GUARD

FILE

2020

भारतसरकार Government of India
रेलमंत्रालय Ministry of Railways
(रेलवेबोर्ड) (Railway Board)

No. 2020/CEDO/SD/RS/01 **New Delhi, Dated 23.12.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Condonation of infringements w.r.t. IRSOD (BG) Revised, 2004 by **wheel diameter (840mm)** of Broad Gauge Flat Steel wagon type **'BFNV'** to RDSO Drawing No. WD-19024-S-02(Alt-3) for operation on Indian Railways

Ref:- (i) RDSO's letter No. CT/DG/LW/BFNS, Dated 21.10.2020

(ii) CCRS's letter No. Q.14011/03/2020-21-T.W, Dated 05.12.2020

With reference to your above application, dated 21.10.2020, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised, 2004 by **wheel diameter (840mm)** of Broad Gauge Flat Steel wagon type 'BFNV' to RDSO Drawing No. WD-19024-S-02(Alt-3), as shown in details enclosed with above mentioned application, details of infringements as under :

(i) **Clause 2(ii) –** Minimum diameter on the tread of new carriage of wagon wheel, measured at 63.5mm from wheel gauge face by 74mm (i.e. 840mm instead of 914mm)

Further, above sanction of condonation is subject to the following stipulations :

"(i) Instruction related to the movement of the rolling stock on Points and Crossing/Turnouts & Diamond Crossings should be incorporated in the Speed Certificate for its operation, whenever being issued by RDSO.

(ii) The limit of wheel flat to be reduced from 60 mm to 50mm for 840mm diameter wheel."

Prem Sagar
23/12/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

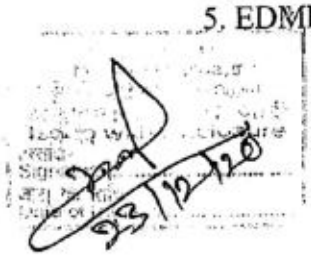
O/C

No. 2020/CEDO/SD/RS/01 **New Delhi, Dated 23.12.2020**

ISSUE PLS 23/12/2020

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No.Q.14011/03/2020-21-T.W., dated 05.12.2020
2. Commissioner of Railway Safety, all Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. ED Standards (Wagon), RDSO, Manak Nagar, Lucknow
5. EDME(Freight)/Railway Board, New Delhi



(2)

भारतसरकार Government of India
रेलमंत्रालय Ministry of Railways
(रेलवेबोर्ड) (Railway Board)

No. 2020/CEDO/SR/18E(2) **New Delhi, dated 15.12.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Running of Broad Gauge Bogie covered wagon type **'BCNHL'** (Maximum Axle Load: **22.9t)** to RDSO's Drawing no. WD-06076-S-02 at up to speed of **75 kmph in loaded condition and 70 kmph in empty condition** over Indian Railway.

Ref:- (i) Board's letter no. 2020/CEDO/SR/18E, dated 11.11.2020
(ii) RDSO's letter No. MW/SPD/BG/BCNHL/22.9T, dated 16.09.2020.
(iii) CCRS's letter No. Q-13011/42/2009-T.W., dated 13.10.2020.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction/re-validation of Broad Gauge Bogie covered wagon type **'BCNHL'** [Maximum Axle Load: **22.9t**] to RDSO's Drawing no. WD-06076-S-02, **upto 75 kmph in loaded condition and 70 kmph in empty condition, by Zonal Railways,** vide Railway Board's letter under reference (i) above.

Member (O&BD), while agreeing with the above proposal has passed the following remarks, reproduced as under :

".....immediate steps may be taken to allow BCNHL empty to run at 75 kmph to start with and improve the speed of empty wagon to100 kmph in the long run."

RDSO may take necessary action accordingly.

Prem Sagar
15.12.20
(प्रेम सागर गुप्ता)
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[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. Executive Director (Standards) Motive Power, RDSO, Lucknow.
2. Executive Director ME (Fr) , Railway Board.

O/C
Issue ok
17/12/2020

17/12/20

(3)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 70/WDO/ORI/RO/I Vol.VI

New Delhi, dated 10.12.2020

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Railways (Opening for Public Carriage of Passengers Rules (Amendment) in Form-XVI (Certificate given by General Manager
Ref: GM/WCR letter no. WCR/JBP/T-118 'G', dated 02.09.2020 (copy enclosed)

GM/WCR vide letter under reference has sought relaxation/removal of condition mentioned in item (iii) of Form XVI "Certificate given by General Manager of the Railways Opening for Public Carriage of Passengers Rules 2000", which states as under.:

"(iii) that more than two engines shall not under any circumstances be allowed at one time on the same track of one span of any bridge."

RDSO is requested to examine the above issue and offer their comments at the earliest.

Encl: As above.

Prem Sagar
10.12.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी. (जी) रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information & necessary action to:
(i) PEDEE(RS)/ Railway Board
(ii) ED/Track-1, RDSO, Manak Nagar, Lucknow
(iii) ED/B&S & ED/STRUCTURES, RDSO, Manak Nagar, Lucknow

O/C
ISSUE PLS
15/12/2020

16/12/2020

(4)

भारतसरकार Government of India
रेलमंत्रालय Ministry of Railways
(रेलवेबोर्ड) (Railway Board)

No. 2020/CEDO/SR/24 **New Delhi, dated 08.12.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Sanction for Increase in speed of Air- Conditioned Self-Propelled Inspection car 'SPICAC' [Maximum Axe Load:14.62t] to ICF's Drawing no. SPICAC-9-0-001 from **80 kmph to 105 kmph** on track maintained as per standards specified under Para 522 of Indian Railways Permanent Way Manual, June 2020 over Indian Railway system

Ref:- (i)RDSO's letter No. MC/SPIC/US/ICF, dated 16.10.2020.
(ii) CCRS's letter No. Q-12011/08/2018-19-T.W., dated 26.11.2020.

CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested the following :

"As per Para 2.6.2 of RDSO Final Speed Certificate No.MC/SPIC/US/ICF, dated 09.10.2020 "Air-Conditioned Self-Propelled Inspection Car (SPICAC) shall not be attached with Passenger train". ***However, for movement in dead condition/window trailing inspection in passenger trains, RDSO shall issue necessary amendment to the para 2.6.2 of RDSO's FSC before actual operation of the SPICAC".***

RDSO is requested to examine the above and take necessary action at the earliest.

Prem Sagar
08.12.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी. (जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :
1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-12011/08/2018-19-T.W., dated 26.11.2020
2. Principal Executive Director CEP, Railway Board
3. Executive Director ME(Chg.), Railway Board

ok
Issue pls
08/12/2020

9/12/20

E-Offm ⇒ 3332768 (5)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No. 2020/CEDO/SR/15 **New Delhi, dated 11.11.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

The General Manager,
All Indian Railways

Sub:- Introduction of operation of Broad Gauge Bogie Ammonia Tank wagon type **'BTALNM (Variant-B)'** [Maximum Axle Load: **20.03t**] to RDSO's Drawing no. WD-14002-S-52 Alt. Nil over Indian Railway BG routes up to maximum speed of **100 kmph in Empty and 90 kmph in Loaded condition**

Ref:- (i) RDSO's letter No. MW/CS/BTAL, dated 11.09.2020
(ii) CCRS's letter No. Q-12011/09/2020-21-t.w, dated 12.10.2020 & corrigendum dated 13.10.2020

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of operation of Broad Gauge Bogie Ammonia Tank wagon type **'BTALNM (Variant-B)'** [Maximum Axle Load: **20.03t**] to RDSO's Drawing no. WD-14002-S-52 Alt. Nil over Indian Railway BG routes up to maximum speed of **100 kmph in Empty and 90 kmph in Loaded condition,** by **Zonal Railways,** over **Indian Railway Track** with following stipulations :

i. Observance of all conditions laid down in RDSO's Final Speed Certificate No. MWOSPD(TANK)/3/2020, Dated 07.08.2020 for operation up to a maximum speed of 100 kmph in Empty and 90 kmph in Loaded condition, shall be ensured on the Railway, while seeking the sanction of General Manager for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
iii. Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff are aware of the instructions.
iv. The Dome cover of Bogie Alumina Tank 'BTALNM' shall be in closed & locked down condition during movement.

o/c
Issue pls
17/11/20

18/11/20

Prem Sagar
11.11.20

v. Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

vi. Brakes of the locomotive and the rake of the BTALNM wagons with twin pipe air brake system shall be in good working order during the operation

Prem Sagar
11.11.20

(प्रेम सागर गुप्ता)
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[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-12011/09/2020-21, dated 12.10.2020 & corrigendum dated 13.10.2020
2. Executive Director (Standards) Motive Power, RDSO, Lucknow
3. Executive Director (Standards) Track, RDSO, Lucknow
4. Executive Director ME(Fr) , Railway Board

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India

रेल मंत्रालय Ministry of Railways

रेलवे बोर्ड Railway Board

No. 2020/CEDO/SR/16 E

New Delhi, dated 11.11.2020

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

The General Manager,
All Indian Railways

Sub:- Running of Broad Gauge Bogie covered wagon type **'BCNAHSM1'** (Maximum Axle Load: **22.82t)** to RDSO's Drawing no. WD-05084-S-04 upto maximum speed of **75 kmph in loaded condition and 100 kmph in empty condition** over **Indian Railway**

Ref:- (i)RDSO's letter No. MW/SPD/BG/BCNAHSM1/22.82t, dated 16.09.2020
(ii) CCRS's letter No. Q-13011/09/2011-T.W., dated 13.10.2020
(iii) Railway Board Letter No. 2011/CEDO/SR/07(Duplicate), dated 03.06.2013

A. With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction/re-validation of Broad Gauge Bogie covered wagon type 'BCNAHSM1' (Maximum Axle Load: 22.82t) to RDSO's Drawing no. WD-05084-S-04, up to maximum speed of **75 kmph in loaded condition and 100 kmph in empty condition**, by Zonal Railways, over Indian Railway, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate No. MW/SPD/BG/BCNAHSM1/22.82t, dated 10.06.2010 after incorporating modified paras up to Amendment No. 2 dated 11.09.2020, for operation up to a maximum speed of 75 kmph in loaded condition and 100 kmph in empty condition, shall be ensured on the Railway, while seeking the sanction of General Manager for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per the extant procedure.

(ii) In terms of Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020, General Manager of Zonal Railway shall identify the route for operation of (CC+8+2) t axle load wagon at 75kmph.

(iii) Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

(iv) For speed up to 60 kmph in Loaded condition for minimum standard of 52kg (90UTS) rail, USFD testing shall be carried out at a higher frequency corresponding to 6 GMT of traffic.

(v) CC+8+2 routes will be prioritised for rail grinding at stipulated frequency depending upon the availability of rail grinding machines over Indian Railway.

o/c
Example
17/11/2020

18/11/20

o/c Prem Sagar
11.11.20

However, rail grinding is not a prerequisite for operation of CC+8+2 / 22.9 t axle load trains at 75 kmph.

(vi) Railway should ensure installation of way side lubricators as per provision of IRPWM in a time bound manner.

(vii) As per Clause 2.1.2.1.1(i) of RDSO's FSC No. MW/SPD/BG/BCNAHSM1/22.82t, dated 10.06.2010 after incorporating modified paras up to Amendment No. 2 dated 11.09.2020, for operation in Loaded condition up to 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5^0C (Tm to Tm+5).

Further, as per clause 2.1.2.2 (i) for operation in Loaded condition for speed above 60 kmph and up to 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. **If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February of next calendar year.**

(viii) For regular operation in loaded condition of BCNAHSM1 wagon, Railway shall ensure all the speed restrictions mentioned in para 2.2.3 (b) (ii) and (iii) of RDSO's FSC No. MW/SPD/BG/BCNAHSM1/22.82t, dated 10.06.2010 after incorporating modified paras up to Amendment No. 2 dated 11.09.2020.

(ix) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff is aware of the instructions.

(x) Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.

(xi) No overdue in track/rolling stock maintenance shall be permitted.

(xii) Right powering of loaded trains running with 22.82t axle loaded wagons shall be ensured.

(xiii) Traction power supply shall be augmented to cater for additional load.

(xiv) Brakes of the locomotive and the rake of the BCNAHSM1 wagons shall be in good working order during the operation.

(xv) Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

B. This supersedes Railway Board letter No. 2011/CEDO/SR/07(Duplicate), dated 03.06.2013.

Prem Sagar
11.11.20

ओ/C (प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-13011/09/2011-T.W., dated 13.10.2020

2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track, RDSO, Lucknow
5. Executive Director ME(Fr) , Railway Board

(9)

Prem Sagar
11.11.20
o/c (प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

E-No ⇒ 3333243

(10)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No. 2020/CEDO/SR/17E **New Delhi, dated 11.11..2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

The General Manager,
All Indian Railways

Sub:- Running of Broad Gauge Bogie open wagon type **'BOXNHA'** (Maximum Axle Load: **22.82t)** to RDSO's Drawing No. WD-98015-S-00, up to maximum speed of **75 kmph in Loaded condition and 100 kmph in Empty condition** over **Indian Railway**

Ref:- (i)RDSO's letter No. MW/SPD/BG/BOXNHA/22.82T, dated 16.09.2020
(ii) CCRS's letter No. Q-21015/01/2017-18-T.W., dated 13.10.2020
(iii) Railway Board Letter No. 2017/CEDO/SR/17, dated 27.03.2018

A. With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction/re-validation of Broad Gauge Bogie open wagon type **'BOXNHA'** (Maximum Axle Load: **22.82t)** to RDSO's Drawing No. WD-98015-S-00, up to maximum speed of **75 kmph in Loaded Condition and 100 kmph in Empty condition, by Zonal Railways,** over Indian Railway, with following stipulations :

i. Observance of all conditions laid down in RDSO's Final Speed Certificate No. MW/SPD/BG/BOXNHA/22.82t, dated 31.03.2010 with Amendments No. 1 & 2 dated 13.09.2013 and 11.09.2020 respectively, for operation up to a maximum speed of 75 kmph in loaded condition and 100 kmph in empty condition, shall be ensured on the Railway, while seeking the sanction of General Manager for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE(G) Directorate/ Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.

ii. In terms of Railway Board letter No. 2020/CE-II/TS/22.9 dt 20.08.2020, General Manager of Zonal Railway shall identify the route for operation of (CC+8+2)t axle load wagon at 75kmph.

iii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

iv. For speed up to 60 kmph in Loaded condition for minimum standard of 52kg (90UTS) rail, USFD testing shall be carried out at a higher frequency corresponding to 6 GMT of traffic.

v. CC+8+2 routes will be prioritised for rail grinding at stipulated frequency depending upon the availability of rail grinding machines over Indian Railway.

Issue pls
17/11/2020

18/11/20

o/c Prem Sagar
11.11.20

However, rail grinding is not a prerequisite for operation of CC+8+2 / 22.9 t axle load trains at 75 kmph.

vi. Railway should ensure installation of way side lubricators as per provision of IRPWM in a time bound manner.

vii. As per Clause 2.1.2.1.1(i) of RDSO's FSC No. MW/SPD/BG/BOXNHA/22.82t, dated 31.03.2010 after incorporating modified paras upto Amendment No. 2 dated 11.09.2020, for operation in Loaded condition upto 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5^0C (Tm to Tm+5).
Further, as per clause 2.1.2.2 (i) for operation in Loaded condition for speed above 60 kmph and upto 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. **If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February of next calendar year.**

viii. For regular operation in loaded condition of BOXNHA wagon, Railway shall ensure all the speed restrictions mentioned in para 2.2.3 (b) (ii) and (iii) of RDSO's FSC No. MW/SPD/BG/BOXNHA/22.82t, dated 31.03.2010 after incorporating modified paras upto Amendment No. 2 dated 11.09.2020.

ix. Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff is aware of the instructions.

x. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.

xi. No overdue in track/rolling stock maintenance shall be permitted.

xii. The heap of loading should not exceed the Diagram No. 1D of Indian Railway Schedule of Dimensions (BG) Revised 2004.

xiii. When the wagon is being moved, it shall be ensured that all the protruding parts are withdrawn and suitably locked, so that during the run there is no possibility of any infringement occurring to the standard moving dimensions.

xiv. Right powering of loaded trains running with CC+8+2 / 22.9t axle loaded wagons shall be ensured.

xv. Traction power supply shall be augmented to cater for additional load.

xvi. Brakes of the locomotive and the rake of the BOXNHA wagons shall be in good working order during the operation.

xvii. Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

B. This supersedes Railway Board Letter No. 2017/CEDO/SR/17, dated 27.03.2018.

Prem Sagar
11.11.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-21015/01/2017-18-TW dated 13.10.2020
2. The Commissioner of Railway Safety, all Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track, RDSO, Lucknow
5. Executive Director ME(Fr) , Railway Board

Prem Sagar
11.11.20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

E-mail 3333280

(13)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No. 2020/CEDO/SR/18E **New Delhi, dated 11.11.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

The General Manager,
All Indian Railways

Sub:- Running of Broad Gauge Bogie covered wagon type **'BCNHL'** (Maximum Axle Load: **22.9t)** to RDSO's Drawing no. WD-06076-S-02 at up to speed of **75 kmph in loaded condition and 70 kmph in empty condition** over Indian Railway

Ref:- (i) RDSO's letter No. MW/SPD/BG/BCNHL/22.9T, dated 16.09.2020
(ii) CCRS's letter No. Q-13011/42/2009-T.W., dated 13.10.2020
(iii) Railway Board Letter No. 2017/CEDO/SR/15, dated 14.03.2018

A. With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction/re-validation of Broad Gauge Bogie covered wagon type **'BCNHL'** (Maximum Axle Load: **22.9t)** to RDSO's Drawing No. WD-06076-S-02, up to speed of **75 kmph in loaded condition and 70 kmph in empty condition,** by Zonal Railways, over Indian Railway system, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate No. MW/SPD/BG/BCNHL/22.9t, dated 04.10.2011 after incorporating modified paras up-to Amendment No. 4 dated 11.09.2020, for operation up to a maximum speed of 75 kmph in loaded condition and 70 kmph in empty condition, shall be ensured on the Railway, while seeking the sanction of General Manager for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.

(ii) In terms of Railway Board letter No. 2020/CE-II/TS/22.9 dt 20.08.2020, General Manager of Zonal Railway shall identify the route for operation of (CC+8+2)t axle load wagon at 75kmph.

(iii) Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

(iv) For speed up to 60 kmph in Loaded condition for minimum standard of 52kg (90UTS) rail, USFD testing shall be carried out at a higher frequency corresponding to 6 GMT of traffic.

(v) CC+8+2 routes will be prioritised for rail grinding at stipulated frequency depending upon the availability of rail grinding machines over Indian Railway.

Issue pls
17/11/2020

18/11/20

o/c Prem Sagar
11.11.20

However, rail grinding is not a prerequisite for operation of CC+8+2/22.9t axle load trains at 75 kmph.

(vi) Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.

(vii) As per Clause 2.1.2.1.1(i) of RDSO's FSC No. MW/SPD/BG/BCNHL/22.9t, dated 04.10.2011 after incorporating modified paras up to Amendment No. 4 dated 11.09.2020, for operation in Loaded condition up to 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5^0C (Tm to Tm+5).
Further, as per clause 2.1.2.2 (i) for operation in Loaded condition for speed above 60 kmph and up to 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. **If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February of next calendar year.**

(viii) For regular operation in loaded condition of BCNHL wagon, Railway shall ensure all the speed restrictions mentioned in para 2.2.3 (b) (ii) and (iii) of RDSO's FSC No. MW/SPD/BG/BCNHL/22.9t, dated 04.10.2011 after incorporating modified paras up to Amendment no. 4 dated 11.09.2020.

(ix) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff is aware of the instructions.

(x) Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.

(xi) No overdue in track/rolling stock maintenance shall be permitted.

(xii) Right powering of loaded trains running with 22.9t axle loaded wagons shall be ensured.

(xiii) Traction power supply shall be augmented to cater for additional load.

(xiv) Brakes of the locomotive and the rake of the BCNHL wagons shall be in good working order during the operation.

(xv) Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

8. This supersedes Railway Board Letter No. 2017/CEDO/SR/15, dated 14.03.2018.

Prem Sagar

(प्रेम सागर गुप्ता)

कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-13011/42/2009-T.W., dated 13.10.2020

2. The Commissioner of Railway Safety, all Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track, RDSO, Lucknow
5. Executive Director ME(Fr) , Railway Board

Prem Sagar
11.11.20
भ/द (प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

E-Office - 3330490

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भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

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No. 2020/CEDO/SR/13(1) **New Delhi, dated 11.11.2020**

The Director General
Research Designs & Standards Organization
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of operation of enhanced capacity rolling stock Broad Gauge Bogie Alumina Tank wagon type **'BTAPM1' [Maximum Axle Load-21.92t]** to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes up to a maximum speed of **65 kmph in empty and 60 kmph in loaded condition,** by Zonal Railway

Ref:- (i) RDSO's letter No. MW/CS/BALCO, dated 09.09.2020
(ii) CCRS's letter No. Q,12011/07/2020-21-T.W., dated 22.09.2020

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of operation of enhanced capacity rolling stock Broad Gauge Bogie Alumina Tank wagon type **'BTAPM1' [Maximum Axle Load-21.92t]** to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes up to a maximum speed of **65 kmph in empty and 60 kmph in loaded condition**, by Zonal Railway, with the following stipulations:

i. Compliance of all conditions laid down in RDSO's Provisional Speed Certificate No. MW/CS/BALCO, Dated 08.09.2020 for operation up to a maximum speed of 65 kmph in Empty and 60 kmph in Loaded condition, shall be ensured on the railway while seeking the sanction of General Manager for introduction of the stock on the railway. Documents shall be submitted to the Commission before the start of actual operation of rolling stock as per extant procedure.

ii. The wagon shall run as per extant rules of ODC as circulated to Zonal railways vide letter no. 2014/CEDO/SR/04 dated 20.10.2014. The wagon shall run in only that section where minimum vertical clearance of 4505 mm from rail level is available for fixed structures. Further, in electrified territory the provisions of ACS no. 29 dated 25.10.2018 of ACTM, vol-I shall also be followed.

iii. As per para 3.2.6 (i) of RDSO's PSC No. MW/CS/BALCO Dated 08.09.2020, for regular operation in loaded condition, speed on all standard Bridge spans up to 47.25m, 63.0m & 78.8m (all effective) of BGML/RBG/MBG Loading Standards shall be restricted to 60 kmph.

iv. Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff are aware of the instructions.

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Prem Sagar
11/11/20

v. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

vi. The Dome cover of Bogie Alumina Tank Wagon shall be in closed & locked down condition during movement.

vii. Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

viii. Brakes of the rake of the wagons shall be in good working order during the operation.

Prem Sagar
11/11/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

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2. Executive Director (Standards)Motive Power, RDSO, Lucknow
3. Executive Director ME(Fr) , Railway Board
4. Executive Director (Standards) Track, RDSO, Lucknow

Prem Sagar
11/11/20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

3330490

(18)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No. 2020/CEDO/SR/13(2) **New Delhi, dated 11.11.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

Sub:- Improvement in operation of BTAPM1 wagon [Maximum Axle Load-21.92t] to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes

Ref:- (i) Railway Bd's letter No. 2020/CEDO/SR/13(1), dated 11.11.2020
(ii) RDSO's letter No. MW/CS/BALCO, dated 09.09.2020
(iii) CCRS's letter No. Q,12011/07/2020-21-T.W., dated 22.09.2020

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of operation of **enhanced capacity** rolling stock Broad Gauge Bogie Alumina Tank wagon type **'BTAPM1' [Maximum Axle Load-21.92t]** to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes up to a maximum speed of **65 kmph in empty and 60 kmph in loaded condition** vide Railway Board's letter under reference (i) above. CCRS, while forwarding case for introduction of operation of this Rolling Stock to Railway Board has proposed suggestion for further **Improvement in operation of BTAPM1 wagon [Maximum Axle Load-21.92t] to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes**:

i. Though as per para 2.2 of RDSO's Provisional Speed Certificate (PSC) No. MW/CS/BALCO Dated 08.09.2020, BTAPM1 wagon in NUCAR simulation has exhibited satisfactory riding characteristics & stability behaviour up to test speed of 80 kmph in empty and loaded conditions and as per para 3.0, BTAPM1 wagon has been permitted to run up to the maximum permissible speed of 65 kmph over IR. but due to para 3.1.1 under 'Track Structure' speed on 52 kg (90 UTS) track, speed of the wagon has been restricted up to 60 kmph in loaded condition. There is no reason to restrict the speed to 60 kmph in loaded condition in 60 kg (90 UTS) track. Even on 52 kg (90 UTS) track, no reason is given for restricting the speed for 21.92t axle load to only 60 kmph. Earlier version of BTAPM1 wagon i.e. 'BTAP' was sanctioned by Railway Board for operation up to the maximum speed of 65 kmph in empty and loaded condition.
ii. Instead of single pipe air brake system, BTAPM1 wagons should be planned for running with twin pipe air brake system.

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17/11/2020

18/11/20

o/c Prem Sagar
11.11.20

iii. In view of better speed potential of BTAPM1 wagon, its Final Speed Certificate may be issued early for its greater benefit to the organization.

RDSO is requested to examine above and take necessary action for **Improvement in operation of BTAPM1 wagon [Maximum Axle Load-21.92t] to RDSO's Drawing No. WD-82056-S-01 Alt. 6 over Indian Railway (IR) BG routes** for above rolling stock at the earliest. The compliance of the same should also be submitted to CCRS.

o/c Prem Sagar 11.11.20

(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

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2. Executive Director (Standards)Motive Power, RDSO, Lucknow
3. Executive Director ME(Fr.) , Railway Board
4. Executive Director (Standards) Track, RDSO, Lucknow

o/c Prem Sagar 11.11.20

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

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भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No.2020/CEDO/SR/12

New Delhi, dated 04.11.2020

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011.

The General Manager,
All Indian Railways

Sub:- Running of Broad Gauge Bogie Open wagon type **'BOXNHL'** (Maximum Axle Load: **22.9t)** to RDSO's Drawing no. WD-05086-S-02 over IR system at up to **75 kmph in loaded condition and 100 kmph in empty condition**

Ref:- (i) RDSO's letter No. MW/SPD/BG/BOXNHL/22.9T, dated 04.09.2020 addressed to CCRS
(ii) CCRS's letter No. Q-13011/38/2009-T.W., dated 21.09.2020
(iii) Railway Board Letter No. 2017/CEDO/SR/14, dated 27.03.2018

A. With reference to RDSO's above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction/re-validation of Broad Gauge Bogie Open wagon type 'BOXNHL' (Maximum Axle Load: 22.9t) to RDSO's Drawing no. WD-05086-S-02 over IR system up to 75 kmph in loaded condition and 100 kmph in empty condition, by Zonal Railways, with following stipulations :

1. Observance of all conditions laid down in RDSO Final Speed Certificate No. MW/SPD/BG/BOXNHL/22.9t dated 23.03.2009 with Amendment Nos. 1, 2 & 3 dated 09.04.2009, 31.12.2009 & 03.09.2020 respectively, for operation up to a maximum speed of 75kmph in loaded condition and 100 kmph in empty condition, shall be ensured on the Railway, while seeking the sanction of General Manager for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per the extant procedure.

2. In terms of Railway Board letter No. 2020/CE-II/TS/22.9 dt 20.08.2020, General Manager of Zonal Railway shall identify the route for operation of (CC+8+2)t/(CC+6+2)t axle load wagon at 75kmph.

3. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

4. For speed up to 60 kmph in Loaded condition for minimum standard of 52kg (90UTS) rail, USFD testing shall be carried out at a higher frequency corresponding to 6 GMT of traffic.

Prem Sagar
04/11/20

5. CC+8+2 routes will be prioritized for rail grinding at stipulated frequency depending upon the availability of rail grinding machines over Indian Railway. However, rail grinding is not a prerequisite for operation of CC+8+2/22.9t axle load trains at 75 kmph.

6. Railway should ensure installation of way side lubricators as per provision of IRPWM in a time bound manner.

7. As per Clause 2.1.2(a)(i) of RDSO's FSC No. MW/SPD/BG/BOXNHL dated 23.03.2009 after incorporating modified paras up to Amendment No. 3 dated 03.09.2020, for 52 kg (90 UTS) rail, for operation in Loaded condition up to 60 kmph, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5^0C (Tm to Tm+5).

8. Further, as per clause 2.1.2(b) for operation in Loaded condition on 60 kg (90UTS) rail, for speed above 60 kmph and up to 75 kmph, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. **If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February of next calendar year.**

9. For regular operation in loaded condition of BOXNHL wagon, Railway shall ensure all the speed restrictions mentioned in para 2.2.3 (b) (ii) and (iii) of RDSO's FSC No. MW/SPD/BG/BOXNHL, dated 23.03.2009 after incorporating modified paras up to Amendment no. 3 dated 03.09.2020.

10. Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable so that all operating staff is aware of the instructions.

11. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.

12. No overdue in track/rolling stock maintenance shall be permitted.

13. The heap of loading should not exceed the Diagram No. 1D of Indian Railway Schedule of Dimensions (BG) Revised 2004.

14. When the wagon is being moved, it shall be ensured that all the protruding parts are withdrawn and suitably locked, so that during the run there is no possibility of any infringement occurring to the standard moving dimensions.

15. Right powering of loaded trains running with 22.9t axle loaded wagons shall be ensured.

16. Traction power supply shall be augmented to cater for additional load.

17. Brakes of the rake of the wagons shall be in good working order during the operation.

Prem Sagar
04/11/20

18. Before initiating the operation, PCME of the concerned Railway shall arrange to certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

B. This supersedes Railway Board letter No. 2017/CEDO/SR/14, dated 27.03.2018

Prem Sagar

(प्रेम सागर गुप्ता)

कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q-13011/38/2009-T.W., dated 21.09.2020
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track, RDSO, Lucknow
5. Executive Director ME(Fr) , Railway Board

(प्रेम सागर गुप्ता)

कृते, सचिव रेलवे बोर्ड

(23)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SD/RS/15 **New Delhi, dated 03.11.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Condonation for infringements w.r.t. Indian Railway Schedule of Dimensions (BG) –2004 by Air-conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha manufactured by ICF/Chennai

Ref:- (i) RDSO's letter No. CT/DEL/AC/EMU/BG, dated 31.10.2019
(ii) CCRS's letter No. Q.14011/09/2019-20-t.w, dated 16.12.2019
(iii) Railway Board's letter no 2019/CEDO/SD/RS/15 dated 03.11.2020

With reference to your application dated 31.10.2019 applied through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board has been communicated for condonation of infringements w.r.t. Indian Railway Schedule of Dimension (BG) –2004 by Air-conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha, vide Railway Board's letter under reference (iii) above. Railway Board, while sanctioning the condonation for infringements w.r.t. Indian Railway Schedule of Dimension (BG) –2004 by Air-conditioned EMU coaches has suggested the following :

'RDSO is requested to explore the feasibility of incorporating dimensions for EMU/MEMU as well as Trainsets in the Indian Railway Schedule of Dimension (BG)'.

Prem Sagar
03/11/20
o/c (प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी. (जी) /रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. . The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001
2. Commissioner of Railway Safety, All Circles
3. Executive Directors - Track-1 & (Standards)/Carriage, RDSO, Lucknow
4. EDEE(G) and EDME/Coaching, Railway Board, New Delhi

o/c Prem Sagar
03/11/20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

Issue plz
08/12/2020



(24)

भारतसरकार Government of India
रेलमंत्रालय Ministry of Railways
(रेलवेबोर्ड) (Railway Board)

No. 2019/CEDO/SD/RS/15 **New Delhi, dated 03.11.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Condonation of infringements w.r.t. Indian Railway Schedule of Dimensions (BG) –2004, by Air-conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha

Ref:- (i) RDSO's letter No. CT/DEL/AC/EMU/BG, dated 31.10.2019
(ii) CCRS's letter No. Q.14011/09/2019-20-t.w, dated 16.12.2019

With reference to RDSO application dated 31.10.2019 applied through the Chief Commissioner of Railway Safety, Lucknow, the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Indian Railway Schedule of Dimension (BG) –2004, by Air-conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha. The details of infringement w.r.t. Chapter-IV (A) of Indian Railway Schedule of Dimensions (B.G.), Revised, 2004 as shown in Annexure-A and other details enclosed with RDSO above mentioned letter are as under :

(i) Clause 10 – Minimum height above rail level for floor of fully loaded passenger vehicle by 73 mm (i.e. 1127mm instead of 1200mm for DMC, TC and NDMC)

(ii) Clause 14 – Minimum height above rail level for centres of buffers & CBC couplers when fully loaded by:

(a) 15 mm for buffers at driving end of DMC (i.e. 1015mm instead of 1030mm)

(b) 70 mm at both ends of DMC, TC & NDMC for Schaku coupler (i.e. 960 mm instead of 1030mm)

(iii) Clause 24 –Maximum width over all projections from 940 mm above rail level to 1082 mm above rail level for DMC, TC & NDMC, when fully loaded by:

(a) 0 mm at 1000 mm from above rail level to 36 mm at 1042 mm above rail level.

(b) 36 mm at 1042 mm from above rail level to 247.5 mm at 1049 mm above rail level

(c) 247.5 mm at 1049 mm from above rail level to 236 mm at 1082 mm above rail level

(iv) Clause 25 – Maximum width over all projections from 1082 mm above rail level, to 1170 mm above rail level for DMC, TC &NDMC, when fully loaded :

(a) by 236 mm at 1082 mm from above rail level to 186 mm at 1170 mm above rail level

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o/c Prem Sagar
03/11/20

(v) **Clause 26** – Maximum width over all projection from 1170 mm above rail level for DMC, TC & NDMC, when fully loaded by:

(a) 186 mm at 1170 mm from above rail level to 3261 mm above rail level

(25)

Further, above condonation is subject to stipulations as under :

(i) Movement of subject rolling stock would be at restricted speed at locations of structures belonging to Schedule-II. Necessary conditions for such movement would be addressed & identified and be incorporated in the RDSO's Speed Certificate.

(ii) The Zonal Railways MUST ensure the removal of existing infringements on operating routes for running of subject rolling stock.

Encl. RDSO's letter dated 31.10.2019

Prem Sagar
03/11/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक / सिविल इंजीनियरिंग(जी) / रेलवे बोर्ड
[Rly no. 030-44803, MTNL No.-011-23383379]
e-mail address :edceg@rb.railnet.gov.in

No. 2019/CEDO/SD/RS/15 **New Delhi, dated 03.11.2020**

Copy forwarded for information to :

1. . The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001
2. Commissioner of Railway Safety, All Circles
3. Executive Directors - Track-1 & (Standards)/Carriage, RDSO, Lucknow
4. EDEE(G) and EDME/Coaching, Railway Board, New Delhi

Prem Sagar
03/11/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक / सिविल इंजीनियरिंग(जी) / रेलवे बोर्ड

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भारत सरकार - रेल मंत्रालय
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सं. सीटी/डीईएल/एसी/ईएमयू/बीजी

दिनांक 31.10.2019

The Secretary (Engg.),
Railway Board,
Rail Bhawan
New Delhi - 110 001.

(Through: CCRS/Lucknow)

Sub: Condonation for infringements to Indian Railway Schedule of Dimensions (BG) –Revised 2004 for Air Conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha manufactured by ICF/Chennai.

Ref: (i) ICF letter no. MD/DSS/3Ph/IGBT/168 OB dated 21.06.2019
(ii) MC/Air Condition/On Board EMU/Medha dated 21.06.2019.

1. ICF vide letter at ref:-(i) has informed that as per Railway Board's production programme, ICF has to manufacture 24 rakes of 3 phase Air conditioned EMU with on board equipments, for the year 2019-2020 (12 rakes) and 2020-2021 (12 rakes).

2. ICF Chennai has manufactured fully air conditioned coaches as per ICF layout drawing no. EMU2/DMC/AC-9-0-001 for Driving Motor Coach (DMC), EMU2/TC/AC-9-0-001 for 'C' Coach (TC) and EMU2/NDMC2/AC-9-0-001 for Non Driving Motor Coach (NDMC).

3. The above newly manufactured Air Conditioned coaches (DMC, TC and NDMC) with 3-phase propulsion system of M/s Medha and existing Non Air-Conditioned (HTC+MC+TC+TC+MC+DTC) with 3-phase propulsion system of M/s Medha are to be utilized to make partial Air-Conditioned EMU rakes with 3-phase propulsion system of M/s Medha.

4. Non Air-Conditioned EMU coaches utilized in Partial Air Condition Coaches i.e. HTC, MC, TC & DTC have already been condoned by Railway Board vide letter no.2016/CEDO/SD/RS/01 dated 05.10.2016. A copy of the same is enclosed herewith.

5 In order to run proposed partial Air-Conditioned EMU rake of newly manufactured Air-Conditioned EMU coaches with existing non Air-Conditioned EMU coaches of M/s Medha propulsion system, condonation for infringements to Indian Railway Schedule of Dimensions (BG for newly manufactured Air-Conditioned EMU coaches (DMC, TC and NDMC) with 3-phase propulsion system of M/s Medha is required.

6 The proposed Air-Conditioned EMU coaches with ICF bogie having pneumatic suspension system in secondary stage and dimensions almost similar to these existing Air-Conditioned EMU coaches fitted with M/s BHEL electrics which are already running on Indian Railways.

7 The Air-Conditioned EMU stock having Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving Motor Coach (NDMC) with 3-phase IGBT based propulsion system infringes clause nos. 10, 14, 24, 25 & 26 of Chapter IV(A) to Indian Railways Schedule of Dimensions (BG), Revised-2004 and tabulated in Annexure-A. Clarification for such infringements and justification for condoning the infringements have also been indicated in Annexure-A.

(27) 7/23

In view of above, Railway Board is requested to condone the above infringements for Air Conditioned EMU coaches i.e. DMC, TC and NDMC EMU rakes with Indigenous 3-phase on board propulsion system of M/s Medha having partial Air Conditioning manufactured by ICF/Chennai as tabulated in Annexure-A.

संलग्नक: (i) Annexure-A,
(ii) Drawing no. Annexure-I, II, III & IV.
(iii) ICF layout drawing no. EMU2/DMC/AC-9-0-001.
(iv) ICF layout drawing no. EMU2/TC/AC-9-0-001.
(v) ICF layout drawing no. EMU2/NDMC2/AC-9-0-00.

31/10

(नीलमणि)
कार्यकारी निदेशक मानक/ रेलपथ–1
कृते महानिदेशक/रेलपथ

Annexure-A

Statement showing the infringements for Air Conditioned EMU coaches i.e. Driving Motor Coach (DMC), 'C' Coach (TC) and Non Driving motor Coach (NDMC) with indigenous 3-phase on board propulsion system of M/s Medha manufactured by ICF/Chennai as per ICF layout drawing nos. EMU2/DMC/AC-9-0-001 for Driving Motor Coach (DMC), EMU2/TC/AC-9-0-001 for 'C' Coach (TC), EMU2/NDMC2/AC-9-0-001 for Non-Driving motor coach (NDMC) manufactured by ICF Chennai to Indian Railway Schedule of Dimensions (BG) - Revised 2004.

SN	Item & Chapter no.	Description	Dimensions as per SOD (mm)	Proposed dimensions (mm)	Magnitude of infringement (mm)	Remarks
1.	Item 10 of Chapter IV(A)	Minimum height above rail level for floor of fully loaded passenger vehicle	1200 mm	1127mm for DMC, TC and NDMC. (Shown in Annexure-III & IV)	73 mm	(i) Floor level of coach has been kept low to reduce gap between floor and platform, so that passengers are able to board/de-board the train without need of foot board. (ii) As per note (i) under item 4, 5 and 6 of Chapter II-Station Yards (ACS-27), height of bottom of sole bar above rail level shall not be less than 1039 mm above rail level in fully loaded condition. As per ICF drawings as annexure III & IV, height of bottom of sole bar above rail level in fully loaded condition is 1045 mm for DMC, TC and NDMC coaches which is more than prescribed limit of 1039 mm. (iii) Air conditioned EMU with 3-phase propulsion system of M/s BHEL having floor height in loaded condition as 1127 mm is already running on sub-urban section of WR since December 2017.Railway Board had condoned infringement of 73 mm vide letter no.2017/CEDO/SD/RS/05, dated 30.10.2017. Therefore, the infringement may be condoned.
2.	Item 14 of Chapter IV(A)	Minimum height above rail level for centers of buffers &	1030mm	(i) 1015 mm above rail level for centre of buffer in driving end of	(i) 15mm	(i) Coupler height of both ends of DMC, TC and NDMC is 960 mm and buffer height is 1015 mm in loaded condition. Coupler height is less as floor level of the coach has been kept low to reduce gap between floor and platform so as to facilitate boarding/deboarding of passengers.

		CBC couplers when fully loaded.		DMC (ii) 960 mm at both ends of DMC, TC and NDMC above rail level for Schaku coupler (Shown in Annexure-III & IV)	(ii) 70 mm for DMC, TC and NDMC.	(ii) Coupler height has been reduced to 960mm to accommodate fully sealed gangway for ease of inter-coach passenger movement and operation of train shall be done in consists of these coaches only. (iii) Air conditioned EMU with M/s BHEL 3-phase propulsion system having buffer height of 1015 mm and coupler height 960 mm in loaded condition for both sides i.e. driving & non-driving end of coaches is already in operation on suburban section of WR since December 2017. Railway Board had condoned infringement of 15/70 mm vide letter no.2017/CEDO/SD/RS/05, dated 30.10.2017. Therefore, the infringement may be condoned.
3.	Item 24 of Chapter IV(A)	(a)Maximum width over all projections from 305mm above rail level to 940mm above rail level, when fully loaded.	3050mm	3050 mm of DMC, TC and NDMC. (Shown in Annexure-III & IV)	0 mm	
		(b)Maximum width over all projection from 940mm above rail level to 1082mm above rail level, when fully loaded.	3050mm increasing gradually to 3150mm	(i) Width increasing gradually from 3050mm at a height from 972.5 mm above rail level to 3093mm at a height of 1000mm above rail level. (ii)Width increasing gradually from 3093mm at a	(i) 0 mm (as MMD width at a height of 1000mm is 3093mm) (ii) Magnitude of infringement gradually increasing from 0mm (as MMD width is 3093	(i) Wider body coaches have been designed for suburban services to carry out more number of passengers. (ii) Air conditioned EMU with M/s BHEL 3-phase propulsion system having coach width in loaded condition 3050 mm at a height from 305 mm to 3622mm up to 1045 mm from rail level had been manufactured and is in operation on suburban section of WR since December 2017. Railway Board had condoned infringement of 286 mm on either side of coach vide letter no.2017/CEDO/SD/RS/05, dated 30.10.2017. Therefore, the infringement may be condoned.

29

12/22

				height from 1000mm above rail level to 3194mm at a height of 1042 mm above rail level. (iii) Width increasing from 3194mm at a height from 1042mm above rail level to 3622mm at a height of 1049mm above rail level. (iv) Width remains same as 3622mm at a height of 1049mm above rail level up to a height of 1082mm above rail level of DMC, TC and NDMC. (Shown in Annexure-III & IV)	mm at 1000 mm) to 36mm on either side at a height from 1000mm above rail level to 1042mm above rail. (iii) Magnitude of infringement increasing from 36mm to 247.5 mm on either side at a height from 1042mm above rail level to 1049 mm above rail (iv) Magnitude of infringement gradually decreasing from 247.5 mm to 236mm (as MMD width is 3150 mm at 1082 mm) on either side at a height from 1049mm above rail level to 1082mm above rail level.	
4.	Item 25 of Chapter IV(A)	Maximum width over all projections from 1082mm above rail level, to 1170 mm	3150 mm increasing gradually to 3250mm.	Width remains same as 3622mm at a height of 1082mm above rail level up to a height of 1170mm above rail level of	Decreasing gradually from 236 mm on either side of the coach at a height from 1082mm above rail level to 186 mm on either side of coach at a height of 1170mm above rail level.	(i) Wider body coaches have been designed for suburban services to carry more number of passengers. (ii) Air conditioned EMU with M/s BHEL 3-phase propulsion system having coach width in loaded condition 3050 mm at a height from 1082 mm to 3622mm instead of 3250mmup to 1170 mm from rail level had been manufactured and is in operation on suburban section of WR since December 2017. Railway Board had already condoned infringement of 286 mm as against

		above rail level, when fully loaded.		DMC, TC and NDMC. (Shown in Annexure-III & IV)		247.5mm in present case vide letter no. 2017/CEDO/SD/RS/05 dated 30.10.2017. Therefore, the infringement may be condoned.
5.	Item 26 of Chapter IV(A)	Maximum width over all projections from 1170mm above rail level, when fully loaded to a height of 3735 mm above rail level, when empty.	3250mm	(i) 3622 mm at height of 1170 mm above rail level when fully loaded condition. (ii) Remains same as 3622mm up to height of 3261 mm (in tare condition). (iii) Decreasing gradually from 3622 mm at a height of 3261 mm above rail level to 3250 mm at a height of 3579mm above rail level in empty condition of DMC, TC and NDMC.(Shown in Annexure-I, Annexure-II, Annexure-III and Annexure-IV)	(i) 186mm on either side of the coach at a height of 1170mm above rail level when fully loaded. (ii) Remains same as 186 mm on either side of coach up to a height of 3261 mm above rail level. (iii) Decreasing gradually from 186 mm on either side of coach at a height of 3261 mm above rail level to 0 mm on either side of coach at a height of 3579 mm above rail level in empty condition.	(i) Wider body coaches have been designed for suburban services to carry more number of passengers. (ii) Air conditioned EMU with M/s BHEL 3-phase propulsion system having coach width of 3622 mm in loaded condition at a height of 1170 mm to 3250mm at a height of 3579 mm from rail level had been manufactured and is in operation on suburban section of WR since December 2017. Railway Board had already condoned infringement of 186 mm on either side of coach vide letter no. 2017/CEDO/SD/RS/05, dated 30.10.2017. Therefore, the infringement may be condoned.

GM/16/1/2020/O/o DCE(G)
(31)
14/22

Note: Certified that there is no other infringement to IR Schedule of Dimensions BG, Revised 2004, except those given above in both tare and loaded conditions.

(Samir Lohani)
Executive Director Stds./Carriage

(Nilmani)
Executive Director Stds./Track-I

161/2020/O/o DCE(G)
15/22

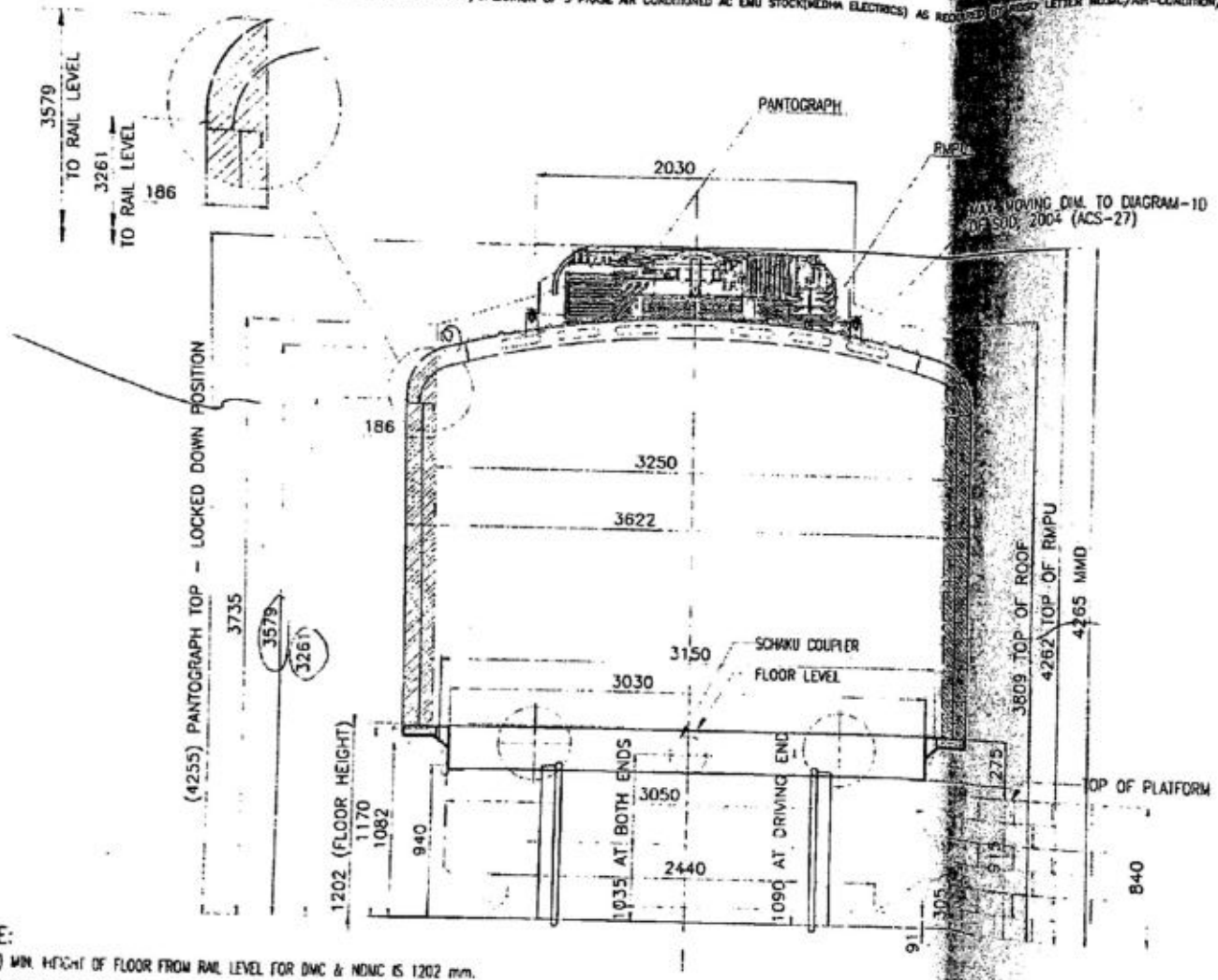
16/22

INFRINGEMENT OF AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS) DRIVING MOTOR, NON DRIVING MOTOR COACHES IN TARE CONDITION

ANNEXURE-I

WITH MMD TO DIAGRAM 1D (EDO/T-2202) OF BG SOD, 2004

(THIS SKETCH IS ONLY MEANT FOR OBTAINING CONDONATION FOR MOVEMENT/OPERATION OF 3 PHASE AIR CONDITIONED AC EMU STOCK(MEDHA ELECTRICS) AS REQUIRED BY RDSO LETTER MDMC/AIR-CONDITION/ON BOARD EMU/MEDHA DT.27-05-2019)



NOTE:

1) MIN. HEIGHT OF FLOOR FROM RAIL LEVEL FOR DMC & NDMC IS 1202 mm.
2) MIN. HEIGHT ABOVE RAIL LEVEL FOR SCHAKU COUPLER AT BOTH ENDS IS 1035 mm FOR DMC & NDMC.
3) COACH PROFILE IS COMMON FOR DRIVING MOTOR COACH(DMC), TRAILER COACH (TC) & NON DRIVING MOTOR COACH (NDMC).
4) HEIGHT OF BUFFER ABOVE RAIL LEVEL IS 1090 mm AT DRIVING END OF DMC ONLY.

SHOWN INFRINGEMENT

ALT.	DATE	ID	DATE	SME/D	SSE/D
b	04.10.19		27.05.19		

STUDY/AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS)/90/001

ALTERATION REASON

b/ 10/19

INFRINGEMENTS REVISED WITH RESPECT TO ACS-27 TO IRSOD (BG) 2004.

(गौरव कुमार सिंह)
निदेशक/सवारी डिब्बा
भारत सरकार रेल मंत्रालय
अ०ओ०म०सं०, लखनऊ-226011

680168/2020/O/o DCE(G)

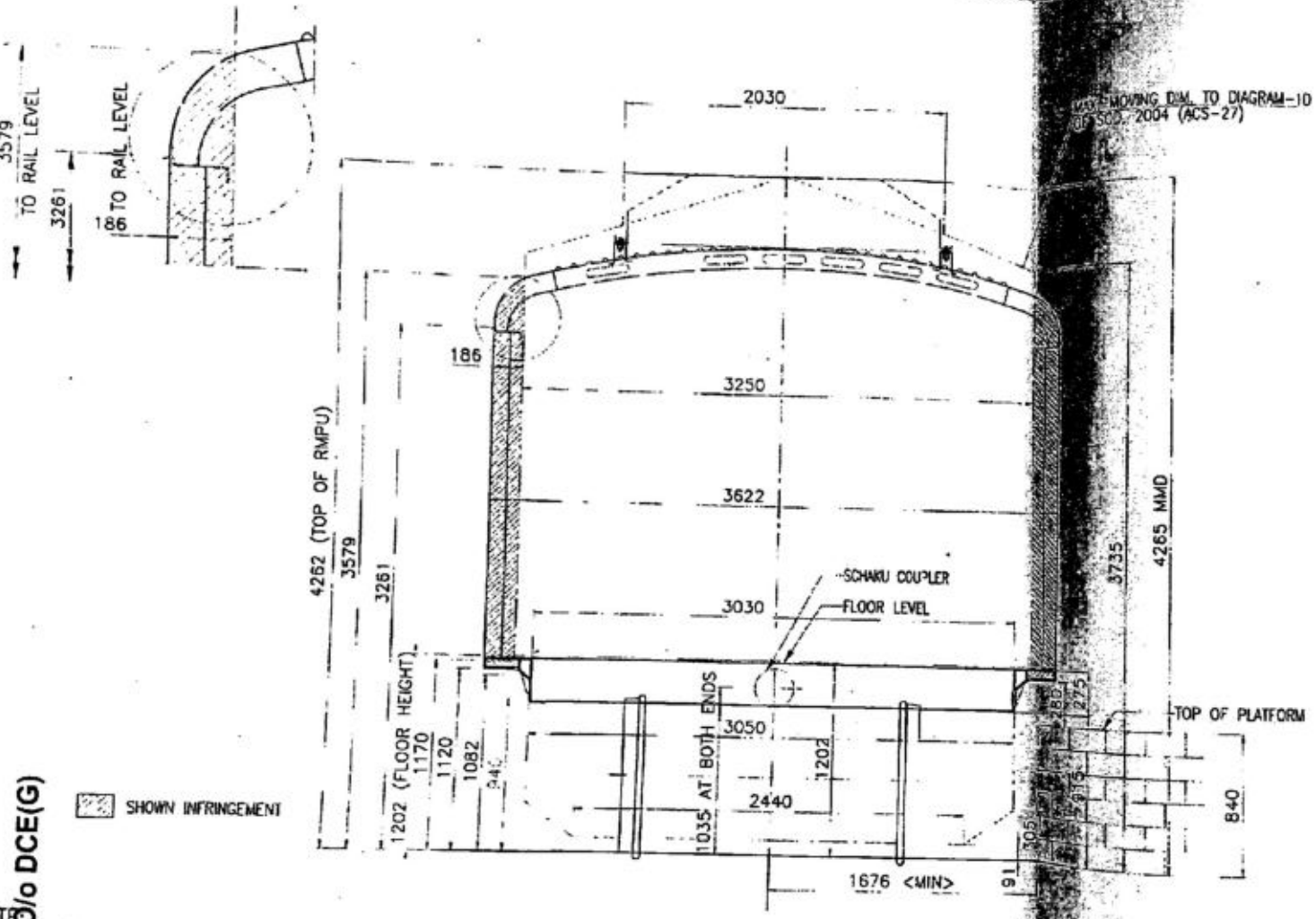
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INFRINGEMENT OF AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS) TRAILER COACHES IN TARE CONDITION WITH MMD TO DIAGRAM 1D (EDO/T-2202) OF BG SOD, 2004

(THIS SKETCH IS ONLY MEANT FOR OBTAINING CONDONATION FOR MOVEMENT/OPERATION OF 3 PHASE AIR CONDITIONED AC EMU STOCK(MEDHA ELECTRICS) AS REQUIRED BY RDSO LETTER NO.MC/AIR-CONDITION/ON BOARD EMU/MEDHA DT.27-06-2019)

ANNEXURE-II



NOTES:

1) MIN. HEIGHT OF FLOOR LEVEL FROM RAIL LEVEL FOR TRAILER COACH (TC) IS 1202 mm.
2) MIN. HEIGHT ABOVE RAIL LEVEL FOR SCHAKU COUPLER AT BOTH ENDS IS 1035 mm .
3) COACH PROFILE IS COMMON FOR DRIVING MOTOR COACH(DMC), TRAILER COACH (TC) & NON DRIVING MOTOR COACH (NDMC).

ALTERATION REASON

b 10/19 INFRINGEMENTS REVISED WITH RESPECT TO ACS-27 TO IRSOD (BG) 2004.

MOVING DIM. TO DIAGRAM-1D OF SOD, 2004 (ACS-27)

(गौरव कुमार सिंह)
निदेशक/सवारी डिब्बा
भारत सरकार, रेल मंत्रालय
अ०ओ०मा०सं०, लखनऊ-226011

ALT.	DATE ALTD.	DATE	SME/D	SSE/D
b	04.10.19	27.06.19		

STUDY/AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS)/90/002

680168/2020/O/o DCE(G)

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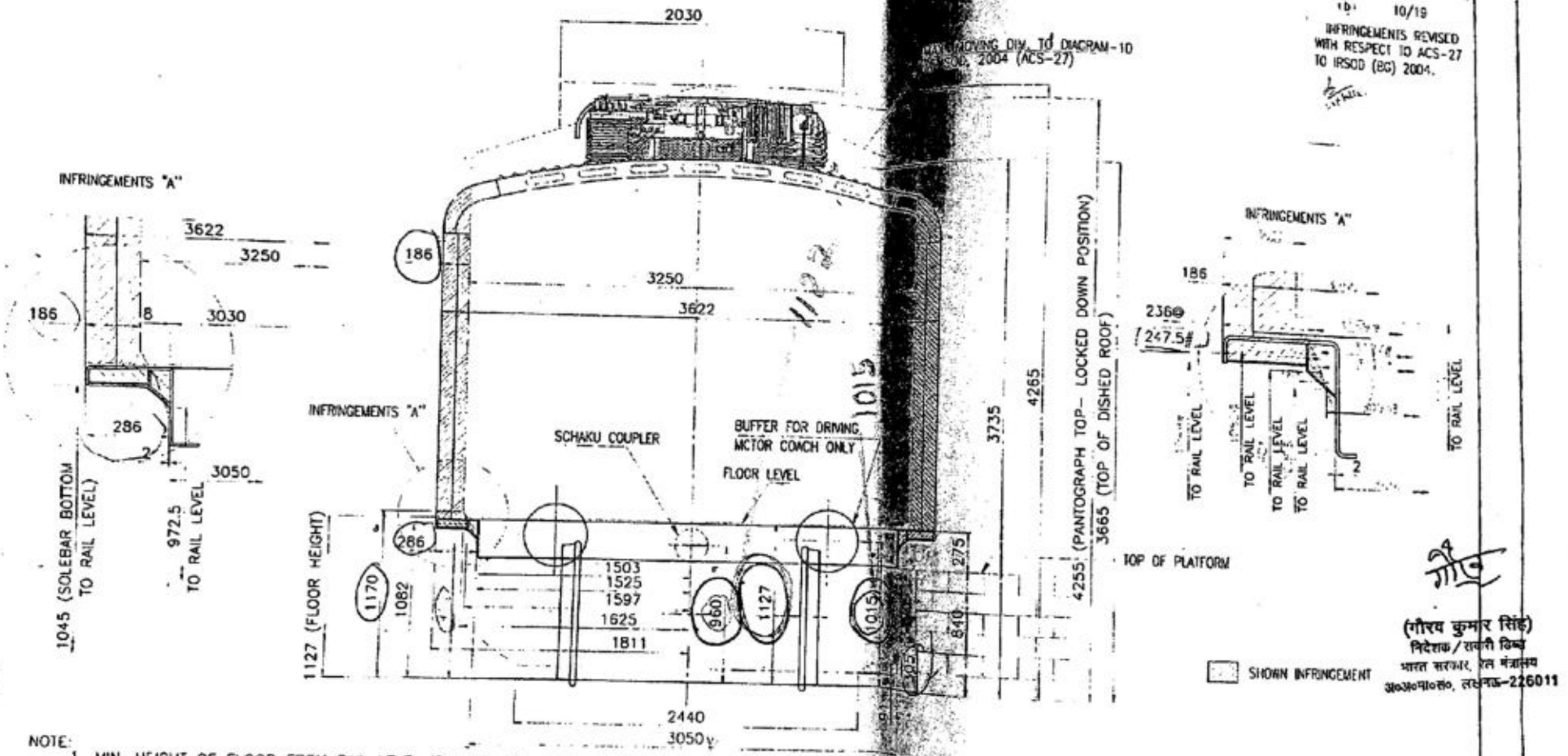
ANNEXURE-III

INFRINGEMENT OF AIR CONDITIONED ONBOARD EMU (MEDHA ELECTRICS) DRIVING MOTOR , NON DRIVING MOTOR COACH IN LOADED (75MM VERTICAL DEFLECTION) CONDITION WITH MMD TO DIAGRAM 1D (EDO/T-2202) OF BG SOD, 2004

(THIS SKETCH IS ONLY MEANT FOR OBTAINING CONDONATION FOR MOVEMENT/OPERATION OF 3 PHASE AIR CONDITIONED AC EMU STOCK(MEDHA ELECTRICS) AS REQUIRED VIDE LETTER NO.MC/AIR-CONDITION/ON BOARD EMU/MEDHA DT.27-06-2019)

ALTERATION REASON

b 10/19 INFRINGEMENTS REVISED WITH RESPECT TO ACS-27 TO IRSOD (BG) 2004.



NOTE:

1. MIN. HEIGHT OF FLOOR FROM RAIL LEVEL IS 1202-75=1127MM FOR DRIVING MOTOR COACH & NON DRIVING MOTOR COACH.
2. MIN. HEIGHT ABOVE RAIL LEVEL FOR SCHAKU COUPLER IS 1035-75=960MM FOR BOTH ENDS OF DMC & NDMC.
3. MIN. HEIGHT ABOVE RAIL LEVEL FOR CENTER OF BUFFER IS 1090-75=1015MM FOR DRIVING MOTOR COACH ONLY.
4. COACH PROFILE IS COMMON FOR DRIVING MOTOR COACH(DMC), TRAILER COACH (TC) & NON DRIVING MOTOR COACH (NDMC).

b	04.10.19	27.06.19			
ALT.	DATE	DATE	SME/D	SSE/D	STUDY/AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS)/90/003

(गौरव कुमार सिंह)
निदेशक / सवारी डिब्बा
भारत सरकार, रेल मंत्रालय
अ०अ०मा०सं०, लखनऊ-226011

680168/2020/O/o DCE(G)

236 19/86 286 Already Condoned

(36) 19/22

INFRINGEMENT OF AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS) TRAILER COACHES IN LOADED CONDITION WITH MMD TO DIAGRAM 1D (EDO/T-2202) OF BG SOD, 2004

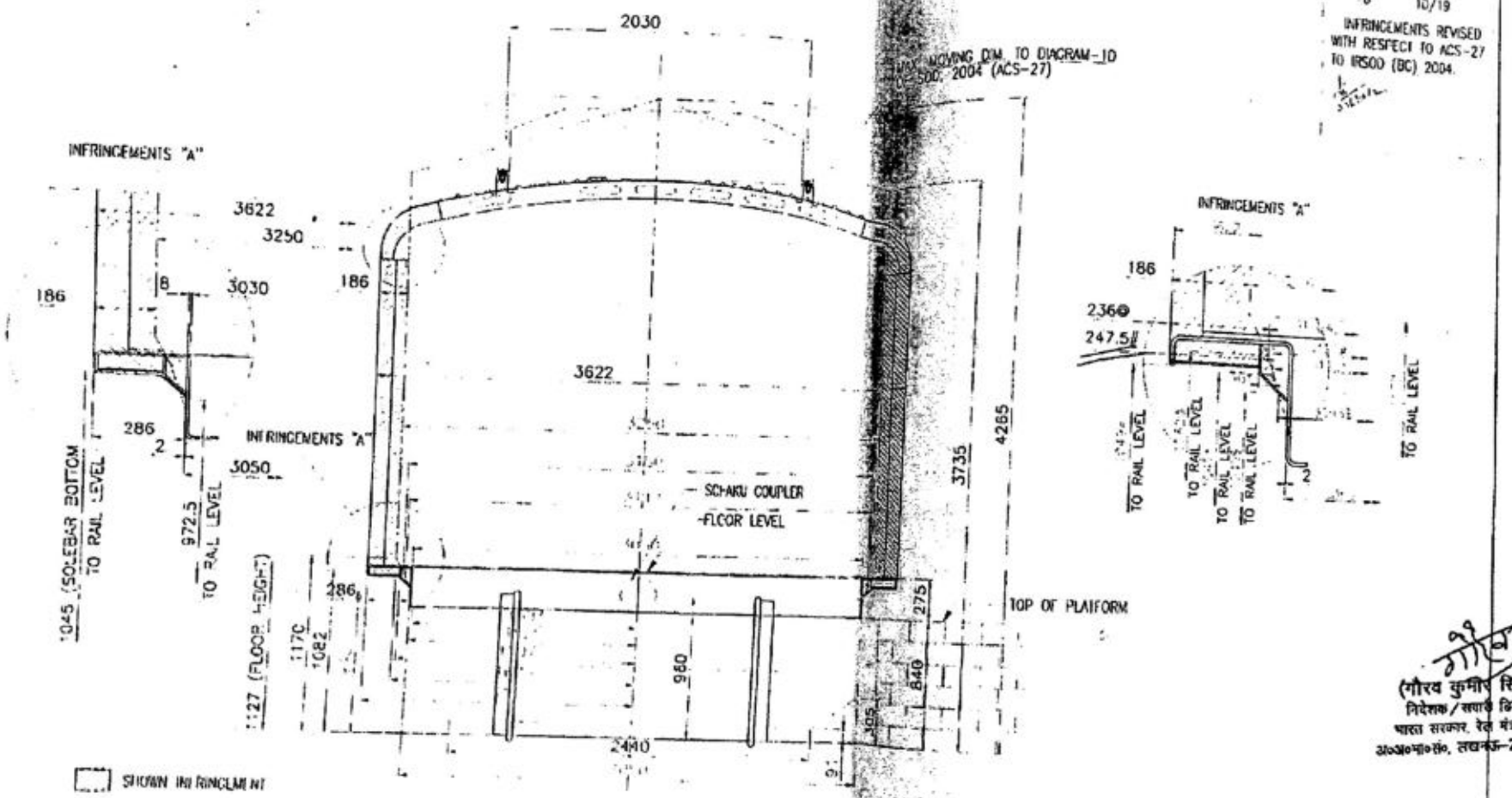
ANNEXURE-IV

(THIS SKETCH IS ONLY MEANT FOR OBTAINING CONDONATION FOR MOVEMENT/OPERATION OF 3 PHASE AIR CONDITIONED AC EMU STOCK(MEDHA ELECTRICS) AS REQUIRED BY RDSO LETTER NO.MC/AIR-CONDITION/ON BOARD EMU/MEDHA DT.27-05-2019)

ALTERATION REASON

b 10/19

INFRINGEMENTS REVISED WITH RESPECT TO ACS-27 TO IRSOD (BC) 2004.



NOTE:
1. MIN. FLOOR HIGHT ABOVE RAIL LEVEL IS 1202-75=1127MM FOR TRAILER COACHES UNDER LOADED CONDITION.
2. MIN. HEIGHT ABOVE RAIL LEVEL FOR CENTER OF BUFFER IS 1090-75=1015MM FOR TRAILER COACHES UNDER LOADED CONDITION.
3. COACH PROFILE IS COMMON FOR DRIVING MOTOR COACH(DMC), TRAILER COACH (TC) & NON DRIVING MOTOR COACH (NDMC).

b	04.10.19	27.06.19			STUDY/AIR CONDITIONED ONBOARD EMU(MEDHA ELECTRICS)/90/004
ALT	RME/D	DATE	SME/D	SSE/D	

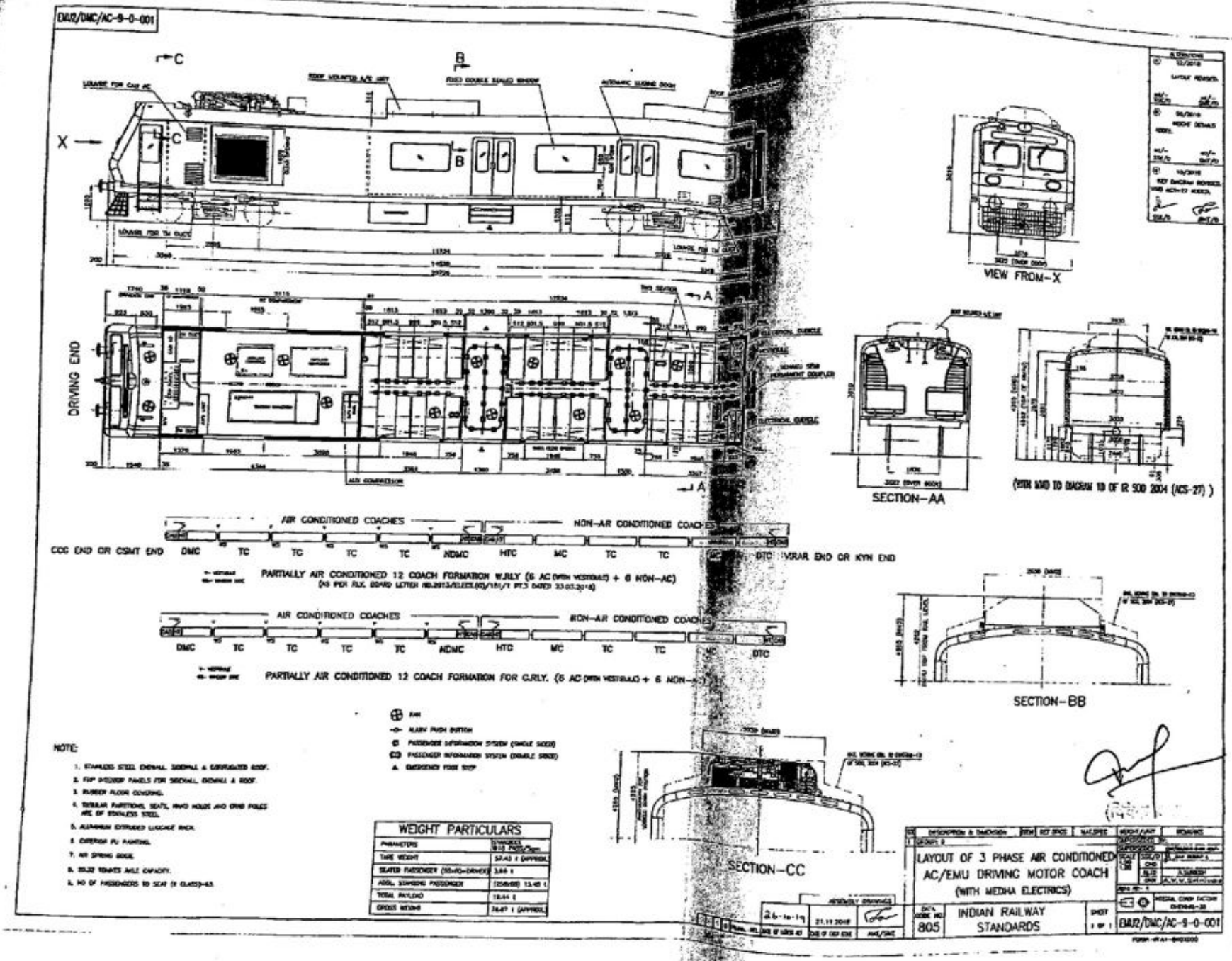
(गौरव कुमार सिंह)
निदेशक / सवारी डिब्बा
भारत सरकार, रेल मंत्रालय
आ०अ०मा०सं०, लखनऊ-226011

680168/2020/O/o DCE(G)

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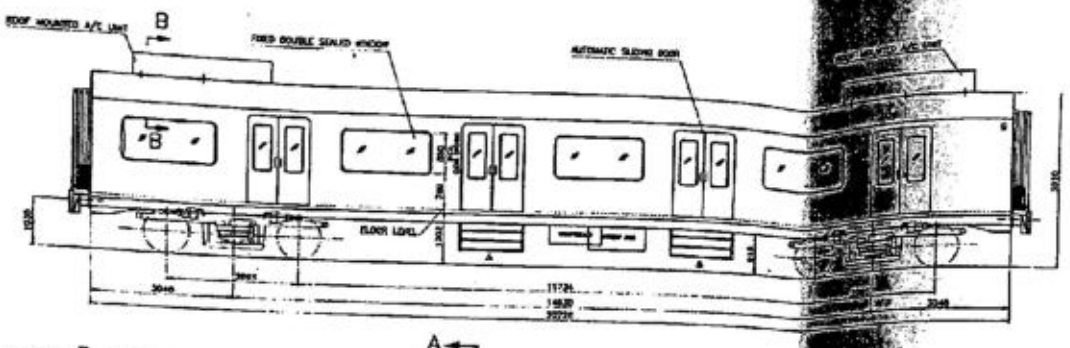
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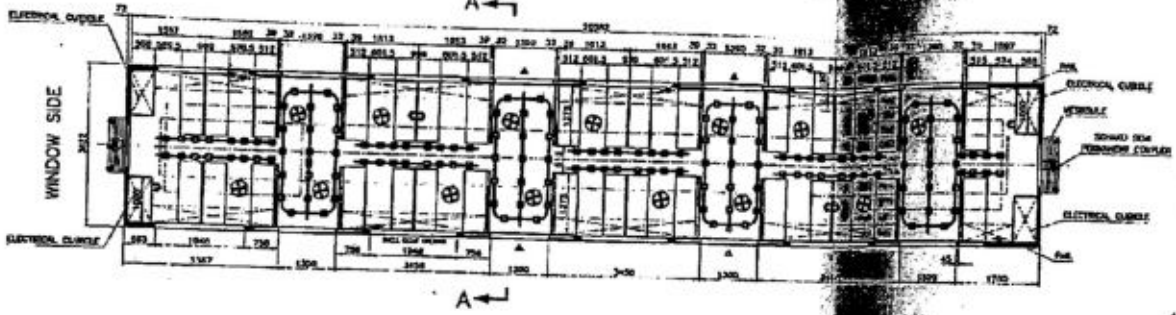


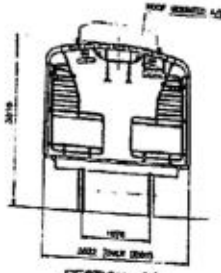
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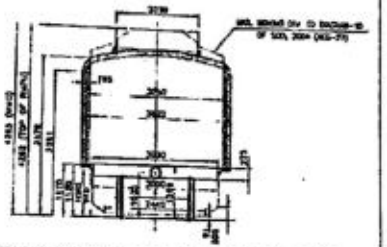
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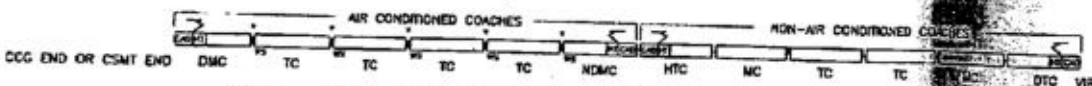
EMU2/TC/AC-9-0-001






SECTION–AA

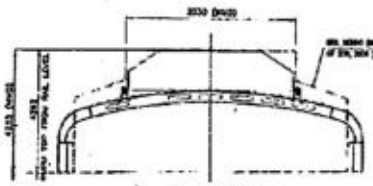

(WITH REF TO DIAGRAM 1D OF IR SOD 2004 (ACS-27))



PARTIALLY AIR CONDITIONED 12 COACH FORMATION FOR W.RLY (6 AC (WITH VESTIBULE) + 6 NON-AC)
(AS PER RLY. BOARD LETTER NO.2014/ELECT/(G)/181/1 PT.3 DATED 23.03.2016)



PARTIALLY AIR CONDITIONED 12 COACH FORMATION FOR C.RLY. (6 AC (WITH VESTIBULE) + 6 NON-AC)


SECTION–BB

NOTE:

1. STAINLESS STEEL SIDEWALL, SIDEWALL & CORRUGATED ROOF.
2. FRP INTERIOR PANELS FOR SIDEWALL, ENDWALL & ROOF.
3. RUBBER FLOOR COVERING.
4. TUBULAR PARTITIONS, ARMS, HAND HOLDS AND GRAB POLES ARE OF STAINLESS STEEL.
5. ALUMINUM EXTRUDED LUGGAGE RACK.
6. EXTERIOR PU PAINTING.
7. AIR SPRING BOGIE.
8. 20.32 TONNES AXLE CAPACITY.
9. NO OF PASSENGERS TO SEAT (2 CLASS)-98.

⊕ FAN
ALARM PUSH BUTTON
PASSENGER INFORMATION SYSTEM (SINGLE SIDED)
PASSENGER INFORMATION SYSTEM (DOUBLE SIDED)
EMERGENCY FOOT STEP

WEIGHT PARTICULARS	
PARAMETERS	SPARSERS (M1) (MSO/Spec)
TARE WEIGHT	39.1 t (APPROX.)
SEATED PASSENGER (54x80)	5.70 t
40KG, STANDING PASSENGER	(480x40) 25.30 t
ROYAL PAYLOAD	35.00 t
GROSS WEIGHT	74.54 t (APPROX.)

1	26-10-2018	26-11-2018	AMC/DMC	DATA CODE NO. 806	INDIAN RAILWAY STANDARDS

LAYOUT OF 3 PHASE AIR CONDITIONED AC/EMU C COACH (WITH MEDHA ELECTRICS)

EMU2/TC/AC-9-0-001

(विवेक खन्ना)

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(39)

(40)

भारतसरकार Government of India
रेलमंत्रालय Ministry of Railways
(रेलवेबोर्ड) (Railway Board)

No. 2016/CEDO/SD/RS/01 **Dated 21.05.2020**

The Director General,
Manak Nagar, RDSO,
Lucknow.

The General Manager,
All Indian Railways

Sub:- Condonation of Infringement to IRSOD (BG)- Revised, 2004 of AC EMU coaches with indigenous 3-Phase propulsion system (M/S Medha Servo Drives).

Ref:- (i) Board's letters of even no. dated 05.10.2016 and 28.02.2017

1. Railway Board vide letter No 2016/CEDO/SD/RS/01 dated 05/10/2016 & corrigendum issued vide letter of even number dated 28.02.2017 has condoned infringements to IRSOD (BG)-Revised, 2004 by AC EMU Coaches with indigenous 3 phase propulsion system (M/S Medha servo Drives) with following stipulation: - *"Platform height should not be kept more than the range of 895mm – 905mm on straight tracks and 870mm – 880mm on curved track including construction tolerances."*

2. Subsequently, Railway board vide ACS No. 27 to IRSOD-2004 has laid down stipulations for running EMU trains in Mumbai & Pune suburban on passenger platforms having height upto 900 mm.

3. Keeping above in view, the stipulation '*Platform height should not be kept more than the range of 895mm – 905mm on straight tracks and 870mm – 880mm on curved track including construction tolerances.*' **stands deleted** from the Railway Board letter No. 2016/CEDO/SD/RS/01, dt. 28.02.2017.

Prem Sagar
21.05.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी. (जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow.
2. EDs :(Standards)Carriage, (PS & EMU)&(Standards)Motive Power, RDSO, Lucknow.
3. Executive Director Mechanical Engineering (Coaching), Railway Board.
4. Executive Director, Standards (Track), RDSO
5. EDEE/G Railway board

29/5/20

01/6/20

कृपया जारी करें
29/5/2020

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

(41)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2020/CEDO/SR/07(2) **New Delhi, dated 20.03.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the Multipurpose tamping Machine Model – Unimat Split Head 275 MFI, manufactured by M/s Plasser India to its General Arrangement Layout Drawing no. CA00.478-5A and CA00.5S-I.

Ref:- (i) Railway Bd's letter No. 2020/CEDO/SR/07(1), dated 20.03.2020
(ii) RDSO's letter No. TM/HM/11/42/275 MFI, dated 23.11.2019
(iii) CCRS's letter No. Q.12011/27/2019-20-त.वि., दिनांक – 20.02.2020.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for Introduction of Multipurpose tamping Machine Model – Unimat Split Head 275 MFI, manufactured by M/s Plasser India to its General Arrangement Layout Drawing no. CA00.478-5A and CA00.5S-I on Indian Railway track up to a maximum speed of 50 kmph when running on its own power and 65 kmph when running in train formation, by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004 vide Railway Board's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested ***following measures for future improvement of the Machine*** :

"It was observed that visibility while driving from the rear Cabin is hampered due to crane provided on trailer. Feasibility of improving the visibility may be explored."

RDSO is requested to examine above and take necessary action for **improvement in** Multipurpose tamping Machine. The compliance of the same should also be submitted to CCRS.

Prem Sagar
20/3/20
o/c (प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/27/2019-20-त.वि., दिनांक - 20.02.2020
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director Track (Machine), Railway Board.

20/3/20

ok

Issue pls
20/03/2020

रेल मंत्रालय
Ministry of Railways
Railway Board
23/03/20
Signature with Endorsement
Issued
Signature
Date

Prem Sagar
20/3/20
o/c (प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

(42)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2020/CEDO/SR/07(1) **New Delhi, dated 20.03.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of Multipurpose tamping Machine Model – Unimat Split Head 275 MFI, manufactured by M/s Plasser India to its General Arrangement Layout Drawing no. CA00.478-5A and CA00.5S-I on Indian Railway track up to a maximum speed of 50 kmph when running on its own power and 65 kmph when running in train formation, by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004.

Ref:- (i) RDSO's letter No. TM/HM/11/42/275 MFI, dated 23.11.2019.
(ii) CCRS's letter No. Q.12011/27/2019-20-त.वि., दिनांक – 20.02.2020.

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of Multipurpose tamping Machine Model – Unimat Split Head 275 MFI, manufactured by M/s Plasser India to its General Arrangement Layout Drawing no. CA00.478-5A and CA00.5S-I on Indian Railway track up to a maximum speed of 50 kmph when running on its own power and 65 kmph when running in train formation, by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Provisional Speed Certificate No. TM/HM/11/42/275 MFI, dated 13.08.2019 for operation up to a maximum speed of 50 kmph when running on its own power and 65 kmph when running in train formation. Remarks of the Railway against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the Locomotive.

(ii) Track on the section shall be the maintained as per standard specified under Para 607 of IRPWM Reprint-2004, duly taking into account the corrections/additions indicated in the Correction Slip No. 150dated 26.08.2019 [issued vide Railway Board's letter No.2018/CE-II/CS/I dated 26.08.2019] to relevant Para of IRPWM, which pertains to revised track maintenance standards for different speed bands. Railway shall impose suitable speed restriction in the sections where the track is not maintained to requisite Standards.

(iii) Observance of all permanent and temporary speed restrictions already in force.

(iv) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the Working Time table.

Prem Sagar

(v) Speed Restriction of 15 kmph shall be imposed on Diamond Crossings when machine is running in train formation.

(vi) Before starting the operation, Principal Chief Engineer of the concerned Railway shall certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

(vii) Brakes of the rolling stock shall be in good working order during the operation.

(viii) When the machine is being moved either on its power or hauled in train, it shall be ensured that all the protruding parts are withdrawn and suitably locked, so that during the run, there is no possibility of any infringement occurring to the standard moving dimensions.

(ix) Safety related instructions including DO's and DONT's, for operation and working of the machine shall be laid down and displayed in the Front and Rear cabins.

(x) Two nos. Handheld Fire Extinguishers shall be provided in each cabin (Front and Rear: Total- Four nos.).

(xi) Stickers indicating names in safety-critical switches and knobs in the cabins shall be provided

o/c Prem Sagar 20/3/20

(प्रेम सागर गुप्ता)

कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/27/2019-20-त.वि., दिनांक - 20.02.2020
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director Track (Machine), Railway Board.

Am 20/3/20

o/c Prem Sagar 20/3/20

(प्रेम सागर गुप्ता)

कृते, सचिव रेलवे बोर्ड

o/c

Issue pls

20/3/2020

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
Issue with Enclosure
Signature 20/03/20
Date of Issue

(44)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2020/CEDO/SR/06(1) **New Delhi, dated 13.03.2020**

The Director General
Research Designs &-Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of the BG WAP-7HS class of locomotive to RDSO's General Arrangement Drawing No. SK.EL-5033 [Unique Transportation Code: WAP-7HS; Maximum Axle Load: 18.08±2%t] up to a maximum speed of 160kmph by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004.

Ref:- (i) RDSO's letter No. EL/301.35/37(WAP7), dated 18.11.2019.
(ii) CCRS's letter No. Q.12011/22/2019-20-त.वि., दिनांक – 04.02.2020.

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of the BG WAP-7HS class of locomotive to RDSO's General Arrangement Drawing No. SK.EL-5033 [Unique Transportation Code: WAP-7HS; Maximum Axle Load: 18.08±2%t] up to a maximum speed of 160kmph by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate SD.WAP7HS.11, Dated 18.11.2019 for operation up to a maximum speed of 160 kmph. Remarks of the Railway against each Para of the Speed Certificate shall be submitted to the Commission before the start of actual operation of rolling stock.

(ii) As per Para 6.1.2 of Revised Policy Circular-6 Dated 31.10.2018, trains will be introduced in the sections at the speeds as per provision of General Rules 1976–Rule 4.08 1(a).

(iii) All the provisions contained in the Railway Board's letter no. 2014/CE-II.TSC/I Pt.1 dated 08.09.2016 regarding track structure for speed beyond 110 kmph should be strictly complied.

(iv) Track on the section shall be the maintained as per standard specified under Para 607 of IRPWM Reprint-2004, duly taking into account the corrections/additions indicated in the Correction Slip No.150 Dated 26.08.2019 [*issued vide Railway Board's letter No. 2018/CE-II/CS/I Dated 26.08.2019*] to relevant Para of IRPWM, which pertains to revised track maintenance standards for different speed bands. Railway shall impose suitable speed restriction in the sections where the track is not maintained to requisite Standards. For speed more than 130 kmph and up to 160 kmph, improved SEJs shall be ensured on entire section.

(v) Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.

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Prem Sagar
13/3/20

(vi) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

(vii) For speed up to 130 kmph, Railway shall ensure provision of sturdy fencing at vulnerable locations to prevent accidents related to trespassing. Zonal Railways should also plan subways at suitable location to avoid trespass and ensure effectiveness of fencing provided.

(viii) For speed beyond 130 kmph and up to 160 kmph, Railway shall ensure provision of sturdy fencing all along the track to prevent accidents related to trespassing.

(ix) All turnouts shall be fixed heel curved switches laid on PSC sleepers' layout with CMS crossings.

(x) Track geometry shall be monitored by Track Recording Car (TRC), Oscillograph Car and OMS at laid down frequency.

(xi) Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.

(xii) Rail grinding at regular interval shall be done on the entire route for better riding behavior and to avoid rail fracture/weld failures. Regular greasing of all the curves in the section shall be ensured.

(xiii) Stretches of existing weak formations (where permanent/temporary speed restriction is imposed), if any, shall be planned to be rehabilitated/strengthen first before permitting higher speed.

(xiv) Sleeper on bridges (other than ballasted deck) shall be steel channel/h-beam/Composite sleepers.

(xv) All level crossing gates with in station limit should be manned and interlocked with station signals. All level crossing gates outside the station limit should be interlocked depending on the classification of level crossing. All level crossings shall be provided with telecommunication facilities.

The visibility at level crossing should be as laid down in IRPWM/Railway Board's instructions. All requirements pertaining to level crossing as laid down in IRPWM/Railway Board's instructions should be fulfilled to ensure safety at level crossing. Drainage of the level crossing and adjoining track should be in good condition.

Level crossing in yard is in violation of Para 901 of IRPWM. Such LCs in the yard should be suitably eliminated by means of outright closure, merger with adjacent LCs or by grade separators on priority within 2 years time. If these LCs are not eliminated within 2 years time, Zonal Railway should seek extension of the sanction to comply this condition. A road map may be prepared for elimination of LCs in the yard and submitted to the Commission. All other level crossing should also be replaced by grade separators within time bound manner as decided by the Ministry of Railway.

(xvi) Signaling to protect level crossings should be provided as per Section 'D' (Para 7.43 to 7.46), Chapter-VII of IRSEM. As per Para 7.46.2 of IRSEM, there should be no LC gate within the Block Overlap (180m) from the Home signal. If it is there, Home signal should be relocated and placed beyond 180m. No new level crossing should be located within Signal/Block Overlap.

(xvii) Action shall be taken for relocation/modification of engineering signals in consultation with S&T and OHE department of Zonal Railways.

(xviii) Provision of Train Protection Warning System (TPWS) shall be ensured on the route for operation at 160 kmph.

(xix) Suitable and reliable communication shall be provided in the locomotive and guards van for communication between loco pilot, guard and adjacent station master.

Prem Sagar
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(xx) Supervisors/officers shall not undertake push trolley inspection and working of rail dolly on the face of 160 kmph trains. Suitable guidelines shall be issued by the Railway in this regard.

(xxi) Zonal Railways shall strictly observe the precautions for public announcements and demarcation through a yellow line on the platforms of run through lines.

(xxi) Before initiating the operation, PCEE of the concerned Railway shall certify the track worthiness and safety of the rolling stock. Proper maintenance of the rolling stock shall be ensured.

(xxii) Brakes of the rolling stock shall be in good working order during the operation.

(xxiii) Safety Certification for all Electrical System shall be done by the EIG of the Zonal Railway maintaining the Rolling stock and submitted to Commission before commencing actual operations.

(xxiv) Earthing in the locomotive body & all the panels shall always be properly maintained.

(xxvi) Before commencing revenue operation of the locomotive, battery box should be secured by providing safety sling to prevent its falling on the track.

Prem Sagar
13/3/20
भ/c
(प्रेम सागर गुप्ता)
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[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/22/2019-20-त.वि., दिनांक - 04.02.2020
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director EE (RS), Railway Board.

Prem Sagar
13/3/20
भ/c
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(47)

No. 2020/CEDO/SR/06(2) **New Delhi, dated 13.03.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the BG WAP-7HS class of locomotive to RDSO's General Arrangement Drawing No. SK.EL-5033 [Unique Transportation Code: WAP-7HS; Maximum Axle Load: 18.08±2%t].

Ref:- (i) Railway Bd's letter No. 2020/CEDO/SR/06(1), dated 13.03.2020
(ii) RDSO's letter No. EL/301.35/37(WAP7), dated 18.11.2019
(iii) CCRS's letter No. Q.12011/22/2019-20-त.वि., दिनांक – 04.02.2020.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for Introduction of the BG WAP-7HS class of locomotive to RDSO's General Arrangement Drawing No. SK.EL-5033 [Unique Transportation Code: WAP-7HS; Maximum Axle Load: 18.08±2%t] up to a maximum speed of 160kmph by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004 vide Railway Board's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested following **improvement in** Broad Gauge WAP-7HS class of locomotive:

(i) Thermo acoustic insulation for crew comfort and noise reduction should be provided in the cab, similar to WDG6G diesel locomotive.

(ii) In Fire Detection Unit, a perforated pipe line is provided which sucks the smoke in the machine room and gives alarm to loco-pilot. It was observed that holes provided in perforated pipes were improper (burred) and of small size will the possibility of getting blocked by dust during the course of time. These holes should be made proper.

RDSO is requested to examine above and take necessary action for **improvement in** Broad Gauge WAP-7HS class of locomotive. The compliance of the same should also be submitted to CCRS.

Prem Sagar
13/3/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/22/2019-20-त.वि., दिनाक - 04.02.2020
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director EE(RS), Railway Board.

Prem Sagar
13/3/20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

13/3/20

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भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/30(1) **New Delhi, dated 11.02.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of the Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive fitted with Co-Co Bogies [Unique Transportation Code: WDG6G; Maximum Axle Load: 23.0t] to M/s GE Transportation's General Arrangement Drawing No. 84A238791BU, up to a maximum speed up to 65kmph, by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004.

Ref:- (i) RDSO's letter No. SD.WDG6G.11, dated 29.05.2019.
(ii) CCRS's letter No. Q.12011/07/2019-20-त.वि., दिनांक – 23.12.2019.

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of the Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive fitted with Co-Co Bogies [Unique Transportation Code: WDG6G; Maximum Axle Load: 23.0t] to M/s GE Transportation's General Arrangement Drawing No. 84A238791BU, up to a maximum speed up to 65kmph, by Zonal Railways, on track maintained as per specified under Para 607 of IRPWM Reprint-2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Provisional Speed Certificate No. SD.WDG6G.11, dated 29.11.2018 last amended vide Amendment No. 3 dated 10.02.2020 for operation up to the maximum speed of 65 kmph. Remarks of the Railway against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the Locomotive.

(ii) Maximum speed of the locomotive shall be restricted as speeds proposed therein in above RDSO speed certificate last amended vide Amendment No. 3 dated 10.02.2020 or the maximum permissible speed of the section, whichever is less.

(iii) Observance of all permanent and temporary speed restrictions already in force.

(iv) In single headed condition, while approaching standard BGML Bridge of effective span 19.4m, the driver shall operate the TELS provided on the locomotive. This condition along with details of such BGML span shall be incorporated in Working Time Table of Zonal Railway.

(v) In double headed condition, while approaching standard BGML Bridge of effective spans 13.1m, 19.4m, 25.6m, 31.9m, 47.25m, 63.0m & 78.8m and standard RBG Bridge span of 13.1m & 47.25m, the driver shall operate the TELS provided in the

O/C Prem Sagar
11.02.20

locomotive. This condition along with details of such BGML and RBG spans shall be incorporated in Working Time Table of Zonal Railway.

(vi) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the Working Time Table.

(vii) Suitable communication shall be provided in the locomotive and guards van for communication between loco pilot, guard and adjacent station master.

(viii) Before initiating the operation, PCEE of the concerned Railway shall certify the track worthiness and ensure safety of rolling stock. Proper maintenance of the rolling stock shall also be ensured.

(ix) Brakes of the rolling stock shall be in good working order during the operation.

(x) Earthing of the loco body & all the panels shall be properly maintained. Safety Interlocks provided with the door opening of Aux-cab and discharging the DC link shall also be properly maintained.

Prem Sagar
11.02.20
o/c (प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/07/2019-20-त.वि., दिनांक - 23.12.19
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director Mechanical Engineering (Traction), Railway Board.

Prem Sagar
o/c 11.02.20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(50)

No. 2019/CEDO/SR/30(2) **New Delhi, dated 11.02.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive fitted with Co-Co Bogies [Unique Transportation Code: WDG6G; Maximum Axle Load: 23.0t].

Ref:- (i) Railway Bd's letter No. 2019/CEDO/SR/30(1), dated 11.02.2020
(ii) RDSO's letter No. SD.WDG6G.11, dated 29.05.2019
(iii) CCRS's letter No. Q.12011/07/2019-20-त.वि., दिनांक – 23.12.2019.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for Introduction of the Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive fitted with Co-Co Bogies [Unique Transportation Code: WDG6G; Maximum Axle Load: 23.0t] to M/s GE Transportation's General Arrangement Drawing No. 84A238791BU, up to a maximum speed up to 65kmph, by Zonal Railways, on track maintained as per standards specified under Para 607 of IRPWM Reprint-2004 vide Railway Board's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested following **improvement** in Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive :

"As the length of longhood is more than the already running locomotives, feasibility of providing dual cab in this loco may be examined for future production."

RDSO is requested to examine above and take necessary action for **improvement** in Broad Gauge 6000 HP IGBT based with AC-AC transmission WDG-6G class of Diesel Electric Locomotive. The compliance of the same should also be submitted to CCRS.

Prem Sagar 11.02.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/07/2019-20-त.वि., दिनाक - 23.12.19
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director Mechanical Engineering (Traction), Railway Board.

Prem Sagar 11.02.20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
अनुलग्नक सहित जारी
Issue with Enclosure
हस्ताक्षर
Signature.....
की तिथि
Date of Issue.....

(51)

भारत सरकार Government Of India
रेल मंत्रालय Ministry Of Railways
(रेलवे बोर्ड) (Railway Board)

सं.2019/CEDO/SD/RS/12 New Delhi, Dated 7.02.2020

The Director General,
Manak Nagar, RDSO,
Lucknow.

विषय : **Corrigendum** to Board's letter dated 04.12.2019 regarding Condonation of infringements w.r.t. IRSOD (BG) Revised, 2004 by Utility Track Vehicle to M/s Ovis Equipments Pvt. Ltd. Hyderabad Layout Drawing No. 432 00 00 00 Rev. 01.

संदर्भ : (i) Board's letters of even No., dated 04.12.2019 & 09.12.2019.
(ii) CCRS letter No.Q-14011/06/2019-20-T.W., dated 04.11.2019.

CORRIGENDUM

Please refer to Board's letter of even No., dated 04.12.2019 wherein the sanction of Ministry of Railways, Railway Board was communicated for Condonation of infringements w.r.t. IRSOD (BG) Revised, 2004 by Utility Track Vehicle to M/s Ovis Equipments Pvt. Ltd. Hyderabad Layout Drawing No. 430 00 00 00 Rev. 01, due to typographical error Layout Drawing No. has erroneously been mentioned as "430 00 00 00 Rev. 01" instead of "432 00 00 00 Rev. 01."

In view of above, " Drawing No." **mentioned in the letter under reference (i) above, should be read as** "Drawing No. 432 00 00 00 Rev. 01".

06/02/2020
(गौरव)
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Mob. 8882207154;Rly. 47598]

सं.2019/CEDO/SD/RS/12 New Delhi, Dated .02.2020

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No. Q-14011/06/2019-20-T.W., dated 04.11.2019
2. Commissioner of Railway Safety, all Circles.
3. ED Standards (Track-1), RDSO, Manak Nagar,Lucknow
4. EDTk(Mc)/Railway Board, New Delhi.

06/02/2020
(गौरव)
कृते, सचिव रेलवे बोर्ड

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
अनुलग्नक सहित जारी
Issue with Enclosure
हस्ताक्षर
Signature.....
जारी की तिथि
Date of Issue.....

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(52)

No. 2020/CEDO/SR/01 **New Delhi, dated 06.02.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of BG LHB Non-AC EOG GS variant on FIAT bogies [Unique Transportation Code : LS-5A; Maximum Axle Load: 16.25t] fitted with pneumatic suspension (160 KN capacity air spring) at the secondary stage on to RCF's Layout Drawing No. LG90012 up to **130 kmph** on track maintained as per standards specified under Para 607 of IRPWM Third Reprint-2019, by Zonal Railways.

Ref:- (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LS-5A, dated 10.12.2019.
(ii) CCRS's letter No. Q.12011/24/2019-20-त.वि., दिनांक – 03.01.2020.

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of BG LHB Non-AC EOG GS variant on FIAT bogies [Unique Transportation Code : LS-5A; Maximum Axle Load: 16.25t] fitted with pneumatic suspension (160 KN capacity air spring) at the secondary stage on to RCF's Layout Drawing No. LG90012 up to **130 kmph** on track maintained as per standards specified under Para 607 of IRPWM Third Reprint-2019, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate No. SV.FIAT(SC)/LS-5A, dated 04.12.2019, applicable up to the maximum speed of 130 kmph on track maintained as per standard specified under Para 607 of IRPWM Third reprint 2019. Remarks of the Railway against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the coach.

(ii) As per Para 6.1.2 of Revised Policy Circular-6 Dated 31.10.2018, trains will be introduced in the sections at the speeds as per provision of General Rules 1976–Rule 4.08 1(a).

(iii) All the provisions contained in the Railway Board's letter no. 2014/CE-II.TSC/I Pt.1 dated 08.09.2016 regarding track structure for speed beyond 110 kmph should be strictly complied.

(iv) Track on the section shall be the maintained as per standard specified under Para 607 of IRPWM Reprint-2004, duly taking into account the corrections/additions indicated in the Correction Slip No.150 Dated 26.08.2019 [issued vide Railway Board's letter No. 2018/CE-II/CS/I Dated 26.08.2019] to relevant Para of IRPWM, which pertains to revised track maintenance standards for different speed bands. Railway shall impose suitable speed restriction in the sections where the track is not maintained to requisite Standards. For speeds beyond 110 kmph, Improved SEIs shall be planned on entire section.

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड Railway Board
अनुलग्नक सहित जारी
Issue With Enclosure
हस्ताक्षर
Signature.....
जारी की तिथि

Prem Sagar

(v) Maximum speed of coach should be restricted as speeds proposed therein or the maximum permissible speed of the section whichever is less.

(vi) Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.

(vii) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

(viii) All turn-outs shall be with Fixed Heel Curved switches laid on PSC sleeper layout with CMS crossings.

(ix) Track geometry shall be monitored by Track Recording Car (TRC), Oscillograph Car and OMS at laid down frequency.

(x) Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.

(xi) Sleeper on bridges (other than ballasted deck) would be steel channel/h-beam/composite sleepers.

(xii) Railway shall ensure provision of sturdy fencing at vulnerable location on need basis.

(xiii) All level crossing gates within the station limit should be manned and interlocked with station signals. All manned level crossing gates outside station limit should be interlocked depending on the classification of level crossing.

(xiv) All level crossings shall be manned with telecommunication facilities.

(xv) Multi Aspect Colour Light Signaling (MACLS) with two Distant Signals of Automatic Signaling shall be provided. If two Distant Signals are provided, the Distant (outer most) signal shall be located at a Distance of not less than 2Km in rear of the home signal. The inner Distant Signal (existing Distant Signals) can be retained at its present Distance in rear of the existing home signal. This shall also be applicable to the IBS and the interlocked level crossing gates located in the block sections.

(xvi) Where automatic signaling is not provided, means for verifying complete arrival of train by provision of block proving by Axle Counter (BPAC) is necessary on high density routes and for stations provided with central panel interlocking.

(xvii) Brakes of the rolling stock shall be in good working order during the operation.

(xviii) Before starting the operation, the PCME of the concerned Railway shall arrange to certify the track worthiness and safety of the Rolling stock. Proper maintenance of the rolling stock shall be ensured.

(xix) The Wheel Slide Protection (WSP) device of all the coaches in the rake shall be functional at the starting station.

(xx) In case air spring gets deflated, the speed shall be limited to 60 kmph. Failure Indication cum Brake Application (FIBA) device shall be provided in pneumatic circuit of Air Spring and Air Brake.

Prem Sagar

(54)

(xxi) Earthing in the coach body & all the panels shall be properly maintained.

o/c Prem Sagar 06.02.2020

(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/24/2019-20-त.वि., दिनांक - 03.01.2020.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

o/c Prem Sagar 06.02.20

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

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भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/29(3) **New Delhi, dated 31.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies.

Ref:- (i) Railway Bd's letter No. 2019/CEDO/SR/29(1 & 2), dated 31.01.2020
(ii) RDSO's letter No.SV.FIAT(SC)/Sanction/LWLRRMD, dated 10.10.2019.
(iii) CCRS's letter No. Q.12011/18/2019-20-त.वि., दिनांक – 16.12.2019.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for Introduction of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies to RDSO's Layout Drawing No. CSC-1847 for use by Zonal Railways up to a maximum speed up to 105/130kmph, on track maintained as per standards specified under Para 607 of IRPWM Reprint-2004 vide Railway Board's letters under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested following **improvement in** LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach :

(i) Feasibility of interchanging Location of both switch board cabinets should be explored for better leg space for crew staff. Later, smaller under-slung switch board cabinet for train lighting, similar to other LHB Non-AC EOG coaches should be provided.

(ii) Noise level in panel room (crew compartment) is measured as 84.5dB which is substantially higher. Provision of thermal-acoustic insulation should be provided at suitable locations to reduce noise level below 70dB. Similarly, noise level in Divyangjan Compartment should be reduced below 60dB.

(iii) Provision for operating Alarm pull handle from lower berth by Divyangjan may be explored.

(iv) Feasibility of providing doors towards lavatory side may be explored so that exit from other end is possible in case of fire on engine side.

रेल मंत्रालय
Ministry of Railways
Railway Board
Signature
Date of Issue

o/c Prem Sagar
31.01.20

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(v) Junction box covers needs improvement matching with the profile of roof, leaving no gap for inserting garbage.

RDSO is requested to examine above and take necessary action for **improvement in** LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach. The compliance of the same should also be submitted to CCRS.

Prem Sagar
21.01.20

(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/18/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

Prem Sagar
21.01.20

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

(57)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/29(2) **New Delhi, dated 21.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies to RDSO's Layout Drawing No. CSC-1847 for use by Zonal Railways up to a maximum speed up to **130 kmph** on track maintained as per standards specified under Para 607 of IRPWM Reprint 2004.

Ref:- (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LWLRRMD, dated 10.10.2019.
(ii) CCRS's letter No. Q.12011/18/2019-20-त.वि., दिनांक – 16.12.2019.

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies to RDSO's Layout Drawing No. CSC-1847 for use by Zonal Railways up to a maximum speed up to 130 kmph on track maintained as per standards specified under Para 607 of IRPWM Reprint 2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate No. SV.FIAT (SC)/LWLRRMD/130 dated 09.10.2019 & Amendment No. 1 dated 10.12.2019, applicable upto the maximum speed of 130 kmph on track maintained as per standards specified under para 607 of IRPWM Reprint 2004. Remarks of the Railway against each para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the coach.

(ii) As per para 6.1.2 of Revised Policy Circular-6 dated 31.10.2018, trains will be introduced in the sections at the speeds as per provision of General Rules 1976– Rule 4.08 1(a).

(iii) All the provisions contained in the Railway Board's letter no. 2014/CE-II.TSC/I Pt.1 dated 08.09.2016 regarding track structure for speed beyond 110 kmph should be strictly complied.

Prem Sagar
21.01.20
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(iv) Track on the section shall be the maintained as per standard specified under para 607 of IRPWM Reprint-2004, duly taking into account the corrections/additions indicated in the Correction Slip No.150 Dated 26.08.2019 [*issued vide Railway Board's letter No. 2018/CE-II/CS/I Dated 26.08.2019*] to relevant para of IRPWM, which pertains to revised track maintenance standards for different speed bands. Railway shall impose suitable speed restriction in the sections where the track is not maintained to requisite Standards.

(v) Maximum speed of coach should be restricted as speeds proposed therein or the maximum permissible speed of the section whichever is less.

(vi) Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.

(vii) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

(viii) All turn-outs shall be with Fixed Heel Curved switches laid on PSC sleeper layout with CMS crossings.

(ix) Track geometry shall be monitored by Track Recording Car (TRC), Oscillograph Car and OMS at laid down frequency.

(x) Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.

(xi) Sleeper on bridges (other than ballasted deck) would be steel channel/h-beam/composite sleepers.

(xii) Railway shall ensure provision of sturdy fencing at vulnerable location on need basis.

(xiii) All level crossing gates within the station limit should be manned and interlocked with station signals. All manned level crossing gates outside station limit should be interlocked depending on the classification of level crossing.

(xiv) All level crossings shall be manned with telecommunication facilities.

(xv) Multi Aspect Colour Light Signalling (MACLS) with two Distant Signals of Automatic Signalling shall be provided. If two Distant Signals are provided, the Distant (outer most) signal shall be located at a Distance of not less than 2Km in rear of the home signal. The inner Distant Signal (existing Distant Signals) can be retained at its present Distance in rear of the existing home signal. This shall also be applicable to the IBS and the interlocked level crossing gates located in the block sections.

(xvi) Where automatic signalling is not provided, means for verifying complete arrival of train by provision of block proving by Axle Counter (BPAC) is necessary on high density routes and for stations provided with central panel interlocking.

(xvii) Before starting the operation, the PCME of the concerned Railway shall arrange to certify the track worthiness and safety of the Rolling stock. Proper maintenance of the rolling stock shall be ensured.

(xviii) Brakes of the rolling stock shall be in good working order during the operation.

Prem Sagar
21.01.20

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(xix) The Wheel Slide Protection (WSP) device of all the coaches in the rake shall be functional at the starting station.

(xx) In case air spring gets deflated, the speed shall be limited to 60 kmph. Failure Indication cum Brake Application (FIBA) device shall be provided in pneumatic circuit of Air Spring and Air Brake.

(xxi) Earthing in the coach body & all the panels shall be properly maintained.

(xxii) Gap between endwall & lavatory to be plugged by panelling. In future production this gap should not be there.

(xxiii) It shall be ensured that power supply of power coupler is cut off when it is put on dummy plug.

(xxiv) There is no safety sling/chain provided for battery box. It should be provided to prevent falling of battery box.

Prem Sagar
21.01.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/18/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

Prem Sagar
21.01.20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
अनुलग्नक हस्ताक्षरी
issue with enclosure
हस्ताक्षर
Signature.....
जारी की तिथि
Date of issue.....

(60)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/29(1) **New Delhi, dated 21.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies to RDSO's Layout Drawing No. CSC-1847 for use by Zonal Railways up to a maximum speed up to **105 kmph** on track maintained as per standards specified under Para 607 of IRPWM Reprint 2004.

Ref:- (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LWLRRMD, dated 10.10.2019.
(ii) CCRS's letter No. Q.12011/18/2019-20-त.वि., दिनांक – 16.12.2019.

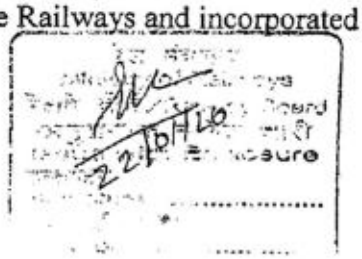
With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of the LHB Non-AC EOG/HOG compliant Brake, Luggage cum Generator Van Coach (with on-board 1x500kVA DA set) with compartment for Divyangan passengers [Transportation Code-LWLRRMD; Max. Axle Load-16.25t] having pneumatic suspension (140kN capacity air spring) in secondary stage on FIAT Bogies to RDSO's Layout Drawing No. CSC-1847 for use by Zonal Railways up to a maximum speed up to 105 kmph on track maintained as per standards specified under Para 607 of IRPWM Reprint 2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate No. SV.FIAT (SC)/LWLRRMD/105 Dated 09.10.2019, applicable upto the maximum speed of 105 kmph on track maintained as per standards specified under para 607 of IRPWM Reprint 2004. Remarks of the Railway against each para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the coach.

(ii) Maximum speed of coach should be restricted as speeds proposed therein or the maximum permissible speed of the section whichever is less.

(iii) Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.

(iv) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.



o/c Prem Sagar
21.01.20

(v) Before starting the operation, the PCME of the concerned Railway shall arrange to certify the track worthiness and safety of the Rolling stock. Proper maintenance of the rolling stock shall be ensured.

(vi) Brakes of the rolling stock shall be in good working order during the operation.

(vii) The Wheel Slide Protection (WSP) device of all the coaches in the rake shall be functional at the starting station.

(viii) In case air spring gets deflated, the speed shall be limited to 60 kmph. Failure Indication cum Brake Application (FIBA) device shall be provided in pneumatic circuit of Air Spring and Air Brake.

(ix) Earthing in the coach body & all the panels shall be properly maintained.

(x) Gap between endwall & lavatory to be plugged by panelling. In future production this gap should not be there.

(xi) It shall be ensured that power supply of power coupler is cut off when it is put on dummy plug.

(xii) There is no safety sling/chain provided for battery box. It should be provided to prevent falling of battery box.

Prem Sagar
31.01.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/18/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

Prem Sagar
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

(62)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/28(1) **New Delhi, dated /6.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

The General Manager,
All Indian Railways

Sub:- Introduction of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage (140 kN capacity Air Spring) to RDSO's Layout Drawing No. CSC-1840 Alt.2, up to a maximum speed up to 130kmph, on track maintained as per specified under Para 607 of IRPWM Reprint-2004.

Ref:- (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LVPH, dated 28.11.2019.
(ii) CCRS's letter No. Q.12011/23/2019-20-त.वि., दिनांक – 16.12.2019.
(iii) Board's letter of even No., dated 08.01.2020.

In reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for Introduction of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage (140 kN capacity Air Spring) to RDSO's Layout Drawing No. CSC-1840 Alt.2, up to a maximum speed of 130kmph, on track maintained as per standards specified under Para 607 of IRPWM Reprint-2004, with following stipulations :

(i) Observance of all conditions laid down in RDSO's Final Speed Certificate no. SV.FIAT(SC)/LVPH, Dated 28.11.2019 for Introduction up to a maximum speed of 130 kmph. Remarks of the Railway against each Para of the Speed Certificate shall be submitted to the Commission before the start of actual Introduction of rolling stock.

(ii) As per Para 6.1.2 of Revised Policy Circular-6 Dated 31.10.2018, trains will be introduced in the sections at the speeds as per provision of General Rules 1976–Rule 4.08.1(a).

(iii) All the provisions contained in the Railway Board's letter no. 2014/CE-II.TSC/I Pt.1 dated 08.09.2016 regarding track structure for speed beyond 110 kmph should be strictly complied.

(iv) Track on the section shall be the maintained as per standards specified under Para 607 of IRPWM Reprint-2004, duly taking into account the corrections/additions indicated in the Correction Slip No.150 Dated 26.08.2019 [*issued vide Railway Board's letter No. 2018/CE-II/CS/I Dated 26.08.2019*] to relevant Para of IRPWM, which pertains to revised track maintenance standards for different speed bands. Railway shall impose

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o/c Prem Sagar
16/01/20

suitable speed restriction in the sections where the track is not maintained to requisite Standards. Improved SEJ shall be planned on entire section.

(v) Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.

(vi) Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

(vii) Railway shall ensure provision of sturdy fencing at vulnerable locations to prevent accidents related to trespassing. Zonal Railways should also plan subways at suitable location to avoid trespass and ensure effectiveness of fencing provided.

(viii) All turnouts shall be fixed heel curved switches laid on PSC sleepers' layout with CMS crossings.

(ix) Track geometry shall be monitored by Track Recording Car (TRC), Oscillograph Car and OMS at laid down frequency.

(x) Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.

(xi) Sleeper on bridges (other than ballasted deck) shall be steel channel/h-beam/Composite sleepers.

(xii) All level crossing gates with in station limit should be manned and interlocked with station signals. All level crossing gates outside the station limit should be interlocked depending on the classification of level crossing. All level crossings shall be provided with telecommunication facilities.

The visibility at level crossing should be as laid down in IRPWM/Railway Board's instructions. All requirements pertaining to level crossing as laid down in IRPWM/Railway Board's instructions should be fulfilled to ensure safety at level crossing. Drainage of the level crossing and adjoining track should be in good condition.

Level crossing in yard is in violation of Para 901 of IRPWM. Such LCs in the yard should be suitably eliminated by means of outright closure, merger with adjacent LCs or by grade separators on priority within 2 years time. If these LCs are not eliminated within 2 years time, Zonal Railway should seek extension of the sanction to comply this condition. A road map may be prepared for elimination of LCs in the yard and submitted to the Commission. All other level crossing should also be replaced by grade separators within time bound manner as decided by the Ministry of Railway.

(xiii) Signaling to protect level crossings should be provided as per Section 'D' (Para 7.43 to 7.46), Chapter-VII of IRSEM. As per Para 7.46.2 of IRSEM, there should be no LC gate within the Block Overlap (180m) from the Home signal. If it is there, Home signal should be relocated and placed beyond 180m. No new level crossing should be located within Signal/Block Overlap.

(xiv) Action shall be taken for relocation/modification of engineering signals in consultation with S&T and OHE department of Zonal Railways.

(xv) Before initiating the Introduction, PCME of the concerned Railway shall certify the track worthiness and safety of the rolling stock. Proper maintenance of the rolling stock shall be ensured.

(xvi) Brakes of the rolling stock shall be in good working order during the operation.

(xvii) In case air spring gets deflated, the speed shall be limited to 60 kmph. Failure Indication cum Brake Application (FIBA) device shall be provided in pneumatic circuit of Air Spring and Air Brake.

(xviii) Earthing in the coach body & all the panels shall always be properly maintained.

o/c Prem Sagar
16/01/20

(xix) Proper support by suitable means for power couplers shall be provided.

(xx) Foldable rackes and internal lighting shall be provided in all LVPH coaches. The same shall also be retrofitted in the prototype.

16/1

(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/23/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

16/1/20

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(65)

No. 2019/CEDO/SR/28(2) **New Delhi, dated /6.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage .

Ref:- (i) Railway Bd's letter No. 2019/CEDO/SR/28(1), dated 16.01.2020
(ii) RDSO's letter No. SV.FIAT(SC)/Sanction/LVPH, dated 28.11.2019
(iii) CCRS's letter No. Q.12011/23/2019-20-त.वि., दिनांक – 16.12.2019.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for Introduction of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage (140 kN capacity Air Spring) to RDSO's Layout Drawing No. CSC-1840 Alt.2, up to a maximum speed up to 130kmph, on track maintained as per specified under Para 607 of IRPWM Reprint-2004 vide Railway Board's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested following **future improvement of** LHB design high capacity **parcel van**:

(i) Provision of suitable fire suppression like Fireball etc. may be examined.
(ii) Light fittings may be made completely flushed.
(iii)Arrangement should be made to prevent power supply in power coupler when it is put on dummy plug.

RDSO is requested to examine above and take necessary action for **future improvement of** LHB design high capacity **parcel van**. The compliance of the same should also be submitted to CCRS.

Prem Sagar
6/1/20
o/c (प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/23/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड/Railway Board
अनुलग्नक सहित जारी
Issue with Enclosure
हस्ताक्षर/Signature.....
जारी की तिथि
Date of issue.....

Prem Sagar
16/1/20
o/c (प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/21 **New Delhi, dated : 14.01.2020**

To

The Director General
R.D.S.O.
Manak Nagar, **Lucknow.**

Sub:- Introduction of 12000 HP WAG11 (Twin Co-Co Electric Locomotives converted from WDG4, Maximum Axle Load 21.0t) to RDSO General Arrangement Drawing No. SK:DL- 4796 Alt.1 & SK.DL-4793 Alt.1 up to a maximum speed of 95 kmph, by Zonal Railway.

Ref:- (i) RDSO letter No. EL/11.5.5/20, dt. 17.05.2019

(ii) CCRS letter No. Q.12011/01/2019-20-त.वि., दिनांक – 02.09.2019

The CCRS has forwarded the above case of introduction of 12000 HP WAG11 locomotive under reference (ii) for Board's sanction with some observations/ conditions, which were communicated to RDSO vide Board's letter No. 2019/CEDO/SR/21 dated 09.09.2019 for parawise comments.

2. Further, Railway Board vide letter No. 2019/04/CE-III/BR/TELS, dated 07.01.2020 has advised use of TELS on the bridges in HHP Diesel and Electric locomotives.

3. RDSO is therefore requested to take necessary action for revision of Final Speed Certificate in line with above Board's letter dated 07.01.2020 and process case for approval of Board for introduction of WAG11 locomotive, through CCRS, along with comments on Para 15 of Annexure-I to CCRS letter under reference (ii) above.

o/c

Encl: As above

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
Issue Date of Issue
Signature
Date of Issue

Prem Sagar
14.01.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

Copy- EDEE/RS & EDCE(B&S), Railway Board for information please.

(67)

भारत सरकार Government Of India
रेल मंत्रालय Ministry Of Railways
(रेलवे बोर्ड) (Railway Board)

सं.2017/CEDO/SD/21 **New Delhi, Dated 14.01.2020**

The Director General,
Manak Nagar, RDSO,
Lucknow.

विषय : **Extension of** Temporary Condonation for vertical infringement to IRSOD-Schedule-I, Chapter I, Item 10(c) and note (b), (c) & (d) by existing **Road Over Bridge** at Katihar yard in connection with Railway Electrification of Katihar – Mukuria – New Jalpaiguri – Raninagar Jalpaiguri section of Katihar Division of N.F.Railway.

संदर्भ : (i) NFR's letter no. 178/W/DRG/BR/Condonation, dated 01.12.16 & 25.10.19
(ii) Board's letter of even No., dated 04.12.2019.

In supersession to Railway Board letter no. 2017/CEDO/SD/21 dated 04.12.2019, sanction of the Ministry of Railways, Railway Board is hereby communicated for **Extension of Temporary** condonation up to 30.06.2020 for vertical infringement to IRSOD-Schedule-I, Chapter I, Item 10(c) and note (b), (c) & (d) by existing Road Over Bridge at Katihar yard in connection with Railway Electrification of Katihar – Mukuria – New Jalpaiguri – Raninagar Jalpaiguri section of Katihar Division of N.F.Railway. All other stipulations mentioned in Board's letter dated 20.03.2017 shall be strictly followed.

Prem Sagar
14/01/20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक/सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड
[Phone : 030-44803 (Rly.); 011-23383379 (MTNL);]
e-mail address : edceg@rb.railnet.gov.in

सं.2017/CEDO/SD/21 **New Delhi, Dated 14.01.2020**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q. 11012/02/NFC/2016-17-T.W., dated 16.03.2017.
2. The Commissioner of Railway Safety, N.F. Circle, 14, Strand Road, (12th Floor), Kolkata-700001, w.r.t. letter no. 304/2/2016-17/NFC,dated 09.03.2017

14/01/20

Prem Sagar
14/01/20
(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(68)

सं.2019/CEDO/SD/RS/13 **New Delhi, Dated 13.01.2020**

The Director General,
Manak Nagar, RDSO,
Lucknow.

विषय : Condonation of infringements w.r.t. IRSOD (BG) Revised, 2004 by **Multi Purpose Tamper (MPT)** Model DDC-16W, manufactured by M/s CRCC High Tech Equipment Corporation Ltd, China.

संदर्भ : (i) RDSO letter No.CT/TMM/GENL, dated 17.11.2019.
(ii) CCRS letter No.Q-14011/10/2019-20-T.W., dated 16.12.2019.

With reference to your above application, dated 17.11.2019{ref. (i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised, 2004 by **Multi Purpose Tamper (MPT)** Model DDC-16W, manufactured by M/s CRCC High Tech Equipment Corporation Ltd, China, as shown in details enclosed with above mentioned application, details of infringements as under :

(i) **Clause 18(i) –** Minimum rigid wheel base for bogie truck of any vehicles by 30mm (i.e. 1800mm instead of 1830mm)

(ii) **Clause 20(b) –** Maximum length over centre buffer couplers or side buffers for bogie vehicles by 5854mm (i.e. 28154mm instead of 22300mm)

Further, above sanction of condonation is subject to the following stipulations :

"Instructions related to movement of the machine on Curves, Point and Crossing/Turnouts and Diamond Crossing should be incorporated in the Speed Certificate of its operation, whenever being issued by RDSO. In addition, issues related to movement of the machine in Train formation in case of emergency should also be considered & addressed and accordingly, instructions for movement in such cases should be clearly mentioned in the Speed Certificate."

Prem Sagar 13.01.20
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

सं.2019/CEDO/SD/RS/13 **New Delhi, Dated 13.01.2020**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No. Q-14011/10/2019-20-T.W., dated 16.12.2019
2. Commissioner of Railway Safety, all Circles.
3. ED Standards (Track-1), RDSO, Manak Nagar,Lucknow
4. EDTk(Mc)/Railway Board, New Delhi.

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड/Railway Board
अनुलग्नक सहित जारी
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जारी की तिथि
Date of Issue.....

Prem Sagar 13.01.20
(प्रेम सागर गुप्ता)
कृते सचिव, रेलवे बोर्ड

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

(69)

सं.2019/CEDO/SD/RS/14 **New Delhi, Dated 13.01.2020**

The Director General,
Manak Nagar, RDSO,
Lucknow.

विषय : Condonation of infringements w.r.t. IRSOD (BG) Revised, 2004 by **Points and Crossings Tamping Machine Model CDC-16W and XCD-16W**, manufactured by M/s CRCC High Tech Equipment Corporation Ltd, China.

संदर्भ : (i) RDSO letter No.CT/TMM/GENL, dated 17.11.2019.
(ii) CCRS letter No.Q-14011/11/2019-20-T.W., dated 16.12.2019.

With reference to your above application, dated 17.11.2019{ref. (i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised, 2004 by **Points and Crossings Tamping Machine Model CDC-16W and XCD-16W**, manufactured by M/s CRCC High Tech Equipment Corporation Ltd, China, as shown in details enclosed with above mentioned application, details of infringements as under :

(i) **Clause 18(i)** – Minimum rigid wheel base for bogie truck of any vehicles by 30mm (i.e. 1800mm instead of 1830mm)

(ii) **Clause 20(b)** – Maximum length over centre buffer couplers or side buffers for bogie vehicles by 7794mm (i.e. 30094mm instead of 22300mm)

Further, above sanction of condonation is subject to the following stipulations :

"Instructions related to movement of the machine on Curves, Point and Crossing/Turnouts and Diamond Crossing should be incorporated in the Speed Certificate of its operation, whenever being issued by RDSO. In addition, issues related to movement of the machine in Train formation in case of emergency should also be considered & addressed and accordingly, instructions for movement in such cases should be clearly mentioned in the Speed Certificate."

Prem Sagar
13/01/20
o/c
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

सं.2019/CEDO/SD/RS/14 **New Delhi, Dated 13.01.2020**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No. Q-14011/11/2019-20-T.W., dated 16.12.2019
2. Commissioner of Railway Safety, all Circles.
3. ED Standards (Track-1), RDSO, Manak Nagar,Lucknow
4. EDTk(Mc)/Railway Board, New Delhi.

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड/Railway Board
अनुलग्नक सहित जारी
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Prem Sagar
13.01.20
o/c
(प्रेम सागर गुप्ता)
कृते सचिव, रेलवे

(70)

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड) (Railway Board)

No. 2019/CEDO/SR/28 **New Delhi, dated 08.01.2020**

The Director General
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226011

Sub:- Improvement of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage .

Ref:- (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LVPH, dated 28.11.2019.
(ii) CCRS's letter No. Q.12011/23/2019-20-त.वि., दिनांक – 16.12.2019.

With reference to your above application, sent through the Chief Commissioner of Railway Safety, Lucknow; for Introduction of the LHB design high capacity **parcel van** without luggage racks on FIAT bogie [Unique Transportation Code: LVPH; Maximum Axle Load: 16.25t] fitted with pneumatic suspension at secondary stage (140 kN capacity Air Spring) to RDSO's Layout Drawing No. CSC-1840 Alt.2, up to a maximum speed of 130kmph, on track maintained as per standards specified under Para 607 of IRPWM Reprint-2004. CCRS; while recommending for introduction of this Rolling Stock to Railway Board CCRS has suggested following **improvement** in LHB design high capacity **parcel van**:

(i) Provision of suitable fire suppression like Fireball etc. may be examined.
(ii) Light fittings may be made completely flushed.
(iii) Arrangement should be made to prevent power supply in power coupler when it is put on dummy plug.

Further, Board(MT) has suggested following improvement in the design of parcel van :

(i) Foldable racks to be provided to accommodate light weight FMCG cargo otherwise small packages may stagger.
(ii) Internal light to be provided to facilitate round the clock handling

RDSO is requested to take necessary action for above **improvements** in LHB design high capacity **parcel van** and approach Railway Board again for sanction of said rolling stock.

Prem Sagar
08.01.2020
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

रेल मंत्रालय
Ministry of Railways
रेलवे बोर्ड / Railway Board
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Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/23/2019-20-त.वि., दिनांक - 16.12.2019.
2. Executive Director (Standards)Motive Power, RDSO, Lucknow.
3. Executive Director (Standards)/Carriage, RDSO, Lucknow.
4. Executive Director Mechanical Coaching, Railway Board.

Prem Sagar
08-01-20

भ/c (प्रेम सागर गुप्ता)

कृते, सचिव रेलवे बोर्ड