

No. 2017/CE-I/CT/9

New Delhi, Dated 31.05.2023

To,  
As per list attached

**Sub: Implementation of Contractor 'e'-Measurement Book ('e'- MB)**

Ref: (i) Railway Board's letter No. 2016/CE-I/CT/14/Measurement/1 dated 21.09.2017

(ii) Railway Board's letter No. 2016/CE-I/CT/14/Measurement/3 dated 21.09.2017

(iii) Railway Board's letter No. 2017/Trans/01/Policy dated 08.02.2018

(iv) Railway Board's letter No. 2018/CE-I/CT/30 dated 01.08.2022

1. Railway Board vide letter under reference (iv) had issued instructions regarding implementation of 'Contractor's e-MB' for measurement and Billing of Works contracts in IR-WCMS on Zonal Railways.
2. Board (MI & MF) has now decided that *"for all contracts costing more than Rs. 5 Crore, Contractor's e-MB is mandatory and Contractor's e-MB should be part of Tender Document. In exceptional cases, approval of DRM/PHOD/CHOD with finance concurrence may be taken, as the case may be."*
3. The Tender documents, wherein, measurement of work by contractor is allowed shall contain special condition to this effect, duly incorporating the provisions of para 1316A of engineering code.
4. Measurement recorded by the contractor shall be test checked by Railway within 45 days of submission of measurement.
5. Following items shall be read alongwith Advance Correction Slip No.50 of Indian Railway Code for Engineering Department dated 21.09.2017:-
  - a) While processing 75% provisional payment bill, concerned executives shall ensure that supply items given by contractor are commensurate with requirement for execution of works.
  - b) The word Deputy CE or its equivalent shall mean equivalent Branch Officer of the division/RE organization. XEN/AXEN shall mean their equivalent counterparts in Division/RE organization.
6. This supersedes Board's letter No. 2016/CE-I/CT/14/Measurement/3 dated 21.09.2017 and item No.10 of letter No. 2017/Trans /01/Policy dated 08.02.2018.

*31.05.23*  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

e-mail address: dceg@rb.railnet.gov.in

New Delhi, Dated 31.05.2023

No. 2017/CE-I/CT/9

Copy forwarded for information to:

1. The PFAs, All Indian Railways.
2. Dy. Comptroller and Auditor General of India (Railways), Room No. 224, Rail Bhawan, New Delhi

*For Member Finance*

**LIST FOR DISTRIBUTION (No. 2017/CE-I/CT/9, New Delhi, dated 31.05.2023)**

1. General Managers, All Indian Railways & Production Units
2. General Manager (Con), N.F. Railway, Guwahati
3. General Manager /CORE, Allahabad
4. Chief Administrative Officers (Con), All Indian Railways (Except N.F. Railway)
5. Principal Chief Engineers, All Indian Railways
- (A)
  1. CAO, COFMOW, Tilak Bridge, New Delhi
  2. Principal CAO, Diesel Loco Modernization Works, Patiala (Punjab)
  3. CAO (Workshop Projects), Chamber Bhawan, Judge's Court Road, Anta Ghat, Patna-800001, Bihar
- (B)
  1. Director General, RDSO, Manak Nagar, Lucknow
  2. Director General, NAIR, Vadodara
  3. Director, IRICEN, Pune – 411 001 (Maharashtra)
  4. Director, IRIEEN, PB No.-233, Nasik Road-422101 (Maharashtra)
  5. Director, IRIS&T, Taa Naka Road, Lalla Guda, Secunderabad-500017
  6. Director, IRIMEE, Jamalpur Distt-Jamalpur, PIN-811214 (Bihar)
  7. Director, IRITM, Sarswati Residential Estate, IRITM Campus, Manak Nagar, Lucknow
- (C)
  1. MD, CONCOR, Concor Bhawan, C-3, Mathura Road, Opp. Apollo Hospital, New Delhi- 110076
  2. IRCON International Limited, C-4, District Centre, Saket, New Delhi- 110017
  3. MD, RITES Ltd., RITES Bhawan, Plot No.1, Sector-29, Gurgaon
  4. CMD, RVNL, August Kranti Bhawan, Plot No.25, 1<sup>st</sup> Floor, Bhikaji Cama Place, New Delhi
  5. MD, MRVC Ltd., Churchgate Station Bldg, Mumbai- 400020
  6. CMD, KONKAN Railway Corporation Ltd, Rail Bhawan, New Delhi-110001
  7. MD, DFCCIL, 5<sup>th</sup> Floor, Pragati Maidan Metro Station Building Complex, New Delhi-110001
  8. MD, RLDA, Near Safdarjung Railway Station, Moti Bagh, Phase-I, New Delhi- 110021
  9. MD, CRIS, Chanakyapur, New Delhi
  10. CMD, RailTel Corporation of India Ltd. Plot No. 143, Institutional Area, Sector-44, Gurgaon – 122003
  11. CME, IROAF, 12<sup>th</sup> Floor, Core-1, Scope Minar, Distt. Centre, Laxmi Nagar, Delhi- 110092
  12. Managing Director, IRFC Limited, UG Floor, East Tower, NBCC Place, Bhisham Pitamah Marg, Lodhi Road, Pragati Vihar, New Delhi
  13. CMD, IRCTC Ltd., B-148, 11th Floor, Statesman House, Barakhamba Road, New Delhi 110001
  14. CMD, Braithwaite & Co. limited, 5 Hide Road Kolkata 700043

**Copy to:**

**(A)**

1. General Secretary, IRCA, DRM Office, New Delhi
2. General Secretary, AIRF, Rail Bhawan, New Delhi
3. General Secretary, NFIR, Rail Bhawan, New Delhi
4. General Secretary, IRPGF, Rail Bhawan, New Delhi
5. General Secretary, FROA, Rail Bhawan, New Delhi
6. General Secretary, AIRPA, Rail Bhawan, New Delhi
7. General Secretary, AISC & STREA, Rail Bhawan, New Delhi
8. The Secretary, RBSS, Group (A) Offices Association, Rail Bhawan
9. The Secretary, RBSS, Group (B) Offices Association, Rail Bhawan
10. General Secretary, RBSSS Association, Rail Bhawan
11. The Secretary, RBMSA, Rail Bhawan
12. The Secretary, Railway Group (D) Employees Association, Rail Bhawan

**(B)**

1. Concerned PSO for kind information of Chairman cum CEO, M/Infra, M/T&RS M/O&BD, M/Finance, Railway Board
2. Adv./MR, EDPG/MR, OSD/MR, OSR(Co-ord)/MR
3. Chief Vigilance Officers, All Indian Railways
4. DG(RHS), DG(RPF), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), AM(ME), AM/Tele, AM/C&IS, AM/Sig., AM(Flg.), PED(B&S), PED(Vigilance), PEDCE(P), PED/Safety, PED/Gati Shakti, EDCE(G), EDTK(M&MC), EDCE(B&S), EDF(X), ED/GS(Civil-I), ED/GS(Civil-II), ED/GS(Elect.), ED/GS(S&T), ED/GS/SD-I, ED/GS/SD-II, EDW(Plg.), ED(L&A), ED(PSU), EDVE, ED(Safety), ED(Sig. Dev.), ED( Tele), EDRS(G), EDEE(G), EDFE, EDE(N), ED(Accounts), ED/T&MPP, EDME(Chg.), EDME(Frt.), ED/Plg., JS(conf), JS(P), JS(G), JS(D), Vigilance-III, Vigil(Conf) of Railway Board.

No.2018/CE-I/CT/30

New Delhi, Dated 01.08.2022

The General Manager,  
All Zonal Railways

**Sub: Implementation of 'Contractor's e-MB' for Measurement and Billing of Works Contracts in IR-WCMS on Zonal Railways**

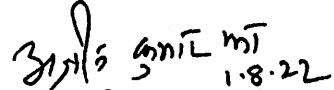
**Ref:** (i) Railway Board's letters No 2018/CE-I/CT/30 dated 29.11.2019, 21.04.2020, 12.06.2022 & 24.06.2022  
(ii) Railway Board's letter No 2018/CE-I/CT/30 dated 30.06.2022

The IT Application of Works Contract Management System (IR-WCMS) has been implemented on Zonal Railways with the approval of Board vide letters under reference (i) above.

2. Railway Board vide letter of even no. dated 30.06.2022 has issued instructions for the implementation of Contractor's e-MB for Measurement and Billing of Works Contracts in IR-WCMS on the five Construction units of IR as pilot project. None of these Construction units have reported any problems/suggestions on use of 'Contractor's e-MB' on IR-WCMS.
3. In continuation of Railway Board's letter of even no. dated 30.06.2022, it has now been decided by the Board (MI, MF and CRB & CEO) to launch 'Contractor's e-MB' for Measurement and Billing of Works Contracts in IR-WCMS, as per contractual provision, on Zonal Railways w.e.f. 01.08.2022.
4. Zonal Railways are advised to use the above portal of 'Contractor's e-MB' with all the conditions as mentioned in Railway Board's letters of even no. referred at (i) above.
5. For any assistance in operation of IR-WCMS, officers may kindly contact the following officials:
  - i. Shri S P Ojha, Sr Project Engineer/CRIS M 8130797596
  - ii. Shri Atul Singh, GM/CEP-II/CRIS M 8810491785
  - iii. Shri Anisur Rehman CE/TMS/N.Rly M 9717630221

Please acknowledge receipt.

Copy: MD/CRIS for information and necessary action

  
(अजीत कुमार झा)  
कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड  
[Phone: 030-44803; Rly: 011-23383379:MTNL]  
e-mail address : edceg2022@gmail.com

No.2018/CE-I/CT/30

New Delhi, Dated 01.08.2022

Copy forwarded for information to:

1. The PFAs, All Indian Railways
2. Dy. Comptroller and Auditor General of India (Railways), Room No. 224, Rail Bhawan, New Delhi

  
For Member Finance

भारतसरकार GOVERNMENT OF INDIA  
रेलमंत्रालय MINISTRY OF RAILWAYS  
रेलवेबोर्ड RAILWAY BOARD

No. 2017/Trans/01/Policy

New Delhi, dated: 08 - 02- 2018

The General Manager, All Indian Railways/PUs, NF(Con), CORE  
The DG/RDSO & NAIR,  
CAOs, DMW/Patiala, WPO/Patna, COFMOW/NDLS, RWP/Bela

**Sub: Process Reforms – Works Contracts.**

**Ref: Railway Board's letter no Trans 01/policy dated 17.11.2017**

In order to expedite decision making and execution of works, following changes have been approved by the Board (ME, FC & CRB).

**1.0 Handling Vitiatio during Variation in Contract Quantities**

In partial modification of existing instructions, it has been decided that as a result of variations, a contract shall be considered "vitiatio" only when, the following percentage variation in contract value between tenderers are noticed to have been exceeded.

SN	Value of Contract	Percentage difference between present Contractor and new L-1 as a result of variation. (percentage shall be calculated with base as the revised contract quantities multiplied by the rates of the present contractor)
1	Small value contracts (Tender Value less than Rs 50 lakh)	10
2	Other than small value contracts (Tender Value equal to or more than Rs 50 lakh)	5

**1.1** When the percentage difference between present Contractor and new L-1 is noticed as becoming beyond the values specified above, the following action shall be taken.

The Railway administration should immediately examine whether it is practicable to bring in a new agency to carry out the extra quantity of work keeping in view the progress of the work in accordance with the original contract and the nature and lay-out of the work. If it is found that there will be no serious practical difficulty in meeting the additional quantity of work done by another agency, then fresh tenders for the extra quantity may be invited **otherwise** negotiating the rate with the existing contractor for arriving at a reasonable rate for the additional quantities of work, may be adopted.

**1.2** The above shall be regulated as under:

- The case shall be decided by the tender accepting authority (competent for the revised quantity) and shall not be treated as a case of single tender. The provisions of Railway Board letter no 2007/CE.I/CT/18/Pt. XII dated 31.12.2010 hereby gets superseded.
- These instructions will be similarly applicable to earning contracts with H-1,H-2 substituted for L-1, L-2 and so on.
- Executives while executing the work shall make all efforts to ensure that no vitiatio takes place in normal circumstances. Vitiatio should be an exception rather than a

*Sanjeeb Kumar*

routine affair. Efforts should be made to invite bids on the basis of percentage above/below/at par.

- d) Vitiating should always be computed with respect to the items, rates, quantities and conditions as available at the time of Tender Opening and subsequent changes/additions by way of new items will not be counted for computing Vitiating.

## **2.0 Dispense with Vetting of Brief Notes & size of TC Recommendation**

2.1 It has been decided that all system generated statements from IREPS website, post tender-opening are directly seen by the Tender Committee and vetting of the comparative statement and vetting of brief note is not required for Tender Committee proceedings.

2.2 The Tender Committee proceedings are made brief and crisp.

## **3.0 System of Verification of Tenderer's credentials:**

3.1 For the works tenders, it has been decided to adopt the affidavit-based system of credential verification. The tenderer shall submit along with the tender document, documents in support of his/their claim to fulfill the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/certificates in support of credentials, submitted by the tenderer, shall be self-attested/digitally signed by the tenderer or authorized representative of the tendering firm. Self-attestation shall include signature, stamp and date (on each page). Only those documents which are declared explicitly by the tenderer as "*documents supporting the claim of qualifying the laid down eligibility criteria*", will be considered for evaluating his/their tender. The system shall be applicable once it is made operational in IREPS. This system is already being followed by some of Railway PSUs.

3.2 In all works tender documents, following para may be added in the section describing the qualification and eligibility criteria.

*"The tenderers shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to be disqualified and all their statements/documents submitted alongwith bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as annexure-A. Non submission of an affidavit by the bidder shall result in summary rejection of his/their bid. And It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned."*

With the submission of the affidavit as mentioned above, the practice of verification of tenderer's documents by the Railways may be dispensed with. Following clause may also be added to the Instructions to Bidders.

- a) *The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the railway thereunder.*
- b) *In case of any wrong information submitted by tenderer, the contract shall be terminated, Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire Indian Railways for 5 (five) years.*

*Sanjeev Kumar*

*nl*

- c) With such a system of self-certification of credentials, tender finalization should also be speeded up. It has accordingly been decided that the tender validity period should be reduced to 45 days for single packet and 60 days for two packet system of tendering (in place of the present limits of 90 days and 120 days) for tenders having affidavit based system of credential verification.

#### **4.0 Tender Invitation at short notice period**

In continuation of existing instructions, for tenders called with short notice period of 21 days, tender validity period would be 30 days and for tenders called with 14 days notice period, the tender validity would be 20 days only. This would in fact justify the urgency of work.

#### **5.0 Calling tenders pending sanction of detailed estimates**

In cases of urgency, open tenders may be called, before sanction of detailed estimates, with the approval DRM/PHOD/CHODs. However, the letter of acceptance shall be issued only after the sanction of detailed estimate.

#### **6.0 Multiple L-1**

In case of more than one L-1 bidders, tender may be awarded to tenderer having higher Bid Capacity. In case Bid Capacity is also the same, tenderer having done more value of similar work in last three previous financial years and the current financial year upto the date of opening of the tender, may be selected for the award. Instructions with respect to Bid Capacity will follow.

#### **7.0 Discharge of tenders**

Before discharging a tender due to higher rates etc, the TC and TAA may examine the possibility of a cartel formation, getting lower rates as a result of retendering, loss of transparency in re-invited tender, the opportunity cost for delay in the execution of the work and the cost of retendering. Each zonal Railway may workout a model cost estimate for the process of tendering which may be kept in view by the TC and TAA while examining the tender.

#### **8.0 Price variation Clause (PVC)**

Price variation Clause (PVC) in Works Contract is dealt with in accordance with provisions of item 46A of GCC-July 2014. In order to simplify and enhance the pace of the works, it has been decided to remove the PVC clause in all works contract tenders having value less than Rs 5 Crore.

#### **9.0 Project Management Consultancy (PMC)**

In partial modification to Railway Board's letter no 2007/CE.1/CT/18 dated 05.07.2010, and 14.09.2017, it has been decided to extend the scope of PMC services for all works contracts costing more than Rs 10 Crore in open line, Construction and RE organization while ensuring the following:

- a) Personal approval of DRM/PHOD/CHOD would be required on case to case basis.
- b) The proposal to engage PMC services for any project/contract shall be governed as per instructions contained in Railway Boards letters mentioned above (and amended from time to time). These instructions will also be applicable for all the works approved for PMC by DRM/PHOD/CHOD.
- c) The word Deputy CE or its equivalent mentioned in the instructions above shall mean Equivalent Branch Officer of the Division/Railway Electrification (RE).
- d) The expenditure incurred on PMCs should be within the D&G charges as per extant instructions.

*Sanjeeb Kumar*

#### 10.0 Contractor's Measurements

In partial modification to Railway Board's letter no 2016/CE-I/CT/14 Measurement/1 dated 21.09.2017, and 2016/CE-I/CT/14 Measurement/3 dated 21.09.2017, it has now been decided to extend the scope of Contractors Measurement for all works costing more than Rs 5 Crore in Divisions, Construction and RE organization, subject to following condition:

- a) Approval of DRM/PHOD/CHOD, without finance concurrence.
- b) The proposal to have works measurements by Contractors for any project/contract shall be governed in accordance with the instructions contained in Railway Board's letters mentioned above (amended from time to time). Such instructions are applicable for all the works approved for Contractors Measurement by DRM/PHOD/CHOD.
- c) The word Deputy CE or its equivalent mentioned in the instructions above shall mean equivalent Branch Officer of the division/RE organization. XEN/AXEN shall mean their equivalent counterparts in Division/RE organization.

#### 11.0 Deposit Works

These works are defined in accordance with para 1843 of IR Code of Engineering Department. The method of execution is also defined therein. The limit of variation by 20% due to reasons other than escalation etc may not be applicable for Deposit Works. Sanction, execution and variations in these works shall be made by the Railway administration in consultation with the sponsoring authority bearing the cost of the deposit works, within the broad guidelines provided in IR Code of Engineering Department and Model SOP-October 2017. Revised detailed estimate should however be within the powers of the sanctioning authority.

- 12.0 This issues with the concurrence of Associate Finance of Transformation Cell Railway Board.

Kindly acknowledge the receipt and ensure compliance.



(T. K. Pandey)

Executive Director, Transformation

1. PFAs, All Indian Railways & Production Units
2. The ADAI (Railways), New Delhi
3. The Director of Audit, All Indian Railways



(Sanjeeb Kumar)

Executive Director (Accounts), Transformation



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

2016/CE-I/CT/14/Measurement/3

New Delhi, dated 21.09.2017

To,  
As per list attached

**Sub: Measurement of work by Contractor in Works Contract**

1. Board (ME, FC) have approved system of measurement of works by contractors and release of provisional payment in 'works contract'. Indian Railway Code for Engineering Department-2012 has accordingly been amended by introduction of a new para 1316A through Advance Correction Slip No. 50, issued vide RB's letter No. 2016/CE-I/CT/14/Measurement/1 dated 21.09.2017. Indian Railways Standard General Conditions of Contracts-2014 has also been amended vide RB's letter No. 2016/CE-I/CT/14/Measurement/2 dated 21.09.2017.
2. Zonal Railways are advised to introduce the system of measurement of work by contractors, subject to following stipulations:
  - (i) Measurement of work by contractors shall be allowed only in works tender having value Rs 20 crore or more;
  - (ii) To start with, measurement of work by contractors shall be permitted in 3 works contracts of construction organisation on each zonal railway, to be decided by CAO/C;
  - (iii) The Tender documents, wherein, measurement of work by contractor is allowed shall contain special condition to this effect, duly incorporating the provisions of para E.1316A;
  - (iv) Measurement recorded by the contractor shall be test checked by Railway within 45 days of submission of measurements;
  - (v) While processing 75% provisional payment bill, concerned executives shall ensure that supply items given by contractor are commensurate with requirement for execution of works.
3. Railways are advised to give feedback to Board on working of this system by 31.03.2018, to review the policy.
4. This issues with the concurrence of Finance Directorate of the Ministry of Railways.

*अनिल कुमार*  
21/9/17

(अनिल कुमार)

निदेशक/सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

[Phone : Rly: 030-47598, MTNL:011-23047598,  
e-mail address: padcegrb@gmail.com]

2016/CE-I/CT/14/Measurement

New Delhi, dated 21.09.2017

Copy forwarded for information to:

1. The FA & CAOs all Indian Railways.
2. The Deputy Comptroller and Auditor General of India (Railways), New Delhi.

*अनिल*

For Financial Commissioner / Railways



## LIST FOR DISTRIBUTION

1. General Managers, All Indian Railways & Production Units.
- 1a. General Manager (Con), N.F. Railway, Guwahati.
- 1b. General Manager /CORE, Allahabad.
2. Principal Chief Engineers, All Indian Railways.
3. Chief Administrative Officers (Con), All Indian Railways.(Except N.F. Railway)
4. FA&CAOs/ All Indian Railways.
5. Chief Vigilance Officers, All Indian Railways.

### Copy to:

#### (A)

1. CAO/CAO(R), COFMOW, Tilak Bridge, New Delhi.
2. CAO/CAO(R), Diesel Locomotive Works, Patiala(Punjab).
3. CAO, Rail Coach Factory/Rae Bareilly Project, Kishanganj, Delhi -110007.

#### (B)

1. Director General, RDSO, Manak Nagar, Lucknow.
2. Director General, Railway Staff College, Vadodara
3. Director, IRICEN, Rail Path, Pune – 411 001 (Maharashtra).
4. Chief Commissioner of Railway Safety, Ashoka Road, Lucknow.

#### (C)

1. MD, DMRC, Metro Bhawan, 13, Fire Bridge Lane, Barakhamba Road, New Delhi- 110 001,
2. MD, CONCOR, Concor Bhawan, C-3, Mathura Road, Opp. Apollo Hospital, New Delhi- 110076.
3. IRCON International Limited, C-4, District Centre, Saket, New Delhi- 110017
4. MD, RITES Ltd., RITES Bhawan, Plot No.1, Sector-29, Gurgaon.
5. MD, RVNL, August Kranti Bhawan,Plot No.25, 1<sup>st</sup> Floor, Bhikaji Cama Place, New Delhi.
6. MD, MRVC Ltd., Churchgate Station Bldg, Mumbai- 400020
7. MD, KONKAN Railway Corporation Ltd, Rail Bhawan, New Delhi-110001.
8. MD, DFCCIL, 5<sup>th</sup> Floor, Pragati Maidan Metro Station Building Complex, New Delhi- 110001
9. MD, RLDA, Near Safdarjung Railway Station, Moti Bagh, Phase-I, New Delhi- 110021
10. MD, CRIS, Chanakyapur, New Delhi.
11. CMD, RailTel Corporation of India Ltd. Plot No. 143, Institutional Area, Sector-44, Gurgaon – 122003.
12. RCF, Rae Bareilly, Kishan Ganj, Delhi-110007.
13. CME, IROAF, 12<sup>th</sup> Floor, Core-1, Scope Minar, Distt. Centre, Laxmi Nagar, Delhi- 110092
14. CAO (Workshop Projects), Chamber Bhawan, Judge's Court Road, Anta Ghat, Patna- 800001, Bihar.

### Copy to:

ME, M(Tr.), M(RS), FC, DG(S&T), DG(RS), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), PED(Projects), PED/SDE, PED(Bridges), EDCE(G), EDCE(P), EDTK(M), EDTK(MC), EDTK(P), EDCE(B&S), EDF(X)-I, EDF(X)-II, ED(Works), EDW(Plg.), ED/Project(Mon.), ED(L&A), ED/SDE, ED(PSU), ED/RE, ED/Sig(Project), ED/E/Transformation.



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

2016/CE-I/CT/14/Measurement/1

New Delhi, dated 21.09.2017

To,  
As per list attached

**Sub: Indian Railway Code for Engineering Department  
- Advance Correction Slip No. 50**

Board (ME, FC) have approved introduction of Clause 1316A in Indian Railway Code for Engineering Department-2012, in order to introduce system of measurement of work by the contractor and release of provisional payment in 'works contracts'. Kindly find enclosed herewith the Advance Correction Slip No. 50 to Indian Railway Code for Engineering Department.

This issues with the concurrence of Finance Directorate of the Ministry of Railways.

Enclosures- As above

अनिल कुमार  
21/9/17

(अनिल कुमार)  
निदेशक/सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Phone : Rly: 030-47598, MTNL:011-23047598,  
e-mail address: padcegrb@gmail.com]

2016/CE-I/CT/14/Measurement

New Delhi, dated 21.09.2017

Copy forwarded for information to:

1. The FA & CAOs all Indian Railways.
2. The Deputy Comptroller and Auditor General of India (Railways), New Delhi.

For Financial Commissioner/Railways

Addendum & Correction Slip (ACS) No. 50 to Indian Railways Code for Engineering Department  
for introduction of  
Measurement and Recording of 'Executed Works' by the Contractor  
in Railway Construction works

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**1316A (Applicable for contracts wherein the measurement of work by contractor is permitted):** Para 1316 of Engineering Code shall not be applicable for these contracts. For such contracts, contractor shall be responsible for carrying out measurements of work executed and recording of measurements for the release of on account/final payment. In such cases, the detailed procedure for recording of measurements, provisional payment, test check and final payment shall be as follows:

**Contractor's Measurement Book:**

1. Railway shall arrange contractor's measurement book (CMB), each having sheet No. 1A to 4A (Form E 1313), followed by 100 machine number pages (Form E 1313, sheet No. 5A). On the top of each sheet of CMB, there shall be provision for recording the name of the work, agreement number, name of contractor and CMB number.
2. CMBs shall be printed in such a way so as to keep a clear margin of 50 mm on the left side of page. Further, the left side shall have pinhole tear line at a distance of 15 mm from edge for ease of taking out sheets from these books. The binding shall be within 15mm of the margin available between edge and pinhole tear line. This shall ensure availability of minimum 35 mm clear margin to re-bind measurement books later on.

**Movement and upkeep of Contractor's Measurement Book:**

3. Dy Chief Engineer in charge of contract (Dy CE/C) shall hand over required No. of CMBs to Assistant/Executive Engineer in-charge of contract (AEN/XEN) after taking receipt of the same on sheet No. 2A (Form E.1313) for further issuance to contractor time to time as per progress of work.
4. CMB shall be registered with unique No. in the Register of Measurement Books (Form E.1314) maintained in the office of Dy CE/C. Separate accountal of CMBs for each agreement shall be maintained in the office of Dy CE/C and AEN/XEN.
5. In case of change of 'contractor's authorized engineer', fresh approval shall be taken from Dy CE/C before recording of measurement.
6. While issuing the CMB to contractor, AEN/XEN shall take out sheet No. 2A to 4A from the CMB, take receipt of CMB from contractor on sheet No. 3A (Form E 1313), and keep the same in safe custody.
7. Similar system as for CMB, shall be followed for issuing Field Book/ Level Book (E.1317/A) to contractor for recording of levels in the field book/level book.

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*अभिषेक*

## Measurement

8. The contractor's authorized engineer shall record the measurements in CMB neatly in his own handwriting, without any use of eraser/overwriting, without use of any typing fluid or any such thing. All cuttings shall be initialed. No page shall be damaged/destroyed. No page shall be kept blank in between the measurements.
9. The Contractor shall communicate the date of measurement to AEN/XEN in sufficient advance to witness any measurement. Witnessing of measurement by railways is not compulsory except for initial levels in case of earthwork and hidden measurements. Initial levels of earthwork and hidden measurements are to be recorded in the presence of railway officials and test checked as prescribed.
10. In on account contract certificate, measurement shall be recorded for the items and quantities to be paid in the concerned on account contract certificate.
11. However, in every 4th on account contract certificate and final contract certificate, the recording of measurement for works executed shall include all the items and their quantity included in previous on account contract certificates, irrespective of whether to be paid or not in the current On Account Contract Certificate/ Final Contract Certificate.
12. No payment shall be processed on Lump sum measurement taken by contractor's authorized engineer except for earthwork. For earthwork, every 4<sup>th</sup> bill shall be based on actual levels taken and detailed calculations carried out for the work done.
13. The contractor shall take out carefully from CMB the used pages of CMB with one extra blank page for processing the bill; staple them for submission to AEN/XEN along with bill, duly signing the measurements. The contractor shall keep a photocopy of the measurements with him for future reference.
14. At the time of submission of final bill, the contractor shall submit all the remaining CMBs (unused as well as partially used) with him along with bill to AEN/XEN.
15. The contractor shall submit required copies of invoice and on account contract certificate / final contract certificate (similar to form E.1337 and Form E.1338) to the AEN/XEN duly marking them - original or duplicate copy. Original shall be used for release of payment whereas duplicate copies shall be used for record purpose in different offices.
16. In case contractor requires provisional payment of on-account bill, the contractor shall submit his invoice and provisional on account contract certificate for 75% of amount of work done (before deduction of taxes). The contractor shall write 'For Provisional Payment' on top of such on-account contract certificate.
17. AEN/XEN while issuing receipt of stapled sheets of CMB to contractor shall clearly record the same in sheet 4 (E.1314) of concerned CMB, kept in the office of AEN/XEN.

## Release of Provisional Payment

18. Senior Section Engineer / 'Junior Engineer with 5 year experience' (SSE/JE) and AEN/XEN shall sign & record a certificate on the original provisional 'on account contract certificate' as under :

*officer 9/1/17*  
*Pr Singh*

*"Certified that the payment being made is less than the amount due for the quantities of works executed by the contractor".*

In case of payment of earthwork items in any contract, calculation of quantity of such items along with field book / level book must be enclosed. This shall be cross checked, as considered appropriate by SSE/JE & AEN/XEN, to ensure that no excess payment is being made.

At this stage no test check of measurements by railway is required.

19. AEN/XEN shall keep a copy of contractor's invoice & provisional on account contract certificate in his office, and submit original invoice & original provisional on account contract certificate along with required number of duplicate copies, and used sheets of CMB to the Dy CE/C unit for passing the bill and release of payment.
20. The provisional on account contract certificate shall be passed by Dy CE/C and payment shall be released by associate finance based on above certification of SSE/JE and AEN/XEN. After release of payment, blank sheet of CMB (if any) shall be crossed by Dy CE/C before sending the measurement sheets back to AEN/XEN for carrying out required test checks. At this stage measurements shall not be crossed.
21. No provisional payment shall be allowed in final contract certificate. Further, once provisional payment has been released in any on-account contract certificate, the next on account contract certificate can be raised by contractor only when accounts of previous on account certificate (Provisional as well as remaining payment) has been finalised.

#### **Test Check**

22. Necessary test checks shall be carried out by the SSE/JE and AEN/XEN for the works done before full payment of on-account contract certificate/final contract certificate. SSE/JE and AEN/XEN shall communicate the date of test checks to contractor in advance. The contractor can accompany during test check. The contractor shall provide support staff and all required tools & plants to facilitate test check by railway officials.
23. The stipulated test checks for AEN/XEN and SSE/JE Level is tabulated as under:

S. No.	Description of Works	Test Check in terms of % of value by	
		SSE / JE	AEN/XEN
(a)	Measurement of Ballast, pitching stone, Earth work and hidden items	100%	100%
(b)	Measurement of all other items	100%	20%
(c)	Initial and Final levels along centre line for earthwork in embankment and cutting	100%	100%
(d)	Intermittent levels along centre line for earth work in embankment and cutting	100%	20%
(e)	Initial, intermittent and final levels except centre line for earth work in embankment and cutting	100%	20%

Note: The check regarding levels of earthwork invariably shall be carried out in cross sections having heavy cross slopes.

*27/10/2018*  
*Pr Singh*

24. Contractor's recorded measurement sheets shall be checked for any corrections/over writing during test check. All the corrections/over writing shall be initialed by SSE/JE.
25. The discrepancy noted (if any) during test check of recorded measurement shall be communicated by AEN/XEN to the contractor.
26. In case of discrepancy noticed during test check, the contractor shall submit original and required copies of fresh invoice of amount corrected for discrepancy, and in case provisional payment has been released earlier, the required copies of fresh invoice of remaining amount corrected for discrepancy (if any), along with on account/final contract certificate to AEN/XEN.

**Full payment of On Account Contract Certificate/Final Contract Certificate**

27. AEN/XEN shall submit original copy of invoice and on account contract certificate of remaining amount/ Final Contract Certificate, along with required number of duplicate copies and used sheets of CMB (all used/blank CMBs in case of final contract certificate), duly signed by SSE/JE and AEN/XEN to the Dy CE/C for passing the bill and release of payment.
28. Once the payment is released, Dy CE/C shall return back the used sheets of CMB to AEN/XEN for safe custody, duly crossing of measurements by finance officer.
29. Once all used sheets of a particular CMB is received back by AEN/XEN from Dy CE/C, the AEN/XEN shall re-bind all 100 pages of CMB along with sheet No. 1A to 4A for submission of CMB to Dy CE/C office. Dy CE/C office shall record the receipt of same in sheet No. 2A of CMB and Register of Measurement Books (Form E1314).
30. The final contract certificate shall be passed by Dy CE/C only after receipt of all CMBs (used/blank) from AEN/XEN.
31. The provisions of this para 1316A shall be applicable to all the departments of Indian railways and to be executed through equivalent authorities of respective departments.

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Railway .....

CMB No. ....

**CONTRACTOR'S MEASUREMENT BOOK**

Department .....

Division/Construction Unit.....

Name of Work .....

Agreement No.....

Name of Agency.....

Name to Whom Issued .....

Designation .....

Date of issue .....

Date of return .....

Railway .....

CMB No. ....

**CONTRACTOR'S MEASUREMENT BOOK**

Department .....

Division/Construction Unit .....

Name of Work .....

Agreement No.....

Name of Agency.....

Issued to .....

(Name &amp; designation)

.....  
(station)on.....  
(date)

Received by .....

(Signature)

.....  
(Designation).....  
(Station)on.....  
(date)

Date of first entry .....

Date of last entry .....

Date received back in Division/Const.Unit }  
office after completion of book } .....Certified that this Measurement Book contains 100 machine numbered pages from  
.....to ..... (both pages inclusive) which have been counted by me and  
are correct.

Signature .....

Date .....

Designation .....

Office 3rd fl  
Bd Singh

Initial ( ) Binding Space

Re Binding ( ) Space

Tearing line



Railway .....

CMB No. ....

**CONTRACTOR'S MEASUREMENT BOOK**

Name of Work .....

Agreement No. ....

Name of Agency.....

Issued to.....

(Contractor's name)

.....

on.....

(station)

(date)

Certified that this Measurement Book contains 100 machine numbered pages from .....to ..... (both pages inclusive) which have been counted by me and are correct. No sheet is torn.

I understand that the measurement book is very important document and hence I shall ensure its proper upkeep and safe custody.

Received by.....

(Signature of contractor)

.....

(Name)

(Station)

(Date)

Date of first entry.....

Date of last entry.....

Certified that this Contractor's Measurement Book pages returned by contractor have been counted by me and are correct. The details of pages received by me is as under:

S. No.	On Account Bill No.	Page No. From.....To	No. of Pages	Date of receipt in AEN/XEN office	Sign & Designation of Railway official
1					
2					
3					
4					
5					
6					
7					

अध्यापक  
पुस्तक

Tearing line

CMB No. ....

## Name of Work .....

Agreement No.....

Name of Agency.....

## INDEX OF M.B

[illegible]

ਅੰਤਿਮ 3 ਮਾਰਚ  
ਪੰਜਾਬ

Tearing line

*Space for Machine numbering  
with six digits unique number*

\*\*\*\*\*

Name of Work .....

Agreement No.....

Name of Agency.....

[illegible]

Tearing line.