
10. Chairman & Managing Director, MRVC, 2nd Floor, Churchgate Station Building, Churchgate, Mumbai-400020.
11. Vice Chairman, RLDA, Near Safdarjung Railway Station, Moti Bagh-I, New Delhi-110021.
12. Managing Director NHSRCL, Asia Bhavan, Sector-9, 2nd Floor, Road No. 205, Dwarka, Delhi.
13. Managing Director, Pipavav Rail Corporation Ltd, B 1202, B Wing, 12th Floor, Statesman House, 148 Barakhamba Road, New Delhi -110001.

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2014/CE-III/BR/Bridge Policy **Date-12.02.2020**

Principal Chief Engineer,
All Zonal Railways.

Chief Administrative Officer/Construction
All Zonal Railways.

Sub: Design Basis Report (DBR) and Technical Advisory Group (TAG) for new important bridges.
Ref: Board's letter no. 2014/CE-III/BR/Bridge Policy dt. 10.03.17

RDSO, in Nov-2015 has issued report no. BS-122 "Guidelines of RDSO approval of planning and DBR for important bridges". Board vide ref above thereafter issued guidelines for approval of design basis of important bridges in cases where use of special type of span/use of new technology is envisaged or which warrants use of codes other than Indian Codes due to peculiarity of the bridge.

It is gathered that in case of important bridges being constructed by PSU, the TAG is being formed without ED/RDSO and CBE of concerned railway.

In view of above, the following consolidated guideline has been approved by Board (ME) regarding preparation of DBR, formation of TAG and approval of DBR:-

i. DBR should be prepared (as per BS-122) for important bridges by the executing agency (CAO/C unit or PSU) and should be approved by CBE.
ii. DBR should be submitted to RDSO if RDSO association is required as per Rly Bd letter under reference (i).
iii. RDSO will examine the DBR and clear it.
iv. For few cases where requirement of expert opinion from outside railways is felt, RDSO will recommend formation of TAG.
v. CAO/C or PCE(for PSUs) of the concerned zonal railway will approve formation of TAG, its members and Terms of Reference. ED/RDSO and CBE of concerned zonal railway must be members of the TAG.
vi. Modified DBR including final TAG recommendations should be submitted to Board for approval.

12/2/2020

(O.N. Sharma)
Director C E/B&S
Railway Board
Telefax: 011-23388210
Email:dcebsrb@gmail.com

Copy to:-

1 ED/B&S/RDSO
2 ED/Structures/RDSO
3 PSU's

i) Managing Director, Konkan Railway Corporation Ltd, (KRCL), Post Box No:-9, Belapur Bhawan, Sector-11, CBD Belapur, Navi Mumbai–400614, Maharashtra.

ii) Chairman & Managing Director, IRCON, C-4, District Centre, Saket New Delhi – 100017.

iii) Chairman & Managing Director, RITES, RITES Bhavan, Plot No-1,Sector–29, Gurgaon, Harayana-122001.

iv) Chairman, DMRC, Metro Bhawan, 13, Fire Bridge Lane, Barakhamba Road New Delhi - 110001,

v) Chairman & Managing Director, CONCOR, Concor Bhawan, C-3, Mathura Road, Opp. Appolo Hospital New Delhi – 110076.

vi) Chairman & Managing Director, RVNL, 1st Floor, August Kranti Bhavan, Bhikaji Cama Place, R.K.Puram, New Delhi.

vii) Chairman, DFCCIL, 5th Floor, Pragati Maidan, Metro Station Building Complex, New Delhi – 110001.

viii) Chairman & Managing Director, (MRVC), 2nd Floor, Churchgate Station Building, Churchgate, Mumbai – 400020.

ix) Vice Chairman, (RLDA), Near Safdarjang Rly. Station, Moti Bagh-I, New Delhi - 110021.

x) Managing Director NHSRCL, Asia Bhavan, Sector-9, IInd Floor, Road No.-205, Dwarka Delhi.

xi) Managing Director, Pipavav Rail Corporation Ltd, B 1202, B Wing, 12 th Floor, Statesman House, 148 Barakhamba Road, New Delhi -110001.

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No.2014/CE-III/BR/Bridge Policy

New Delhi, dt 09.03.2017

Director General
RDSO/Manak Nagar, Lucknow.

Principal Chief Engineer,
All Zonal Railways.

Chief Administrative Officers(Construction)
All Zonal Railways.

Sub: Approval of design basis of important bridges by RDSO.
Ref: Board's letter No.2013/CE-III/BR/RDSO/Misc dated 4/06/2014.

Vide letter under reference above, the instructions were issued that in future, RDSO shall be associated in planning of all important bridges which include approval of design basis by RDSO and approval of waterway planning.

2. Subsequent to issue of above instructions, a lot of representations are being received from Zonal Railways regarding procedural delay in approvals at various levels resulting in delay in execution of works.

3. In view of above, the matter has been reviewed and in partial modification to the earlier instructions issued vide reference above, it has now been decided that in all such cases of important bridges where standard RDSO spans are proposed and where waterway is being provided following provisions of IRS Sub-structure and Foundation Code and other IRS Codes, RDSO may not be associated. However, in all cases of important bridges where use of special type of span/use of new technology is envisaged or which warrants use of Codes other than Indian Codes due to peculiarity of the bridge, RDSO may be associated in planning of all such important bridges and final approval for the same may be obtained from Railway Board.

(A.K.Singhal) 10.3.17

(A.K.Singhal)
Executive Director Civil Engg./B&S
Railway Board

Copy for information and necessary action to:

1. CMD/RVNL, New Delhi
2. CMD/IRCON, Saket, New Delhi
3. CMD/RITES, Gurgaon

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No. 2013/CE-III/BR/RDSO/Misc. **New Delhi, dt. 04.06.2014**

1. **Principal Chief Engineers,**
   All Indian Railways.

2. **Chief Administrative Officer (Con.)**
   All Indian Railways.

Sub.: Planning of new important bridges

Planning of important bridges is an important activity and needs to be carried out carefully. Guidelines for this are available in various codes, manuals and instructions etc. However, it has been observed that sometimes planning is not done properly and certain decisions are taken which create difficult situations later on.

2.0 It is, therefore, advised that henceforth RDSO be associated with the planning of all important bridges. This association shall be in two ways:

(i) Approval of design basis for the bridge shall be done by RDSO. The design basis shall include choice of span configuration, choice of materials and methods of construction etc. The basic field date on ecological conditions, environmental conditions etc. shall be enumerated in the design basis note so that the design basis for the bridge can be approved.

(ii) Approval of waterway planning including choice of location of bridge, computations for waterway and flood etc. shall be given by RDSO.

Vkjain 9/6/14.

(V.K. Jain)
Director Civil Engg (B&S)
Railway Board

Copy to:

1. **Chief Bridge Engineers, All Indian Railways** for information and necessary action.
2. **CMD, Rail Vikas Nigam Ltd., New Delhi – 110006,** for information & necessary action.
3. **Executive Director/B&S/RDSO,** for information & necessary action.
4. **Executive Director/Structure/RDSO,** for information & necessary action.