Free discussion report

Autor(en): **Wex, B.P.**

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Free Discussion Report
Résumé de la discussion libre
Zusammenfassung der freien Diskussion

Coordinator/Coordinateur/Koordinator:

B.P. WEX
Freeman, Fox & Partners
London, England

Mr. Ford (UK) opened the discussion by citing the contract methodology currently employed for a major bridge in Scotland. He thought the matter would be of interest to developing countries because it demonstrated one of the ways in which "design and build" contracts could be operated.

A specification was prepared by the Client and his Consulting Engineers, laying down all the essential criteria to be met by the design. A selected number of contracting firms, each employing its own Consulting Engineer, then prepared designs in sufficient detail to enter tender prices for the work. These bids were evaluated by the Client's Consultants who, having satisfied themselves of the compliance with the specification of the favoured design recommended its acceptance at the tendered price. The detailed design of the bridge is now proceeding and the Consulting Engineers will accept responsibility for the design as if it were their own subject to its conformity, shown by the Engineers' appraisal, with all the required criteria and specification.

Construction of the job will proceed under exactly the same contract conditions as if the bridge design had been prepared by the Client's Consulting Engineers, and the contract had been awarded in the normal manner by bidding on that design.

Mr. Ford thought the method described combined, in the best manner possible, the skills of the designer and the know-how of the contractor, and yet retained normal contractual relationships.

In his comment, Mr. Wex said that he had touched briefly upon the pro and contra of turnkey projects in the Introductory Report. He thought that developing countries, contemplating the method described by Mr. Ford, should be aware that Consulting Engineers had been employed for a very long time on the project of which Mr. Ford spoke. Indeed, it was essential in this type of arrangement for the Client or his Consulting Engineer to know all the problems intimately in order to write a competent design specification. In most cases that would necessitate long term employ-

ment of a consultant prior to issue of the design specification as well as during tender evaluation and construction. In such circumstances, developing countries might think it appropriate to get him to do the full job, namely include in his work the preparation of a design upon which bids could be called in the normal manner. For that to work well, of course, it was essential to choose a Consulting Engineer with a known record of economic design in the chosen field. Good consultants could and should produce more economic designs than could contractors.

Mr. Geddes (UK) commented that there were two main systems for obtaining bids:

a) Consulting Engineers design

b) The "turnkey" arrangement

The latter seemed to be growing in popularity and he wished to hear the views of delegates from developing countries on this question.

Mr. Ramaswamy (India) stated that as a Client he found that in bidding for official schemes the alternative design submitted by contractors could create severe delays in tender evaluation. The official designs were prepared complete with a Bill of Quantities. However, alternative designs were submitted in outline only insufficient to see whether they did in fact conform to the Client's ideas of reasonable design. Since it was not possible to specifiy in minute detail all these ideas beforehand, great time was consumed in trying to ensure that the alternative design with its lower price would not "cut-corners". In spite of these efforts, however, great arguments and claims could result during execution of the work, and workmanship might suffer. Dr. Ramaswamy therefore asked if in developing countries it might not be better to permit tenders only on official designs, and prohibit alternatives. These alternative designs were usually put forward by large contractors; use of official designs only would perhaps reduce sophistication, but it would give medium sized and small contractors a better chance, at the same time building up the experience of the Clients Design Department in relation to construction of its own designs. Acceptance of alternative designs also posed problems as to who was responsible for the adequacy of the design, the contractor or the Client who accepit.

Mr. Sriskandan explained that for the British Department of the Environment tenderers were bound to put in an unqualified bid on the official design otherwise they were disqualified. Alternative designs simultaneously submitted by the tenderers could be considered. However, to be accepted they had to be subject to a full vetting procedure and the Department would require certification from an independent engineer that the design complied with all relevant specification requirements. The bid, if accepted, remained at the lump sum price put forward at the time of tender.

Another speaker from India said that alternative bids created such a problem that they were adopting a "two envelope" system of tendering. One envelope contained the technical proposals, the other the financial ones. The technical proposals were examined first and only after they had been considered were the financial envelopes opened.

At this juncture the Chairman closed the meeting, time having expired.