

1st Meeting of Works Standards Committee Held At IRICEN/Pune On 16th June 2005

Recommendations As Accepted By Board (ME)

Non-Agenda Items

Item No.1 - Name and Constitution of Committee

- (a) Name of committee should be Works Standards Committee instead to Works Standards Standing Committee.
- (b) Constitution of The committee should be on same pattern as that of TSC and BSC.
- (c) Whether officers from Railway Board should be member of committee or can participate as observers or there is need to change members of committee from Railway Board's office.

Recommendations :

- (a) Name of committee should be Works Standards Committee instead of Works Standards Standing Committee
- (b) Committee recommends for revised constitution on the same pattern of Bridge Standards Committee or Track Standards Committee. ROSO should prepare the revised constitution of the committee and forward to Railway Board for acceptance.

Board (ME)'s Decision :

Committee's recommendation accepted.

Name of the committee can be changed to Works Standards Committee (WSC). Following revised constitution is approved -

The members of the proposed Works Standards Committee can be Director/IRICEN, CGE/CPDEs (concerned headquarter officer dealing with Works) of Zonal Railways with Member (Secretary) as ED (B&S)/RDSO. Officers from the Railway Board (officers of L&A Directorate and EDCE/G) will be observers in the committee. The senior most officer in the committee can as Chairman of the WSC in that sitting. Representative from construction unit from major construction units like NR, SR, NFR and ECoR (and any other unit considered necessary later), RITES, IRCON, RVNL etc. can be called as special invitees.

Item No. 2 - Strengthening of organization for works at various levels :

- (a) RDSO
- (b) Zonal Railways
- (c) Divisional Head Quarter

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.

Board (ME)'s Decision :

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 Standard, 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.

Item No.3 - Unified works specifications and basic data sheet for preparation of SOR.

RECOMMENDATIONS

Committee recommends for formation of Expert Group for unified work specification and preparation of basic data sheet for preparation of SOR. The Expert Group would consist of

- N.Rly (Cons)-SAG Officer (Member Secretary);
- Sr.Prof. (Works)/IRICEN-Convener of Committee;
- NF Rly - SAG officer dealing with works matter-Member;
- W.Rly-SAG officer dealing with works matter-Member;
- S.Rly-SAG Officer dealing with works matter-Member;
- ED (B&S)/RDSO-Member;

Board (ME)'s Decision

Committee's recommendation accepted with a change that Eastern Railway instead of NF Railway can be part of the expert group. Following will be the composition of the Expert Group :

- N.Rly (Cons)-SAG Officer - Member Secretary
- Sr. Prof. (Works) IRICEN - Convener of Committee
- E.Rly - SAG officer dealing with works matter - Member
- W.Rly - SAG officer dealing with works matter - Member
- S.Rly - SAG Officer dealing with works matter - Member
- ED (B&S)/RDSO - Member.

Necessary support work can be outsourced, if departmental resources are inadequate.

Item No. 4 :

- a) **Standardization of flooring of platform, concourse & FOB and platform cover sheds based on categories of stations (A,B,C & others)**
- (b) **Standardization of Workshop flooring.**

RECOMMENDATIONS

Committee recommends that N.Rly and S.C.Rly will compile the data in this regard and will forward to RDSO. RDSO will prepare the compiled note and will present the same in the next meeting. Other Railways may also forward their suggestions to RDSO.

Board (ME)'s Decision

Committee's recommendations accepted.

Agenda Items

Item No.1 - Review of Indian Railway Works Manual

RECOMMENDATIONS

The Committee discussed various paras 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 paras of Works Manual in this meeting. Committee recommends for formation of a Sub-Committee consisting of representatives from N, SE, SEC Rly, IRICEN/Pune and RDSO/Lucknow to review the referred paragraphs and to present the same in next Works Standards Committee meeting. 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.

Board (ME)'s Decision

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.

ITEM No.2 - Review of provisions of IRWM and Engg. Code regarding measurement.

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.

Board (ME)'s Decision

The recommendation of the Committee is accepted.

ITEM No.3 - Rationalization of the specification

RECOMMENDATIONS

Expert Group formed against item no. 3 (Non-Agenda) will deal with this subject alongwith preparation of data sheet for Schedule of Rates.

Board (ME)'s Decision

Agreed to.

Item No.4 - New Building Materials

RECOMMENDATION

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 area of Ductile iron pipes and CI mechanical compression joint - These materials may be used regularly in new works or through renewal works, heavy public use particularly service buildings.
 - 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 (out door use only)

Board (ME)'s Decision

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.

Item No.5 - Rationalization of maintenance practices : Maintenance of leaky roofs as suggested by ER & SER

RECOMMENDATION

Committee recommends for further trial of different methods. SWR, NFR, NE Railways will try method adopted by IRICEN. Other Railways will also forward their experiences in leak proofing treatment to RDSO. RDSO will present the item in next meeting.

Board (ME)'s Decision

Agreed to. Railways can forward their experiences in leak proof treatment to RDSO. RDSO will compile and analyse the results and present in the next meeting of WSC.

Item No.6 - Rationalization of yardstick for works organization

RECOMMENDATION

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.

Board (ME)'s Decision

Committee's recommendation accepted.

Item No.7 - Use of bricks made of Fly ash

Recommendation

Item was discussed in details. Relevant information about the cost, quality etc. of new material was not readily available. Director/IRICEN informed that use of fly ash brick has become compulsory for those areas where thermal plants are there in nearby area. All Zonal Railways were requested to pay attention towards this aspect also and to find out pros and cons of use of fly ash bricks.

Board's Observation

This item is already covered under item No.4 "New Building Materials".

ITEM No.8 - Strengthening of works unit.

RECOMMENDATIONS

Committee discussed the item. All the Zonal Railways will give suggestions in this regard and send it to RDSO for consideration of the Committee.

Board (ME)'s Decision

This item is related to item no.6. Committee's recommendation accepted.

ITEM No.9 - Setting up Quality Audit Cell for checking the quality of construction and maintenance works executed by Railway Board.

RECOMMENDATION

Item was discussed. All the Railways will ensure setting up of Quality Audit Cell and their experience in this regard will be discussed in detail in next WSC Meeting.

Board (ME)'s observation

Committee's recommendation to discuss the experience of setting up of Quality Audit Cell in the next WSC meeting is agreed to.

ITEM No.10 - Authority of work measurement at various levels in works cadre (Open line/Construction).

RECOMMENDATION

EDCE/G/Rly Bd. is involved in similar exercise. Sub-Committee formed for item no.1 may interact with EDCE/G/Railway Board and make suggestions for consideration of Committee.

Board (ME)'s observation

Committee's recommendation for sub-committee formed under item no.1 to go into this aspect also is agreed to. Sub-committee can interact with EDCE(G).

ANY OTHER ITEMS

Delegation of power for consultancy contracts .

RECOMMENDATION

Presently GM of the Zonal Railways is only delegated with the powers of consultancy. It would be essential to delegate the power to PCE/CE (Coordinating) of the Zonal Railways with consultancy power. This power should be of Rs. 5 lacs in each case with the ceiling of Rs. 20 lacs per annum.

Board (ME)'s observation

Committee's recommendation is accepted for examination in Board.