

## User manual for Junior Engineer

This guide is for the users of the E-Measurement Book Software, specifically for the port authorities and the contractors. These users will be accessing the system to set up and execute the system according to the user role. The users must have intermediate to expert knowledge of computers and web-based applications.

Let's have a look on each of them in detail as we move step by step in the process of creating project and recording measurements in E-MB software

#### 1: User Registration

As JE will visit on the URL, a log in page is seen where JE will be able to see the log-in details as well as the user registration tab on the bottom right side of the same page. User will have to click on the user registration tab to add his/her basic details required.

	INTELLIGENT Works Management System
Vizag Port e-Measurement Ecosystem Login to your Account	
Username	
Enter Password	
Forgot Password?	Register Now Need an account? Sign Up

Decimentian #	Colore Devices and			
Designation "	Select Designation			
Contact *	C	Email *		C
First Name *		Last Name *		
Department	Sub Department		Division	
Address				
Signature	Select Signature			
Employee Code				
	Cre	eate		

The above page will appear when clicked on user registration tab where the above-mentioned details are to be filled by the user to generate the log-in ID and password. The details include-

- Designation of user
- Contact number
- E-mail address
- First and Last name
- Department
- Division
- Address
- Desired Password
- Scanned signature

Once the registration form if submitted the details will go for verification to the authorizing person and once, he has verified the details of user, an SMS will be received with active log in password. JE will use the details and can login the E-Mb system, to perform the process of creating measurement.

## 2: Creating Project

Once the JE has logged in, on the home page tab named "Project" can be seen on top, after clicking on it a drop box opens with the option "create project".

🚱 Vizag	Port E-mb	Dashboard Project +	User + Repo	orts +							🔅 🍐 Demo JE1 (Junior	Engineer) 风	
Reference	e Documents										Completed Projects	All Projects	
III Pend	ding Project For	Approval											
Q Advanced	i Search	Work ID	Work Order Date	Bill No	S	ent By		Status	5		Fund Head	Action	l
						-		·		~		•	l
No results for	und.												
🔊 V	/izag Por	rt E-mb	Da	ashboard	Project	-	User 🚽	Repor	ts 🚽				
	0												
	foron co Dov				Create	Project	t						
	Terence Doo	uments			Project	-List							
								1					
	Pending	g Project Fo	o <mark>r App</mark> r	oval									
<b>Q</b> Ad	lvanced Sea	rch											
Sr No	Action	_	Work	ID		Wo	rk Order	Date	E	Bill No		Sent By	,
									r				
No re	sults found.												
🚱 Vizag F	Port E-mb	Dashboard Project +	User + Repo	rts +							🔅 💧 Demo JE1 (Junio	or Engineer) 🔽	l
+ Create	e Project - Admi	inistrative Details											
Fields with *	are required.												
Name of W	'ork *	Name of Work					Pla	ce of Work		Place of Wor	k		
Designation	n Of Head Division	Executive engine	eer			~							
Departmen	15 *	Select Department	ν γ	Sub Department *		Select	t Sub Department	٧	Division		Select Division	٣	
Fund Head		Select Head				* Project	Type		Select Project	Туре		Ŧ	
Assign User	r	Junior Engineer	Sele	ect Junior Engineer			* Assi	stant Engineer	54	elect Assistant Enginee	r	Ŧ	
		Superitendent Engin	Sele	ect Superitendent Engi	neer		v Dep	uty Chief Mechar	nical Eng Se	elect DCME		Ŧ	
		Chief Mechanical En	gineer Sele	ect CME			v Exec	utive Engineer	Se	Select Executive Engineer v			
		Assistant executive i	Sele	ect Assistant Executive	Engineer		Ψ						
1					Sa	ve & Final							

The JE will fill the basic information regarding a project which includes name of the work, place of work, departments, division, sub-department, project type, fund heads,

#### and user associated

these details are to be filled by the user and click on save button below.

VIZAG PORT E-MD Das	hboard Project - User - Reports -		Demo JE1 (junior Engineer)
+ Create Project - Technical S	Sanctioned Information		
Fields with * are required.			
Name of Work	demo pr (Proj ID - 17).		
Technical Sanctioned No	ts1234	Tech Sanctioned Amount	100000
			(e.g. 300000)
Latitude	12.00.13	Longitude	12.0.13
Tech Sanctioned Date	October v	Technical Sanctioned Year Of Project	2023 *
Do You Want To Apply System Calculated Gst Amount	No v		
Previous	Save 6	k Final	Next -

Next page opens where the JE will fill the following details.

TS number,

TS-date,

amount,

Latitude,

Longitude.

Then click on save button.

Ide with \$ are required					
ids with " are required.					
lame of Work	demo pr (Proj ID - 17).				
ontractor	Select Contractor	¥	Full Name & Address Of Agency		Agency Name & Address
Work Order Date		Work commencement date			Site Clearance Date
Work Order Date		Work commencement date			Site Clearance Date
Date of Completion As Per Agreemen Date of Completion	it				
Tender Amount		Above / Below			Quoted Amount
Tender Amount		Above Below		96	Quoted Amount
e.g. 300000)					
ender Type	○ Online ○ Offline				
Vork Order No.	Work Order No				
lork Id (Tender ID) for Non tender:- Work Order No_ ubdivision )	Work ID	0			

Third page will open where the JE will fill the data regarding Work order which includes

Name of contractor,

tender opening date,

work commencement date,

work completion date,

work order date,

duration of completion,

tender amount,

below/above percentage,

tender type whether online or offline word ID.

#### 3: Uploading BOQ

BOQ is needed to be uploaded for the respective project so that the data of rates and quantities of the various items can be filled in the E-MB system for that particular project on basis of which the final abstract can be generated after the measurement is uploaded.

Search the created project on all project list, an action tab titled "GO" will be seen in front on the desired project, click on it e-MB page will be opened.

M Thegr of the trib besidence troject		
Work Name : demo pr (17) Pending at (0 and Final)		Work Order Date : 01-11-2023 Work Completion Date : 29-02-2024
Upload Your BOQ		
BOQ Type	OLD FORMAT BOQ NEW FORMAT BOQ OUR FORMAT Click Here to Download Our Template	
BOQ File	Choose File BOQCustom (7).xtsx. Only.xtsx File Are Allowed	
	Upload File	
Note- Please Make Sure that Royalty & Consumption Updated Before Fl	nal Schedule B	
+ Add Schedule B		

- Here a check-box with title- 'upload your BOQ' is seen on screen,
- clicking on which new options are opened for BOQ type and BOQ file.
- Select BOQ format.
- BOQ will get downloaded, user is supposed to fill the provided sheet with necessary information and upload the same.

🙀 Vizag Port E-mb 🛛 🕬	hboard Project - e	MB / eBill + Documents +	User + Reports +	🔷 🍐 Demo jEt (junior Engineer) 风
Work Name : demo pr (17) Pending at (0 and Final)				Work Order Date : 01-11-2023 Work Completion Date : 29-02-2024
BOQ Uploaded Successfully. All Records Save	d Successfully.			
Upload Your BOQ				
Note:- Please Make Sure that Royalty & Consumpti	on Updated Before Final Sche	lule B		in Final Schedule B
+ Add Schedule B				

- Finalize the BOQ.
- Once the BOQ is finalized the list of uploaded items can be seen below on the same page.

## 4: Create Measurement:

JE will click on e-mb tab seen on the above ribbon, with the option of **create MB** to add measurements. In IWMS measurements can be added using two ways that are as follows:

Sizag Port E-mb Dashboard Project +	eMB / eBill + Document	ts + User + Reports + 🔷 🌢 Demo JE1 (junior Engineer) 🗖
	Manage Schedule B	
Work Name : demo pr (17) Rending at (0 and Final)	Create MB / Add MB data	Work Order Date : 01-11-2023 Work Completion Date : 29-02-2024
r chang at (o ana rina)	Scrap MB	
ROO Liploaded Successfully, All Percente Saved Successfully	Edit MB / Edit MB data	Y
bog oproduce successiony. An records saved successiony.	View MB	
Linload Your BOO	Abstract	
opious rost	View Bills	
	Manual MB Setting	🖬 Final Schedule B
Note:- Please Make Sure that Royalty & Consumption Updated Before Final S	All Pdf	
at a did Calcadada D	Contract Management	
<ul> <li>Add Schedule B</li> </ul>		

- System method
- Bulk record entry method.

## 4.1: System Method:

To record the measurements in the system method following steps are to be followed:

- Click on E-mb Tab, Select Create Mb option.
- Fill the required data on the given page including- number, length, breadth, height, description and date. Save the data.

+ Create MB							
Department	civil engineering						
Name of Agency	Demo Contractor		Work Order Date	01-11-2023			
Agreement Number	87656		Work Order No	87656			
Item No	Select Item			]			
Description	Description						
	Estimated Quantity	Estimated quantity	Previously Record	ed Quantity	Previously recorded quantity		
Not for payment	Material	Unit	Date of Measurement		Measurement Type		
			30-01-2024		Record Entry For Normal	~	
Measurement details	N L avg	B/w avg	D/H avg	Quant	Add	I	
Formula	Please select formula v		UP TO DATE				

# 4.2: Bulk Record Entry Method-

• Click on **E-mb** Tab, Select **Create Mb** option.

Jurrent Project: A te	est 004	
Note:- Date before work ord	er date will not accept	
Bulk Record Entry		
Measurement Type	Bulk Record Entry For Normal	Click Here To Download Template
Upload XLS	Bulk Record Entry For Normal	Upload File
	Bulk Record Entry For Steel	
	Bulk Record Entry For Earth Work	
<ul> <li>Create MB</li> </ul>		

- Select the E-mb template,
- Download desired template according to the measurement,
- Fill the details of measurement in template,
- upload the template,
- Click on **view MB** to see the results.

	А	В	С	D	E	F	G	н	1	J	к
1	EIRL	Item No	Subitem No	For Payment	Date of Measurement	Particulars of Work	No.	Length	Breadth	Depth	Quantity
2				Yes/No	DD-MM-YYYY		N	L (m)	B (m)	D (m)	N*L*B*D (m <sup>3</sup> )
3		2		Yes	22-03-2022	point a to b	2				
4						point b to c	3				
5						point c to d	5				
6		3		Yes	23-03-2022	point a to b	1	1	2	0.8	
7						point b to c	1	1	3	2	
8						point c to d	1	1	0.5	1	
9		4		Yes	24-03-2022	at point a	8				
10		5		Yes	24-03-2022	point a to b	1	5			
11						point bto c	1	3.7			
12		6		Yes	24-03-2022	piont a	7.7				
13											
14											
15											
16											
17											
18											
19											
20											
21											
[						1					
	< > Sheet	Sheet2 Sheet	3 +								

Excell sheet for Normal bulk record entry

K10	~]	÷	$\times$	$\checkmark$	fx			

	А	В	С	D	E	F	G	Н	1	J	K	
1	EIRL	Item No	Subitem No	For Payment	Date of Measurement	Particulars of Work	No.	Length	Area	Average Area	Quantity	
2				Yes/No	DD-MM-YYYY		N	L (m)	A ( m <sup>2</sup> )	Av ( m <sup>2</sup> )	N*L*Av ( m <sup>3</sup> )	
3		2		Yes	25-05-2023	yashwant vihar sectio	1	2	4	4		
4				Yes	25-05-2023	yashwant vihar sectio	1	2	4	4		
5				Yes	25-05-2023	yashwant vihar sectio	1	4	16	16		
6				Yes	25-05-2023	tushar archades	1	2	4	4		
7				Yes	25-05-2023	tushar archades	2	3.2	10.24	10.24		
8				Yes	25-05-2023	sawani apartment	1	4	16	16		
9				Yes	25-05-2023	sawani apartment	1	2.7	7.29	7.29		
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

#### Excell sheet for Earth work record entry

EI	.5	V I (	$\times \checkmark f_x$											
	A	в	С	D	E	F	G	н	1	J	К	L	м	N
1	EIRL	Item No	Subitem No	For Payment	Date of Measurement	Particulars of Work	Total No	No Of Bar	Length Of One Bar	бтт	8mm	10mm	12mm	16mm
2				Yes/No	DD-MM-YYYY		N	NI	L (m)	NxN1xL (m)	NxN1xL (m)	NxN1xL (m)	NxN1xL (m)	NxN1xL (m)
3		5		Yes	20-06-2023	Steel for Columns of t	16	5	2.5		0.39			
4				Yes	20-06-2023	8*34	272	4	0.001				0.89	
5				Yes	20-06-2023	28*34	952	1.2	0.001		0.39			
6				Yes	20-06-2023	24*34	816	0.9	0.001		0.39			
7				Yes	20-06-2023	9*2	18	5.6	0.001				0.89	
8				Yes	20-06-2023	22*2	44	1.15	0.001		0.39			
9				Yes	20-06-2023	8*2	16	2.45	0.001		0.39			
10														
11														
12														
13														
14														
15														
16														
17														
18														
_		-									-			

Excell sheet for Steel Record entry

#### 5: View MB

Once the MB template is uploaded its result can be seen/viewed. For this JE should follow the following steps.

- Click on E-Mb Tab,
- Select View MB option from drop box

## 6: Generate abstract

When the measurements are uploaded, an abstract is to be generated where the user will see all the uploaded quantities of executed items and the total amount of work which is been done till date, this data will be generated with respect to the measurements uploaded and the BOQ uploaded earlier.

JE will follow the following steps to generate the abstract, once he is done with uploading the measurements.

Vizag Port E-mb		eMB7eBill -									Composite a figuration of the states of the
rk Name : demo 07 ( Sing at Junior Engineer (1 RA	9) (Offline Tender) V	Manage Schedule Create MB / Add I Scrap MB	e B MB data						Work	Order Date : 01-08-2023 Wi	ork Completion Date : 30-04-202
View MB		Edit MB / Edit MB View MB	8 data				O View MB	History	3 MB Flow Int	• View Abstract Bill	Make Royalty Required No
		Abstract									
		View Bills Manual MB Settin All Pdf	ng	(2) AE	(3) AGE	(4) Cont		5)			
tatus : Pending at Junior Engir	neer										
Select MB No:	1 RA					Send Back MB	+ FOR	WARD MB			PDF
Select MB No :	1 RA	Pe	cord En	try		▶ Send Back MB	♠ FOR	WARD MB			Office Note
Select MB No :	184	Re	cord En	try		▶ Send Back MB	<b>↑</b> FOR	WARD MB			Office Note
Select MB No. :	184	Re Bill E	ecord Ent	try		Send Back MB	<b>↑</b> FOR	WARD MB			Office Note
Select MB No:	1 RA Particulars of work	Re Bill E	Entry - 09-01-2 Length	try 1024 Breadth	Depth	Send Back MB Quantity	Unit	WARD MB	ked by		Office Note
Select MB No:	1 RA Particulars of work	Re Bill E	Entry - 09-01-3 Length	try Breadth	Depth	Send Back MB Quantity	+ FOR	WARD MB Chec DE	ked by EE		Office Note
Select MB No. : Date Date Item No.1 :	1 RA Particulars of work: abc	ке вите 12.000	ecord En: Entry - 09-01-2 Length	try Breadth	Depth	Send Back MB     Quantity     12.000	◆ FOR	Chec DE	ked by EE		Office Note

- Click on E-Mb
- select abstract option from Dropbox

		1 104		• view c	urrent measureme	ik.							Parc Rate
						GENERATE	ABSTRACT OF RA 1						
ABSTR	RACT BILL												
Item No			Description			ų	p To Date	Previo	usly Paid		Now To be Pair	t	Unit
						Qty	Amt	Qty	Amt	Qty	Rate	Amt	
1	Item No.1: abc					12.000	12000.00	0.000	0.00	12.000	1000.00	12000.00	cum
2	Item No.2: cde					20.000	20000.00	0.000	0.00	20.000	1000.00	20000.00	cum
3	Item No.3: fgh					19.000	19000.00	0.000	0.00	19.000	1000.00	19000.00	cum
4	Item No.4: ijk					20.000	20000.00	0.000	0.00	20.000	1000.00	20000.00	cum
5	Item No.5: rcclmn					19.800	19800.00	0.000	0.00	19.800	1000.00	19800.00	cum
											Total	90,800.00	
											Above below (1%)	908.00	
											Total	91,708.00	

• click on generate abstract option seen on screen

• View abstract.

## 7: Upload Documents

JE shall upload the documents or photographs of the concern project he is working on, documents may be anything like pdf files, photographs or even videos. Various categories are been provided in the system which can be selected by the users to upload the documents in the specific category.

Following steps are to be followed for this process of uploading the documents.

💈 Vizag Port E	-mb Dashboard F	Project + eMi	B / eBill +	Documents	User +						<b>0</b> 6	Demo JE1 (Junior Engineer) 📃
Work Name : de Pending at Junior Eng	e <b>mo 07 (9)</b> (Offline Tender) gineer (1 RA)			Upload Docu Search Docu	ment nent					Work Ord	er Date : 01-08-2023 Wo	rk Completion Date : 30-04-2024
🖉 View MB								0 View MB	History	C MB Flow Info	• View Abstract Bill	Make Royalty Required No
				1	2 AE	3 AEE	(4) Cont		5			
Status : Pending at Select MB No :	Junior Engineer			•			Send Back MB	♠ FOR	WARD MB	I		PDF
												Office Note
			R	ecord En	try							
			Bi	ll Entry - 09-01-	2024							
Date	Particulars of work		No	Length	Breadth	Depth	Quantity	Unit	Chec	ked by		
									DE	EE		
	Item No.1: abc											
vizagport.com/doc	/upload		12.000				12.000	cum				
Q Search		0		w 🗾							^	ENG 중 대) D 09-01

- Click on E-Mb
- Select documents option from Dropbox

Unload Documon		
opidad Documen		
Bill No	1 RA	•
Select Category		•
	Note -> Please upload site board document/photo) under Site Board Photo category	
File-input	Choose File Screenshot 2024-01-05 151542.png	
Remark	Document for your review	
		e e e e e e e e e e e e e e e e e e e
Upload Cancel		

- select MB number Select Category brows and upload document
- Write the description for the selected document
- Upload and save

#### 8: Edit MB

- Click on E-Mb
- Select Edit MB option from Dropbox

- Select the item to edit
- Save the changes
- view MB

#### 9: Scrap MB

- Click on E-MB Tab •
- Select Scrap MB option
- Select MB number

• Click on scrap MB button

## 10: Part Rate

In some cases the Rate of any particular item needs to be changed from the one uploaded in the BOQ earlier, for any particular reason. In such cases part rate option is used to change the rate.

- Click on Abstract option in dropbox
- on right side column edit rate option is seen click on the same
- Enter the new rate Enter specific reason
- Save changes
- View MB

## 11: Time Extension

If the project has been extended beyond the date in work order, and the measurements are to be recorded in the extended period the following steps are to be followed to do so-

🚱 Vizag Port E-mb	Dashboard	Project -	eMB / eBill 👻	Documents	- User -	Reports +
Work Name : demo 07 (9) Pending at Assistant Engineer (1 and	Nork Name : demo 07 (9) (Offline Tender) Pending at Assistant Engineer (1 and Final)					
Note:- Please Make Sure that Royalty &	Consumption Upda	ted Before Fin	Edit MB / Edit M View MB	//B data		
Schedule B Details			Abstract			
Q Advanced Search			View Bills Manual MB Set	ting		
QC Items :			All Pdf			
Royalty Items :			Contract Manag	gement		
Displaying 1-5 of 5 results.						
• Click on E-m	ıb tab					
• select contr	act mana	ageme	nt			
click yes on	time ext	ension	option			

- add date till extension
- add document
- add other required details and save

## 12: Forward MB

Once all the details have been added and all the forms like Abstract are generated then the generated E-mb and documents are to be forwarded to senior officials for checking and verification. To forward any E-Mb following steps are to be taken.

IWMS	Dashboard	Reports - Use	+ Project +	eMB/eBill+		Last Login:	22-08-2023 03:45 PM	Demo Junior I	Engineer (Junic	or Engineer) 🔍
est 004 (231 ding at Junior En	748) gineer (1 RA)	Forward I	ИВ	oll wi	l be forward to Next User - ()			22 Work	Completion (	Date : 31-03-202
👁 View ME	3	Select Rea	ion :	Work Complete measurements of	the concern projects are sub-	nitted for your approva	•	OVIE	w Part I	PDF
		-		Note:250 characters a	llowed		le			
Status :		P			Forward Close					
Select Bill No. :	➔ Item Wise M8	1 RA			Send Back MB	◆ FORWARD MB				Remaining
				R	ecord Entry					
				Rec	ecord Entry	1	1			

- Click on E-Mb tab,
- Select View Mb option Forward button will be seen below the flow diagram, click on the button.
- Add reason and remark for forwarding the MB

## 13: Generating Reports

The reports of all the mb recorded in the system can be generated using following steps.

	Vizag Port E-mb	Dashboard	Project +	User +	Reports +				🗢 🍐 Demo eJE (Jun	ior Enginee	r) 🎮		
Completed Projects A8 Projects													
<b>Q</b> A	Pending Project For Approval  Advanced Search												
Sr No	Action	Work ID		Work Ord	ler Date	Bill No	Sent By	Status	Fund Head		Action		
1	demo05 (PID - 6) (GST - ) Junior Engineer - Demo aJE Contractor - Demo Contractor Optimized By Demo JE1(Junior Engineer)	100wo (Offline Tender)		01-08-202 Tender An Rs 10000	23 nount 0(1%)	RA - 1 <sup>st</sup> Bil Date 08-01-2024		V		•	ອ ເຊ 60		

- Click on Report tab
- Add department
- Add necessary details like project type and dates for generating reports etc.
- Results of it will be shown below.

🙀 Vizag Port E-mb	Dashboard Project -	User - Reports -			🗢 🌢 Demo eJE (Junior Engineer) 风
All Report					
Project Type					
Department		Sub Department		Division	
Date	From	То			
			Search		
Show 10 🗸 entries					Search:
Sr. No. 🔺 Name of the Project	Project type	Department 🔅 Name of contracto	r/firm 🗘 Work order number	Work order date      Work completion date	ate 🗘 Status of work 🗘 Amount 🗘
			No data available in table		
Showing 0 to 0 of 0 entries					Previous Next