

AIRPORTS AUTHORITY OF INDIA

No. AAI/CHQ/Engg(E)/TechCircular/2007 / 606

21st February, 2008

TECHNICAL INSTRUCTION NO.13

Sub : Amendment to contract provisions for recording measurements and payment of bills.

: Measurement and Bill Payment through Computerized Measurement Book - reg.

There have been considerable delays in the recent past for making payments for the ongoing works on account of time taken in recording of measurements and preparation of bills in the conventional measurement books by the Site Engineers, leading to hold ups in progress of work. Delay in payments for the work already executed affects cash flow and hampers overall progress of the project. In order to obviate the delays, it is decided to introduce a modified procedure for recording of measurements and preparation of bills with the use of computer technology and software applications. Initially the system is to be made part of contracts of works estimated to cost more than Rupees Five crores and will be considered in future for all other works after obtaining feed back from the Units.

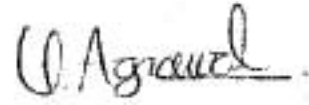
The modified procedure for measurement and billing to be adopted in implementation of capital works shall be as under:

- During the progress of work the measurements are to be recorded from time to time. On completion of a stage of work, the measurements for the items executed shall be entered by the Contractor or his authorized representative on the A4 size measurement sheets as per the format prescribed by AAI (Measurement sheet proformas are enclosed as Annexures I & II for reference). These measurements and levels shall be submitted to the Engineer-in-Charge for getting them checked / test-checked as per department procedure.
- After necessary corrections if any, are made by the Engineer-in-Charge, the measurement sheets shall be returned to the Contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for signatures of Engineer-in-Charge and Contractor or their representatives in token of acceptance.

- Whenever bill is due for payment the computerized measurement book comprising of jointly recorded measurement sheets, Secured Advance measurements and Abstract Cost as per Annexure III all duly bound with its pages machine-numbered shall be resubmitted by the Contractor. Preferably, there shall be one Measurement Book for RA Bill. The Engineer-in-Charge or his authorized representative(s) would thereafter check this MB and record the necessary certificates for their checks / test-checks.
- The final, fair computerized measurement book given by the Contractor duly bound with its pages machine-numbered should be hundred percent correct and no cutting or overwriting in the measurements would thereafter be allowed. This computerized MB shall be taken in the Engineer-in-Charge office records and allotted a number as per the register of computerized MBs. This should be done before the corresponding bill is submitted for payment. The contractor shall also submit two spare copies of such computerized MBs for the purpose of reference and record by the various officers of the department.
- In the similar manner computerized abstract of cost as per Annexures IV A & B and bill Form as per the format of department based on these final measurement duly bound pages machine-numbered along with two spare copies shall be submitted to the Engineer-in-Charge. The computerized record shall have required certification and security provisioning by the Contractor, so that no change can be made in the stored matter of figures, data or text etc.
- The final, fair computerized measurement book including the Abstract of Cost and Bill Form shall also be transferred in a soft copy (CD) and to the computerized data for respective work. To facilitate handling of data, the services of a Computer Operator including one PC and its peripherals shall be taken under the respective contract and only the PC (including peripherals) shall become the property of Airports Authority of India after completion of work. A parallel storage data shall also be kept to avoid any damage or breakdown of the system, besides keeping soft copies on CDs / pen drive.
- After completion of work, record of measurements as standard measurements for future use in maintenance shall be kept as soft copy record in offices of Engineering head at the airport and at RHQ.

Based on above modified procedure the relevant clause in the conditions of contract shall be amended suitably by the NIT approving authority. For ongoing contracts, no separate approval is required for adopting this procedure if written consent is given by the Contractor for recording the measurement and getting the same checked from the Engineer-in-Charge or his authorized representatives as per the procedure enumerated above.

Feedback, difficulties or suggestions, if any, in implementation of the procedure may be forwarded to GM (Engg-Elect), CHQ within the next 4 months for firming up procedures for all the works.



**[V.P. AGRAWAL]
MEMBER (PLANNING)**

Enclosure: Annexures I, II, III, IV A, IV B.