Introduction

1. It is essential to introduce state of art products and technologies in our works. A number of such products are available in the market which can enhance overall quality and output of works. A large number of firms approach this HQ for approval of Construction Material, Products and Technology (CMPT) for use in MES works. With this as the back drop, it has been decided to amend the existing policy on the introduction of CMPT for greater transparency and user satisfaction as laid out in succeeding paragraphs.

Aim

2. The aim of this letter is to disseminate policy guidelines to further streamline and standardize the procedure for introduction of CMPT in our work services.

Selection of CMPT

3. The approval of CMPT will be done at two levels ie at CE Command and at E-in-C’s Branch. All the CMPT will be approved/ renewed by CEs Command other than the following categories of CMPT which will be approved by E-in-C’s Branch:

(a) Civil Construction Products:

(i) Cement and steel.

(ii) All runway related products.

(iii) Construction chemicals, additives (including fibre) and waterproofing.

(iv) PEB.
(b) **Electrical Products.**

(i) Solar/ wind generation equipment and storage excluding independent lighting/ heating equipment.

(ii) STPs/ WTPs/ Water treatment products/ food grade chemicals/ additives to water supply.

(iii) Lifts and cranes.

(iv) Hospital incinerators.

(c) **Architectural Products.**

(i) Modular OTs.

(ii) Structural glazings/ curtain walls, structural balustrades.

4. CMPT Committees will be constituted to select new CMPT for introduction/ approval. The CMPT Committees will be assisted by a BOO for selection and approval of CMPT. In addition, a BOO will be constituted by CEs Command once a year to review/ consolidate the list of products approved.

### Composition of CMPT Committees

5. The approval of CMPT will be done by the committees composed as under:

(a) **CMPT Committee – I.** At Zonal CE level consisting of the following:

   (i) ACE (Works) - Chairman.

   (ii) SO-1 Design - Member (Secretary).

   (iii) SBSO/ SO-1 (Resources) - Member.

   (iv) SSW - Member.

   (v) SO-1 E/M - Member.

(b) **CMPT Committee – II.** At CE Command level consisting of the following:

   (i) ACE (Works) - Chairman.

   (ii) Colonel (Works) - Member (Secretary).

   (iii) SO-1/ Director (E/M) - Member.

   (iv) Director Contracts - Member.

   (v) Senior Architect - Member.
CMPT Committee – III

At E-in-C's Branch consisting of the following:

(i) DGW - Chairman.
(ii) DDCW (Design) - Member (Secretary).
(iii) Joint DG (Utility) - Member.
(iv) Joint DG (Contract) - Member.
(v) Joint DG (Architect) - Member.

Note: The above mentioned composition is a broad guideline. Composition can be modified suitably considering availability of officers and the item to be approved.

Functions of CMPT Committees

6. CMPT Committee – I

At the Zonal CE level, CMPT Committee – I will only carry out an environmental check, performance review and render recommendation to the CE Command. It will check the availability/ non availability of items which have been approved by the CMPT - II and CMPT - III committees. Its functions are to collect, collate, recommend addition/ deletion of products.

7. CMPT Committee – II

It will function at the level of CE Command and will be responsible for according approvals/ renewals for all categories of products other than those products in the purview of E-in-C’s Branch as mentioned at Para 3 above. The Committee will be assisted by a Board of Officers with representatives of CE’s Zone, for selection and approval of products. The proceedings of the Committee will be approved by the Command CE after the GOC-in-C Command has been intimated in a presentation/ on Noting Sheet whose records will be maintained. The products once approved will be included in the Zonal specifications within the Command.

8. CMPT Committee – III

At the E-in-C’s Branch, CMPT Committee – III will evaluate all products and technologies and accord approvals/ renewals for all categories of products under its purview as listed at Para 3 above. The Committee will be assisted by a Board of Officers which will have representatives of Commands. The proceedings/ recommendations may be got approved through circulation of file. The proceedings of the committee will be approved by DGW. The products once approved will be included in the Zonal Specifications of all Commands.

9. Other than approval of designated categories of products, the E-in-C's Branch will:

(a) Maintain comprehensive database about brands/ products being incorporated in works all over the country.

(b) Apprise the Commands of products in similar categories and groups that have been approved by other CE's Command as also products that are from reputed companies but may have been overlooked in the Command BPs. for
their consideration. Decision to include such products in their next annual Command BOO for selection of products will however solely rest with CEs Command. The recommendation of E-in-C's Branch is not binding on CEs Command who will solely be responsible for quality of products in their Area of Responsibility (AOR).

(c) Share information on problems/shortcomings/manufactures/operating defects noticed by any MES establishment.

**Command BOO**

10. All CMPTs approved by E-in-C's Branch (for items mentioned at Para 3)/CEs Commands will be included in the Annual Command BOO for selection of products. This BOO, after dissemination/consultation with their OL branches and approval of GOC-in-C/COS, will be consolidated at CE Command level and disseminated to all formations down to AGEs (l) in their AOR. CE Zones in Navy & AF Commands will keep their C-in-C's/CsO's informed of the list of approved products. The products approved will be included in the Zonal Specifications within the Command. Approval period will be for two years and further renewal for a period of three years will be done based on the performance of the product. Yearly BOO will be conducted by all CEs Command to include new products meriting incorporation into the works and to delete unreliable products. Reasons for any deletion must be well documented. All Command BOO (Hard and soft copies) will be forwarded to E2 (Design), E-in-C's Branch by 30 Sep of each year for information. The copies will also be endorsed to other Commands for their information.

11. All makes in the Command BOO will form part of all tenders as the approved makes of products available for incorporation in MES works of that Command AOR. Every GE, CWE and CE will make a formal presentation to the Station Commander about the products approved at Command level and being incorporated in tenders related to the works in their AOR. Record of this will be kept and details forwarded up for information of the Engineer Authority in the chain. Every time a Formation Commander/executives changes, this exercise will be repeated.

**Procedure for Approval**

12. The broad procedure for approval of CMPTs is as under:

(a) **For Introduction of Equivalent Products/Brands.** The methodology for approval of such products and brands is as under:

(i) Identification of Materials/Brands/Products/Technologies.

(ii) Preliminary technical and cost evaluation with relevance to our works and cost comparison with equivalent brands by Standing BOO.

(iii) Member Secretary of the CMPT committee to organize a presentation to the CMPT Committee by the firms to evaluate the product.
(iv) Approval for use by CE Command on recommendation by CMPT Committee, with the Command hierarchy informed as mentioned before.

(v) Inclusion in Zonal specification by all CE Zones within the Command.

(vi) Initial approval for two years.

(vii) Intimation of approved manufacturers/ brands with their categorisation into three groups with Group 1 (High End), Group 2 (Medium End) and Group 3 (Low End) to HQ CE Command for consolidation of data in the Command BOO for selection of products.

(viii) Feedback/ performance by Zone to CE Command.

(ix) Yearly review by BOO for Selection of Products conducted by all HQ Commands only to delete unreliable products or to include new products meriting incorporation into works.

(x) Subsequent renewal for next three years based on minimum five satisfactory feedback reports.

(b) **For Introduction of New Product/ Technology.** The activities involved for approval of such products/ new technologies, not earlier used in MES by CMPT committee, will have the following steps:

(i) Identification of new material/ product/ technology not earlier used in MES.

(ii) Member Secretary of the CMPT committee to organize a presentation to the CMPT Committee by the firms to evaluate the product.

(iii) CMPT Committee to recommend rejection or acceptance or trial evaluation of the product/ technology, on file with reasons recorded for either recommendation.

(iv) The product/ technology will thereafter either be rejected or ordered for trial evaluation on 'No Cost No Commitment' basis by a nominated CE Zone/ Zones/ ADG D&C and a comprehensive trial evaluation report with recommendations obtained. Procedure of trials is given at Appendix.

(v) The CMPT Committee thereafter will consider the trial evaluation report and give approval or reject the same or recommend further trial evaluation as the case may be.

(vi) Standing BOO will prepare a comprehensive board incorporating all details, test results, trial reports etc for perusal of the CMPT Committee.
and its approval to be recorded on file. Any such approval will also be informed to the Command hierarchy and other Formation Commanders.

(vii) Intimation of recommended manufacturers/brands with their categorisation into three groups with Group 1 (High End), Group 2 (Medium End) and Group 3 (Low End) will be sent to HQ CE Command for their consolidation in the Command BOO for selection of products.

(viii) Once the product is accepted it will be approved initially for a period of two years for monitoring its usage and obtaining ground level feedback.

(ix) If the feedback after use for two years is satisfactory, the product/technology will be renewed for a period of next three years and proposal for inclusion in the SSR (if required) be forwarded to E-in-C’s Branch (Directorate of Contract Management/ E8 Section).

(x) Yearly review of BOO for selection of products conducted by all HQ Commands will only be to delete unreliable products or to include new products merits incorporation into works.

(xi) If the product has not been used in any MES formation for two years, the product will be deleted and intimation forwarded to all Commands/Zones.

Standing Board of Officers

13. For initial evaluation of material/product/technology after the presentation has been held, a BOO may assist the CMPT Committee in decision making. The composition of the standing BOO at the Zones/ Commands level will be decided by the CEs as per expertise required. At the E-in-C’s Branch, the following standing BOO will assist the CMPT committee in decision making:

(a) For B/R CMPT.

    Presiding Officer - Colonel / Director (Sub Dte E2 Design)
    Members
    1. SO1 (Arch) (Sub Dte E-6)
    2. SO1 (Contracts) (Sub Dte E-8)
    3. SO1 (Design) (Sub Dte E-2 Des)
    4. One representative of Command to be detailed by E-in-C’s Branch, in rotation from each Command

(b) For E/M CMPT.

    Presiding Officer - Colonel / Director (Sub Dte E4 Utility)
1. SO1 (E/M) (Sub Dte E4 Utility)
2. SO1 (Contracts) (Sub Dte E8)
3. SO1 (Design) (Sub Dte E2 Des)
4. One representative of Command to be detailed by E-in-C’s Branch, in rotation from each Command

(c) After the presentation, the literature/ details of the firm approaching this HQ. for introduction of their material/ product/ technology/ brand will be processed by Director (Design) to the standing BOO.

(d) The BOO will submit the following information to DDGW (Design):
   (i) Technical literature.
   (ii) Detailed specifications.
   (iii) Latest Test Certificates issued by approved Govt Laboratories/ Departments, if available and quality control assurance by the firm.
   (iv) Type of certification and conformity to codes, if available.
   (v) Details of organisations who have used the product and performance report issued by them, if any.
   (vi) Life cycle costing.

(e) CMPT Committee with the approval of the Chairman, may visit the manufacturing unit of the firm, or depute any one or two member(s) to visit the manufacturing plants/ unit and submit their findings to DDGW (Design).

(f) The DDGW (Design) shall depute officer(s) from nearby Zonal CE of the manufacturing plants/ unit in case plants/ units are outside of NCR region on approval of the same by DGW.

(g) The CMPT Committee may also dispense with the visit to manufacturing plant/ unit of the firm after careful study and verification of the documents as submitted by the firm and with the approval of the DGW.

14. **Analysis.** DDGW (Design), based on above inputs, will analyse the CMPT and put up the proposal to CMPT Approval Committee with his specific recommendations for its utility for use in MES.

**Non Usage**

15. In case any product/ technology approved by any CMPT Committee is not used for two years period, the product/ technology will be removed from the approved list. If
less than five satisfactory feedbacks are received, such products can be considered for provisional renewal for a period of next one year based on the quality of work done.

Conclusion

16. As a result of advancement in building material technology, a number of CMPT/Brand are entering the market. It is desirable to incorporate these CMPT/Brand in our works as an alternative to scarce conventional material and to achieve better quality, durability and economy. The procedure for incorporation of CMPT as outlined above has been framed with a view to provide clear guidelines on the subject and ensure speedy processing.

17. This letter supersedes this HQ letter No 43285/CMPT/E2 (Design-2) dated 15 Apr 08 (Policy No 03/2008).

18. This has the approval of the E-in-C.

Copy to:

QMG's Branch / DG LWE
IHQ of MoD (Navy) / Dte of Works
IHQ of MoD (Air Force) / Dte of AF Works
HQ IDS / Works Dte
Coast Guard HQ
QMG's Branch / ADG TE
College of Military Engineering
(Faculty of Construction Management)
Pin – 908797
C/o 56 APO

Internal

ESP Dte Pers Dte E-1 (D)
All Sub Dtes of Wks Dte
Automation Cell For uploading on the MES website
PROCEDURE OF TRIALS

1. The brief process to carry out trial on 'No Cost, No Commitment' (NCNC) basis will be as under:

(a) Nominate CE Command/ Zones to carry out trial of the selected material/product/ technology. Direct vendor to the specific appt/ office who will conduct the trials.

(b) Vendor will be briefed at the area of a site/ building/ complex where the product is to be incorporated to trials. The vendor, through authorised representative/ applicator will incorporate the product/ technique in presence of GE/ AGE so nominated.

(c) Post incorporation, material/ product will be inspected & tested at specified period/ usage by nominated GE. The CE Zone on required basis will see behaviours of materials through usage and tests from a recognized test laboratory/ CTL.

(d) To submit an interim and final trial report to CE Command / E-in-C's Branch on the findings of the trials and its recommendations for its use or otherwise after the completion of the trials.

(e) All administrative cover will be provided by the Zonal CE.

(f) The trial report will contain specific recommendations and shall cover the following important aspects:

(i) Technical suitability.

(ii) Durability.

(iii) Functional utility.

(iv) Maintenance.

(v) Cost effectiveness.

(vi) Limitations and recommendations.
During trial evaluation, the following should be ensured:

(i) The subject product/material/technology/brand be used in any one of the ongoing works or work under planning and due for execution in the near future.

(ii) If no work is ongoing/under planning, where such a product can be utilized for trial, an experimental work shall be sanctioned under existing procedures on the subject.

(iii) The extent/quantity of usage shall be the minimum required to adequately assess the material/product/technology/brand.

(iv) Repeat work/usages shall not be carried out till trial report is submitted by concerned CE Zones and approval of CMPT/Brand is received.

The time required for assessing the product will depend upon the type of the CMPT. However, submission of feedback report should be completed within six months of trial.

Approval of Products on Trials

2. On receipt of the trial report, comprehensive evaluation of the product will be done at E-in-C’s Branch/HQ CE Commands by CMPT Committee and final recommendations will be put up to Chairman CMPT Committee for his perusal/approval.

3. After approval of the product by the CMPT Committee, a formal letter will be issued approving the product for incorporation in MES. The copies of the approval letter will be endorsed to E-in-C’s Branch (E2 Design), all CEs Command, CE Zones and concerned manufacturer/firm as appropriate/relevant.