

EVALUATION GUIDELINES
FOR

Procurement of Works

(Above Nu. 5 Million)



Royal Government of Bhutan
Ministry of Finance

2023

PREFACE

One of the principal mandates and powers of the Ministry of Finance, as provided under section 104 (i) of the Public Finance (amendment) Act of Bhutan 2012 is to issue rules, manuals, directives, instructions or notifications ensuring an equitable, transparent, competitive and cost-effective procurement system in the country for which this Evaluation Guidelines for the Procurement of Works (Above 5 million) 2023 drafted as implementing document of Procurement Rules and Regulation 2023.

This guidelines describes a point-based scoring system for selecting and awarding the work to the contractor most suited to perform a given construction work. The system has been designed to evaluate a contractor on a combination of technical and financial parameters. While the financial parameter comprises financial Bid quoted by the contractor, the technical parameter comprises of several measures like manpower, equipment, financial capacity, bid capacity, similar works executed, works completed on time and so on, on all of which a contractor gets scores based on his level of achievement. At the end, the contractor qualifying on the technical score and getting the highest combined technical-financial score is awarded the contract.

This guidelines is the revision of Evaluation Guidelines for the Procurement of Works (Above 5 million) 2022 with the inclusion of provisions amended vide various notifications and fiscal measures proven to be effective in achieving basic principles of public procurement.

Ministry of Finance in the exercise of the power conferred by the section 104 (i) of the Public Finance (amendment) Act of Bhutan 2012 hereby adopts Evaluation Guidelines for the Procurement of Works (Above 5 million) 2023 vide 141st Policy and Planning Coordination Meeting on 20th February, 2023 which shall come into effect from 1st July 2023.

Any queries, clarification, interpretation on this standard bidding document contact:

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1. Introduction to the Point Based System of Evaluation

The Point Based System is a two-stage system: -

- (i) 1st Stage: Bidder Qualification
In this stage, the Bidder needs to qualify on a set of qualification criteria in order to be considered for award of work. These qualification parameters can broadly be divided into the following two categories (along with their share of points):

1. Capability (70points)
2. Capacity (30points)

The qualification parameters used for qualification in the first stage totals to a maximum score of 100 points. A Bidder needs to obtain a score of at least 70 points out of 100 on these parameters in order to qualify for the next stage.

Summary Table of 1st Stage

Sl. No	Parameters	Level of Achievement	Score
1	BIDDER QUALIFICATION		
1.1	CAPABILITY		
a)	Similar Work Experience (0-10) Aggregate size of similar contracts (max 3) in the last 5 calendar yrs OR Size of the largest similar contract executed in the last 5 calendar yrs	<ul style="list-style-type: none">o > 175% of current project sizeo 125 – 175% of current project sizeo 75 – 125% of current project sizeo < 75% of current project sizeo > 100% of current project sizeo 70 – 100% of current project sizeo 50 – 70% of current project sizeo < 50% of current project size	<ul style="list-style-type: none">o 10o 8o 4o 0o 10o 8o 4o 0

Sl. No	Parameters	Level of Achievement	Score
1	BIDDER QUALIFICATION		
b)	Access to equipment (0-20)	o Total score for equipment out of a score of 100 to be scaled down to 20	o 20
c)	Availability of skilled manpower (0-20)	o Total score for skilled manpower out of a score of 100 to be scaled down to 20	o 20
d)	Average performance score from previous work (past 5 calendar years)	o 100% 1 mark lesser for every 5% point decrease in score rounded off to lower 5% o < 55%	o 10 o 0
e)	Works (any category) completed in last five years		o 10 o 5 o 0
1.2	CAPACITY		
a)	Bid Capacity (0-25) *BC =2.5 * A * N –B	o Bid Capacity ≥ quoted Bid o Bid Capacity is between 80–100% quoted Bid Bid Capacity is between 60 – 79% quoted Bid o Bid Capacity is between 40 – 59% quoted Bid o Bid Capacity < 40% quoted Bid	o 25 o 20 o 15 o 10 o 0
b)	Credit line available (unused) (0-5)	o > 100% of estimated 3 months project cash flow o 81 – 100% of estimated 3 months project cash flow o 60 – 80% of estimated 3 months project cash flow o <60% of estimated 3 months project cash flow	o 5 o 4 o 2 o 0
		END OF STAGE 1 out of a score of 100	

- * Where A = Average turnover of the contractor over the last 3 calendar years
 N = Estimated duration of the project to be tendered
 B = Portion of other ongoing works to be completed in the period
 that overlaps with the current project's duration (that is, N)

(ii) 2nd Stage: Bid Evaluation

A Bidder should obtain a score of at least 70 points out of 100 on these parameters (Capability & Capacity combined) in order to qualify for the award stage.

The Bids scoring minimum qualifying score of 70 points out of 100 will then be considered for the second stage of Bid evaluation. 30 % of Technical evaluation score shall be carried forward to the 2nd stage of evaluation. This score will be combined with their financial Bid to obtain the overall technical-financial score. The following shall be the score bearing:

- (a) Financial score = 70%
- (b) Technical score = 30%

Award of Work:

The overall technical and financial score is obtained by using the following formula for any qualified contractor (A):-

$$70\% \times \frac{\text{Lowest quoted Bid among qualifying Bids}}{\text{Financial Bid quoted by A}} + 30\% \text{ of technical score of A}$$

The contractor who gets the highest overall technical & financial score shall be recommended for the award of the work.

2. Capability

These parameters test the Bidder on their capability to execute the given work. Capability is defined as prior experience in doing works of similar nature and size, their ability to generate enough resources in form of manpower and equipment, and their performance track-record from previous works. Specifically, the parameters covered under this category are described below.

Parameters	Scoring
(a) Similar work experience	0 – 10
(b) Access to adequate equipment	0 – 20
(c) Availability of skilled manpower	0 – 20
(d) Average performance score from previous work*	0 – 10
(e) Works (any category) completed in last five calendar years	0- 10

(a) Similar work experience (0-10 points)

This parameter evaluates the Bidder on experience in executing works of similar nature and size. A contractor can score anywhere between 0 and 10 points based on the size of his similar work experience from the last 5 calendar years. That is, in order to be considered for award of points under this parameter, a previous work executed by a contractor must have had its completion date within the last 5 calendar years (including the year in which the work is being tendered).

In order to ensure a fair opportunity for the relatively young contractors who might not have had experience in executing a single similar work of significant size in the past, this parameter contains an option – **that is, the contractor can either be evaluated on the size of a SINGLE largest similar work that (s) he might have executed in the past OR on the aggregate size of THREE similar works that (s) he might have executed in the past.** The evaluation score for this parameter shall be auto-generated from the e-tool/CiNET based on the similar work experience information updated. The level of achievement for each scoring point varies between the two options.

» Scoring Pattern

Parameter	Level of achievement	Score
Aggregate size of similar contracts (max 3) in the last 5 calendar yrs OR	o $\geq 175\%$ of current project size	o 10
	o 125–175% of current project size	o 8
	o 75–125% of current project size	o 4
	o $< 75\%$ of current project size	o 0
Size of the largest similar contract executed in the last 5 calendar yrs	o $\geq 100\%$ of current project size	o 10
	o 70–100% of current project size	o 8
	o 50 – 70% of current project size	o 4o
	o $< 50\%$ of current project size	o 0

» Illustrative Example

Consider three contractors – X, Y, Z – who have executed works of the following sizes in the last 5 calendar years (last being the current year in which the work is being tendered)

Contractor	X	Y	Z
Year 1	30	0	70
Year 2	45	0	65
Year 3	35	80	75
Year 4	40	0	80
Year 5	50	85	65
Size of single largest work in last 5 years	50	85	80
Aggregate size of 3 largest works in last 5 years	= 50 + 45 + 40 = 135	= 85 + 80 + 0 = 165	= 80 + 75 + 70 = 225

Now assume that the current project size is 70 million. Then, according to the point given earlier in the table, the points obtained by X,Y,Z according to the two choices explained above will be as follows (underlined points are the one that will finally be awarded in the evaluation for this parameter):

Contractor	Aggregate size of 3 largest works	Size of single largest work
X	10 (>175% of current project size)	8 (70% - 80% of the current project size)
Y	10 (>175% of the current project size)	10 (>100% of the current project size)
Z	10 (>175% of the current project size)	10 (>100% of the current project size)

» Documents Required

Bidders shall produce and update the information on similar work experience with following documents in the e-tool/CiNET in order to be evaluated and awarded points on this parameter:

1. Completion certificate of the single largest work of similar kind executed in the last 5 calendar years OR completion certificates of no more than 3 works of similar kind executed in the last 5 calendar years (works whose completion date is within the last 5 calendar years, including the current one)

Key points to remember

1. All slabs in the level of achievement are inclusive of the lower limit, not the upper limit.
2. Points will be awarded to the contractor based on the completion certificate submitted. If certificates for 3 biggest works are submitted then scoring should be done according to “Aggregate size of similar contracts (max 3) in the last 5 calendar yrs”. If certificate for only one work is submitted then scoring should be done according to “Size of the largest similar contract executed in the last 5 calendar yrs.”
3. If contractor submits completion certificates for 2 works, the aggregate of those two works should be considered.
4. If contractor submits completion certificates for more than 3 works, then the 3 largest works should be considered and their aggregate should be scored.
5. Partially completed works will NOT be considered for award of points under this parameter.

(b) Access to adequate equipment (0-20 points)

This parameter evaluates contractors on their access to the necessary nature and number of equipment required for the timely and quality execution of the work. A contractor can score anywhere between 0 and 20 points on this parameter indicating the high importance of this criterion in the overall system.

The Procuring Agency at the time of document preparation will specify the type and number of equipment required for the execution of the work. The contractor’s equipment commitment will then be evaluated against the requirement and given points accordingly.

The Procuring Agency has to allocate points to each equipment based on its importance in the execution of the work. The total point to be allocated is 100. These 100 points may be allocated as follows:

- o Equipment of Tier-I importance: 50 points
- o Equipment of Tier-II importance: 30 points
- o Equipment of Tier-III importance: 20 points

The Procuring Agency should allocate points equally amongst the equipment falling under same tier. For example, three equipment under Tier-II shall carry 10 points each, total not exceeding 30 points.

Following are the guidelines for scoring on equipment:

- o Total marks out of 100 to be scaled down to 20
- o Contractors will get marks in proportion to the number of equipment committed by them.

Illustrative list of equipment under different Tiers is given below. PLEASE NOTE that this is just an example. Actual list of equipment required under each tier should be based on the Procuring Agency's need and the nature of the work.

Nature of work	Tier-I	Tier-II	Tier-III
Road construction	Excavator	Road roller, Paver, Vibrator	Air compressor, Tipper trucks, survey equipment
Building construction	Bull-dozer, Concrete-mixer	Shuttering set, Crane truck, Dumper truck	Air compressor, Survey equipment
Road resurfacing	Road roller	Vibrator, Sprayer	Air compressor, Tipper trucks

Illustrative Example

Consider the case of a 10 km road construction project.

Step 1: the Procuring Agency shall prepare the list of type and number of equipment required

Equipment	Number required
Excavator	2
Paver	3
Vibrator	3
Pneumatic road roller	1
Static road roller	2
Truck	4
Mechanical sprayer	2
Air compressor	1
Survey equipment	3

Step 2: the Procuring Agency shall decide the Tier of importance for the each equipment, considering the nature of the work

Equipment	Tier of importance
Excavator	Tier-I
Paver	Tier-II
Vibrator	Tier-II
Road roller	Tier-II
Truck	Tier-III
Mechanical sprayer	Tier-III
Air compressor	Tier-III
Survey equipment	Tier-III

Step 3: the total points for each Tier (Tier I-50, Tier II-30 and Tier III-20) shall then be distributed equally amongst all the equipment falling under each of the Tiers

Equipment	Tier of importance	Maximum marks
Excavator	Tier-I	50
Paver	Tier-II	10
Vibrator	Tier-II	10
Road roller	Tier-II	10
Truck	Tier-III	5
Mechanical sprayer	Tier-III	5
Air compressor	Tier-III	5
Survey equipment	Tier-III	5

Step 4: the equipment requirement specified in the tender documents will be in the following format

Tier	Equipment	Number required	Maximum marks
Tier I	Excavator	2	50
Tier II	Paver	3	10
	Vibrator	3	10
	Road roller	3	10
Tier III	Truck	4	5
	Mechanical sprayer	2	5
	Air compressor	1	5
	Survey equipment	3	5

Assume that a contractor has committed the following equipment in his Bid:

Equipment	Number required	Number committed
Excavator	2	1
Paver	3	3
Vibrator	3	2
Road roller	3	2
Truck	4	4
Mechanical sprayer	2	1
Air compressor	1	1
Survey equipment	3	3

According to the above, the points scored by this contractor on each equipment will be as follows:

Equipment & Tier	Number required	Number committed	% commitment	Maximum marks	Points
Excavator (I)	2	1	50%	50	50% of 50 = 25
Paver (II)	3	3	100%	10	100% of 10 = 10
Vibrator (II)	3	2	67%	10	67% of 10 = 6.7
Truck (III)	4	4	100%	5	100% of 5 = 5
Mechanical sprayer (III)	2	1	50%	5	50% of 5 = 2.5
Air compressor (III)	1	1	100%	5	100% of 5 = 5
Survey equipment (III)	3	3	100%	5	100% of 5 = 5
Total equipment points					65.9

These equipment points are out of 100. This will be scaled down to 20 for the final score on the equipment parameter.

Therefore, final score for this contractor on the equipment parameter = $65.9/100 * 20 = 13.18 / 20$

» Documents Required

Along with the commitment of equipment, the contractors are required to submit the following documents:

1. Copy of the registration certificate of each equipment committed;
2. Copy of Insurance policy for each equipment where applicable; and
3. In case of hiring, copy of the lease agreement in addition to 1 & 2 above
4. In case of equipment that do not require registration with BCTA, a copy of cash memos stamped by RRCO if newly imported or copy of sale deeds or verification letter issued by a Government Engineer or Construction Association of Bhutan (CAB) whichever is found to be more authentic to the Procuring Agency.

Key points to remember

1. The equipment requirement list should be prepared by the Procuring Agency as described in step 1 to 4 in the above illustrative example. However, please note that the above example is only illustrative in nature. For each project, the Procuring Agencies should prepare their own equipment requirement list, which is specific to that particular project.
2. The hiring agreement produced by the contractor should be specific to the current project and not a general.
3. E-tool, which is used for evaluation based on Point-Based System, will require the user to provide the registration numbers of each equipment committed by the contractor. e-tool will automatically generate an alarm if equipment is already engaged in some other projects. This will help avoid a situation where the contractor might commit equipment that is already being used in some other project and as a result will not be available for the current project. This equipment can be permitted to be used in the current project only if the project manager of the other project certifies that this equipment is no longer required for that project.

4. To ensure that a technically sound Bidder is selected, minimum number of requirements for each Tier specified by the Procuring Agency has to be complied with.

(c) Availability of skilled manpower (0-20points)

The Illustrative list of manpower requirements under different tiers is given below. PLEASE NOTE that this is just an example. Actual list of manpower required under each Tier should be based on the Procuring Agency's need and the nature of the work.

This parameter evaluates contractors on their ability to deploy personnel with suitable qualifications and experience in order to ensure timely and quality execution of the works. A contractor can score between 0 and 20 points on this parameter indicating the high importance of this criterion in the overall system.

The Procuring Agency at the time of document preparation will specify the qualification and experience of key personnel required for the execution of the work. The contractor's manpower commitment will then be evaluated against the requirements and points awarded accordingly.

The Procuring Agency has to allocate points to each personnel based on its importance in the execution of the work. The total point to be allocated is 100. These 100 points should be allocated as follows:

- o Personnel position of Tier-I importance: 40 points
- o Personnel position of Tier-II importance: 30 points
- o Personnel position of Tier-III importance: 20 points
- o Personnel position of Tier-IV importance: 10 points

For each of the three personnel positions (of each importance tier) the minimum points will be 0 and the maximum will correspond to the Tier of importance. That is, for Tier-I position, minimum is 0, maximum is 40; for

Tier-II position, minimum is 0, maximum is 30; for Tier-III position, minimum is 0, maximum is 20 points and for Tier-IV position, minimum is 0, maximum is 10 points. Points in each Tier will increase from minimum to maximum as the experience and qualification of the personnel improves. That is, in order to score higher points corresponding to any personnel position, a contractor will need to meet a higher requirement in terms of experience and qualification of the personnel as specified by the Procuring Agency. Following are the guidelines for scoring on manpower:

- o Total marks out of 100 to be scaled down to 20.
- o The requirement of personnel of different positions under Tier I, Tier II and Tier III can be from project to project. They may be Project Manager, Project Engineer, Site Supervisor; or Project Engineer, Deputy Project Engineer, Site Supervisor; or any other such combination. However, for Tier IV their requirement will remain constant.
- o Incases, where the project does not have requirement of manpower in all three Tier ((There are only 2 key personnel and the rest is the labor force), there total point will be only 80 (Tier I, Tier II and Tier IV). Score out of 80 will then be scaled down to 25 to get the final score on the manpower parameter.

An illustrative listing of personnel positions with scoring of the corresponding points as explained above is given below. PLEASE NOTE that this is just an example. Actual allocation of points should be based on the Procuring Agency's requirement and nature of project.

Tier of importance	Position	Qualification/Experience	Score
Tier – I	Project Manager	<ul style="list-style-type: none"> o BE Civil Engineer with 10+ years of experience o BE Civil Engineer with 5-10 years of experience o BE Civil Engineer with less than 5 years of experience o Fresh Graduate Engineer with BE civil o Any other level of qualification or experience 	<ul style="list-style-type: none"> o 40 o 30 o 20 o 10 o 0
Tier – II	Project Engineer	<ul style="list-style-type: none"> o BE Civil Engineer with more than 5 years' experience. o Diploma Engineer with more than 5 years' experience. o Diploma Engineer with less than 5 years of experience o Any other level of qualification or experience 	<ul style="list-style-type: none"> o 30 o 20 o 10 o 0
Tier – III	Site Supervisor	<ul style="list-style-type: none"> o Diploma Engineer with 3+years of experience o Personnel with formal training certification from TTI at least 5 years of experience o Fresh TTI Graduate o Any other level of qualification or experience 	<ul style="list-style-type: none"> o 20 o 15 o 10 o 0
Tier- IV	Fresh Diploma/ Graduate Engineer	<ul style="list-style-type: none"> o Fresh Graduate/Diploma Engineer trained and certified in CMS, OHS, e-GP & BCTA refresher courses o Any other level of qualification or experience 	<ul style="list-style-type: none"> o 10 o 0

Illustrative Example

Consider the case of a 10 km road construction project.

Step 1: the Procuring Agency shall list down the key personnel with positions for each Tier

Tier	Personnel
Tier – I (Most important)	Project Manager
Tier – II	Site Supervisor
Tier – III	Chief Foreman
Tier- IV	Fresh Diploma/Graduate Engineer

Step 2: the Procuring Agency decides the idea qualification and experience of the key personnel required. Ideal qualification and experience will be what the Procuring Agency believes will help deliver excellent quality and timeliness of the project.

Personnel	Ideal qualification & experience
Project Manager	BE Civil Engineer with more than 5 years of experience in relevant field
Site Supervisor	Diploma Engineer with 5+ years of experience in relevant field
Chief Foreman	TTI Graduate with more than 5 years of experience relevant field
Fresh Graduate/Diploma Engineer	Fresh Graduate/Diploma Engineer trained and certified in CMS, OHS, e-GP & BCTA refresher courses

Step 3: the Procuring Agency has to allocate the total points of each Tier (Tier I-40, Tier II-30, Tier III-20 and Tier IV-10). The highest point in each Tier has to be assigned to the ideal requirement listed in step 2. Then gradually reduce the requirement in terms of qualification and experience and assign points lesser than the maximum to each of these reduced requirements as illustrated below:

Tier of importance	Position	Qualification/ Experience	Score
Tier – I	Project Manager	<ul style="list-style-type: none"> o BE Civil Engineer with more than 5 years' experience in relevant field o BE Civil Engineer with less than 5 years' experience in relevant field o Diploma Engineer with 5-10 years' experience in relevant field o Fresh Graduate Engineer with BE civil o Any other levels of qualification or experience 	<ul style="list-style-type: none"> o 40 o 30 o 20 o 10 o 0
Tier – II	Site Supervisor	<ul style="list-style-type: none"> o Diploma Engineer with more than 5 years' experience in relevant field o Diploma Engineer with 3-5 years of experience in relevant field o TTI Graduate with more than 7 years of experience in relevant field o Any other levels of qualification or experience 	<ul style="list-style-type: none"> o 30 o 20 o 10 o 0
Tier – III	Chief Foreman	<ul style="list-style-type: none"> o TTI Graduate with more than 5 years of experience in relevant field o TTI Graduate with less than 5 years of experience in relevant field o Fresh TTI Graduate o Any other levels of qualification or experience 	<ul style="list-style-type: none"> o 20 o 15 o 10 o 0
Tier- IV	Fresh Diploma/ Graduate Engineer	<ul style="list-style-type: none"> o Fresh Diploma/Graduate Engineer trained and certified in CMS, OHS, e-GP & BCTA refresher courses o Any other levels of qualification or experience 	<ul style="list-style-type: none"> o 10 o 0

Now let's assume that a contractor has committed the following manpower in his bid

Personnel	Qualification & experience of contractor's personnel
Project Manager	BE Civil Engineer with 8 years of experience in relevant field
Site Supervisor	Diploma Engineer with 6 years of experience in relevant field
Chief Foreman	Fresh TTI Graduate
Fresh Diploma/Graduate Engineer	Fresh Diploma/Graduate Engineer trained and certified in CMS, OHS, e-GP & BCTA refresher courses

According to above, the points scored by this contractor on manpower will be as follows:

Personnel	Qualification & experience of contractor's personnel	Points scored
Project Manager	BE Civil Engineer with 8 years of experience in relevant field	40
Site Supervisor	Diploma Engineer with 6 years of experience in relevant field	30
Chief Foreman	Fresh TTI Graduate	10
Fresh Diploma/ Graduate Engineer	Fresh Diploma/Graduate Engineer trained and certified in CMS, OHS, e-GP & BCTA refresher courses	10
Total manpower points		90

These manpower points are out of 100. These will be scaled down to 20 for the final score on the manpower parameter. Therefore, final score for this contractor on the manpower parameter = $90/100 * 20 = 18/20$

» Documents Required

Along with the commitment of manpower, the contractors are required to submit the following documents:

1. Original signed CVs of technical manpower committed.
2. Copies of Citizenship ID Cards or work permit/ Passport/ Election/Voter ID cards (for foreign workers) of all manpower committed.
3. Copies of contract agreements with all personnel if they have been hired on contract by the contractor.
4. Copies of Provident Fund Account Documents for all regular personnel or payrolls or Copies of monthly remittance schedule of Health Contribution and Tax Deducted at Source for all regular personnel committed for this project.
5. Copy of Certificate for Skilling of Engineers (Construction) for Tier-IV in addition to the above applicable documents.

Key points to remember

1. The manpower requirement list should be prepared by the Procuring Agency as described in step 1 to 3 in the above illustrative example. However, please note that the above example is only illustrative in nature. For each project, the Procuring Agencies should prepare their own manpower requirement list, which is specific to that particular project.
2. For Tier-IV the Fresh Graduate Engineer shall remain constant for all projects.
3. The contract agreement produced by the contractor for the committed manpower should be specific to the current project and not general.
4. e-Tool which is used for evaluation based on point-based system will require the user to provide the CID numbers of each personnel committed by the contractor. e-Tool will automatically generate an alarm if the same person is already engaged in some other projects. This will help avoid a situation where the contractor might commit manpower that is already engaged in some other project and as a result, it will not be available for the current project. These people can be permitted to be used in the current project only if the project manager of the other project certifies that these people are no longer required in the other project. This will also avoid situations where multiple contractors commit the same people for a project.
5. To ensure that a technically sound Bidder is selected, minimum experienced manpower for each Tier specified by the Procuring Agency has to be complied with.

(d) Average performance score from previous work (0-10 points)

This parameter gives points to the contractor based on its performance score in the last 5 calendar years. In the initial period when performance scores were not available, all contractors would be considered at their default performance score, that is, 100%. Similarly, if performance score for any contractor is not available because (s) he has not executed any project after the introduction of this system, the default score of 100% will be considered.

This score will diminish whenever a contractor defaults on any one of the parameters of the performance (described later). For every project the contractor will obtain certain performance score. As a contractor executes more projects, this score will keep getting averaged over the number of projects executed. For any work that is about to be contracted, the average performance score of works performed by the contractor over the last 5 calendar years will be taken into account.

The 100% performance score will be composed of the following parameters:

1. On-time completion (30%)
2. Quality of execution (70%)

1. On-time completion (30%)

Scoring for this component of performance will be done by the Site Engineer of the implementing agency. A contractor can be penalized under this component if the contractor fails to deliver the project within the agreed original project duration or an extension (if any)

The Site Engineer can penalize the contractor up to 30%. The quantum of penalty could vary as following:

- o 10% for a minor default
(If the final completion of the project is delayed by 10 - 15% as compared to original project duration or an extension, if any)
- o 20% for a medium default
(if the final completion of the project is delayed by 15 - 25% as compared to original project duration or an extension, if any)
- o 30% for a major default
(If the final completion of the project is delayed by 25% or more as compared to original project duration or an extension, if any)
- o Illustrative Example
Assuming that the estimated project duration for a particular project is 24 months and the contractor completes the project in

30 months. So the delay in the project is

$$\begin{aligned} &= (\text{Actual completion time} / \text{estimated duration time} - 1) \% \\ &= (30 / 24 - 1) \\ &= 25\% \end{aligned}$$

Since the delay is 25%, it qualifies as a major default. Therefore, the penalty will be full 30%.

2. Quality of execution (70%)

The scoring on this component of performance will be done by the Site Engineer and verified by superiors based on the Guidelines issued by Ministry of Infrastructure and Transport (MoIT) or any other competent authority.

MoIT, BCTA or any other competent authority will have the authority to determine the extent of deviation based on reports submitted by the Site Engineer:

- o Procuring Agencies will be provided a kit of basic testing apparatus and equipment that the Site Engineers might use to cross-verify the results reported in the contractors' tests;
- o MoIT, BCTA or any other competent authority will have the authority to conduct random audits and inspections on-site in cases including but not limited to those where it suspects a case of misrepresentation of results reported, collusion between site engineer and contractor, critical deviation reported by results, large size of the project; and
- o If any element of corruption/fraudulent practice is determined, the issue will be forwarded to Anti-Corruption Commission of Bhutan for their perusal.

The central repository of performance scores for contractors will be maintained by the PMDD in an online format. MoIT, BCTA or any other competent authority will also be authorized to conduct random audits and checks to ensure that the implementing agencies are submitting honest and true performance reports.

Scoring Pattern

Parameter	Level of achievement	Score
Average performance score from previous work (past 5 calendar years)	o 100% o 1 mark lesser for every 5% point decrease in score rounded off to lower 5% o <55%	o10 o0

Documents Required

Bidders shall produce and update the information on performance from every project with following documents in the e-tool/CiNET in order to be evaluated and awarded points on this parameter:

- 1.Performance Score from previous works (past 5 calendar years).

Key points to remember

1. In case of a Joint Venture executing a project, the same performance score applies to all JV partners for that project.
2. In giving score for timely completion, time compensations allowed due to scope changes are given due consideration. That is, the estimated duration is increased to account for time compensation.
3. The baseline for performance score is 100% for each contractor for each project. Marks are deducted only under the circumstances described above.

This sums up the scoring of 70 points under the “capability” category in the Bidder qualification criteria. The next category is Capacity which carries total of 30 points.

e) Works (any category) completed on time in the last 5 calendar years (0-10 points) -

The procuring agency shall consider the works (any category) completed on time in the last 5 calendar years.

Each work completed by % for last 5 calendar years. The score for this parameter shall be auto generated from e-tool based on the information updated by the Bidder with e-tool/CiNET:

Parameter	Levels of achievement	Score
Works (any category) completed on time in the last 5 calendar years	<ul style="list-style-type: none">o 100-75%o 74-50%o <49%	<ul style="list-style-type: none">o 10o 5o 0

The Bidder shall be responsible for updating the above information in e-tool/CiNET.

This parameter evaluates the Bidder on the number of works completed on time out of the total number of works executed in the last 5 calendar years. A Bidder can score anywhere between 0 and 10 points based on the number of works completed on time. That is, in order to be considered for award of points under this parameter, a previous work executed by the contractor must have been completed within the last 5 calendar years (including the year in which the work is being tendered).

Any category of works completed in the last 5 calendar years can be considered for awarding the points. The purpose of this parameter is to determine the capability of the Bidder to manage and complete the works on time in accordance with the contract and not to check similar work experience.

In order to ensure a fair opportunity, the Bidders who completed the works on time will obtain the same point irrespective of the number of works undertaken. The evaluation score for this parameter shall be auto-generated from the e-tool/CiNET based on the information on works completed and updated by the Bidders themselves in e-tool/CiNET

» Scoring Pattern

Parameter	Levels of achievement	Score
Works (any category) completed on time in the last 5 calendar years	100-75%	10
	74-50%	5
	<49%	0

Illustrative Example

Consider three contractors – X, Y, Z – who have executed following number of works in the last 5 calendar years (last being the current year in which the work is being tendered)

Contractor	X	Y	Z
Year 1	2	0	1
Year 2	0	2	0
Year 3	3	1	0
Year 4	1	0	0
Year 5	4	2	0
Total number of works in last 5 years	10	5	1
Number of works completed on time	1	3	1
% of works completed on time	$= (1/10) * 100$ =10%	$= (3/5) * 100$ =60%	$= (1/1) * 100$ =100%

Contractor	Levels of achievement	Score
X	10% (10% of work completed on time)	0 (<49%=0)
Y	60% (60% of work completed on time)	60% (60% of work completed on time)
Z	100% (100% of work completed on time)	10 (75% - 100% = 10)

» Documents Required

Bidders shall produce and update the information on works completed with following documents in the e-tool/CiNET to be evaluated and awarded points on this parameter:

1. Completion certificate of work executed in the last 5 calendar years.

Key points to remember

1. Points will be awarded to the contractor based on the completion certificate submitted.
2. Partially completed works will NOT be considered for award of points under this parameter

3. Capacity

The capacity is a function of Bid Capacity and credit line available (unused).

Parameters	Scoring
Bid Capacity	0 – 25
Credit line available (unused)	0 – 5

(a) Bid Capacity (0-25points)

This parameter evaluates the contractor's capacity to take on additional work to what he/she is already doing. A contractor can score between 0 and 25 depending on the Bid Capacity in comparison to the quoted Bid. This parameter is crucial in determining whether or not the contractor can successfully execute the tendered work taking into account the works in hand.

» Scoring Pattern

Parameter	Level of achievement	Score
Bid Capacity	o Bid Capacity \geq quoted Bid	o 25
	o Bid Capacity is between 80–100% quoted Bid	o 20
	o Bid Capacity is between 60–80% quoted Bid	o 15
	o Bid Capacity is between 40–60% quoted Bid	o 10
	o Bid Capacity $<$ 40% quoted Bid	o 0

Bid capacity is calculated using the following formula:

$$\text{Bid Capacity} = 2.5 * A * N - B$$

Where A = Average turnover of the contractor over the last 3 calendar years

N = Estimated duration of the project to be tendered

B = Portion of other ongoing works to be completed in the period that overlaps with the current project's duration (that is, N)

» Illustrative Example

Steps in calculation of 'A'

Step 1: List all projects that the contractor has executed in the last 3 CALENDAR years

Assuming following are the projects he executed:

- (i) Project A – Nu 54 million, January 2007 to June 2008
- (ii) Project B – Nu 96 million, May 2007 to April 2009
- (iii) Project C – Nu 100 million, August 2008 to July 2010

Step 2: Obtain the value of each of these projects per month, calculated as the total size divided by the total duration (in months)

For the given projects, the value per month will be:

- (i) Project A – Nu 54 million / 18 months = Nu 3 million per month
- (ii) Project B – Nu 96 million / 24 months = Nu 4 million per month
- (iii) Project C – Nu 120 million / 24 months = Nu 5 million per month

Step 3: Arrange these projects clearly according to their timelines on a calendar for last 3 years

Project	2007												2008												2009											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
A																																				
B																																				
C																																				

Step 4: For each of the last 3 calendar years note the number of months for each project In this case, it will be as follows:

2007

Project A – January to December = 12 months

Project B – May to December = 8 months

Project C – None = 0 months

2008

Project A – January to June = 6 months

Project B – January to December = 12 months

Project C – August to December = 5 months

2009

Project A – None = 0 months

Project B – January to April = 4 months

Project C – January to December = 12months

Step 5: Now for each of the last 3 calendar years, obtain the total quantity of work as the sum of each projects value per month and its number of months for that particular year as follows:

2007

Total Value = $(3 \times 12)_{\text{Project A}} + (4 \times 8)_{\text{Project B}} + (5 \times 0)_{\text{Project C}}$
= Nu 68 million

2008

Total Value = $(3 \times 6)_{\text{Project A}} + (4 \times 12)_{\text{Project B}} + (5 \times 5)_{\text{Project C}}$
= Nu 91 million

2009

Total Value = $(3 \times 0)_{\text{Project A}} + (4 \times 4)_{\text{Project B}} + (5 \times 12)_{\text{Project C}}$

= Nu 76million

Step6: Inflate the total value from each year by 5% to bring it to the price levels of the current year in this case the values will be:

2007 = Nu 68 X $(1.05)^2$ = Nu 68 X 1.1025 = Nu 74.97 million

2008 = Nu 91 X $(1.05)^1$ = Nu 91 X 1.05 = Nu 95.55

2009 = Nu 76 million

Step7: Calculate the average annual revenue A as an average of the total values of all the 3 years as follows:

$$A = (74.97 + 95.55 + 76) / 3 = \text{Nu } 82.2 \text{ million}$$

Calculation of 'N'

Estimated project duration will be calculated first in number of months and then converted to years by dividing by 12 and rounding off to the next higher multiple of 0.5

For example if the project is to run from April 2010 to June 2012, the project duration will be as following:

27 months, that is, $27 / 12 = 2.25 \sim 2.5$ years

Therefore N = 2.5

Steps in calculation of 'B'

Assuming the current project to be awarded is as follows:

Project E – Nu 250 million, April 2010 to March 2011

Step 1: List all ongoing projects that the contractor is currently executing let's assume these projects are as following:

(i) Project C – Nu 100 million, August 2008 to July2010

(ii) Project D – Nu 72 million, January 2010 to December2010

Step 2: Obtain the value of each of these projects per month, calculated as the total size divided by the total duration (in months)

For the given projects, the value per month will be:

- (i) Project C – Nu 120 million / 24 months = Nu 5 million per month
- (ii) Project D – Nu 72 million / 12 months = Nu 6 million per month

Step3: Arrange these projects (including the current one) clearly according to their timelines on a calendar for the current and the next 2-3 years such that the duration of the current project (that is, N) is completely covered

Project	2010												2011											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
C																								
D																								
E																								

Step 4: Make note of the number of months of each ongoing works that overlap with the months of the current work as follows:

Project C – April 2010 to July 2010 = 4 months

Project D – April 2010 to December 2010 = 9 months

Step 5: Find the total value of overlapping ongoing works (B) as the sum of the product all overlapping periods and their corresponding monthly volumes

In this case overlapping ongoing work will be:

$$B = (5 \times 4)_{\text{Project C}} + (6 \times 9)_{\text{Project D}}$$

= Nu 74 million

Therefore B = Nu 74 million

Therefore, Bid Capacity will be as follows:

$$\text{Bid Capacity} = 2.5 \times 82.2 \times 2.5 - 74$$

$$= \text{Nu } 439.75 \text{ million}$$

Assume that the quoted Bid of this contractor for a project estimate of Nu 500 million, the scoring for Bid Capacity will then be as following:

Parameter	Level of achievement	Score
Bid Capacity	= $493.75 / 500$ = 98.75% = 80 – 100% of quoted Bid	o 20

Documents Required

Bidders shall produce and update the information on Bid capacity with following documents in the e-tool/CiNET in order to be evaluated and awarded points on this parameter:

1. Completion certificates for all works having their completion dates in the last 3 calendar years (including the current year)
2. Award letters for all works having their start dates in the last 3 calendar years (including the current year)

Key points to remember

1. All slabs in the level of achievement are inclusive of the lower limit, not the upper limit
2. All works that have been completed or started by the contractor in the last 3 calendar years should be considered
3. However only the portion of these works that lie within the last 3 calendar years should be considered (using the method described in the illustrative example)
4. The duration of current project, that is N, should be rounded off to the next higher multiple of 6 months (or 0.5 years). It should not be any other number.
5. Irrespective of the start and end dates of ongoing works, as long as any portion of these works will be carried out by the contractor in the same period as that of the current project, they should be considered in calculation of 'B'

6. It is possible that the actual duration of the current project turns out to be more than the estimated duration, 'N'. In such a case, the actual overlap between an ongoing work of the contractor and the current project may be more than what is calculated using the method given here. However, this should NOT be considered while calculating Bid Capacity. The reason for this is that it is impossible to know at the time of awarding a work whether it will be completed within the estimated duration or not. Therefore, Bid evaluation should be based only on information that we have at the time of evaluation, which is the estimated duration, 'N'. So the overlap should be checked for only with the estimated duration, 'N' without considering what the actual duration of the current project 'might finally be'.

(b) Credit line available (unused) (0-5points)

This parameter evaluates the contractor's ability to raise credit from the financial institutions (FIs) to manage the working capital requirements of the project. The contractor will get a score based on a letter of credit from the FIs, wherein the amount of credit available to the contractor for the work to be awarded will be mentioned.

Level of achievement on this parameter will be judged in terms of months of project cash flow for which the credit is available. Months of project cash flow are calculated by dividing the project cost by the project duration. This gives the cash flow per month. The ideal credit line is considered to be of 3 months or more. Points are awarded depending on how close a contractor's credit is to this ideal limit.

» Scoring Pattern

Parameter	Level of achievement	Score
Credit line available (unused)	o $\geq 100\%$ of estimated 3 months project cash flow	o 5
	o 80–100% of estimated 3 months project cash flow	o 4
	o 60–80% of estimated 3 months project cash flow	o 2
	o $<60\%$ of estimated 3 months project cash flow	o 0

» Documents Required

Contractors should be required to furnish the following documents in order to be evaluated and awarded points on this parameter:

1. Letter of credit (in the format specified in Bidding Document) from the financial institutions in Bhutan certifying the availability of credit for that specific project

Key points to remember

1. All slabs in the level of achievement are inclusive of the lower limit, not the upper limit
2. This sums up the scoring of 30 points under the “Capacity” category in the Bidder qualification criteria.

All the Bids which score 70 points out of 100 at this stage of Bidder Qualification are taken to the next stage of Bid evaluation.

4. Second Stage: Bid Evaluation

All contractors who obtain a score of 70 points or more on qualification criteria will be considered for evaluation in this stage. 30 % of technical evaluation score shall be carried forward to the 2nd stage of evaluation. This score will be combined with their financial Bid to obtain the overall technical-financial score. The following shall be the score bearing:

(a) Financial score=70%

(b) Technical score30%

4.1 Award of Work:

The overall technical and financial score is obtained by using the following formula for any qualified contractor (X)-

Lowest quoted Bid among qualifying Bids)

70%X_____ + 30% of technical score of X
Financial Bid quoted by X

The contractor getting the highest overall technical & financial score shall be recommended for the award of the work.

Illustrative Example

Following method may be followed while awarding points:

Contractor	X	Y	Z
Technical Score	60/100	70/100	90/100
Qualification to 2nd stage (minimum 70points)	Disqualified for second stage	Qualified	Qualified
30% carry forward of technical score	-	21%	27%
Financial quote	5000000	5560000	6000000
70% Financial Score	Disqualified	70% ($\frac{5560000}{5560000}$) =70	70% ($\frac{5560000}{6000000}$) =64.6
Combined Technical-financial	Disqualified	91%	91.6%

Work will be awarded to the contractor obtaining the highest combined technical-financial score. In this case work will be awarded to contractor Z.

5. How to handle the case of Joint Ventures

For the purpose of awarding points to Joint-Venture Bidders, the various parameters in the Point Based System can be divided into two categories—one, those parameters for which the individual credentials of the Joint Venture partners need to be averaged using their stake in the JV for the purpose of evaluation; and two, those parameters for which the resources or information committed/ provided by the JV as a single entity will be considered for award of points. We now discuss which parameters will fall under each of these categories and how to score the JV on each of these. The first category contains the following parameters:

- (a) Similar work experience

- (b) Performance score from previous work
- (c) Works (any category) completed in the last five years
- (d) Bid Capacity
- (e) Credit Line available

(a) Similar work experience

Following guidelines should be used in scoring JVs on this parameter:

- (i) Since there is a choice involved on this parameter, the same choice should be used by the two or more partners of any JV. That is, information on EITHER the aggregate size of 3 similar works from the past OR size of the single largest similar work should be considered for ALL partners of in a JV
- (i) Depending on the choice selected, as the first step, the aggregate size of 3 similar works of the size of the single largest similar work should be obtained using the method described in the illustrative example earlier.
- (ii) To obtain the final figure for similar work experience for the JV, the weighted average of their individual information should be considered by multiplying their work experience number by their % stake in the JV
- (iv) Documents required for evaluation on this parameter will still be the same. However this information should now be provided for all partners in a Joint Venture.
- (v) For example, say that there is a JV of 3 partners–A, B, C, where A holds a 30% stake, B holds 45% stake and C holds 25% stake. Now say, the single largest similar work done by A, B, C is Nu 50 million, Nu 70 million, and Nu 65 million respectively. Then their weighted average similar work experience will be

$$= 50 * 30\% + 70 * 45\% + 65 * 25\%$$

$$= \text{Nu } 62.75 \text{ million}$$

So while awarding the points on this parameter this figure should be used for comparison to the levels of achievement according to the scoring pattern

(b) (Performance score from previous work)

As explained above for similar work experience, for performance score also the weighted average of the performance scores of individual contractors should be considered for award of points on this parameter.

(c) Works (any category) completed in the last five calendar years

As explained above for similar work experience, the works (any category) completed on time in last five calendar years also the weighted average scores of individual contractors should be considered for award of points on this parameter.

(d) Bid Capacity

- (i) Calculate the Bid Capacity of each partner in a Joint Venture according to the method described in the illustrative example for Bid Capacity
- (ii) Calculate the weighted average Bid Capacity of the JV by multiplying their individual Bid Capacities with their % stakes in the JV
- (iii) Use this weighted average Bid Capacity for comparison against the levels of achievement and award of points as per the scoring pattern
- (iv) Documents required for evaluation on this parameter will still be the same. However, this information should now be provided for all partners in a joint venture.

(e) Credit line available

- (i) Calculate the weighted average credit line available of the JV by multiplying their individual credit amounts (as specified in their letter of credit) with their % stakes in the JV
- (ii) Use this weighted average credit line and calculate the months of credit available as per the method described in credit line discussion earlier
- (iii) Use the levels of achievement as described in the scoring pattern to award points
- (iv) Documents required for evaluation on this parameter will still be the same. However this information should now be provided for all partners in a joint venture.

The second category consists of parameters for which a JV will commit resources as a single entity. No weighted average calculation will be required for these parameters. This category includes following parameters:

1. Access to adequate equipment
2. Access to manpower

For all these parameters, the JV will make a joint commitment which will be evaluated for award of points. For example, the equipment committed could be owned or hired by either of the partners in the JV, but it will be considered to be committed jointly by the JV.