

3 July 1984

Lands and Works Branch Technical Circular No. 9/84

Engineering & Associated Consultants Selection Board
Consultants Remuneration - Fees based on a Percentage Basis

1. **INTRODUCTION**

- 1.1 Fees for the investigation, design and construction of engineering projects are calculated as a percentage of the cost of the works according to a fixed scale of percentage charges. The validity of such a scale relies on the assumption that there is a constant relationship between the cost of the works and the cost of the consultant in providing the service. However, the general trend is for the cost of works to rise substantially when the construction industry is booming and to fall dramatically during recession. Set against this, consultants' operating costs tend to rise steadily irrespective of these factors.
- 1.2 This circular sets out the measures approved by the Engineering and Associated Consultants Selection Board to be introduced to counter the effect that large and rapid variations in the level of tender prices have on consultants' fees which are calculated as a percentage of the cost of the works, viz. :-
- (a) a Consultants Remuneration Index designed to take account of the overall trend in the level of tender prices and Consulting Engineer's operating costs and,
 - (b) provision to make further adjustments in the cost of the works where Uncharacteristic Tenders are accepted which are lower or higher than the level expected from the prevailing conditions which the Consultants Remuneration Index is designed to counter.

2. **CONSULTANTS REMUNERATION INDEX**

2.1 **Introduction**

- 2.1.1 The Consultants Remuneration Index (CRI) has been developed as a means of adjusting the cost of works on which consulting engineers fees are calculated. Being a function of the Gross Domestic Product Deflator (GDP Deflator) which reflects the fluctuations in consulting engineer's operating cost from quarter to quarter and the Tender Price Index (TPI) for public building projects which reflects the fluctuations in tender prices from quarter to quarter, it links consulting engineers' fees to the prevailing conditions.

A base of 100 points has been selected representing an equitable remuneration to consulting engineers when the remuneration is based on the scales of fees currently in use. The CRI will be published quarterly by the Director of Engineering Development. The index to date from the 3rd quarter of 1982 onwards is as follows :-

	<u>Period</u>	<u>CRI</u>
1982	3rd quarter	102
	4th quarter	105
1983	1st quarter	118
	2nd quarter	118
	3rd quarter	115
	4th quarter	113

..... 2.1.2 A resume of the basic principles and compilation of the CRI is included at Appendix A for information.

2.2 Application

2.2.1 The CRI adjustment shall only be applied to engineering Investigation, Design & Construction (IDC) agreements under the jurisdiction of the Engineering & Associated Consultants Selection Board (EACSB) as follows :-

- (a) on all new arrangements in conjunction with anti-inflation measures which provide for design stage fees to be based on the Net Cost of the Works.
- (b) on all existing agreements provided that the consulting engineers so request.

2.2.2 Amendments to existing agreements shall be notified to the Secretary of the EACSB in batches.

2.2.3 The temporary suspension of anti-inflation measures promulgated by DED's memo (7) in EDD G 4/3PC/1 dated 13.10.83 is cancelled consequent on the introduction of the CRI adjustment.

2.2.4 Agreements where landscape architects are employed as the principal consultant are not subject to CRI adjustment and the temporary suspension of anti-inflation measures shall remain in force for the time being. Separate action is being taken to review the remuneration of landscape architects.

2.3 Operation

2.3.1 The CRI is intended to adjust the cost of works of individual contracts for the purpose of fee calculation and shall operate as follows :-

- (a) on all contracts for which tenders are received on or after 1st July 1982.
- (b) on all cost of works as a percentage addition or deduction after all other additions or deductions on the cost of works provided under the agreement have been applied.
- (c) the CRI shall correspond to the quarter during which tenders for the contract are received.
- (d) no adjustment will be made if the CRI lies between 95 and 105 points. The cost of works shall be adjusted upwards by 1% for every point that the index rises above 105 points and shall be adjusted downwards by 1% for every point that the index drops below 95 points.

..... 2.3.2 A Standard Clause is attached at Appendix B.

3. UNCHARACTERISTIC TENDERS

3.1 The EACSB recognises that if an uncharacteristically low tender is accepted, consultant's fees may be reduced to a level at which they can no longer provide an adequate service during the Construction Stage.

3.2 When such an uncharacteristically low tender is accepted, an upward adjustment to the cost of works for the purpose of fee calculation may be negotiated.

3.3 On rare occasions, Government may accept a tender which is uncharacteristically high (e.g. when time pressures preclude re-tendering). In such an instance, consultants may be over-remunerated for the effort they put into the works and a downward adjustment to the cost of works for the purpose of fee calculation may be negotiated.

..... 3.4 A standard clause is attached at Appendix C.

3.5 Procedures for dealing with uncharacteristically low tenders

3.5.1 Application

3.5.1(a) For the purpose of fee calculation, upward adjustments to the cost of works of uncharacteristically low tenders may be applied to all contracts administered under all existing and new engineering and landscape agreements approved by the Engineering and Associated Consultants Selection Board :-

- (i) for which tenders are received on or after 1st July 1982, and
- (ii) subject to individual approval from the EACSB.

3.5.1(b) It should be noted that approval for upward adjustment to the cost of works will only be given when full justification can be provided to the satisfaction of the EACSB.

3.5.2 Operation

3.5.2(a) When a consultant considers that the accepted tender is uncharacteristically low, he may submit his justification to the Director's Representative for an initial upward adjustment in the cost of the works for the purpose of calculating interim fee. The justification shall be fully argued in the consultant's submission. For guidance, the following criteria (which are not exhaustive) may be used singularly or collectively :-

- (i) by the statistical analysis in Appendix D,
- (ii) by visual inspection of a graph of all tenders received for the contract as in Appendix E,
- (iii) from a comparison with the Engineer's/Architect's estimate.

2.5.2(b) The upward adjustment of the tender price will establish a "floor value" for the contract and should be determined through methods described in paragraph 3.5.2(a) above and be submitted to the EACSB for approval. If an upward adjustment is approved by the EACSB the difference between the accepted tender and the approved "floor value" should be expressed as a percentage increase and interim fees for the design stage should be based on the estimated final contract sum enhanced by the percentage. Similarly, interim fees for the construction stage should be based on the cost of the completed works to date enhanced by the same percentage. However, as the contract proceeds the validity of the original assessment of the "floor value" should be checked in the light of variations or any other changes and if considered necessary a revised "floor value" and percentage adjustment should be submitted to the EACSB for approval.

- 3.5.2(c) On completion of the contract when all claims have been assessed and the final contract sum is known, the Director's Representative should review whether the final cost is valid for the purpose of calculating final fees. If the final contract sum is not considered uncharacteristically low for the works executed, the final fees shall be based on the actual cost of the works in accordance with the provisions of the agreement. If the final contract sum is still considered uncharacteristically low and warrants an upward adjustment for the purpose of calculating final fees, a further submission shall be made to the EACSB reassessing the "floor value" in line with para. 3.5.2(a) above. (It should be noted that where the cost of the works exceeds the tendered sum as a result of increased quantities on remeasurement or variations priced at rates comparable with tendered rates, the original "floor value" and percentage adjustment will remain valid.)
- 3.5.2(d) Attention is drawn to the fact that contracts initially assessed as being uncharacteristically low are likely to give rise to legalistic claims and pressure to agree high rates for extra works. In reviewing the validity of the "floor value" for the purpose of calculating interim or final fees, the Director's Representative should take account of the magnitude of the claims settlement and the cost of extra works in relation to the resources expended by the consultant in dealing with these matters. (i.e. The payment to the contractor may be large while the Consultant's effort is small and vice versa).
- 3.6 Procedures for dealing with uncharacteristically high tenders
- 3.6.1 Application
- 3.6.1(a) Similar to those for dealing with uncharacteristically low tenders, downward adjustments to the cost of works of uncharacteristically high tenders may be applied to all contracts administered under all existing and new engineering and landscaping agreements :-
- (i) for which tenders are received on or after 1st July 1982, and
 - (ii) subject to agreement with the consultants and individual approval from the EACSB.
- 3.6.2 Operation
- 3.6.2(a) On the rare occasion when an uncharacteristically high tender has to be accepted, the Director's Representative shall initiate action with the consultants to agree on a downward adjustment to the cost of works for the purpose of calculating fees. The adjustment shall operate on similar lines to those outlined in para. 3.5 for dealing with uncharacteristically low tenders. The arrangements negotiated with the consultants shall be submitted to the EACSB for approval.

4. REVIEW

The CRI adjustment and Uncharacteristic Tenders adjustment are intended to be long term measures. Their operation will be reviewed annually by the EACSB.

(CHAN Nai-keong)
Secretary for Lands and Works

Subsumed