

EXTRACTS FROM "DRAFT PROCEDURE FOR PREPARING CAC SCHEMES"

The Central Assessment Committee (CAC) on new techniques of road construction was formed by the Government of India in 1961 under the Chairmanship of Director General (Road Development), Ministry of Shipping and Transport (Govt. of India), with a view to promoting new techniques developed as a result of research and/or experimentation. The techniques recommended under the CAC are those which have been considered to have passed beyond the experimental stage and are ready for large scale utilisation on regular road construction.

The terms of reference of the Committee, as enunciated in letter No. PL-4 (9)/59 Pt. II dated 8.8.1961 of the Ministry of Transport and Communication (Govt. of India) :

2. CAC TECHNIQUES

Over the years, 20 new well-ried techniques have been approved by the Central Assessment Committee for large scale use in the country. A complete list of the techniques approved so far (upto mid-1983) is given in Table 4. enclosed with Ministry's letter No. RD/MISC/6/81 Vol. III dt. 25th July, 1983.

3. RISK COVERAGE IN UTILISATION OF CAC TECHNIQUES-CAC SCHEMES

CAC techniques may be adopted by road construction organisations in the country in their constructions on regular basis as Departmental Specifications. Before approving any technique as a CAC technique, the Central Assessment Committee fully satisfies itself, on the basis of the performance of full scale field test tracks, of the soundness of the technique.

In case, however, before such adoption of the CAC techniques on a regular basis, any organisation desires to try out some or all of the techniques on limited lengths of road sections, with financial cover for risk of failure from the Committee, CAC Schemes can be proposed by the organisation for approval of the Committee, prior to undertaking such construction. Specific proposals of CAC Schemes of road construction utilising CAC techniques, once approved by the Committee, and constructed with proper quality control provide financial cover against risk of failure. In special cases, where the use of a CAC technique is technically imperative from various considerations, but the total cost of construction as per the CAC technique exceeds that of the conventional specification, the Committee also considers CAC Schemes Proposals for meeting the excess cost of construction from the Risk Fund.

4. GUIDELINES ON PREPARATION OF CAC SCHEME PROPOSALS

The CAC Scheme proposals for consideration for approval by the Central Assessment Committee should be prepared in DUPLICATE, keeping in view the guidelines given below, and forwarded to the Secretary, Central Assessment Committee :

1. CAC Scheme proposals should pertain only to such CAC techniques which have not yet gained routine currency with the concerned organisation/in the particular zone.
2. The minimum length requirement for a road section for CAC scheme proposal is 2-5 km, reduceable to 1 km in special cases at the discretion of the State Chief Engineer or head of the executing agency.
3. Each CAC Scheme proposal should be accompanied by some length, at least ¼ km, of new construction with conventional specifications for assessment of comparative performance. The construction with conventional specification would, however, not be covered under the risk fund.
4. Adequacy of total pavement, crust thickness as per design requirements should be ensured in case of all CAC scheme proposals, as otherwise the performance of the layer adopting CAC technique could be adversely affected on this account.
5. "Preliminary Survey and Design Data" for the CAC scheme proposal as well the accompanying conventional proposal should be furnished in duplicate the CAC Proforma 'A'. The subgrade soil test data should be furnished separately for each ¼ km section, indicating locations where major changes of soil type occur. The information on existing and proposed pavement crust thicknesses should be accompanied by simple illustrative sketches.
6. The CAC Scheme proposal should also include a preliminary abstract estimate for the Scheme proposal as well as the accompanying conventional proposal, in duplicate.
7. At the time of making the CAC Scheme proposal, if not already done, the State PWD (or other executing organisation) should nominate a Liaison Officer (CAC) for the department-preferably Director of State PWD Laboratory or SE (Planning) or SE (Designs) at Chief Engineer's Headquarters for planning and monitoring of CAC Scheme proposals. State PWD Laboratories should be closely associated with the preliminary investigations, construction quality control and performance assessment of these schemes.

5. PROCEDURE FOR PROCESSING OF CAC SCHEME PROPOSALS

The normal procedure followed for processing of CAC Scheme proposals received from the States is as given below :

1. The CAC Scheme proposals received from the States will be scrutinised by the Secretary, Central Assessment Committee. If any proposal is not complete in all respect, or if any supplementary information is considered necessary, the State PWD Chief Engineer or Liaison Officer (CAC) will be intimated accordingly for supplying the needed information.
2. The Scheme proposals which are complete in all respects will be included in the Agenda for the next meeting of the Central Assessment Committee, for consideration of the Committee for approval.
3. The decisions of the Committee in respect of individual scheme proposals approval in principle, rejection, calling for further clarification or information, alternative suggestions, etc. will be communicated to the proposing organisation.
4. The proposals will be approved by the Committee subject to making available the designs to the Secretariat at a subsequent

date but before the construction is undertaken.

5. The Secretary will get the designs checked from CRRJ and comment on their adequacy or otherwise, for modification, if necessary.
6. The detailed estimates may thereafter be prepared by the Proposer States, got approved from competent authority, e.g.—the Ministry of Shipping and Transport (Roads Wing) for National Highways, and a copy of the approved estimate sent to the Secretary.

In all these matters CRRJ will function mainly in an advisory capacity. The services of the Secretary, Central Assessment Committee and other staff of the Institute can be drawn upon by the State Chief Engineers right from the planning stage for each CAC Scheme proposal. The presence of a CRRJ team during construction—at least for some days in initial stages—is, however, imperative to familiarise the State PWD officers with such CAC techniques with which they may not be fully conversant, and to monitor quality control, where such facilities are not available with the concerned department. Towards this an appropriate amount, normally between Rs. 5000 to 10000 should be deposited in advance with the Institute through crossed cheque or demand draft drawn in favour of "Central Road Research Institute, New Delhi and forwarded to the Secretary, Central Assessment Committee, at CRRJ, to meet the TA and DA expenses of the officers/staff of CRRJ in this connection. As and when this deposit is depleted further deposit will be requested for by CRRJ from the States.

6. EXECUTION OF CAC SCHEMES

The field execution of approved CAC Schemes will be carried out by the proposer organisations. The full cost of construction will be met by the proposer organisation, except where special approval of CAC exists for meeting the excess cost of construction over conventional specifications from the Risk Fund.

To qualify for coverage of financial risk in case of failure, or for meeting the excess cost of construction, from the Risk Fund, the execution of CAC Schemes has to be carried out in accordance with the procedure laid down by CAC failing which the same will no longer be valid.

A satisfactory Completion Certificate is essential for the financial cover for additional cost (over and above that of properly designed conventional specification) to be valid. Failing this, any advance for the purpose made to the executing agency from the Risk Fund is liable to refund. For financial cover against risk of failure to be operative, in addition to a satisfactory Completion Report, up-to-date submission of Service Performance Reports to the CAC Secretariat is also essential.

Actual amount in each case will be indicated by the Secretary, CAC at the time of communication of CAC Scheme approval.