

Appendix 3.4B – Sample Template for Guidelines on Preparation of Technical Proposal

(A) Requirements of Technical Proposals

Consultants are encouraged to use electronic format in submitting their proposals. They are nevertheless free to choose the format (i.e. paper or CD-ROM). The technical proposals should be limited to [8-15¹] pages in A4 size, excluding attachments of appendices, figures/drawings and curriculum vitae, with a minimum font size of 12 points Times New Roman or equivalent. The appendices attached to the technical proposals should be limited to [20¹] pages in A4 size (excluding pages of manning schedule in A3 size, the table indicating the listed and unlisted sub-consultants to be employed and the sub-consulting service undertaken, curriculum vitae and any declarations/ confirmations required in A4 size), the figures/drawings/illustrations limited to [15¹] pages in A3 size and the curriculum vitae limited to [2] pages per staff in A4 size. The technical proposals including the attachments shall be inexpensively bound, printed on both sides.

For exceedance of the specified number of pages of technical proposals, appendices, figures/drawings/illustrations and curriculum vitae in the first paragraph above, all the exceeded pages shall be discarded prior to the assessment. For non-compliance with the specified format in the first paragraph above, such as font size, paper size, double-sided printing etc., mark(s) shall be deducted from the overall technical score (see Note (5) in Part B).

The technical proposals shall be divided into sections and sub-sections under main headings as shown below.

1. CONSULTANT'S EXPERIENCE

- (a) The relevant consultancy assignments conducted; and
- (b) Relevant experience and knowledge.

2. RESPONSE TO THE BRIEF

To include sub-sections on –

- (a) Identification of key issues/problems in the assignment, including but not limited to project constraints/risks, special requirements, etc.; and

- (b) Suggestions of practicable solutions to address the key issues/problems identified, including presentation of design approach and ideas (in regard to aspects such as general arrangement, layout, functionality, green measures, heritage conservation, aesthetics and overall appearance where appropriate).

3. APPROACH TO COST-EFFECTIVENESS AND SUSTAINABILITY

To include sub-sections on –

- (a) examples and discussion of past projects to demonstrate the consultant's will, ability and physical measures to produce cost-effective, energy efficient and environmentally friendly solutions which are applicable to the project; and
- (b) approach to achieve cost-effectiveness (including life-cycle costs vis-à-vis initial project cost), energy efficiency and environmental friendliness on this project.

4. METHODOLOGY AND WORK PROGRAMME

To include sub-sections on –

- (a) technical approach to enable delivery of the project practicably having regard to the reasonable time required and other technical constraints vis-à-vis the project requirements (including construction methods to facilitate mechanization, prefabrication and other productivity enhancements where appropriate, especially where they can reduce manpower demands of trades of labour shortage);
- (b) health, safety and environmental issues to be addressed in delivering the project;
- (c) work programme with highlights to demonstrate ways to expedite the programme where practicable, to deal with programme constraints and interfaces, and to level and reduce the resources peak; and
- (d) arrangements for contract management and site supervision including a proposed system of monitoring site supervision.

5. INNOVATION AND CREATIVITY

To include sub-sections on –

- (a) particular design aspects/issues/requirements (as identified and specified by the department); and
- (b) particular construction aspects/issues/requirements (as identified and specified by the department).

6. STAFFING

To include sub-sections on –

- (a) staff organisation chart with highlights on the efficiency and effectiveness of the organisation;
- (b) relevant experience (including design constructability and risk management where applicable) and qualifications of key staff. In particular, the post qualification experience and relevant job reference of the specified core personnel in Note (2) of Part B below shall be included;
- (c) responsibilities and degree of involvement of key staff; and
- (d) adequacy of professional and technical manpower input.

7. APPENDICES

- (a) Previous relevant experience and projects completed;
- (b) Current projects, listing total and outstanding cost and duration and staff expertise and deployment;
- (c) Manning schedule (**without** any indication of cost); and
- (d) Brief curriculum vitae of key staff.

(B) Marking Scheme

- (1) The marks to be allocated to each main section of the technical proposal shall be within the range indicated below and shall total 100%²:

Section		Percentage mark to be allocated (%)	
		Sub-section	Section
(1)	Consultant's Experience	-	XX
(2)	Response to the Brief	-	XX
(3)	Approach to Cost-effectiveness and Sustainability	-	XX
	Sub-section 3(a)	XX	-
	Sub-section 3(b)	XX	-
(4)	Methodology and Work Programme	-	XX
	Sub-section 4(a)	XX	-
	Sub-section 4(b)	XX	-
	Sub-section 4(c)	XX	-
	Sub-section 4(d)	XX	-
(5)	Innovation and Creativity	-	XX
	Sub-section 5(a)	XX	-
	Sub-section 5(b)	XX	-
(6)	Staffing	-	XX
	Sub-section 6(a)	XX	-
	Sub-section 6(b)	XX	-
	Sub-section 6(c)	XX	-
	Sub-section 6(d)	XX	-
(7)	Past Performance	-	XX
	Past Performance of the consultant	XX	-
	Past Performance of sub-consultants	XX	-
Total		100	100

- (2) Each Assessment Panel Member shall grade each section/sub-section, except the “past performance” section/sub-sections and the “adequacy of professional and technical manpower input” sub-section of the “Staffing” section, as either “very good”, “good”, “fair” or “poor”. The marks corresponding to these grades are:

Grade	Marks (%)
Very Good (VG)	1.0 × Y
Good (G)	0.8 × Y
Fair (F)	0.6 × Y
Poor (P)	0.3 × Y

where Y is the percentage mark allocated to the criterion.

For selection criteria “Consultant’s experience”, “Response to the Brief” and “Staffing” which adopt the “Full Marks Approach”, full marks should normally be given if the quantitative specifications set out by the Assessment Panel in the following tables are able to be met as assessed by the Assessment Panel Members:

Consultant’s experience

For attaining full mark (i.e. grade VG), a consultant should possess experience on having conducted [5] or more relevant consultancy assignments within [10] years on or before the original or the extended T&F proposal submission closing date.

No. of relevant consultancies involved	Grade
[5] or more	VG
[3] to [4]	G
[1] to [2]	F
0	P

Response to the Brief

For attaining full mark (i.e. grade VG), a consultant should identify in the assignment [5] or more key issues/problems with practicable suggestions on ways of addressing them.

No. of key issues/problems identified	Grade
[5] or more	VG
[3] to [4]	G
[1] to [2]	F
0	P

Staffing – Staff organization chart

The pre-set descriptions for the four different grades are follows:

Description	Grade
Very efficient and effective staff organization with strong teams of experts and professionals and comprehensive communication and collaboration platforms	VG
Efficient and effective staff organization with well-defined teams of experts and professionals and suitable communication and collaboration platforms	G
Fair staff organization showing reasonable teams of experts and professionals and communication and collaboration platforms	F
No information or a poor staff organization	P

Staffing – Relevant experience and qualification of key staff

For attaining full mark (i.e. grade VG), a consultant should provide the minimum number of core personnel who should possess the corresponding minimum qualification and experience as mentioned in the tables below. Marks allocated to each core personnel under the same designation are on equal basis. If the undertakings signed by the non-fulltime core personnel to confirm their involvement in undertaking the designations of Project Manager, Project Director and/or Team Leaders **【the procuring department shall amend it where appropriate to align with the assessment criteria】** cannot be produced, the staff concerned shall be considered as failure to meet the requirements and “P” shall be marked for the staff concerned accordingly.

Key Staff	Post Qualification Experience	Relevant Job Reference	Grade
[Project Manager] (Mark: XX%) Minimum number: [1] Minimum qualification of a [P/D] category	Not less than [20] years	Not less than [5] projects	VG
	Not less than [18] years	Not less than [3] projects	G
	Not less than [15] years	Not less than [1] project	F
	Fail to meet the standard above		P

Key Staff	Post Qualification Experience	Relevant Job Reference	Grade
[Project Director] (Mark: YY%)	Not less than [20] years	Not less than [5] projects	VG
Minimum number: [1] Minimum qualification of a [P/D] category	Not less than [18] years	Not less than [3] projects	G
	Not less than [15] years	Not less than [1] project	F
	Fail to meet the standard above		P

Key Staff	Post Qualification Experience	Relevant Job Reference	Grade
[Team Leader] (Mark: ZZ%)	Not less than [18] years (professional); or Not less than [23] years (academic)	Not less than [5] projects	VG
Minimum number: [3] Minimum qualification of a [CP] category	Not less than [15] years (professional); or Not less than [20] years (academic)	Not less than [3] projects	G
	Not less than [12] years (professional); or Not less than [17] years (academic)	Not less than [1] project	F
	Fail to meet the standard above		P

(N.B: The sum of XX, YY and ZZ shall be 100. Add additional tables if required. In addition, the job reference to be counted as relevant may be elaborated to suit the specific nature of project where appropriate.)

Staffing – Responsibility and degree of involvement of key staff

For attaining full mark (i.e. grade VG), a consultant should propose at least [80%] of the weighted total manpower input to be named staff with professional category or above.

Degree of Involvement (X)	Grade
$X \geq [80]\%$	VG
$[60]\% \leq X < [80]\%$	G
$[40]\% \leq X < [60]\%$	F
$X < [40]\%$	P

where X is calculated by using the following formula:

$$\frac{\text{Weighted manpower input of named staff with professional category or above}}{\text{Weighted total manpower input}} \times 100\%$$

For other selection criteria not adopting the “Full Marks Approach”, if the Brief or other relevant requirements are just fulfilled, a “fair” grading at most should normally be given.

The weighted marks of Assessment Panel Members shall be accumulated to produce the final marks for each sub-section. Summation of all sub-section final marks will produce a total mark for the technical proposal.

- (3) The method of assessing the “adequacy of professional and technical manpower input” sub-section of the “Staffing” section is set out in **Appendix C of Development Bureau (DEVB) Technical Circular (Works) (TC(W)) No. 2/2016 and No. 5/2018**. For the purpose of assessment of adequacy of professional and technical manpower input only, “conforming bids” mean those technical proposals which have been checked and found to be conforming before the opening of the fee proposals.

If the consultant’s proposed staff claimed to be in a particular staff category do not meet the minimum academic/professional qualifications and/or minimum experience requirements, the procedures set out in item 4, Appendix C to DEVB TC(W) No. 2/2016 and No. 5/2018 should be followed. Where the information, together with clarifications from the consultant (if any), reveals non-compliance with the minimum academic/professional qualifications and/or minimum experience for one or more than one staff member, the “adequacy of professional and technical manpower input” attribute shall be adjusted by the Assessment Panel using the table below.

If the consultant does not input the staff category for any particular staff in the manning schedule of his technical proposal, the consultant may be approached, before the opening of the fee proposal, for clarification on the staff category for that particular staff, if any, input in the manning schedule of his fee proposal. In case the consultant

clarifies that no staff category has been input for the staff in both technical and fee proposals, that particular staff shall be counted as non-compliance with the minimum academic/professional qualifications and/or minimum experience requirements for the purpose of assessment on this aspect only and the “adequacy of professional and technical manpower input” attribute shall be adjusted by the Assessment Panel using the table below. In determining the degree of non-compliance under this circumstance, the staff category and the academic/professional qualifications and/or experience of that particular staff shall be determined from the information in the curriculum vitae for named staff or the declaration to meet the minimum academic/professional qualifications and/or minimum experience requirements in the relevant staff categories for unnamed staff submitted in the technical proposal together with any clarification from the consultant on the factual information of the staff if appropriate.

Degree of non-compliance	Calculated Percentage = $B/A \times 100\%$ where A = Weighted total manpower input of the consultant B = Weighted manpower input of the proposed staff claimed to be in a particular staff category not meeting the minimum academic/professional qualifications and/or minimum experience requirements	Mark for the “adequacy of professional and technical manpower input” attribute shall be multiplied by
Minor	> 0% and \leq (5%)	XX
Medium	> (5%) and < (10%)	XX
Serious	\geq (10%)	XX

[Remarks: The procuring department may update the figures in brackets to suit the project specific circumstances.]

Staff working under an overloading situation

The manpower input as at end of [February, May, August or November YYYY]³ **【procuring department shall input the end month of the reporting quarter as at which the manpower input is as captured in the final snapshot taken immediately before the tender closing date of the tender under assessment】** captured in the final snapshot taken by the Public Works Consultants Resources Allocation Register (PWCRAR) as detailed in DEVB TC(W) No. 5/2018 will be used for checking if any named professional staff or above proposed in the manning schedule of his technical proposal

is working under an overloading situation. If overloading is identified for a particular named professional staff or above, the consultant may be approached for clarification.

Where the manpower input data in the PWCRAR, together with relevant clarifications from the consultant (if any) reveals overloading situation, mark to be given for the “adequacy of professional and technical manpower input” attribute shall be adjusted by the Assessment Panel using the following table:

Overloading Situation	Degree of Overloading	Marks for “Adequacy of professional & technical manpower input” shall be multiplied by
Minor	$\leq [5\%]$	XX
Medium	$> [5\%]$ and $< [10\%]$	XX
Serious	$\geq [10\%]$	XX

Notwithstanding the above, the following circumstances shall be considered by the Assessment Panel as “Serious” overloading situation:

- (a) Where the consultant or any of its proposed sub-consultant fails to provide the first manpower input updating in accordance with paragraph 3 of Appendix 3.7 to DEVB TC(W) No. 5/2018 with refinements as instructed by the procuring departments for any signed consultancies and consultancies having Expression of Interest Submissions or Technical and Fee Proposals (for one-stage procedure) invited before 3 December 2018 (referred to as “existing consultancies”) undertaken by the consultant or any of its proposed sub-consultant as the sole consultant or one of the participants in the joint venture. For the purpose of tender assessment in this regard, a consultant will be considered as failing to provide the first manpower input updating for an existing consultancy if it fails to provide a manpower input updating which enables the procuring department of the existing consultancy concerned to endorse it in the PWCRAR as described in paragraph 2 of Appendix 3.7 to DEVB TC(W) No. 5/2018 for all the reporting quarters before the tender closing date of the tender under assessment; or
- (b) Where the consultant fails to provide the manning schedule as required in the invitation letter for the Technical and Fee Proposal for the consultant selection exercise under assessment and/or failed to provide the manning schedule as required in the invitation letter for Technical and Fee Proposal for any concurrent tender with the same bidder, which make the assessment of overloading situation in accordance with DEVB TC(W) No. 5/2018 unable to

be properly performed. For the avoidance of doubt, concurrent tenders shall mean other tenders registered in the PWCRAR which have been closed but not yet been awarded as at end of **【February, May, August or November YYYY】** **【procuring department shall input the end month of the reporting quarter as at which the manpower input is as captured in the final snapshot taken immediately before the tender closing date of the tender under assessment】** captured in the final snapshot taken by the Public Works Consultants Resources Allocation Register (PWCRAR) as detailed in DEVB TC(W) No. 5/2018.

- (4) The following method shall be used in the assessment of past performance of the consultant and sub-consultants:
- (a) Assessment of past performance of a consultant and his sub-consultants (if applicable) should be carried out separately, based on their updated Past Performance Rating (PPR) under the purview of the board which the consultancy is procured in the CNPIS. Details of PPR shall be referred to DEVB TC(W) No. 3/2016. For any unincorporated joint venture making a submission, his PPR shall be taken as the average of PPRs of all his participants having a PPR *(or the weighted average of PPRs of all his participants having a PPR if approved by EACSB/AACSB/relevant DCSC). The latest PPR issued by DEVB on or before the due date for submission of the technical and fee proposals shall be used for the marking of the past performance of the consultant and sub-consultants in the nomination stage.
 - (b) Those consultants proposing no sub-consultant should be assessed under the criterion “past performance of sub-consultants” as if they were sub-consultants to themselves.
 - (c) Where a consultant proposes more than one sub-consultant, the PPR shall be taken as the average of PPRs of those sub-consultants who have a PPR.
 - (d) Where none of the proposed sub-consultants of a consultant has a PPR, the consultant should be assessed under the criterion “past performance of sub-consultants” as if he was a sub-consultant to himself.
 - (e) The following formula shall be used to calculate the mark for “past performance of the consultant” (same for sub-consultants):

$$\text{Mark assigned to consultant "i"} = \text{Mark allocated for the criterion of past performance} \times \frac{R_i}{R_{\text{highest}}}$$

where: (i) R_i is the current PPR of consultant "i".

(ii) R_{highest} is the highest current PPR among all of the consultants involved in the exercise.

(iii) In case there is only one consultant in the exercise having a PPR, his mark in the criterion of past performance shall be calculated by:

$$\text{Mark allocated for the criterion of past performance} \times \frac{\text{PPR of the consultant}}{100}$$

and the calculated mark shall then be taken as a “cap” for all the other consultants' marks calculated using the method in the item (B)(4)(f) below.

- (f) For a consultant having less than 4 performance scores under the relevant consultants selection board concerned in the past three years, his PPR shall not be considered. The “past performance of the consultant” sub-section shall then be marked based on the consultant’s weighted average percentage mark (not the grade) in the remaining sections excluding the “past performance of sub-consultants” sub-section if any, subject to the cap derived in item (B)(4)(e)(iii) above for the case with only one consultant having a PPR if applicable.
- (g) A consultant who is under suspension from bidding shall not be shortlisted for submission of technical and fee proposals for further consultancy assignments until the suspension is lifted. Bids already submitted by the shortlisted consultant in response to invitations before the suspension from bidding, which is imposed after submission of technical and fee proposals, should continue to be assessed subject to further consideration as given in item (B)(4)(h) below. Bids submitted by the shortlisted consultant who is under suspension from bidding, which is imposed before submission of technical and fee proposals, shall not be considered further.
- (h) For a consultant who is suspended from bidding after he has submitted technical and fee proposals or a consultant, although not suspended from bidding but serious default or non-performance of him (such as those mentioned in paragraph 22 of Annex I of DEVB TC(W) No. 3/2016) has been made known to the Assessment

Panel, the Assessment Panel shall carefully consider whether the proposals of such consultant should be further processed. If the Assessment Panel decides not to further process the bid of such consultant, the Assessment Panel should seek endorsement from the AACSB/EACSB (or the relevant DCSC) on such decision before continuing with the consultant selection exercise.

- (5) [1] mark shall be deducted for non-compliance with the format.
- (6) Combined score assessment of Technical and Fee Proposals will be carried out in accordance with DEVB TC(W) No. 2/2016 and No. 5/2018 and its subsequent updates (if any).
- (7) The Assessment Panel comprises [insert the number] marking members from [insert the department names and respective numbers] and [insert the number] non-marking members (Chairperson and Secretary) from [insert the department name].

Remarks:

- 1. It is the procuring department’s responsibility to select an appropriate page limit that suits the nature of an assignment under consideration. The page limits set in the first paragraph should generally be used under normal circumstances. Guidelines on the page limits for normal and special circumstances are given below:

	Page Limits		
	Technical proposal	Appendices	Figures/ Drawings/ Illustrations
Normal circumstances	8 to 15	Up to 20	Up to 15
Special circumstances (e.g. assignments of high complexity, large scale or other circumstances that the Assessment Panel considers appropriate)	Up to 30	Up to 30	Up to 30

Page limits deviating from the above table can also be adopted, subject to the approval by an officer of D3 rank or above. The justifications including deliberations by the Assessment Panel should be properly recorded.

Project offices may solicit comments from consultants on the page limits at the pre-submission meeting if necessary. In case any subsequent adjustment of the page limits is considered appropriate by the Assessment Panel, the consultants should be

notified of the change and be given adequate time for preparing the Technical Proposals in response to the revised submission requirement.

2. The marks to be allocated to each main section of the technical proposals shall be within the range indicated below and shall total 100%:

Section (Each Section to be expanded into Sub-sections with a percentage mark to be allocated to each Sub-section which should be made known to the bidders)	Percentage mark to be allocated (%) [Percentage mark (%) in square brackets is to be adopted if EOI is not used]
	EACSB
1. Consultant's Experience	0 – 5 * [5 – 10 *]
2. Response to the Brief	5 – 15
3. Approach to Cost-effectiveness and Sustainability	10 – 25
4. Methodology and Work Programme	20 – 30
5. Innovation and Creativity	5 – 15
6. Staffing#	25 – 35
7. Past Performance	10 – 25
Past Performance of the consultant	10 – 20
Past Performance of sub-consultants	0 – 10

* For major tunnel/cavern projects with difficult geological and ground conditions, or major projects with high risks of scope changes and project complexities, the top mark of “10” or “5”, whichever is appropriate, could be adopted so as to assign a greater weight for consultants' experience and knowledge on geotechnical conditions and risk management.

The “adequacy of professional and technical manpower input” sub-section of the “Staffing” section should carry 7–12% of the overall marks.

3. The end month of the reporting quarter to be input is determined as follows:

End month to be input	Final snapshot captured on	Applicable to tender closing dates between
February XXXX	00:00 of 23 March	23 March to 22 June
May XXXX	00:00 of 23 June	23 June to 22 September

August XXXX	00:00 of 23 September	23 September to 22 December
November XXXX	00:00 of 23 December	23 December to 22 March

For more details, please refer to **Appendix 3.20F**.

4. The procuring department should make reference to DEVB TC(W) No. 2/2016 and No. 5/2018 and its subsequent updates (if any) and amend the guidelines as appropriate.
5. The procuring department should update the information in square brackets to suit specific project need.
6. The procuring department should update the relevant note similar to Note (6) in Part B above in the fee proforma.
7. For one-stage consultants selection process, reference should be made to the provisions in Appendix 3.10.

* Delete as appropriate