



**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**Minutes of 6<sup>th</sup> meeting  
of  
Works Standards Committee  
(12<sup>th</sup> - 13<sup>th</sup> September 2013)  
at  
Nainital  
North Eastern Railway**

**Research Design & Standards Organisation  
Lucknow-226011**



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## 6<sup>th</sup> Meeting of the Works Standards Committee September 2013.

### Introduction

1. 6<sup>th</sup> Meeting of Works Standards Committee was hosted by North Eastern Railway at Nainital on 12<sup>th</sup> & 13<sup>th</sup> September 2013. Shri. Pradeep Kumar, Hon'ble Additional Member Civil Engineering, Railway Board inaugurated the meeting of Works Standards Committee and graced the first session by attending the same. Other dignitaries present on the first day were Shri C.P.Tayal, Director/IRICEN and Shri O.P. Agarwal, PCE/NER.
2. Sri Subodh Kumar Jain, Hon'ble Member Engineering graced the session on second day by attending the same. In addition, Shri K.K. Atal GM/NER, Shri H.K. Jaggi, Secretary/Railway Board & Adviser/L&A Railway Board, and Shri C.M. Jindal, DRM/IZN, NER were also present in the session on second day.

All the members of Works Standards Committee i.e CPDE/CGE of zonal Railways, Shri Alok Kumar, EDCE (G) Railway Board, Shri D.R. Gupta, ED/L&A-III Railway Board, Shri Ramesh Kumar, Director/L&A, Railway Board, Shri N. C. Sharda, Dean/ IRICEN and ED/Works, RDSO have also attended the meeting on both days.

3. Member Engineering, Additional Member/Civil Engineering, GM/NER, Secretary & Advisor/L&A/Railway Board, all the members of WSC and distinguished observers from Railway Board were welcomed by PCE & CGE of the North Eastern Railway.
4. Shri Nand Kishore, Executive Director/Works/RDSO and Member Secretary/WSC during his introductory address gave a brief historical resume of WSC. He also pointed out the major achievements of WSC like preparation and finalization of 'Unified Standard Schedule of Rates' & 'Unified Specifications' and Guideline on "Standardization of Specification of flooring, Roofing material for platform covering in Station Premises & Standardization of Specification of Workshop flooring". Important issues to be discussed in the 6<sup>th</sup> meeting of WSC were also briefed.
5. Shri C.P.Tayal, Director/IRICEN/Pune was entrusted with the responsibility to Chair the 6<sup>th</sup> meeting of WSC.
6. Shri O.P. Agarwal, PCE/ North Eastern Railway welcomed the dignitaries and members of the Works Standards Committee at Nainital for deliberating on standardization of works matters. He complemented officials of NE Railway HQ and Division for arrangements made by them for 6<sup>th</sup> WSC meeting. He stated that WSC is the best forum to come up with the solution for existing issues as well as the new issues that crop up from time to time. He requested the committee to deliberate and formulate the required changes in rules pertaining to work matters.

7. Shri C. P. Tayal, Director/IRICEN/Pune extended his warm welcome to all delegates of 6<sup>th</sup> meeting of WSC. He also expressed his pleasure and conveyed his thanks to Member Engineering & Additional Member, Civil Engineering for sparing their precious time to attend the occasion and emphasized on import of standards of other organizations. He emphasized that the issues related to maintenance of colonies and improvements at work sites need to be addressed in an advanced manner.
8. Shri H. K. Jaggi, Secretary & Advisor (L&A)/Railway Board emphasized upon meticulous planning and attention required to be taken during execution of work at even the lowest level to avoid discrepancies. He asked the committee to meet once a year for which he promised to extend all required assistance. He complemented on the major achievement of finalization of IRUSSOR and standard specifications and emphasized upon the need of constantly updating the same through the mechanism which has been devised so far with new materials and specifications. He appreciated the efforts of WSC on subjects like standard specification for roofing and flooring materials, guidelines for passengers with disabilities. He also emphasized upon ensuring quality implementation at work site as there are many small things, which if overlooked, brings bad name to Civil Engineers
9. Sri. Pradeep Kumar, Hon'ble Additional Member Civil Engineering, Railway Board in his address emphasized the need of conducting regular meetings of WSC. In his address, he suggested the following:
  - (a) Regular/ periodical review of USSOR to update existing rates and accommodating new items so as to enable the field officials to choose an option based on the site condition.
  - (b) Disables are part of our society and citizens of our country and it is our duty to provide them the facilities which are user friendly.
  - (c) Retrofitting of structures is important as many emergent situations have arisen in the past. We should design and built our structures so that they should not only be economical but also withstand such additional loads.
  - (d) We should develop and implement systems so that our buildings use less energy. Buildings should be environment friendly and we should implement the concepts of 'Green Buildings' as far as possible.
  - (e) Our buildings are getting older and therefore we need to maintain them in a better way, by using new materials and methods which are cost effective.
  - (f) Develop multi-skills in our staff. Artisans should be provided with modern tools. We should take advantage of innovations by use of science and technology in order to sustain with less staff.

10. Sri Subodh Kumar Jain, Hon'ble Member Engineering, Railway Board, in his address appreciated the hard work by WSC in completing IRUSSOR and asked to all WSC members to meet once a year. He emphasized on :
- (a) Giving due importance to Works, as it is one of the core area of Civil Engineers of Indian Railways besides track and bridges. Railways, in the past have constructed many landmark institutional, service and station buildings and as civil engineers we should always come forward with new ideas.
  - (b) Paying more attention to Stations. Platform flooring should be heavy duty to withstand the load of parcel traffic and can be cleaned by mechanized means. Station architecture should be developed for new constructions. Module shall be developed for signage's for new stations and the same may be adopted for existing stations.
  - (c) Regular/periodical review of USSOR to update existing rates and accommodate new items and specifications.
  - (d) Evolving the system of feedback, conveying and implementing of policies and guidelines at the grass root level so that discrepancies are avoided.
  - (e) Bringing transparency in the system through web based portals like IRPSM which also reduce the paper work. Contract and work management system must be online.
  - (f) Documentation of merits and demerits of good works done.
  - (g) Need of deciding functionality of a building material, environment protection through recycling of waste water, use of solar power and LED lights. Water conservancy is necessary so the double pipe line system (one for potable water supply & other for water supply for miscellaneous uses) is must for the colonies for domestic use. Platform shelter of new stations can be used for the production of electricity by using solar panels. The possibility of private partnership may be explored for generating electricity by using solar panels provided on platform shelters. By this way we can save environment as well as electricity.
  - (h) GRIHA & LEED system of certification for green buildings. The experience with GRIHA and LEED should be shared with each others.
  - (i) To keep track of new developments made in technology and incorporating such developments into our system.
  - (j) Saving the space on platforms by using steeper slope of 1:6 for FOB ramps. The lift/escalators can be used as the cost of one 1:12 ramp is more than cost of 3 lifts.
  - (k) Similar conferences and discussions at Zonal and Divisional levels so that the required information and decisions can percolate down below at the execution levels.

11. The meeting of the Committee was held in 4 technical sessions, during which 22 Review items were carried forward from earlier WSC meetings and 08 new items were also deliberated.
12. During the meeting technical presentations & exhibition were made by industries bringing out the highlights of new technology/products. Following presentations were organized during the meeting on the topic indicated below :

<u>SN</u>	<u>Organisation / Agency</u>	<u>Subject</u>
1.	Construction Industry Development Council	- Training to Artisan
2.	M/S Electrosteel Steels Limited	- Manufacturing of structural steel
3.	M/S STP Limited	- Construction chemicals & water proofing
4.	M/S Timpack Private Limited	- Bamboo sheet roof covering
5.	M/S Everest India	- Prefab structures
6.	M/S Shyam Steel Industries Limited	- Manufacturing of structural steel
7.	M/S HIL Ltd.	- Prefab structure components
8.	M/S BASF India Limited	- Construction chemicals & water proofing

In addition following industry partners participated in arranging exhibitions:

1. M/S Electrosteel Steels Limited
2. M/S STP Limited
3. M/S Timpack Private Limited
4. M/S Shyam Steel Industries Limited
5. M/S HIL Ltd.
6. M/S BASF India Limited
7. M/S Prince SWR Systems Pvt. Ltd.
8. RDSO on Tool kits

13. The Committee specially acknowledges the assistance rendered by following officers from RDSO for their valuable contribution during 6<sup>th</sup> Meeting of the Works Standards Committee.

- (i) Shri Sandeep Kumar, Director/Works.
- (ii) Shri J.K. Srivastava, ADE/Works.

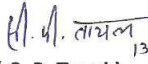
14. The Committee would like to place on record their gratitude and appreciation for Principal Chief Engineer/ North Eastern Railway and his team of officers and staff for the excellent arrangements made and the hospitality extended to all the participants.

15. The next (7<sup>th</sup>) meeting of WSC is proposed to be hosted by South Western Railway at Vasco-de-Gama on 4<sup>th</sup> & 5<sup>th</sup> of Sept 2014.


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The Minutes of the 6<sup>th</sup> Meeting of the Works Standards Committee  
( 12<sup>th</sup> & 13<sup>th</sup> Sept 2013 at Nanital/ N.E. Railway )


  
( C. P. Tayal ) 13/09/2013  
Chairman  
Director/IRICEN


  
( R.G. Singh ) 12.9.2013  
Chief Engineer Planning & Design  
East Central Railway

  
( S.P. Samantaray )  
Chief General Engineer  
East Coast Railway

  
A.K. Sinha  
Chief Engineer Planning & Design  
Southern Railway

  
( Pradeep Singh )  
Chief General Engineer  
North Eastern Railway

  
( T.P.R. Narayan Rao )  
Chief Engineer/Works  
South Central Railway


  
( K. D. Rath )  
Chief Engineer/Con/C  
North Central Railway

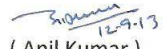
  
( G. K. Jalan )  
Chief General Engineer  
South West Railway

  
( J. K. Singla )  
Chief Planning & Design Engineer  
South East Central Railway

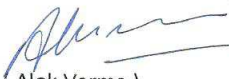
  
( S.C.L. Meena ) 12/9/13  
Chief Planning & Design Engineer  
North Western Railway


  
( P. K. Acharya )  
Chief Engineer Planning & Design  
Eastern Railway


  
( V. K. Srivastava )  
Chief Engineer Planning & Design  
South Eastern Railway

  
( Anil Kumar ) 12-9-13  
Chief Engineer Planning & Design  
Northeast Frontier Railway


  
( R. P. Jingar )  
Chief Engineer Planning & Design  
West Central Railway

  
( Alok Verma )  
Chief Engineer/Works  
Northern Railway

  
( S.K. Garg )  
Sr. Professor/Works  
IRICEN

  
( N. C. Sharda )  
Dean  
IRICEN

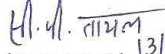
  
( S.P.S. Gupta )  
Chief Engineer /Planning  
Central Railway

  
( D.D. Banjara ) 12-9-13  
Chief Engineer /Planning  
Western Railway


  
( Harpal Singh )  
Chief Engineer/Con  
NEF Railway

  
( Nand Kishore ) 12/09/13  
Executive Director/Works/RDSO &  
Member Secretary


The Minutes of the 6<sup>th</sup> Meeting of the Works Standards Committee  
( 12<sup>th</sup> & 13<sup>th</sup> Sept 2013 at Nanital/ N.E. Railway )


  
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Director/IRICEN

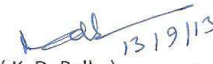
  
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East Central Railway

  
( S.P. Samantaray )  
Chief General Engineer  
East Coast Railway

  
A.K. Sinha  
Chief Engineer Planning & Design  
Southern Railway

  
( Pradeep Singh )  
Chief General Engineer  
North Eastern Railway

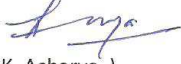
  
( T.P.R. Narayan Rao )  
Chief Engineer/Works  
South Central Railway

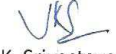
  
( K. D. Ralh )  
Chief Engineer/Con/C  
North Central Railway


  
( G. K. Jalan )  
Chief General Engineer  
South West Railway


  
( J. K. Singla )  
Chief Planning & Design Engineer  
South East Central Railway

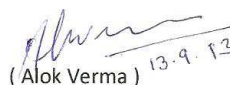
  
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Eastern Railway


  
( V. K. Srivastava )  
Chief Engineer Planning & Design  
South Eastern Railway

  
( Anil Kumar )  
Chief Engineer Planning & Design  
Northeast Frontier Railway


  
( R. P. Jingar )  
Chief Engineer Planning & Design  
West Central Railway

  
( Alok Verma )  
Chief Engineer /Works  
Northern Railway

  
( S.K. Garg )  
Sr. Professor/Works  
IRICEN

  
( N. C. Sharda )  
Dean  
IRICEN

  
( S.P.S. Gupta )  
Chief Engineer /Planning  
Central Railway

  
( D.D. Wanjari )  
Chief Engineer /Planning  
Western Railway

  
( Harpal Singh )  
Chief Engineer/Con  
NEF Railway

  
( Nand Kishore )  
Executive Director/Works/RDSO &  
Member Secretary

**RECOMMENDATIONS ON AGENDA ITEMS  
OF 6<sup>th</sup> MEETING OF THE 'WORKS STANDARDS COMMITTEE'**

**A. Earlier Continuing Agenda Items :**

Following items, as discussed during 6<sup>th</sup> meeting of WSC, have further been deliberated -

**1. Item 002/01/05**

**Subject:- Strengthening Of Organisation For Works At Various Levels -  
(Proposed by WSC)**

- a) RDSO
- b) Zonal Railways
- c) Divisional Headquarters

**AGENDA :-** During 1st WSC meeting, WSC members felt that on Indian Railways Works organization needs to be strengthened at various level to get works equal importance.

**RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

**5<sup>th</sup> Meeting:**

**Recommendations -**

- (i) The regional Training Centre of CPWD at New Delhi, Chennai, Kolkata & Mumbai may be contacted by CPDE of that area for details of training modules.
- (ii) The adjoining Railways may utilise each regional office of CPWD Training Centre by sending 20 Nos. of artisan staff per course. The following may be the arrangement for training of Artisan by Railways.
  - (a) New Delhi - NCR, NWR, NER & NR (Co-ordinating).
  - (b) Kolkata - ECR, SER, NF, Kolkata Metro, ER ( Co-ordinating)
  - (c) Mumbai - WCR,WR, CR ( Co-ordinating ).
  - (d) Chennai - SWR, SR (Co-ordinating)
  - (e) Secunderabad -SCR.

Railway Board may issue instructions for trial training by Co-ordinating Railway for training of specified staff of Railways.

### **Railway Board's Order**

Training Centre of CPWD at Delhi should be visited by SP/Works/IRICEN for Artisan training. Multi-skilling artisan training Course package should be organized at Regional Training Center of CPWD at Delhi, Kolkata ,Mumbai, Secunderabad and Chennai. The Zonal Railways and PUs etc. falling in the geographical jurisdiction of these Zonal Railways shall be covered a under:

- a. Delhi-NR ,NCR, NWR and NER (NR to coordinate)
- b. Kolkata-ER,SER,ECR, NFR and Metro (ER to coordinate)
- c. Mumbai-WR,CR,WCR (WR to coordinate)
- d. Secunderabad -SCR, SECR and ECoR (SCR to coordinate)
- e. Chennai-SR and SWR (SR to coordinate)

Letter from Railway Board also to be issued on the subject.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

IRICEN has chalked out a scheme for training through CIDC who are providing training as per Railway's requirement. Initially, its planned to will be provided at 5 Zonal Training Centre at New Delhi, Kolkata, Mumbai, Chennai and Secunderabad. Later on it can be planned at other Zonal Centers and Divisional Training Centers. The training shall be planned in two groups viz. Initial course and Refresher course. The technical assistance will be provided by IRICEN while administrative part including logistics etc will be arranged by concerned Zonal Railways.

#### **COMMITTEE RECOMMENDATIONS :-**

Railway Board may issue instructions to concerned Zonal Railways for arranging initial trial training at Five Zonal Centers at New Delhi, Kolkata, Mumbai, Chennai and Secunderabad through CIDC.

## **2. Item No. 005/01/05**

**Subject**:- Review of Indian Railway Works Manual

(Proposed by NER/SECR/SER)

**AGENDA** :- During 1st WSC meeting NER, SECR and SER Proposed item for Review of Indian Railway Works Manual.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

- (i) Board may issue suitable instructions to PCEs of all Indian Railways to go through the Manual & send Suggestions/Remarks of the Railways on priority to Board for early issue of Works Manual.
- (ii) Policy Circulars from Railway Board may be issued in the form of correction slips in the Manual or amendment to Manual so that it is connected easily by Railways.

#### **Railway Board's Order**

- (i) WSCs recommendations are accepted.
- (ii) PCEs of all Indian Railways to go through the Manual & send Suggestions/Remarks of the Railways on priority to IRICEN for early issue of Works Manual.
- (iii) Full-fledged meeting of Sub-Committee should be held separately and Draft Works Manual to be presented to Board before it is submitted for necessary approval. Target Date- Februarys 2013.
- (iv) While issuing Circulars, the relevant Para of Works Manual should also be linked by the concerned Directorate in Board.
- (v) Correction Slip to Manuals, Codes etc. should also be issued simultaneously by the concerned Directorate of Board.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

Soft copy of draft IRWM has been given to all Members and letters have also been issued to PCEs of Zonal Railways for sending comments and suggestion if any, to Dean/IRICEN on various provisions of draft IRWM latest by 30.09.2013.

#### **COMMITTEE RECOMMENDATIONS :-**

After receiving comments from various Railways, necessary modification to draft IRWM will be made if felt necessary and final IRWM will be sent to Railway Board for approval.

**3. Item No. 006/01/05**

**Subject:-** Review Of Provisions Of IRWM & Engineering Code Regarding Measurement. (Proposed by NER)

**AGENDA:-** During 1st WSC meeting NER Proposed item for Review of Indian Railway Works Manual& Engineering Code Regarding Measurement.

**RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

**5<sup>th</sup> Meeting:**

**Recommendations -**

The following may be included by Sub-Committee in the recommendations to be submitted to Board.

- (i) Financial limit for test check, provisional payment on the basis of bill produced by contractor and Certificate in this respect by SSE & AEN may be examined by Sub-Committee.
- (ii) The Sub-Committee report may accordingly be submitted after incorporating these issues.

**Railway Board's Order:**

Sub-Committee's recommendations are under consideration in Board's office.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

The recommendations of sub-committees have been submitted to Railway Board for approval. ED/CE(G)/Railway Board informed that this is under consideration of Railway Board.

**COMMITTEE RECOMMENDATIONS :-**

After approval of Railway Board the recommendations on provisions of IRWM and Engineering code regarding measurement will be implemented.

**4. Item No. 007/01/05**

**Subject:-** New Building Materials. (Proposed by ER/NER/SER/SR)

**AGENDA:-** During 1st WSC meeting ER, NER, SER & SR Proposed item for introduction of New Building Materials in Indian Railways and adoption on Indian Railways .

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

Item will continue as a standing agenda item.

#### **Railway Board's Order:**

- (i) Board have already approved vide letter no.2010/CE-I(SPL)/IRUSSOR/W&M/1 dated 11.08.11. the formation of Standing Expert Group comprising of Shri Alok Kumar, EDCE(G)/RB, Convener cum Member and Shri K. Raveendra Babu, CE/Cons/SR (these two officers by name) and Sr. Professor/Works/IRICEN, ED/Works/RDSO and Director/F(X)-I/Railway Board.
- (ii) All the field units should ensure that new building materials and the technological advancements are tried on Indian Railways system and these items should be made part of IRUSSOR through Correction Slips every year, so that all items of works contracts are covered on IRUSSOR and NS items are only by exception.
- (iii) This item will continue to remain as the Standing Agenda Item.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

RDSO and Zonal Railways will continue to upload information regarding new building material to the IRICEN website. ED/CE(G) informed that new items are being added in IRUSSOR periodically after consideration of the same by nominated Committee for their item

#### **COMMITTEE RECOMMENDATIONS :-**

- (i) Zonal Railway and RDSO should share the experience on link provided on IRICEN website.
- (ii) The item will continue as standing agenda item.

### **5. Item No. 009/01/05**

**Subject:- Rationalisation of yardstick for Works organization. (Proposed by NER & WR)**

**AGENDA :-** During 1st WSC meeting NER & WR Proposed item for Rationalisation of Yardstick for Works Organisation on Indian Railways.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

Practices and yardsticks prevalent in CPWD also to be studied by Sub-Committee and considered adequately.

#### **Railway Board's Order :**

- (i) Yardstick Criteria should better be crystallized by the Sub-committee. Focus should be on creation of more supervisory engineers since contracts have increased manifold under each AEN and JE/SSE. CPWD practices may be studied and followed as considered relevant on IR system. Target Date for submission of modified report is 31.03.2013
- (ii) There is need for re-organizing the jurisdictions of AENs, and P.Way/Works Supervisors, based on prescribed work-load, so that due and prescribed attention and mandatory inspections may be ensured at all levels. Creation of posts, wherever required, due to re-organization should be framed and action taken by zonal Railways accordingly.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

The Report was presented by Sh. A.K.Sinha, CPDE/SR one of the sub-committee member. The Committee observed that report should be modified so that it gives full details regarding different types of buildings required to be maintained.

#### **COMMITTEE RECOMMENDATIONS :-**

Practices and yardstick followed by CPWD and Railway should be studied more closely on realistic basis and modified report should be submitted.

### **6. Item No. 018/02/06**

**Subject:- Provision Of Green Building Concept In India.**

(Proposed by SWR, SCR)

**AGENDA :-** During 2nd WSC meeting SWR & SCR Proposed item for introduction of Green Building Concept in Works being executed on Indian Railways .



## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

- (i) To begin with, Railways should incorporate as many green features as possible as indicated in the guidelines of "GRIHA" issued by TERI.
- (ii) There is no need of Green Certification of building at present.
- (iii) Item is proposed for closure.

#### **Railway Board's Order:**

Recently, newly constructed CAO/CON/SC Rly. office has received 3-star GRIHA rating. RDSO should study the technical requirements and compliances including initial and recurring cost of CAO/Con. office building and send the report, inter-alia containing guidelines for Zonal Railways to construct green buildings, to Board for consideration. RDSO shall submit the report before 30.04.2013.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) Committee observed that RDSO has submitted the revised report to Railway Board covering various aspects of green buildings for Railway Board's consideration.
- (ii) As per new draft IRWM being framed, provisions have been made for internal certification of new buildings having area less than 2000 sq.mtr. For buildings having area more than 2000 sq.mtr should be certified by GRIHA.

#### **COMMITTEE RECOMMENDATIONS :-**

Railway Board may issue policy guidelines for implementing the concept of green building over Indian Railways for new as well as old structures which are being modified.

### **7. Item No. 019/02/06**

**Subject:- Change In System Of Maintenance Of Colony.**

(Proposed by WR, NFR)

**AGENDA:** - During 2nd WSC meeting WR & NFR Proposed item for change in system of maintenance on Indian Railways.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

All Railways may send their comments to Railway Board on the recommendations of the report for consideration.

#### **Railway Board's Order:**

Committee's recommendations are under examination with the Board.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) The sub-committee has deliberated on the issue and Draft of "Change in system of Maintenance of Colony" has been submitted to Railway Board.
- (ii) Recommendation/comments on the same is solicited from Railways for taking a view/decision on the report vide Railway Board letter no.204/LMB/01/04 (pt.) dated 28.05.2012 addressed to PCE & Chief Engineer of all production units of Indian Railways.

#### **COMMITTEE RECOMMENDATIONS :-**

On acceptance of report by Railway Board, this item is proposed to be closed.

### **8. Item No. 021/02/06**

**Subject:- Prefabricated Buildings. (Proposed by WSC)**

**AGENDA:** - During 2nd WSC meeting WSC members Proposed item for use of prefabricated buildings.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

Railways can upload the details of Works where prefabricated materials are being used for benefit of other user Railways on IRICEN Website on the relevant link-up.

#### **Railway Board's Order:**

- i) No. of prefab solutions are available with the Industry which may be useful especially for construction of staff quarters, PF shelter etc. RDSO shall

submit a report on the same to Railway board within three months, i.e.by 30.04.2013.

- ii) IRICEN website has provision for discussion forum on new building materials. All Zonal Railways to provide necessary inputs so that it could be utilized by the Standing Expert Group for inclusion in IRUSSOR.
- iii) IRICEN to make Presentation on the subject during next meeting of WSC.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) A link has been made available at IRICEN Website, where all Railways can upload their information. USSOR group has also been apprised for using this uploaded information on website.
- (ii) A report on prefabricated buildings was submitted to Railway Board by RDSO vide letter dated 29.04.2013. Railway Board has directed to include cost benefit analysis and availability of products in industry into the report. Modified report is being prepared and shall be submitted by 30.10.2013.

#### **COMMITTEE RECOMMENDATIONS :-**

RDSO shall prepare a modified report including cost benefit analysis and availability of products with the industry and submit the same to Railway Board by 30.10.2013 for further consideration.

### **9. Item No. 024/03/08**

**Subject : Development of Master Plans for Infrastructure Facilities At Stations & Colonies on Indian Railway. (Proposed by SWR & NCR)**

**Agenda :** SWR proposed to prescribe the Development of Master Plans for Infrastructure Facilities like water supply and sewage systems, power supply, roads, drains, electrical & S&T cabling etc. during creation of new assets.

**NCR proposed for:**

- Developing radial type water supply distribution in Railway colony.
- Centralization of hydrant valve and centralized control and monitoring of water supply system.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

#### **Railway Board's Order:**

No feedback has been reported by zonal railways on this item, wherein Board's Order said that:

- (i) NCR, WR and SCR shall develop arrangements for 'Valve Panels' for centralized water supply arrangement at station, yards, colonies etc. and report to Railway Board by end of May 2012.
- (ii) Zonal Railways shall also upload their excellences including information on radial type water supply distribution and centralized operation of hydrants on the Engineering portal for cross sharing.

Proper feedback should be reported by all PCE's; otherwise, this agenda item will be re-opened during next meeting of WSC.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) SCR and NCR have presented the work done on centralised valve panel at Vijayawada and Kanpur respectively. The other Railways were asked to execute such works and send the feedback to Committee/RDSO.
- (ii) Committee observed that the operations of valves should be done electrically through centralized control panel and not through manual operation as being done presently. In addition each platform should be controlled independently.
- (iii) The Waste water coming out from station and washing lines should be recycled after treatment of the water. This can lead to substantial savings of precious sources.

#### **COMMITTEE RECOMMENDATIONS :-**

- (i) SCR, NR, SWR and WC Railways shall develop plans for one point control system for valve operation at stations & other important service centers. These Railways will specifically also indicate the details of the savings accrued out of this recycling of water to Railway Board.
- (ii) Recycling of waste water should be made as new agenda item.

## 10. Item No. 025/03/08

**Subject : Provision of Tool Kit With Artisan Staff on Indian Railways.**  
(Proposed by SWR)

**AGENDA** : SWR proposed to modernize the IOW artisan staff, such as carpenter, blacksmith, mason etc. by prescribing small tools & equipments for them, including provision of funds for purchase of these tools & equipments.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

##### **Recommendations -**

Committee further observed the following:

- (i) SCR informed that tool kits are being provided by NICMAR along with the training module.
- (ii) Three lists of Standard tool kits have been recommended by the Sub-Committee for plumber, mason and carpenter.
- (iii) Tool kit bag to be modularly customized, portable - conveniently carried by helpers/artisans so that they can move comfortably.
- (iv) It needs to be incorporated in USSOR also.

WSCs recommended for closure of this item.

#### **Railway Board's Order:**

- i) Tool kits to the Artisans need to be standardized by the Sub-Committee and put in the Works Manual.
- ii) Item for kits procurement / supply should be put in IRUSSOR document.
- iii) SP/works/IRICEN will send necessary inputs for USSOR to Standing Expert Group based on recommendations of the Sub-Committee.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) Modified list of Tool-kit to be carried daily and to be kept in workshop for mason, carpenter and plumber was presented by RDSO. Model kit bags were also displayed.

(ii) Committee observed that bag should be all weather and more rugged.

(iii) Suggestions are sought from Zonal Railways to further improve the tool-kit. Practices adopted by CIDC should also be obtained.

**COMMITTEE RECOMMENDATIONS :-**

After obtaining suggestions from Zonal Railways and CIDC, the modified tool-kit list will be submitted by RDSO/IRICEN to Railway Board for approval.

**11. Item No. 027/04/12**

**Subject :** Standard procedure for ducting and wall recess in buildings (Proposed SR).

**AGENDA :** SR proposed for Standard procedure for ducting and wall recess in buildings.

Presently ducting for electrical wiring and wall recess for electrical switch boxes are being done after the wall is constructed by making non-standard grooves on the wall that too, by breaking with crow bars/hammering etc. which lead to development of cracks at such locations immediately after building is commissioned. In order to avoid such practice, there is necessity to issue a standard procedure for ducting/concealed wall recess in buildings.

**RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

**5<sup>th</sup> Meeting:**

**Recommendations -**

Board may issue instructions which are already in the process of finalization.

**Railway Board's Order:**

Instructions have since been issued vide Railway Board's letter no.2012/LMB/1/57 dated 30.11.12.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

The joint procedure order has been issued by Railway Board duly signed by Engineering, Electrical and Telecom Engineering Directorates through letter No. 2012/LMB/1/57 dated 30.11.2012 .

**COMMITTEE RECOMMENDATIONS :-**

This item is now proposed for closure.

**12. Item No. 034/04/12**

**Subject :** Detailed guidelines for site order book, Material passing Register, quality of Cement & Steel (Proposed by SECR).

**Agenda :** SECR proposed for detailed guidelines for Site Order Book, Material Passing Register, Quality of Cement & Steel.

Detailed guidelines for Site Order Book, Material Passing Register, Accountal of cement & steel supplied by contractor, Type of test reports & test to be conducted for ensuring quality of cement & steel, test check by Officers of different levels; be issued by Railway Board.

**RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

**5<sup>th</sup> Meeting:**

**Recommendations -**

Sub Committee has submitted report to Railway Board on 16.8.2012. Further it is recommended that:

- (i) Registers suggested by Sub-Committee will be made part of proposed Works Manual which is under revision.
- (ii) Geo-tech Lab may be set up only where it is required. The equipments required may be procured through Store contract. Other tests may be done through Institutions and Engineering Colleges etc., if available nearby.

**Railway Board's Order:**

- i) The Sub-Committee should re-organize the report containing various provisions for site Order Book, Material Passing Registers etc, and it should be made part of works manual.
- ii) The testing and specification should be made part of Indian Railways Unified Standard Specifications and Correction Slips to the relevant para should be proposed by the sub-Committee.
- iii) Testing facilities are already prescribed as mandatory requirements at big work sites. For other contracts, testing should be got done through standard test houses, academic and research institutions as available nearby.

## Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013

### COMMITTEE OBSERVATIONS : -

- (i) Convener of Sub-committee Shri J.K. Singla, CPDE/SECR presented the report to WSC. There are 8 essential registers and 32 item specific register to be kept by SE/Works.
- (ii) Committee observed that list of register should be modified and registers should be made segment wise. As far as possible, the number of registers should be reduced.

### COMMITTEE RECOMMENDATIONS :-

The Report should be modified as per WSC observation before sending it again to Board for approval.

### 13. Item No. 035/04/12

**Subject** : Penalties for non deployment of Engineers by Contractors at worksite (Proposed by SECR).

**Agenda** : SECR proposed for Penalties for non-deployment of Engineers by Contractors at work site.

Vide Railway Board letter no. 81/W1/CT/16, dated 18.03.1983; the penalty of Rs. 1000 and Rs. 2000 per month for diploma and degree holder respectively is to be imposed for defaulting the provision. This has lost relevance after passing 28 years.

NWR had moved the proposal to their HQ/Finance for enhancing the amount narrated above to Rs. 20000 and 25000 per month penalty for diploma holder and degree holder respectively. Finance had opined that since policy was issued by Railway Boards hence modification shall be issued by Railway Boards. In view of this issue should be taken up with Railway Board for enhancing the penalty amount.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

**Recommendations** - 5<sup>th</sup> WSC recommended-

- (i) Site engineer whether diploma or degree holder will be considered at par only.
- (ii) Number of site engineers may be decided as per the value and nature of the work.



- (iii) Penalty may be laid down on the basis of "per engineer per month".
- (iv) This is not part of GCC so far. It may be incorporated as a special condition.
- Railway board is requested to consider and issue necessary instruction.

**Railway Board's Order:**

The matter is under approval in Railway Board for modification to clause 26 of GCC.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

The modified clause 26A of GCC has been circulated to all concerned vide Railway Board letter No.2012/CE-I/CT/O/20 dated 10.05.2013.

**COMMITTEE RECOMMENDATIONS :-**

The Item is now proposed for closure.

**14. Item No. 038/04/12**

**Subject :** Standard drawings for Platform Shelters with openings for OHE mast in sloped corrugated sheet roofing (Proposed by SR.)

**Agenda :** Standard drawing for opening in COPs for OHE mast etc.

Presently there are no standard drawings available for openings in platform shelters for OHE mast, leading to adoption of local arrangements which are not effective in preventing water leakage from shelters. In most of the places where OHE mast is on platform, wet floors are seen. These locations are creating inconvenience to passengers during rainy seasons. RDSO may arrange to issue standard drawings for openings in platform shelters; specially with corrugated AC sheet, Galvalume sheet roofing etc.

**RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

**5<sup>th</sup> Meeting:**

**Recommendations -**

WSC observed that SR had submitted drawing with sealing arrangement to RDSO. WSC recommended:

- (i) SR should upload the drawing to be used by all Railways on trial basis.

- (ii) The future construction should ensure that generally portals are not allowed on platform obstructing passenger movement & causing leakage problem etc. as far as possible.

**Railway Board's Order:**

- (i) WSC's recommendations are accepted.
- (ii) SR should upload the drawing to be used by Zonal Railways on trial basis. SR will coordinate with all Railways and will present the results of the trial drawing in next meeting of WSC.
- (iii) Item (ii) can be examined with Electrical Dte. in Railway Board.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

- (i) Southern Railway had uploaded the drawing with sealing arrangements on IRICEN website.
- (ii) Traction installation Dte. of RDSO has already sent recommendation to Railway Board for not planting OHE mast on passengers platforms on new constructions vide their letter no. TI/OHE/GA/2013 dated 26.07.2013.

**COMMITTEE RECOMMENDATIONS :-**

- (i) Planting OHE mast on passenger platforms on new constructions should be avoided.
- (ii) Item is now proposed for closure.

**15. Item No. 039/05/12**

**Subject: Provision of ramp on FOBs and at the end of platforms**

(Proposed by SCR.)

**Agenda:** SCR proposed for Provision of ramp on FOBs and at the end of platforms.

Most of the FOBs on South Central Railway have not been provided with ramp and are having steps on one side or both sides. Handicapped people are being taken by ramp of 1 in 6 (provided as per SOD, item no. 6, note (b), Chapter-II), from the one end of platform to other platform, whereas to carry physically challenged persons the ramp should be 1 in 20.

This requires correction to the SOD, item no. 6, note (b), Chapter-II. The Board may issue necessary instructions for modification of ramp from 1 in 6 to 1 in 20 in case ramp is not provided on FOB's or alternate arrangements may be suggested.

It is proposed that all new FOBs should invariably to be provided with ramp on one side and steps on one side. Also wherever feasible ramps may be provided on existing FOBs. Board may issue suitable instructions to this.

At few stations lift is being provided on the end platforms. If the same is provided on the island platform also, then the existing ramp of 1 in 6 available at the end of Platform need not be replaced with 1 in 20.

This item may be included under minimum essential amenity under Passenger amenities. Board may issue suitable instructions.

#### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

##### **5<sup>th</sup> Meeting:**

##### **Recommendations -**

WSC observed that as per direction indicated in the RDSO Guidelines of 1998, 1 in 12 ramp is permitted and flatter slope can be provided by Railways. Trolley path may be used by handicapped person with escort.

WSC recommended:

- (i) Wherever space permits, one side stair & other side ramp may be constructed with 1 in 12 slope for FOB with centrally supported single columns to reduce the area at platform for foundation like it is done for Metro etc.
- (ii) In future structures and end of platform 1:12 ramping may be provided. Wherever possible, modification in existing structures may also be provided with 1:12 ramp.

##### **Railway Board's Order:**

- i) Guidelines on "Amenities to be provided at Railway station and other public buildings for the persons with disabilities" prepared by RDSO, have been circulated to Railways vide Board's letter no. 96/LM(B)/2/404, dated

30.12.1998 (SN-53). These guidelines provide for 1 in 12 to 1 in 20 ramp on FOBs and approach to stations. WSC recommendations accepted.

- ii) RDSO to issue instructions separately and also develop & circulate standard drawings for the same.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) RDSO has issued drawings of ramp on FOBs at the end of platform.
- ii) Committee observed that the structure is supported on two columns instead of one with cantilever beams. The modified drawings having single supported column should also be issued by RDSO.

#### **COMMITTEE RECOMMENDATIONS :-**

- (i) RDSO to issue modified drawings.
- (ii) Item is now proposed for closure.

### **16. Item No. 040/05/12**

**Subject :** 1) Re-designating various categories of artisans as multi skilled artisans  
2) Imparting training from outside organization and providing a standard tool kit  
3) Drafting a specified syllabus for multi-skilled artisans.  
(Proposed by SCR.)

**Agenda :** SCR proposed-

- 1).Re-designating various categories of artisans as multi skilled artisans
  - 2). Imparting training from outside organization and providing a standard tool kit
  - 3). Drafting a specified syllabus for multi-skilled artisans.
- 1) It is proposed that the present system of posts of multiple disciplined artisans, is to be disbanded. There should be multi-skilled artisans.

There is need to re-designate various multiple posts like Mason/Carpenter/Plumber etc., as multi skilled Khalasi/Artisan.

- 2) They should be trained to carry out a small repairs/work pertaining to plumbing, carpentry, mason etc., as in case of private maintenance of residential, apartments/buildings.

Training for artisans will improve output of staff. Procuring and replacement on a regular basis and providing them a standard tool kit.

- 2) CAMTECH schedule and syllabus may be adopted and referred to in IRWM. This will help in developing multi-skilled Khalasis and also increase in the efficiency of the artisans in addition to savings.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

##### **Recommendations -**

Sub Committee of CE/P&D from WCR, NCR and SCR (Convener) is nominated to further study the issue and submit recommendation for consideration.

##### **Railway Board's Order :**

Sub-Committee (by name), comprising of Shri K.D. Ralh, CE/P&D/NCR, Shri O.P. Tanwar, CE/P&D/WCR and Shri B.S.K. Raj Kumar, CE/P&D/SCR (Convener) is nominated. It should submit report & recommendation to Board by 30.04.2013 for consideration by the WSC.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) Imparting training from outside organizations to artisans is already incorporated in WSC item no.002/01/05.
- (ii) Providing a standard tool kit for artisan staff is already covered in WSC item no. 025/03/08.
- (iii) Sub-Committee member Shri K.D. Ralh, CE/Con/NCR presented the report.
- (iv) Committee observed that multi-skilling can be developed through training by combining two or more trades to the extent practicable. The sub-committee is re-nominated and shall now consist of Shri T.P.R.Narayan Rao CE/Works/SCR (Convenor), Shri S.P.S.Gupta, CE/Plg/CR and Shri S.P. Samantaray, CGE/ECOR as members.

## **COMMITTEE RECOMMENDATIONS :-**

Sub-committee should make comprehensive report after considering all relevant important issues including industry related issues and submit the report to Railway Board.

### **17. Item No. 043/05/12**

**Subject :** Approval for creation of separate imprest for SE/JE/SSE (Works) for local purchase of materials for maintenance works.

(Proposed by CR)

**Agenda :** CR Proposed for Approval for creation of separate imprest for SE/JE/SSE (Works) for local purchase of materials for maintenance works.

On central railway, no power of imprest for making local purchase of miscellaneous materials for emergent requirements has been given to SSE(Works). The SSE(Works) utilizes the ADEN' imprest ranging Rs.10000 to 15000 which has been found to be grossly inadequate considering the increase in prices of materials, requirement of new type of fittings not connected with PL number and delay involved in purchase and supply from stores. The other route of local procurement through EA to DRM is effective only purchases valuing near Rs.40000 per case. The procurement through this route is not suitable for small value purchases due to cumbersome procedures involved in local purchase. Further, through the supply chapter - 25 of USSOR contains broad list of items which can be taken from zonal contractor as supply item but procurement of small quantities of material is difficult due to procedural requirements of issue and sanction of W.O.

It is, therefore necessary, to approve creation of imprest for all SE/SSE depots which needs to be decided at board's level. It is brought out that the efficiency of the maintenance system of SE/SSE largely depends on the availability of requisite materials on time. The adequate availability of imprest shall go a long way in improving the efficiency of system. A detailed policy guideline is therefore required to be issued.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

Requirement of creation of Cash imprest for IOWs for carrying out emergent repairs and to purchase materials, equipments & hiring men for such purpose may be included in IRWM.

**Railway Board's Order :**

- i) Items of IRUSSOR should be thoughtfully utilized and annual work orders may be made for supply items which are required for day to day maintenance activities.
- ii) Imprest to SSE/Works may be got sanctioned, wherever needed.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

- (i) The criteria for allocation of cash imprest to supervisors are already covered in WSC item no. 019/02/06.
- (ii) The issue of cash imprest for JE/SSE (works) has already been addressed in relevant para of draft IRWM.

**COMMITTEE RECOMMENDATIONS :-**

The item is now proposed for closure.

**18. Item No. 044/05/12**

**Subject : Instructions for signage's at Railway stations.**

(Proposed by NCR)

**Agenda :** NCR Proposed for Instructions for signage's at Railway stations.

Various guidelines including colour scheme for signages at Railway stations are not matching with the provisions in 'Indian Railways Works Manual', as indicated below:

1. Para 425 of 'Indian Railways Works Manual' as issued by Railways Board in year 2000.

Area/Type of signage	Background	Signage matter
Important offices (i.e. SS, Dy SS, Enquiry, Telegraph and RMS etc)	White	Red
Passenger amenities (i.e. refreshment room, waiting room, retiring room, platform lavatories etc.)	White	Blue
Other offices	White	Black
Direction-for amenities	On wall	Blue arrow
Direction-for offices	On wall	Red arrow

2. (i) Para 4.9.4.1 of 'manual of Standard and Specifications for Stations' issued by Railway Board in June 2009 in connection with development of world class stations.
- (ii) Policy circular No.2 issued by Commercial Directorate vide letter No.97/TG.II/39/11/signages dated 11.03.1999.

Area/Type of signage	Background	Signage matter
Services	Yellow	Black
Utilities	Blue	White
Caution	Red	White
Direction-within station building	Yellow	Black
Direction-station circulating area	Green	White
Direction-station approach roads	Blue	White

3. Pictograms for Railway Premise' issued by IRICEN, Pune in December 1995.

Area/Type of signage	Background	Signage matter
Services	Yellow	Black
Utilities	Yellow	Black
Caution	Yellow	Black/Red
Direction	White	Black

**Suggestion:** The item requires discussion in the Works Standards Committee meeting for reconciling the provision in both the manuals to match with each other. Even circulars issued should be either matching with manuals otherwise correction slips should be issued to manuals to remove the contraction.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

Sub-Committee of CE/P&D/NCR (Convener) & CPDE/NWR are nominated to study further and submit report for consideration of WSC.

#### **Railway Board's Order :**

- i) WSC's recommendations are accepted.
- ii) Sub-Committee (by name), comprising of Shri K.D. Ralh, CE/P&D/NCR (Convener) and Shri S.C.L. Meena, CPDE/NWR to submit report by 30.04.2013 to RDSO. RDSO shall obtain views of Zonal Railways and make recommendations to Board.



## Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013

### **COMMITTEE OBSERVATIONS :-**

Convener of Sub-committee presented the report. However, the committee observed that this issue pertains to commercial department being passenger amenity item. As such a comprehensive recommendation should be sent to commercial department of Railway Board for consideration & final decision.

### **COMMITTEE RECOMMENDATIONS :-**

- (i) Sub-Committee's report should be forwarded to Commercial Department of Railway Board after approval of the same by Railway Board.
- (ii) The item is now proposed for closure.

## **19. Agenda Item No. 045/05/12**

**Subject : Performance Guarantee (PG)**  
(Proposed by RCF, Kapurthala)

**Agenda : RCF, Kapurthala Proposed for Performance Guarantee (PG)**

The introduction of submission of PG in works contracts has improved the contract management wonderfully. It has reduced court cases which were mandatory to recover Liquidated damages of any other outstanding dues against the defaulting contractors. Dispensing with calling of tenders at the risk & cost of the defaulting contractors and forfeiting PG and security deposit on termination of the contract on contractors default has eliminated wastage of time in pursuing the contractors for signing the final bills and vetting thereafter. The time previously wasted in these activities is now being fruitfully utilized for finalizing the tenders for the balance work.

The contractors were previously required to submit the PG within 15 days of the date of issue of letter of acceptance. This period has now been extended to 30 days and further extendable up to 60 days with penal interest of 15% per annum. This revision has not taken care of the duration of completion period.

### **Suggestion:-**

Submission of PG within 30 days from the date of issue of letter of acceptance in case of urgent works with shorter completion period (say upto 6 months) and works relating to day today maintenance such as zonal contracts, is hampering the satisfactory execution, Therefore it is suggested that the earlier provision of submission PG within 15 days should be restored in such cases. For

contracts other than zonal with completion period of more than 6 months and up to one year, the period of submission of PG may be kept within 30 days without any grace period and for contracts having completion period more than one year, additional grace period of 30 days with penal interest may be given.

It is also suggested in the interest of work that signing of contract agreement be de-inked from the submission of PG so that the work could be got started immediately after issue the contractor, if any, before the prescribed time frame of submission of PG, should not be violation to contractual conditions and contract agreement might be terminated on this account also. Suitable clause may be enshrined in the GCC.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

##### **Recommendations -**

WSC observed that as per Existing instructions, contractor can start the work after issue of acceptance letter even without depositing the PG.

WSC recommended-

- i) Existing instructions are sufficient. No need to issue further instructions.
- ii) Item is proposed for closure as no further action is required.

#### **Railway Board's Order:**

- i) The existing provisions of Performance Guarantee are sufficient and reasonable for execution of contractual works at sites.
- ii) For service contracts, modification to the Clause should be suggested and drafted by Northern Railway and sent to Board by 28.02.2013 for consideration.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATIONS : -**

- (i) Northern Railway is yet to suggest modification in Performance Guarantee clause for service contract only.
- (ii) Committee also observed that some flexibility is required in PG clause to deal with exceptional circumstances.

## **COMMITTEE RECOMMENDATIONS :-**

Northern and NF Railway shall draft the modified performance guarantee clause for service contracts and will send it to Railway Board for approval by 15.10.2013.

### **20. Item No.046/05/12**

**Subject** : Review for planning & policies towards housing accommodation in Railways. (Proposed by NWR, Jaipur)

**Agenda** : NWR, Jaipur Proposed for Review for planning & policies towards housing accommodation in Railways.

Corporate welfare plan (2006-2015) made for providing adequate residential accommodation & improving upkeep of existing quarters, Which includes basically providing basic amenities like kitchen, bathroom, toilet & replacement of non-standard quarters on age cum condition basis.

Further Railway Board has issues instructions for providing type-II quarter for new construction. But the sanction works are slow progressing due to less fund allotment.

Thus staffs are not incline to live in Railway accommodation which are having grossly in- adequate accommodation for family needs and to live decent life, looking to the raised living standards of people. So also there is enhance rate of HRA which is sufficient to higher rented accommodation having better living accommodation. There are 8826 nos Nonstandard type I quarter and most of these quarters are vacant on one hand & HRA is being granted to employee on other hand.

To overcome all the problem conversion of old type-I, two quarters into Standard type-II quarter is a better solution without incurring much of expenditure.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting :**

#### **Recommendations -**

WSC observed that Railways feel the requirement that two quarter (Type - I) may be allotted to one staff so that he may have Type II accommodation. This issue can be dealt by Railway either by attaching one additional new room to existing Type I quarter.

WSC recommended that:

- (i) Two type I quarters can be combined to make it as Type II quarter. No extra rent be payable by occupant due to extra covered area as the same is on account of administrative decision.
- (ii) Board may consider issuing suitable instructions on the issue if felt necessary.
- (iii) Item is proposed for closure.

**Railway Board's Order :**

WSC's recommendations are accepted for further consideration & issue of policy instructions.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATIONS : -**

- (i) Two Type-I staff quarter can be combined to form one Type-II quarter. ED/L&A-III Railway Board has informed that the proposal for the same is under finance concurrence.
- (ii) Committee observed that while joining the two quarters, the condition of quarter should be kept in mind. Rent of the quarter so combined may be kept as lower of the rent of one Type II and double of Type I quarter.

**COMMITTEE RECOMMENDATIONS :-**

Proposal is under consideration of Railway Board. After the issue of guidelines, this item shall be closed.

**21. Item No. 047/05/12**

**Subject: Maintenance of bore wells fitted with Electrical pumps.**

(Proposed by SR)

**Agenda:** Now days more or less, all the bore wells are fitted with electrical pump. Electrical department is not having any annual contract for maintenance of these pumps Hence, all pumps in bore well with capacity up to 2HP/5HP can be brought under the maintenance of engineering department and item can be included in SOR for maintenance of the same.

## **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

WSC recommended that:

- (i) All pumps fitted with bore well can be brought under maintenance of Engineering department in consultation with Electrical Deptt.
- (ii) Item can be included in SOR for maintenance of the same.
- (iii) The issue can be referred to Board if Electrical Deptt. does not agree for this change of system.

#### **Railway Board's Order:**

- (i) WSC's recommendations are accepted.
- (ii) CE/Works/SR shall draft new item for inclusion in IRUSSOR and send it to the Standing Expert Group.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

- (i) CE/Works/SR has drafted the necessary amendment for inclusion in IRUSSOR.
- (ii) Committee observed that Engineering Department does not have necessary infrastructure for maintenance of submersible pumps and therefore maintenance of pumps will be difficult.

#### **COMMITTEE RECOMMENDATION:**

Item is now proposed for closure.

### **22. Item No. 048/05/12**

**Subject: Issue of controlled documents** (Proposed by SR)

**Agenda:** All the instructions on policy matters, circulars, correction slip being issued are not reaching gross root level. Many times correction slip, latest instructions etc. go out of sight. There is no system of maintaining all the related instructions at one places and deleting the instructions which would have been superseded subsequently. During review of vigilance cases also it has been noticed that several vigilance cases have resulted because of ignorance of relevant instructions on the subject. It has also been noticed that though executive applies/ use a particular instruction vigilance try to examine the case with respect to some other instruction both of which may co-exists with certain amount of overlap. Earlier the issue of controlled

documents was addressed by way of issuing various Engineering Standing Orders under the signature of ME incorporating all the relevant instruction on tender and other subjects. It was also stated in the above standing order that the instructions /circulars which do not find a place in the above standing order were not valid and deemed to be cancelled. The above compendiums of instructions were very handy and useful. However, with the passage of time, the above system has gone into dis-use. Hence, there is need to revive the above system so that various circulars/policy letters are issued in a systematic way through systems of "controlled document "to ensure that no policy letter/circular misses from the applicability list. It is also felt that the above system of issuing and maintenance of controlled documents would reduce the avoidable vigilance cases.

### **RECOMMENDATIONS DURING WSC MEETING & RAILWAY BOARD'S ORDERS:**

#### **5<sup>th</sup> Meeting:**

#### **Recommendations -**

WSC recommended that:

- (i) Board may consider reviewing the system of Standing Engg. Orders.
- (ii) Sub-Committee should prepare Compendium of Instruction on Tender to begin with.

#### **Railway Board's Order:**

- i) WSC's recommendations are accepted. All circulars & instructions, issued by Board and Zonal Railways should be on the web site.
- ii) Compendium of instructions on contract matters needs to be issued.
- iii) A Sub-Committee (byname), comprising of Shri K.D. Ralh, CE/P&D/NCR, Shri O.P. Tanwar, CE/P&D/WCR and Shri J.K Singla, CPDE/SECR (Convener) is nominated. It should compile the document and submit to Board for final approval and issuing latest by 31 March. 2013

#### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

- (i) The sub-committee has submitted the modified compendium to Railway Board incorporating the latest circulars on the subject.
- (ii) Committee is also of the view that comments of Zonal Railway on this report may also be taken by the 30<sup>th</sup> Sept 2013. Thereafter the report may be considered for approval by Railway Board.

## **COMMITTEE RECOMMENDATION:**

After the approval of Railway Board, same will be circulated in soft copy to all the Zonal Railways. Item will then be closed.

### **B. New Agenda Items :**

#### **23. Item No. 049/06/13**

**Subject:** Revision of powers of quotation (Proposed by SP/Works/IRICEN & ER)

**Agenda:** IRICEN & ER Proposed for Revision of powers of quotation.

Vide para 1124 of Engineering Code, powers have been delegated for dispensing with calling of Tenders, extract of which is as under:

"Circumstances when tenders need not be called for - Except where for reasons which should be in public interest the General Manager decides that it is not practicable for advantageous to call for tenders, all contracts over Rs.25,000/- in value should be placed after tenders have been called for in the most open and public manner possible and with adequate notice. For works contracts based on Schedule of Rates in force on the Railway, calling of tenders upto Rs.50,000/- can be dispensed with by the General Manager without recording reasons for doing so. In all other cases where it is decided not to call for tenders, the reasons should be recorded and financial concurrence obtained.

Should the General Manager's powers of decision under the preceding sub-para be delegated to lower authority (who will exercise it subject to the same proviso) and should the Account Officer consider the reasons adduced by such authority to be insufficient or other than in public interest, he should represent his views to the higher authority concerned and, if necessary, consult the General Manager.

As per the above stipulations, it is not necessary to record the reasons for calling of quotations for the contract up to Rs.25,000/- with NS Items and upto Rs.50,000/- if the contract is based upon the SOR items. These powers have been laid down more than 20 years ago while in the meantime the powers to dispense with calling of tenders, with recorded reasons have been increased from Rs. 50,000/- for SAG officers to Rs. 4 lakhs recently issued as per Railway Board's letter no. 2007/CE-I/CT/18/Pt dated 05/03/2009.

Secondly, the cost of advertisement of one tender in the local newspaper come in the range to Rs. 15,000 - 25,000/- depending upon the size of the notice, it

is therefore necessary that for the small value contracts we must follow the path of executing it through quotation even without recording reasons. In our opinion, these powers to dispense with calling of tender should be approximately 10 times the value of advertisement of the notice into the newspaper.

Accordingly, it is proposed that these powers be raised to Rs. 2 lakhs for mixed schedule and for Rs. 4 lakhs for schedule having the SOR items for the works contract without recording the reasons.

Also the increased have also not been incorporated in Engineering code. Therefore suitable correction slip to be issued to the Engineering Code to incorporate the same.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

Committee observed that there are two issues involved:

- Revision of Para 1211 of Engineering Code regarding dispense with calling of tenders without mentioning the reasons.
- Modifications required in power of calling quotation as provided in Railway Board's letter no. 2007/CE-I/CT/18/Pt dated 05/03/2009. On this, Eastern Railway has submitted a reference to Railway Board.

#### **COMMITTEE RECOMMENDATION:**

A reference in this aspect shall be initiated by Shri T.P.R.Narayan Rao, CE/Works/SCR and Shri R.G.Singh, CPDE/ECR to Railway Board by 31<sup>st</sup> Oct 2013 for making necessary amendments in instruction on this issue.

### **24. Item No. 050/06/13**

**Subject: Sewage disposal from the Railway Premises.** (Proposed by RDSO)

**Agenda** : RDSO Proposed for Sewage disposal from the Railway Premises.

Standard flushing sewerage systems are meant primarily for the purpose of transporting human waste from the house to the treatment plant located at a distance. Therefore, the standard flushing toilets are relevant only where underground sewerage system exists. In Railway colonies, either Railway sewerage system is connected to municipal sewer line or where water borne



sewage is not possible, system of septic tank is normally adopted for disposal of sewage.

The prohibition of employment as manual scavengers and their rehabilitation bill has been passed by the Parliament of India vide bill no. 96 of 2012.

As per the bill " without prejudice , Municipalities, Cantonment Board and Railway Authorities shall also construct adequate number of sanitary community latrines, within such period not exceeding three years from the date of commencement of this act, as the appropriate government may be notification, specify, so as to eliminate the practices of open defecation in their jurisdiction".

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

- i) As per the new bill, it is the responsibility of Railway, to remove, modify and upgrade any insanitary latrines existing in the Railway system.
- ii) In this regard rectification of the structure shall be the responsibility of the Engineering Department.

#### **COMMITTEE RECOMMENDATION:**

- i) Any insanitary latrine available in the Railway jurisdiction should be identified and demolished/converted into sanitary latrine in a time bound manner before the allowed period of three years from the date of commencement of this Bill/Act.
- ii) Zero discharge toilet should be installed in the coaches by the Mechanical Deptt. at the earliest so that toilet dropping should not come on the track except at notified places. Disposal system of excreta from zero discharge toilets in stabling lines/washing lines at terminal stations should also be made by Mechanical Department.
- iii) Railway Board may also issue suitable guidelines for the same.

### **25. Item No. 051/06/13**

**Subject: Improvement in water supply system of Indian Railways. (Proposed by NR)**

**Agenda : NR Proposed for Improvement in water supply system of Indian Railways.**

Indian Railway has one of the largest water supply systems in the country. Northern Railway alone has more than 1000 borewells and equal number of chlorination plants spread over almost half of Northern India.

There are several items of water supply on which guidelines regarding technical specifications and design are not available in our IRWM, Standard Specifications, and SOR. Guidelines regarding matters such as monitoring residual chlorine need further expansion and elaboration to meet the present day needs. In recent past, Northern railway has issued a total of eighteen circulars on the following items:-

- i) Guidelines for design and constructions of borewells.
- ii) Technical specifications for the various types of chlorination plants viz. hypo-chlorinators, gas chlorinators and on-site hypo chlorinator generation and dosing units.
- iii) Guidelines regarding handling, storage, and testing of sodium hypochlorite, which is the main disinfectant today.
- iv) Guidelines for effectively monitoring residual chlorine
- v) Guidelines regarding design and layout of ground level water storage tanks.
- vi) Guidelines regarding adequate contact time.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

Committee observed that :

- i) Drinking and other water uses on the Indian railway system should be segregated so that chlorination burden is reduced to the minimum.
- ii) Necessary paras and guidelines should be incorporated in the IRWM which is under revision.

#### **COMMITTEE RECOMMENDATION:**

Sri Alok Verma, CE/works/Northern Railway should be co-opted as one of the member for writing Chapter 5 on water supply who shall submit necessary modification in Chapter- 5 of IRWM Part-I within two months time (end of October 2013) and shall prepare necessary references in Part-II of IRWM by next four months (end of December 2013) to DEAN/IRICEN who is the convener of the Sub-Committee for revision of IRWM.

**26. Item No. 052/06/13**

**Subject: Improvement in scale of Amenities & Standardization of specification of staff quarters:** (Proposed by SER, DMW /Patiala)

**Agenda :** SER, DMW /Patiala Proposed for Standardization of specification of staff quarters

- a) Provision for construction of Garage to Railway Staff Quarters: (Proposed By : SER)

This Railway is frequently receiving application from staff of various departments appealing for construction of Motor Garage. But as per Railway's Code for Engineering Department 1919, chapter XIX Building and rent Para No. 1903 under "Scale of Accommodation for Staff" there are no such provision and it speaks as follows:

The Scale of accommodation and the unit cost for each class of quarters are prescribed by the Railway Board. Motor Garages should not as a rule be provided in staff quarters. In exceptional cases, however, the General Manager considers that the provision of a Garage is essential in the interest of an official's work it may be provided. In such case, the cost of garage should be taken into account in assessing the rent for the quarter and arriving at the requisite return of six percent on the total capital cost of all the quarters of the particular class concerned.

With the changing economic scenario, the purchasing of personal four wheelers has increased manifolds. Railway staff is not exception and after 6th CPC, the ability of staff to purchase four wheelers is not a surprising fact as there is an obvious hike in the salary payment of almost all railway staff.

- b) Standardization of specification of various type of staff quarters: (Proposed By : SER)

In our Railway Organization, there are no such specifications for providing various types of amenities such as flooring, kitchen & bathroom fittings, wash basin & mirror, bed rooms/living rooms etc.

Maintenance manual of Central Public Works Department (CPWD) have clearly stipulated standard specifications of various works for kitchen. Bed rooms/living rooms, wash basin & Mirror, common circulation areas and staircases and other fixtures and amenities for various types of quarters.

- c) Provision of vitrified flooring tiles and wash basin in Type II quarters  
(Proposed By : DMW /Patiala)

There is no specific provision for flooring with vitrified tiles. It is required to replace the damaged floors of offices and residence with vitrified tiles.  
Para 207 of IRWM should be reviewed as there is no provision of wash basin in below type-III quarters.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATION:**

Committee observed that the scale of Amenities & Standardization of specification of staff quarters have already been incorporated in draft IRWM.

**COMMITTEE RECOMMENDATION:**

Zonal railways should send their comments, if any, on this subject to DEAN/IRICEN for necessary modification in draft IRWM by 30.09.2013.  
Item is now proposed for closure.

**27. Item No. 053/06/13**

**Subject: Arbitration cases.** (Proposed By : WR)

**Agenda :** WR Proposed for Arbitration cases.

The proposal of enhancing the financial limit, for appointment of Sole Arbitrator in arbitration cases, from Rs. 10 lacks to Rs. 50 lacks is under consideration of Railway Board.

Many arbitration cases are pending over Western Railway due to the various reasons, mainly because of transfer of AT members/Sole Arbitrator and also due to serving officials entrusted this work in addition to their normal duties, resulting in non finalization of the cases of arbitration in reasonable time.

At present few Retired SAG officers and above are also entrusted this job as AT member and with this, the desired reduction in number of cases could not be achieved.

In view of above, the following changes proposed in the policy for getting better results:

- (i) Retired JAG Officers be also entrusted this job on the line of retired SAG Officers.
- (ii) The limit for appointment of Sole Arbitrators be modified after inclusion of item (i) above, as under:
  - (a) For claims upto and less than Rs. 25 lacks-  
Any serving JAG officer or retired SAG Officer.
  - (b) For claims over Rs. 25 lacks upto Rs. 50 lacks-  
Serving JAG Officer.

The above will definitely improve the position and also off load the work of serving JAG Officer.

### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

#### **COMMITTEE OBSERVATION:**

Committee observed that:

- i) Policy Guidelines on the appointment of retired railway officers as Arbitrator & their fee etc. has been issued by the Board vide their letter No. 95/CE.I/CT/24 dated 14.01.1996 & 12.01.2004 which do not require any further modification.
- ii) Different procedure for appointment of Arbitrator is being adopted in different departments of Indian Railway. A uniform guideline covering entire Indian Railway is required.

#### **COMMITTEE RECOMMENDATION:**

Zonal railway may send proposals to Railway Board for drawing policy guidelines.

Item is now proposed for closure.

### **28. Item No. 054/06/13**

**Sub: Completion of similar single work as part of eligibility criteria.**

(Proposed by : E.Co.R)

**Agenda :** E.Co.R Proposed for Completion of similar single work as part of eligibility criteria :

As per standard minimum eligibility criteria for works tenders costing above Rs. 50 lakh , the tenderer should have completed in the last three financial year (i.e. current year and three previous financial years), at least one similar single work for a minimum value of 35% of advertized tender value. As per practice in vogue, the completion certificate submitted by the tenderer in

support of similar work is considered if the total work under the said single contract is completed in all respect. If the work under the said contract is under progress, even if more than 35% of similar work (tendered for) is completed, the said certificate is not considered.

Railway Board vide their letter no. 2010/CE-1/CT/11 dated 11.06.2010 have modified clause no. 48(1) of GCC empowering the engineer to issue completion certificate with respect to any part of the work ( before the completion of whole of work), which has been both completed to the satisfaction of is engineer and occupied or used by the railway. When any such certificate is given in respect of part of a work, such part shall be considered as complete and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

Since no corrigendum has been issued with respect to completion of similar single work for satisfaction of eligibility criteria on the basis of above modification, doubt arises, whether such certificate shall be considered for evaluation of eligibility criteria, if it is submitted by a tenderer in support of completion of 35% of the similar single work. This issue needs to be taken up for issue of necessary clarification.

#### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

##### **COMMITTEE OBSERVATION:**

Committee observed that existing provisions are adequate.

##### **COMMITTEE RECOMMENDATION:**

Item is now proposed for closure.

#### **29. Item No. 055/06/13**

**Subject: Use of Low Volatile Organic Compound (VOC) Paints. (Proposed by CAO/C/SCR)**

**Agenda : SCR Proposed for Use of Low Volatile Organic Compound (VOC) Paints.**

These paints made from natural ingredients such as water, plants oils and resins, plant dyes and essential oils; natural minerals such as clay, chalk and talcum; milk

casein, latex, bees wax, earth and mineral dyes. Water based natural paints give off almost no smell. The oil based natural paints usually have a pleasant fragrance of citrus or essential oils. Allergies or sensitivities to these paints are uncommon. These paints are the safest for one's health and also for the environment.

In "LOW VOC paints" as described above, the level of harmful emissions are lower than solvent borne surface coatings, as they carry water as a carrier instead of petroleum base solvents. These certified coatings also contain no, or very low levels, of heavy metals and formaldehyde. The amount of VOCs in paints should not exceed 200 grams/litre and in varnishes, it should not exceed 300 grams/litre. Low VOC paints tend to emit odour until dry. To avoid this, one should buy paints that contain VOCs less than 25 grams/litre.

Advantages:

- Environment friendly, as there are lower levels of ozone pollution
- Fewer emissions of smog-forming chemicals
- Better indoor and outdoor air quality
- Allergies or sensitivities to these paints is uncommon
- Low odour.
- Increased UV resistance, flexibility

In Rail Nirman Nilayam/SCR/Secunderabad, Asian paints' low VOC Paints were used.

**Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

**COMMITTEE OBSERVATION:**

Committee observed that this is an element of green building concept which has already been covered in draft IRWM.

**COMMITTEE RECOMMENDATION:**

Item is now proposed for closure.

**30. Item No. 056/06/13**

**Subject: Conversion of SD into FDR for works contract. (Proposed by CAO/C/SCR, CGE/ECOR)**

**Agenda :** SCR, ECoR Proposed for Conversion of SD into FDR for works contract.

As per clause 16(1) of GCC (part-II) the earnest money deposited by the Contractor with his tender will be retained by the Railways as a part of the security Deposit for the due and faithful fulfillment of the contract. The balance security Deposit may be deposited by the contractor in cash or may be recovered from the running bills and the rate of recovery should be at the rate of 10% of the bill amount till the security deposit i.e. 5% of the contract value is fully recovered. Security Deposit in the form of instruments like BG/FD etc. is not accepted for contracts of value below Rs.50cr.

Security Deposit shall be returned to the contractor after the expiry of the maintenance period and after passing the final bills based on the 'NO Claim Certificate' with the approval of the competent authority. After the work is physically completed, the security deposit recovered from the running bills of contractor can be returned in lieu of FDR/irrevocable bank guarantee for the equivalent amount to be submitted by him.

With the above clauses, the Security Deposit available in the cash form will not accrue any interest till completion of work and the same cannot be converted even as FDR till the completion of work. There is a persistent demand from the contractors to convert the security deposit as FDR once the entire SD amount is fully recovered so that they would get the benefit of interest on the security deposit till it is returned.

Hence, the issue of conversion of SD amount available with the railways once it is fully recovered into FDR if desired/requested by the contractor may be discussed. This would improve further competition at least to the extent of interest element in lieu of SD in cash form.

#### **Minutes of 6<sup>th</sup> meeting of WSC held on 12<sup>th</sup>-13<sup>th</sup> September 2013**

##### **COMMITTEE OBSERVATION:**

Committee observed that existing provisions are adequate. However, Zonal Railway may send their recommendations to Railway Board for approval regarding conversion of security deposit into FDR.

##### **COMMITTEE RECOMMENDATION:**

The item is now proposed for closure.



## Annexure 1

### Agenda Items Closed During Previous Meetings of Works Standards Committee

SL	Item No.	Subject (Proposed By)	Item Closure Reference
<b>Item closed in 2<sup>nd</sup> WSC Meeting</b>			
1.	001/01/05	Name & Constitution of Committee. (WSC)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
2.	008/01/05	Rationalisation of the Specifications. (NER, ER, SR)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
3.	011/01/05	Use Of Bricks Made Of Fly Ash. (SECR)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
4.	012/01/05	Strengthening Of Works Unit. (WR)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
5.	014/01/05	Authority of Works Measurement At Various Levels In Works Cadre (Open line /Construction). (WSC)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
6.	015/02/06	Contract - System Improvement suggestions. (NWR)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
7.	016/02/06	Arbitrations (EDCE/G/Rly Board will be able to discuss the subject matter). (NWR)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
8.	017/02/06	Separate cadre for Architect. (WSC)	2 <sup>nd</sup> WSC Meeting 04 <sup>th</sup> & 05 <sup>th</sup> Apr 2006
<b>Item closed in 3<sup>rd</sup> WSC Meeting</b>			
9.	013/01/05	Setting Up Quality Audit Cell For Checking The Quality Of Construction And Maintenance Works Executed By Railway Board.(WSC)	3 <sup>rd</sup> WSC Meeting 2 <sup>nd</sup> & 3 <sup>rd</sup> July 2008
10.	020/02/06	ISO Certification of Railway Colonies.(RCF)	3 <sup>rd</sup> WSC Meeting 2 <sup>nd</sup> & 3 <sup>rd</sup> July 2008

SL	Item No.	Subject (Proposed By)	Item Closure Reference
<b>Item closed in 4<sup>th</sup> WSC Meeting</b>			
11.	010/01/05	Rationalisation of maintenance practices : Maintenance of leaky roofs (ER &SER)	4th WSC Meeting 19th & 20th January 2012
12.	023/03/08	Standardisation of Landscaping Area At Various Class Of Stations on Indian Railway (SCR)	4th WSC Meeting 19th & 20th January 2012
13.	028/04/12	Outsourcing of maintenance works related to water supply and sanitation (SR)	4th WSC Meeting 19th & 20th January 2012
14.	029/04/12	Hoisting of the Passenger Amenity Data on website (SECR)	4th WSC Meeting 19th & 20th January 2012
15.	030/04/12	Standardization of GCC for entire Indian Railways (SECR)	4th WSC Meeting 19th & 20th January 2012
16.	032/04/12	Enhancement of plinth area of quarters (SECR)	4th WSC Meeting 19th & 20th January 2012
17.	037/04/12	Planning of expeditious completion of works say 1-3 years (CR)	4th WSC Meeting 19th & 20th January 2012
<b>Item closed in 5<sup>th</sup> WSC Meeting</b>			
18.	003/01/05	Unified Works Specifications And Basic Data Sheets For Preparation Of SOR (WSC)	5th WSC Meeting 27th & 28th September 2012
19.	004/01/05	(a) Standardisation of flooring of platform, concourse & FOB and platform cover sheds based on categories of stations (A1, A, B, C & others) (b) Standardisation of Workshop flooring (WSC)	5th WSC Meeting 27th & 28th September 2012
20.	022/03/08	Standardisation of Various Drawings on Indian Railways (SCR &NCR)	5th WSC Meeting 27th & 28th September 2012

<b>SL</b>	<b>Item No.</b>	<b>Subject (Proposed By)</b>	<b>Item Closure Reference</b>
21.	026/03/08	Manual On Passenger Amenities on Stations Of Indian Railway (SER)	5th WSC Meeting 27th & 28th September 2012
22.	031/04/12	Guidelines on Retrofitting of Existing Buildings (RDSO)	5th WSC Meeting 27th & 28th September 2012
23.	033/04/12	Standardization of facilities for Engineering Department at Stations (SECR)	5th WSC Meeting 27th & 28th September 2012
24.	036/04/12	Appreciable improvement of existing Railway Colonies and to develop Model Colonies for maximum staff satisfaction (CR)	5th WSC Meeting 27th & 28th September 2012
25.	041/05/12	Provision of MSL at Stations (SCR)	5th WSC Meeting 27th & 28th September 2012
26.	042/05/12	De-linking the maintenance activities of Bridges entrusted with the works Cadre.(SR)	5th WSC Meeting 27th & 28th September 2012

WSC Recommendations & Railway Board's Orders of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Meeting:

1. **Item 002/01/05** :Strengthening of organisation for works at various levels

**1<sup>st</sup> Meeting :**

**Recommendations -**

- a) RDSO - Committee recommends for a separate Works Directorate in RDSO. Organization structure to be decided by DG/RDSO in consultation with Railway Board.
- b) Zonal Railways - Committee recommends for creation or re-designation of one SAG post as CE/Works who will look after maintenance, policy and cadre pertaining to works.
- c) Divisional Head Quarters - Committee recommends for a separate Branch Officer in Divisional Office Exclusively dealing with works matter.

**Orders of Railway Board -**

1. **For RDSO** - Committee recommendation for a separate Works Directorate in RDSO is found justified and agreed to. This could be headed by ED level officer and can be designated as ED/Works Standards, RDSO. Such Directorates can be created through reorganization of the existing structure of engineering department in RDSO. Structure of this Directorate can be decided by DG/RDSO in consultation with Railway Board.
2. **On Zonal Railways** - Committee's recommendation for creation/designation of one SAG post as CE/Works who will look after the maintenance, policy and works cadre and any other item pertaining to works matter, is agreed to in principle taking into account of the need. However, it is necessary that the duties and responsibilities of proposed CE/Works are to be listed, including those of CPDE and CGE as they are presently looking after such works. As far as new posts are concerned, these posts can be assigned for the cadre restructuring of the engineering department under process at present.
3. **At Divisional Level** - Committee recommended a separate branch officer in Division office exclusively dealing with works matters as works are found to be neglected. The need for separate branch officer dealing with works matter, may be agreed in principle. However, details of his duties and responsibilities need to be worked out before final decision.

The details of the work to be assigned/seen by proposed CE/Works in Zonal headquarter and Sr. DEN/Works in Division, should be deliberated by Works Standards Committee in its next meeting and make appropriate recommendations for consideration of the Board.

## **2<sup>nd</sup> Meeting:**

### **Recommendations -**

#### **(A) Duties of CE/Works :**

The committee discussed various suggestions given by Zonal Railways. After detailed deliberation, the Committee recommends the Duty List of CE/Works as under:-

- i) Administrative control of Sr. DEN/Works, DEN/ADEN/Works of the Division
- ii) Cadre control of Works cadre & Horticulture
- iii) Policy in regards to upkeep & maintenance of Colonies, Office/Station Building, Water Supply, Drainage and Horticulture
- iv) Works Policy
- v) Quarter Policy
- vi) Contract, Arbitration Policy
- vii) Quality Audit of works, inspection schedule of Sr.DEN/Works, DEN/ADEN/Works
- viii) Updating of Works Manual, SOR and Specifications
- ix) Performance review of latest construction/execution techniques and new materials
- x) Technical training of Works Cadre
- xi) Any other duty assigned by PCE

#### **(B) Duties of Sr. DEN/Works :**

The committee discussed suggestions given by some Zonal Railways. Keeping in view the complexity of the issue, the committee recommends constitution of sub-committee comprising CE/G/WR, CE/Works/ NWR and CE/Works/SR to frame their recommendations on duties of Sr. DEN/DEN (Works) within the next three months.

Sub-committee may consult all other Zonal Railways. In the mean time, Zonal Railways should forward their views to CE/G/WR within 15 days.

#### **Orders of Railway Board -**

- (A) Item (i) may be excluded from the duty list as there is no such post at present.  
Item (vii) may also exclude the post of Sr. DEN/DEN/ADEN Works. The duty list will be guidelines for PCEs to allocate these duties as far as possible to one SAG officer in addition to any other duties considered necessary.
- (B) This may not be pursued further.

### **3<sup>rd</sup> Meeting:**

#### **Recommendations -**

Committee observed that Railway Board has not agreed to duties of Sr. DEN/Works at Division level. The committee discussed the item in detail and felt that there is a need for strengthening of works organization at Division level at the level of DEN, AEN & IOW. Therefore, Railway Board may reconsider the issue related to works organization at Division level.

#### **Railway Board's Order**

Concept of Sr.DEN/Works at Divisional level is not agreed to due to functional and administrative reasons. It also overlaps & duplicates the work. Item need not be pursued further and is Closed.

However, the Works Standard Committee should take up following items for functional improvement:

- i. Basic technical training (in-house and from outside organisations) to supervisors and artisans staff of Works Cadre.
- ii. Availability and acquaintance with relevant Codes, e.g. National Building Code, IS: 456, Design Mix Guidelines, Latest advancements etc. to JEs & SSEs of Works.
- iii. Availability of standard and state of art tools & kits for working & supervision.
- iv. Ensuring System of Material Passing before its use at site.
- v. Introduction of Quality Assurance through 'Check List', 'Method Statement' etc.
- vi. Mandatory 'Refresher Courses' at Zonal Railway Training Institutes along with 'Resource Management Training' for Works Cadre.

### **4th Meeting:**

#### **Recommendations -**

- (1) As already decided, the item related to separate work cadre in the division is closed.
- (2) The measures suggested by Railway Board for strengthening the work cadre may be implemented on Zonal Railways for functional improvement.
- (3) For technical training, the services of outside institutions may be taken by ZTS or Divisional Training School. Training in institutions having core competence in these fields may be utilized for senior supervisory levels & officers by nominating them directly.

- (4) Practices being followed by Zonal Railway can be put on e-based portal which can be shared by all Railways. IRICEN may provide link to this portal on its web site.

Item is proposed for closure.

#### **Railway Board's Order:**

Non-Railway Institutions (within India) imparting training to engineering officers, supervisors and artisan staff shall be identified by IRICEN and RDSO and submitted to Railway Board for formation of standing panel. Care should be taken that training institutes for artisan staff may have proximity to their respective HQ. IRICEN, RDSO and all Zonal Railways have already been advised in term of Board letter no. 2012/LMB/8/1, dated 23-1-2012.

Name of the training programme, its duration alongwith approximate cost and justification shall be prepared jointly by IRICEN & RDSO and submitted to Board within a month. Training programme may cover all spectrum of technical aspects, quality test & control and managerial skills.

RDSO shall circulate the instructions as approved by Board to all Railways/PUs etc. for implementation.

## **2. Item No. 005/01/05 : Review of Indian Railway Works Manual**

### **1<sup>st</sup> Meeting :**

#### **Recommendations -**

The Committee discussed various para of Works Manual as proposed for amendment by NE & Northern Railways. SEC & SE Rly also referred few paragraphs of Works Manual. Looking to the quantum of referred paragraphs, Committee found that it would be difficult to discuss all these para of Works Manual in this meeting. Committee recommends for formation of a Sub-Committee consisting of representatives from N, SE, SEC Railway, IRICEN/Pune and RDSO/Lucknow to review the referred paragraphs and to present the same in next meeting of Works Standards Committee. Senior Prof./Works will be Convener and CE/G N.Rly will be Secretary for this Sub-Committee. Paragraphs already discussed and decision taken by Committee will be forwarded to this Sub-Committee by RDSO. All other Railways may forward their views on IRWM paras requiring amendments.

#### **Orders of Railway Board -**

Number of Railways have indicated the need for correction in various provisions of Works Manual in the meeting. Committee's recommendations to form a Sub-Committee consisting of NR, SE, SECR, IRICEN/Pune and RDSO/Lucknow is

accepted. CE/G/NR will be the Secretary and Sr. Professor (Works)/IRICEN will be the Convenor. The Sub-Committee will collect views of all the Railways on this matter and present the report in the next meeting of the Works Standards Committee.

## **2<sup>nd</sup> Meeting :**

### **Recommendations -**

Sr.Prof./Works/IRICEN, convener of Sub-committee nominated in 1<sup>st</sup> WSC for this review presented proposed amendments to IRWM. Committee members deliberated on proposed amendments for Chapter-I. It is observed that nos. of amendments proposed by sub-committee are quite large and is not possible to deliberate all the proposed amendments in this WSC meeting. However, the copy of proposed amendments has been circulated to all Zonal Railways. In view of volume of discussion involved on this item, committee recommends to conduct a special meeting of WSC.

### **Orders of Railway Board -**

WSC's recommendations accepted.

## **3<sup>rd</sup> Meeting:**

### **Recommendations-**

Sr. Professor/works/IRICEN presented the proposed amendment in Works Manual to committee. In addition, members proposed following items to be included in the Works Manual :

- Water supply treatment process
- Sewage treatment process
- Test check by AEN & Dy.CE should be included
- Imprest power to IOW for petty works can be included

Green building guidelines should be available in the Works Manual. Committee recommended that there is need of separate special WSC on the issue of amendment to Work Manual. All members can send their suggestions to IRICEN within one month.

### **Order of Railway Board-**

- (i) A Sub-Committee of six Members with Shri N.C. Sharda, Dean/IRICEN as Convenor for Works Manual is reformed as under :
  - Shri N.C. Sharda, Dean/IRICEN
  - Shri S.M. Maheshwari, ED/RDSO
  - Shri R.G. Singh, CE/NR



- Shri R.P. Saxena, CE/WR
  - Shri K.V. Prasad, CE/C, SCR
  - Shri S.P. Samantaray, CE/ECOR
- (ii) The Sub-Committee shall work out the recommended amendments to Work Manual through special meetings, to be convened by Dean/IRICEN.
- (iii) Proper Indexing of Manual also needs to be organised.
- (iv) The Sub-Committee shall make full presentation on the subject during next meeting of WSC.

#### **4<sup>th</sup> Meeting:**

##### **Recommendation-**

1. The Works Manual should be in two parts, the main Manual & Annex, quoting references to NBC, IS Codes etc.
2. Sub-Committee to prepare draft Indian Railway Work Manual through special meetings to be convened by Dean/IRICEN, Pune.
3. After deliberation by sub-committee & getting feedback from Zonal Railways, draft be submitted for further consideration & approval.

##### **Railway Board's Order**

WSC's recommendations are accepted.

Sub-committee shall submit the Draft Works Manual and make presentation to Board by April 2012.

Thereafter, draft will be circulated to Zonal Railways for their comments within next 15 days. Sub-committee shall accordingly modify the draft document and submit final to Board by June 2012.

### **3. Item No. 006/01/05 : Review Of Provisions Of IRWM & Engineering Code Regarding Measurement**

#### **1<sup>st</sup> Meeting :**

##### **Recommendations -**

After thorough discussions, committee recommends that a Sub-Committee formed for item no.1 will also do review of this work. Sub-Committee will present the same in the next Works Standards Committee meeting.

##### **Orders of Railway Board -**

The recommendation of the Committee is accepted.

## **2<sup>nd</sup> Meeting :**

### **Recommendations -**

Sub-committee constituted for review of IRWM was asked to examine this item also in 1<sup>st</sup> WSC meeting. Sr.Prof/Works/IRICEN, convener of the sub-committee presented proposed amendments required in IRWM or Engineering Code to enhance the powers of Railway official with regard to measurements of works. After a long deliberation on the subject by members, the proposed enhancement of powers was agreed upon. Therefore, committee recommends for enhancement of the powers of engineering officials with regard to measurements, as given in enclosed annexure.

### **Orders of Railway Board -**

Committee's recommendation to enhance the powers of Railway official with regard to measurements of works is accepted in principle for examination in Board on case.

## **3<sup>rd</sup> Meeting:**

### **Recommendations -**

Committee observed that recommendations of the Sub-Committee regarding measurements are under consideration at Railway Board level.

### **Order of Railway Board-**

Recommendations of the sub-committee have not yet been received in Railway Board. Committee's recommendations should be presented during next meeting of WSC.

## **4<sup>th</sup> Meeting:**

### **Recommendations -**

Recommendation of sub-committee shall be finalized by Feb. 2012 and sent to WSC members through e-mail & thereafter submitted to the Board for approval.

### **Railway Board's Order:**

WSC's recommendations are accepted.

Sub-committee shall also study the practices being followed in other organizations regarding system of recording of measurements and competency of initiating officials for recording of measurements including recording of measurements by contractors and submit the recommendations by March '12 for consideration of Railway Board.

#### 4. Item No. 007/01/05 : New Building Materials

##### 1<sup>st</sup> Meeting :

##### Recommendations -

- A. Following new materials, as already tried by different Railways may be widely adopted for use -
- i) Ductile iron pipes and CI mechanical compression joint - These materials may be used regularly in new works or through renewal works.
  - ii) Vitrified tiles flooring - These tiles may be used by Railways for indoor areas.
  - iii) Fly ash bricks - These may be used in lieu of clay bricks, wherever available.
  - iv) Fly ash concrete - Use of blended fly ash concrete as per BIS specifications is permitted, Railways may use the same
- B. Following new materials may be used on trial basis -
- i) Polyester fiber reinforced concrete/plaster.
  - ii) Poly tetra Methylene Terephthalate (PTMT) bib cocks and fittings.
  - iii) Aluminum sheet gutters.
  - iv) High strength tiles for flooring and pavements (outdoor use only).

##### Orders of Railway Board -

Some items like ductile iron pipe and CI mechanical compression joint, vitrified flooring tiles for indoor area of heavy public use, use of fly ash bricks in lieu of clay bricks (wherever available) and use of fly ash concrete as per BIS specifications have been in use for quite some time by Zonal Railways. Committee's recommendation for adoption of the same for wide usage is agreed to.

Certain items like Polyester fiber reinforced concrete/plaster, Polytetra Methylene Terephthalate (PTMT) bib cocks and fittings, Aluminum sheet gutters and High strength tiles for flooring and pavements (for outdoor use) have been recommended for use on trial basis by the Committee which is agreed to.

##### 2<sup>nd</sup> Meeting :

##### Recommendations -

During 1<sup>st</sup> meeting of WSC, 4 new building materials were recommended by WSC for wide adoption. RDSO should issue necessary instructions in this regard to all concerned. Expert Group formed for Unified Works Specifications should include these items in Unified SOR.

Some more items were recommended for adoption on trial basis. Railways have taken initiatives for their use. However, no experience has been gained at this stage by Railways. Nominated Railways should undertake their usage on trial basis and send their reports to RDSO within next three months.

#### **Orders of Railway Board -**

WSC recommendations accepted.

#### **3<sup>rd</sup> Meeting:**

##### **Recommendations -**

- (i) Performance of items at SL-1 (Polyester fiber reinforced concrete/plaster) & SL-2 [Poly Tetra Methylene Terephthalate (PTMT) bib cocks and fittings] being satisfactory, can be used on regular basis. However, w.r.t. SL-3 (Aluminum Sheet gutters), there are other materials also available in market. RDSO should study these items and suggest 3 or 4 alternatives.
- (ii) Following materials can be used on trial basis by Zonal Railways :
  - (a) Ready mix bitumen compound for repairs of pot holes.
  - (b) Toughened Glass on counters.
  - (c) Cool and seal (Leak proof/ Thermal protection), white cement based Wall care putty.
  - (d) Floor Repairing Compound.
  - (e) Anti Slip Coatings compound.
  - (f) Expansion joints and wall sealing compound.
  - (g) Chemical Coating for leakage in Tanks.
  - (h) Leak proof Tape in joints of Pipes and fittings.
  - (i) Aluminum Composite Panel

##### **Order of Railway Board-**

- (i) Most of the new building materials being widely used have already been incorporated in the IR's Unified SSOR.
- (ii) New Building Materials and Technological Advancements should be used by field organisations and also to be recommended to the Standing Expert Group for inclusion in the unified documents through Correction Slips for adoption on Indian Railway system.
- (iii) The Standing Expert Group shall submit report on the subject in all the meetings of Works Standards Committee and it shall be Standing Agenda item in all meetings of WSC.

**4<sup>th</sup> Meeting:**

**Recommendations -**

Committee recommends as under :

This item is proposed for closure in view of standing monitoring item on new materials proposed to be included.

**Railway Board's Order :**

This item shall be the Standing Agenda Item in all the meetings of WSC.

**5. Item No. 009/01/05: Rationalisation of yardstick for Works organization**

**1<sup>st</sup> Meeting :**

**Recommendations -**

All the members are of the opinion that presently, there is inadequate supervision for ensuring quality of works. Railways should make suggestions to evolve the system for assessing the requirement of work supervisor based on workload for ensuring proper quality to RDSO. Based on suggestion from Zonal Railways, this item will be discussed in next meeting.

**Orders of Railway Board -**

Committee's recommendation accepted.

**2<sup>nd</sup> Meeting :**

**Recommendations -**

Committee members deliberated on the subject. As there were diverse views by different members, committee recommends for constitution of sub-committee consisting of CE/Works/WR, CE/Works/NWR and CE/Works/ SR to give their recommendations. Sub-committee should forward their recommendations to RDSO within next 3 months. All Zonal Railways should forward their opinion to CE/Works/WR, the convener of the sub-committee within next 15 days. The recommendations of the sub-committee will be discussed in next WSC meeting.

**Orders of Railway Board -**

WSC's recommendations are accepted.

**3<sup>rd</sup> Meeting:**

**Recommendations -**

CE/W/WR presented the recommendation of Sub-committee. Members suggested further changes, e.g. Yardstick should be linked with ITKM.

Total implication of recommendations to be worked out for any selected units. Sub-Committee should again discuss the issue raised by WSC and come out with recommendations at the earliest.

#### **Order of Railway Board-**

The Sub-Committee of Shri S.B. Ninawe, CBE/SECR, Shri A.K. Sinha, CE/Works/SR & Shri C.L. Meena, CE/C/NWR has submitted its report to Board in August 2011. Salient features of the report should be deliberated in 4<sup>th</sup> meeting of WSC and accordingly, with these recommendations, the approval of Board shall be processed.

#### **4<sup>th</sup> Meeting:**

##### **Recommendations -**

The report submitted by Sub-Committee may be submitted to the Board for approval.

##### **Railway Board's Order :**

WSC's recommendation is accepted. Sub-committee shall submit the recommendations for consideration of Railway Board by 15<sup>th</sup> March 2012.

#### **6. Item No. 018/02/06 : Provision Of Green Building Concept In India**

##### **2<sup>nd</sup> Meeting :**

##### **Recommendations -**

Two presentations by SWR & SCR were made bringing out the concept and benefits of Green Building Constructions. In view of the importance being attached to Green buildings world over for environmental considerations, committee recommends to take up at least one important building as Green building in each Zonal Railway.

Railway Board may issue necessary policy guidelines, instruction on this subject to enable the Railways to grasp the technological developments in this direction.

WSC recommends that exposure may be given to the engineering officials in India & abroad.

##### **Orders of Railway Board -**

WSC's recommendations are acceptable. Few Railway Officers may be deputed/ trained abroad/or in India on Green Building Concept.

### **3<sup>rd</sup> Meeting:**

#### **Recommendations -**

Para on Green Building concept should be provided in the Works Manual alongwith the list of items which are as per this concept. Efforts should then be made to plan new buildings as per provisions of these green building concepts in the Manual.

IRICEN can organize two days course for this purpose on green building concept. Thereafter, RDSO may consider standardization of drawing of Type I, II, III & IV quarters as per green building concept.

#### **Order of Railway Board-**

- (i) WSC's recommendations are accepted. Proposed Para should be finalized by the Works Manual Sub-Committee.
- (ii) IRICEN, Pune should include in their curriculum a two days course on the subject.
- (iii) WSC recommendations on development of drawings of Types - II, III & IV quarters as per Green Building Concept by RDSO, is accepted. For this purpose, assistance of professional agencies/organisation could also be taken.
- (iv) Typical Type Plans for Types II, III & IV quarters, as submitted by RDSO are under examination and a decision would be communicated by Railway Board soon.

### **4<sup>th</sup> Meeting:**

#### **Recommendations -**

1. Works Manual Sub-committee to incorporate a Para/Chapter on Green Buildings.
2. IRICEN/Pune to include Green Building Concept in curriculum.
3. Type plan of Type II, III & IV quarters be got approved from Indian Green Building Council to have green building

#### **Railway Board's Order :**

WSC's recommendations accepted except (3).

RDSO shall develop type plan along with framework & guidelines for the Green Building Compliant Design of quarters of type-II, III, IV and V. Its cost and financial implication shall also be brought out by RDSO. Report shall be submitted to Board and presentation made by RDSO in next WSC.

## **7. Item No. 019/02/06 : Change In System Of Maintenance Of Colony**

### **2<sup>nd</sup> Meeting:**

#### **Recommendations -**

WSC discussed the item but has not recommended any suggestion. This item needs more deliberations All Zonal Railways should present their view in next meeting of WSC.

#### **Orders of Railway Board -**

WSC should deliberate on this item further in the next meeting.

### **3<sup>rd</sup> Meeting:**

#### **Recommendations -**

- (i) There are large no. of houses, which are beyond repair - should be proposed for condemnation.
- (ii) Number of supervisors to be increased by giving matching surrender.
- (iii) Item-wise works contract should be carried out as a pilot project on one IOW unit per zone. Based upon experience, further action will be taken.
- (iv) For petty repair, IOW should be given power for quotation and getting petty repairs done through imprest.
- (v) There is no means for mobility of IOW, which is essential for inspection and supervision. Either two wheeler be provided or adequate allowance be given to IOW as mobility allowance.

#### **Order of Railway Board-**

- (i) WSC recommendations for item (i) is accepted.
- (ii) A decision on Item (ii) will be taken after consideration of sub-committee's recommendation on agenda item no. 009/01/05 on Yardstick for works organisation and WSC's recommendations there-on.
- (iii) Only after proper assessment, Zonal Contract tenders should be invited covering all items of Unified Schedule of Rates, duly giving weightage (% of the total) to various Chapters of USSOR as per maintenance assessment.
- (iv) A sub-committee consisting of Shri S.M. Maheshwari, ED/W/RDSO (Convenor), Shri Desh Ratan Gupta, ED/L&A-III/R.Bd. and Shri Alok Kansal, CE/TSP/NR is constituted to make recommendations on improving the maintenance of Qrs./ Colonies and allied assets. Sub-committee shall take into account the best maintenance practices being followed by other organizations like CPWD, MES etc. and PSUs like SAIL, Oil Companies



etc. or Private companies. Outsourcing of maintenance shall also be deliberated. This sub-committee shall also deliberate upon other WSC recommendations on the subject.

- (v) The sub-committee shall submit the report by 30.4.12.

#### **4<sup>th</sup> Meeting:**

##### **Recommendations -**

1. System of BHEL/CPWD like organisation also be studied before finalisation of recommendation.

Main items which need to be maintained properly in even lowest category house are:

- Leakage free / dampness free environment.
- Proper doors and windows.
- Uniform / leveled flooring.
- Proper water supply.
- Proper water closets.
- Proper sanitation / drainage.
- Proper walkable road in front of quarter.
- Fencing to feel personal belonging.

The Sub-Committee should submit their recommendation within stipulated time period of 30.4.2012.

#### **Railway Board's Order :**

WSC's recommendation regarding study of System of CPWD/MES and other like organizations & PSUs by sub-committee before finalization of their recommendations is accepted.

Sub-committee to submit their recommendations by 30.04.2012.

#### **8. Item No. 021/02/06 : Prefabricated Buildings**

##### **2<sup>nd</sup> Meeting :**

This Item was cropped up during 2<sup>nd</sup> WSC meeting but due to shortage of time could not be discussed, so it was decided to discuss in the 3<sup>rd</sup> WSC meeting.

### **3<sup>rd</sup> Meeting:**

#### **Recommendations -**

- (i) Pre-fabricated building concept is very useful for temporary accommodation.
- (ii) Sr. Professor/Works/IRICEN has already done lot of survey and therefore, IRICEN will issue guidelines for the type of pre-fabricated building, which are available in the market and can be used as a temporary structure.

#### **Order of Railway Board-**

WSC's recommendations are accepted.

RDSO in consultation with IRICEN shall issue guidelines on the subject matter and also, the item to be incorporated in IR's USSOR by the Standing Expert Group; to be presented by RDSO during 4<sup>th</sup> Meeting of WSC.

### **4<sup>th</sup> Meeting:**

#### **Recommendations -**

1. Zonal Railways should submit details to RDSO. The details available with IRICEN should also be taken. RDSO will also collect details from the manufacturers and other organizations.
2. CPDE/SER mentioned that details of porta-cabin are available in the list of DGS&D. He should circulate the details to all Zonal Railways.
3. EDCE/G will co-ordinate for providing portal for sharing information. Such details may be loaded on the portal by Railways who may be provided administrative control for loading & viewing by others.

Every six month updates shall be circulated.

#### **Order of Railway Board-**

WSC's recommendations are accepted with the proviso that IRICEN shall place on their website information on new building materials and related issues & concepts.

The information available herein shall be utilized by the Standing Expert Group on IR's USSOR.

9. **Item No. 024/03/08 : Development of Master Plans for Infrastructure Facilities At Stations & Colonies on Indian Railway**

**3rd Meeting :**

**Recommendations -**

NCR has done centralization of hydrant valve and centralized operation of valves of the water supply system in Kanpur Yard. This system is very good and drawing alongwith details should be sent by NCR to all Zonal Railways. All Zonal Railways should try this system & report feedback.

Development of master plan prior to creating any new asset is a good concept, which should be adopted universally.

**Railway Board's Order**

WSC's recommendations are accepted.

Guidelines for developing master plan for Infrastructure Facilities at Stations & Colonies should be prepared by Works Manual Sub-Committee for due incorporation in the Works Manual.

**4<sup>th</sup> Meeting;**

**Recommendations -**

Good practices being followed by organization whose core area is construction & maintenance of colonies etc. be imported by Railways and experiences shared through portal being provided.

This item be closed and new item for office accommodation at station be continued & information on radial type water supply distributions & centralization of hydrant valve and centralized control and monitoring of water supply system at station be circulated by NCR to all Zonal railways.

**Railway Board's Order :**

NCR, WR and SCR shall develop arrangements for 'Valve Panels' for centralized water supply arrangement at station, yards, colonies etc. and report to Railway Board by end of May 2012.

Zonal Railways shall also upload their excellences including information on radial type water supply distribution and centralized operation of hydrants on the Engineering portal for cross sharing.

Item is closed.

10. **Item No. 025/03/08** : Provision Of Tool Kit With Artisan Staff On Indian Railways

**3<sup>rd</sup> Meeting:**

**Recommendations -**

Tools to be provided to Artisan Staff should be part of Works Manual. Works Manual Sub-Committee should look in to the proposal of SWR & guidelines issued by IRCAMTEC, Gwalior and put the details in Manual.

**Order of Railway Board-**

Tools & kit to be provided to the artisan staff need to be standard and state of art. A sub-committee (which can be constituted in next meeting of WSC) shall make recommendations by considering Railways feedback and modern tools & kit available in the market/used by industry/other organization.

These recommendations/approval shall ultimately find a place in IR Works Manual.

**4<sup>th</sup> Meeting:**

**Recommendations -**

1. No need to standardize the kit.
2. Each Railway to nominate 2 artisans each who are sincere, young & not from divisional HQ & send for training in NICMAR, Hyderabad and advise to IRICEN.
3. IRICEN to co-ordinate & tie up with NICMAR for training of artisans.
4. System support & free kit will be a part of the training & kit.

Tool kit shall be as per our requirement.

**Railway Board's Order :**

WSC's recommendation regarding training by IRICEN from NICMAR is accepted.

A comprehensive list of tool kit including battery operated tools shall be prepared for artisan staff of all categories keeping in view the multi-skilling operations.

IRICEN & RDSO shall prepare 'Tool Document' containing Specifications of tools along with scale of tool kit, adequate inventories and consumables with each artisan staff.

RDSO shall circulate the 'Tool Document' to the Zonal Railways/PUs etc. for implementation.

These details will also be advised to the Standing Expert Group for IR's USSOR who shall incorporate these items in the USSOR document for uniform implementation on IR system.

- 11. Item No. 027/04/12 :** Standard procedure for ducting and wall recess in buildings.

**4<sup>th</sup> Meeting :**

**Recommendations -**

Committee observes that this issue requires administrative decision through JPO which can be issued by Railways on the lines of SC & SECR. Railway Board is also requested to issue guidelines in this regard.

**Railway Board's Order :**

WSC's recommendation is accepted.

Joint Guidelines with Electrical & Telecom Directorates from Railway Board shall be considered.

- 12. Item No. 034/04/12 :** Detailed guidelines for site order book, Material passing Register, quality of Cement & Steel

**4<sup>th</sup> Meeting:**

**Recommendations -**

Sub-committee of Shri J. K. Singla, CPDE, SECR as convener & Shri Venkataswar Rao, CE/W/SCR is nominated to study the various guidelines/circulars of Railways.

Committee may submit detailed guidelines with formats to Railway Board under advise to Member Secretary/WSC by April 2012.

**Railway Board's Order :**

WSC's recommendation is accepted. Sub-committee shall submit its recommendation by 30.04.12.

- 13. Item No. 035/04/12 :** Penalties for non-deployment of Engineers by Contractors at worksite

**4<sup>th</sup> Meeting:**

**Recommendations -**

- (i) The imposition of penalty for non engaging the engineer may be enhanced as:  
For degree holder Engineer - Rs. 40000.

For Diploma holder Engineer - Rs. 25000.

- (ii) Penalty for non-engaging the engineer on contracts costing above Rs 5.0 Cr to be decided by CAO/C depending upon the nature of work.

Full time employment of contractor's Engineers and their duties with site supervision specifically should be ensured.

**Railway Board's Order :**

The matter to be suitably examined in Railway Board with correction slip to the concerned clause of GCC and standard special conditions / instructions to tenderers.

- 14. Item No. 038/04/12 :** Standard drawings for Platform Shelters with openings for OHE mast in sloped corrugated sheet roofing

**4<sup>th</sup> Meeting :**

**Recommendations** - Committee recommends that sealing arrangement to prevent ingress of water on the platform from opening due to OHE mast projecting out of shelter may be designed. SR to suggest to measure to be taken in this regard along with drawings and send it to RDSO. RDSO in association with Traction Installation Directorate may finalize it.

**Railway Board's Order:**

WSC's recommendations accepted.

ED/Works /RDSO will co-ordinate.

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