केन्द्रीय लोक निर्माण विभाग कार्यालय ज्ञापन

No. DG/SOP 2022/13

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

Dated:24.04.2023

Sub: Modifications in SOP No. 5/20 for CPWD Works Manual 2022 regarding Measurement Books.

Following Modifications are made in SOP No. 5/20 for CPWD Works Manual

022:	Modified Provision
Existing Provision	SOP No. 5/20 (A): Physical Measurement Book (Refer
SOP No. 5/20	
Physical	para 5.12.1(A))
Measurement Book (Refer para 5.12.1)	The use of Physical Measurement Book/Computerized Measurement Book for recording measurements is being discontinued in phased manner as per
No Provision	directions issued by CPWD directorate/ERP unit from time to time.
	In case of unavoidable circumstances, the Physical Measurement Book/Computerized Measurement Book for recording measurements can be used for recorded reasons, with the written permission of next higher authority of Engineer-in-Charge.
Para- 1. to 13.	
Para- 1. to 13.	Para-1. to 13. No change
SOP No. 5/20 (B)	SOP No. 5/20(B): ERP Electronic Measurement Book (e-MB) (Refer para 5.12.1(B))
No Provision.	Electronic Measurement Book is made applicable in first phase for all future works (excluding EPC Projects), where tenders are yet to be invited, at stations Delhi, Mumbai, Chennai, Kolkatta, Chandigarh and Bengaluru.
enet) premoved in self-	1. The payments to contractors and others for the work done or other services rendered are made on the basis of online measurements recorded in the CPWE ERP portal.
respond to some of the some of	2. The e-MB is the basis of all accounts of quantities whether for works done by the contractors or by the labourers employed departmentally or for material received.
	3. The downloaded and printed e-MB from the CPWI ERP portal are considered as very important account records and are to be maintained very carefully an

A24.04.2023 R K SINGH EE(Manual)

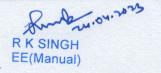
- accurately. These may have to be produced as evidence in a court of law, if and when required.
- 4. All the e-MBs submitted by the contractor after incorporating all the corrections and belonging to a division are numbered serially by the division office. A register is maintained in CPWA 92 showing the serial number of each book or e-MB.
- 5. A similar register is maintained in the Sub-Divisional Office showing the names of persons i.e. Assistant Engineer, Junior Engineer to whom e-MBs are issued.
- 6. The ERP unit of CPWD issues various circulars /SOPs from time to time, explaining the steps involved in recording the measurements online and generating Electronic Measurement Book through CPWD ERP portal "e-NIRMIT". These circulars/SOPs are available on CPWD website and ERP implementation website. The prerequisites and main steps in recording measurements online on CPWD ERP Portal are given below.

No Provision

7. Prerequisites

- A. Uploading details of Agreement and BOQ.
- Basic details of Agreement and BOQ are to be uploaded in the CPWD ERP Portal by concerned Engineer-in-Charge (In case composite agreement, Engineer-in-Charge of Major Component). To login e-NIRMIT details, to these upload implementation web-site tile or e-NIRMIT Employee **CPWD** provided website login tile on "cpwd.gov.in". Alternately via link https://enirmit.cpwd.gov.in
- ii. Go to Data Entry form. Select Work Life Cycle Management (WLCM)-Contract Agreement Data Form. Following five tiles will appear.
 - Contract Agreement Header Data Creation Tile: Enables users to maintain contract header information e.g. agreement number, contractor/agency name, tendered amount, project team etc.
 - Contract Agreement Header Data Change Tile: Enables the users to change /add the missing data. User can also verify uploaded data from this screen.
 - Contract Agreement Header Data Upload Tile:

R K SINGH EE(Manual)





Enables the user to upload BOQ data from filled MS-excel template.

- Item Rate Agreement BOQ Tile: To download template file for the item rate agreements.
- Percentage Rate Agreement BOQ Tile : To download template file for the percentage rate agreements
- iii. Users may refer SOP "WLCM Agreement Data Collection" available on CPWD ERP implementation web site under training tabcategory "Work Life Cycle".
- by user, the Agreement Data and BOQ are available to CPWD officers and contractor for recording on-line measurements, raising RFI, verification and test check process by the CPWD officers, selection of RFI for creating e-MB by contractor, downloading and printing e-MB etc.
 - B. Recording on line Measurement(s) and raising RFI by the contractor.
 - i. Login to CPWD ERP Portal through "e-NIRMIT contractor login" tile available on CPWD web site "cpwd.gov.in".
 - ii. Contractor dashboard appears after successful login. Select the agreement number from the drop down. Project ID, name of work etc. are auto populated with reference to the agreement selected.
- iii. Click on the RFI tile, a screen appears with following tabs:
 - Create Measurement: This functionality is to record online measurement(s).
 - Update Measurement: To update already created measurements and to submit the Measurement for RFI.
 - Display Measurement: To display the recorded measurements.
 - Create RFI: To raise the RFI for the measurements already recorded and submitted for RFI.
 - Update RFI: To Update the RFI or / and submit the

R K SINGH EE(Manual)

3 6

RFI to CPWD team by selecting the concerned JE/AE from the Team.

- Display RFI: To Display the data of the RFI
- C. Verification and test check process by CPWD officers.
- i. Login to CPWD ERP portal through "e-NIRMIT employee login" tile available on CPWD website "cpwd.gov.in" by concerned JE/AE/EE.
- ii. CPWD ERP portal "e-NIRMIT" dashboard appears on login. Go to "WLCM", click on RFI tile. A works and contractual management dashboard will appear. Select the agreement number from the drop down. Project ID, name of work etc are auto populated with reference to the agreement selected.
- iii. Pending Notification including RFI notifications appear in bell icon of the works and contractual management dashboard of the concerned field officers (JE/AE/EE).
- iv. Click on the RFI tile. RFI dashboard appears. click on tab "Approve RFI".
- Select the RFI number to approve / reject the ٧. measurement(s). Navigate screen to view the various measurements in the RFI. Click on dimensions of measurement record to verified/test checked. A pop-up window with dimensions of element appears. Single click on the button provided under action column, make record as "Verified/Checked" and change the colour of that row according to the position of officer "Verified/Checked" who (JE/AE/EE) measurements. Similarly, double click to "Reject" the measurements. On rejection of measurements colour of tab under action button will turn red. It is mandatory to record the reasons for rejection of measurements. In the same way, verify/reject all the measurement records and save the action taken.
- vi. Colour Codes for Test Checks
 - Darker green colour indicates test check done by EE.
 - Light green colour indicates test check done by AE.

R K SINGH EE(Manual)

(4/6

- Dim green colour indicates verification done by JE
- vii. Submit for approval button shall be applicable only after 100% verification of measurements by the first level of verification. Click on "Submit for Approval" to next level Authority (AE/EE). Next level officer has two options: either test check the measurements as per SOP No 5/24 or mark it "Seen and Return".
- viii. On verification/test check/seen action, status of the RFI will be converted to "Inspected and Checked" or "Seen and Returned". Now contractor can use these RFI(s) to proceed for RA bill purpose.
 - D. Generating, downloading and printing e-MB

To generate e-MB, click on the e-MB icon of RFI dashboard for selected agreement, and select discipline against which e-MB has to be raised. contractor/JE/AE can see respective RFIs of the discipline. Select RFI(s) from the list for which e-MB is to be created.

Once selection of RFI(s) is confirmed, contractor/JE/AE can create the e-MB for the same. On next screen system will show summary of the items processed in the RFI(s). Click on save and e-MB will be generated. Print icon will be activated after save, contractor/JE/AE can download the e-MB contents as follows:

- i. Date wise measurements of the items.
- ii. Summary of the quantities of the items measured in the current e-MB.

E. Signature of Contractor

The signature of contractor or his/her authorized representative is obtained in the e-MB for each set of Measurements. Contractor to submit three sets of e-MB, duly bound and machine page numbered, duly signed on each page to the Engineer-in-Charge. Engineer-in-Charge to issue number to each e-MB through Register of eMBs.

F. No cutting/overwriting /insertion is allowed in the downloaded and printed e-MB.

R K SINGH EE(Manual)

5/6

G. The pages of e-MB are ERP numbered.

Notes:

- 1. Further details/ updates to these SOPs will be as per SOPs/guidelines issued by the CPWD ERP unit from time to time. These SOPs are available on CPWD ERP "e-NIRMIT" implementation website under training tab-category work life cycle-"Request for Inspection" Tile.
- 2. Procedure for processes such as: where measurements need not be recorded in e-MB, review of e-MB, Loss of e-MB, notice to contractor before recording measurements-action to be taken if he/she fails to respond, preparation of bill, recording of measurements of supply/issue/laying of steel, transfer of e-MB are analogous to S. No. 7 to 13 of SOP 5/20 (A) for physical MBs.

This is issued with the approval of DG CPWD.

(वी. पी. साहू)

अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. CSQ/CM/16(1)/2023 e- file 9152875

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु। (केलोनिवि वेबसाईट के माध्यम से)

R K SINGH EE(Manual) 6