

**Project System Audit
Subcontracting Group**

Note: Not all items of the checklist shall be checked. It depends on the status of the work and whether it is the first, second or third audit.

1. Project Definition

1.1 Is the Project Procedure and Execution Manual (PPEM) available?

What is the status, issue and date?

1.2 Does the PPEM properly describe the scope of work and services expected from your discipline to execute the work?

1.3 Have Company/client, guides/practices/procedures and forms applicable and to be used by your discipline, been listed in the PPEM?

Are they available in your group?

1.4 Are specific project specifications and/or amendments applicable and to be used?

Are these certified, including client's comments incorporated?

Have they been listed in the PPEM?

1.5 Have job related internal instructions been developed and issued?

2. Subcontracts Engineering

2.1 Have the ITB, the contract and the PPEM been reviewed for specific subcontract requirements?

2.2 Has a project subcontract plan been prepared and issued?

Has that subcontract strategy been agreed with the Project Manager (e.g. unit price, lump sum, etc.)?

Checklist	Remarks	Action (X)
<p>2.3 Has a project list of approved subcontractors been established?</p> <p>Has the client been involved in the approval process?</p> <p>Are all subcontractors known to Company?</p>		
<p>2.4 Have new subcontractors been surveyed?</p> <p>If yes, by whom?</p> <p>Have survey reports been distributed?</p>		
<p>2.5 What investigations have been performed to guarantee that S/C's have sufficient manpower available to fulfill their full scope within the allowable time frame?</p>		
<p>2.6 What proof is available to demonstrate that subcontract packages follow the standard set up?</p>		
<p>2.7 To what extent have the general conditions document BN-S-UP103 been included in the package?</p>		
<p>2.8 To what extent have the following special condition aspects been addressed:</p> <ul style="list-style-type: none"> • safety plan requirements? • quality plan requirements? • authority requirements? 		
<p>2.9 Have forms of tender been checked to include:</p> <ul style="list-style-type: none"> • pay item? • numbering and descriptions? • quantification? • regular and final update? • signatures of material control engineer and specialist engineer? 		

Checklist	Remarks	Action (X)
<p>2.10 Who normally signs for the quantities?</p>		
<p>2.11 Have subcontractor questionnaires been completed and reviewed by your group?</p>		
<p>2.12 Has a sealed bid opening protocol been established and how is it used?</p>		
<p>2.13 Evaluation of subcontractor tender:</p> <ul style="list-style-type: none"> • who reviewed the quality/inspection and test plan? • who reviewed the technical part? • who reviewed the commercial part? • who reviewed the safety plan? 		
<p>2.14 Bid Analysis:</p> <ul style="list-style-type: none"> • have sensitivity studies been performed? • is the control budget from cost engineering shown on the bid tabs? • has procurement been provided with the back-up for the various selections? • whose approval signatures have been established? 		
<p>2.15 To what extent have we met the requirement to obtain at least three bids?</p> <p>Show some examples.</p>		
<p>2.16 Has a policy for single source bidders been established?</p> <p>To what extent were client and Field Construction involved in developing the policy?</p>		
<p>2.17 What interfaces have been established with:</p> <ul style="list-style-type: none"> • client? • procurement? • specialist/engineering? • project manager? 		

Checklist	Remarks	Action (X)
<ul style="list-style-type: none"> • HO construction? • field? <p>2.18 Have any special interface conditions been agreed upon with the client?</p> <p>Has Legal Department been involved?</p> <p>2.19 How is subcontracting informed about quantity adjustments during detailed design after contract award including final expected quantities?</p> <p>2.20 Is a detailed construction schedule available to subcontractors to properly establish the scope of work period?</p> <p>2.21 Has a claim handling procedure been established?</p> <p>2.22 What arrangements have been made to minimize the risk of having to deal with claims?</p> <p>2.23 Where is the pipeshop located in relation to the construction site?</p> <p>2.24 Has the HO subcontract work been executed under responsibility of the Manager Subcontracts?</p> <p>If not, why and by whom?</p> <p>2.25 If no, were all subcontract standard documents used and readily available?</p> <p>2.26 To what extent is the Company S&E standard BN-S-UP102 applicable?</p> <p>Is there proof of proper implementation?</p>		
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Checklist	Remarks	Action (X)
<p>2.27 How has, within the HO, the responsibility split between subcontracting and Purchasing for supply and erect orders been established?</p>		
<p>2.28 How is it ensured that the original cost split for supply and erect is being maintained throughout the project?</p>		
<p>2.29 How is it ensured that S&E/SC amendments as a minimum reflect EWA approvals?</p>		
<p>2.30 What arrangements have been made for approval of S&E/SC amendments between subcontract coordinator at site, Company HO and client?</p>		
<p>2.31 How is the HO informed about status of EWA requests and their approval status?</p>		
<p>3. Miscellaneous</p>		
<p>3.1 How has the project subcontracting file been organized?</p>		
<p>3.2 Is it expected that we need the services of HO subcontracting in the field?</p>		
<p>4. Job Control</p>		
<p>4.1 Where has the budget for the subcontracting group been defined?</p>		
<p>4.2 Did the subcontract supervisor prepare or accept the manhour estimate, planning and manpower curve in executing his scope of work?</p>		
<p>4.3 Which basis has been used to establish the manhours, manpower duration for the Subcontracting Group?</p>		
<p>4.4 Is progress of the Subcontracting Group being measured?</p> <p>Which tool is being used to measure the progress?</p> <p>How is the progress reported to the Project Manager and Cost Engineer?</p>		
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Checklist	Remarks	Action (X)
<p>4.5</p> <p>How much is the measured progress against the planned progress for the Subcontracting Group?</p> <p>State cut-off date.</p>		
<p>4.6</p> <p>What is the relationship between spent and planned manhours?</p>		
<p>4.7</p> <p>Have subcontracting manhours and budget been adjusted as a result of approved project variations?</p>		
<p>4.8</p> <p>How does the final expected manhours requirement for the discipline relate to the assigned manhour budget?</p>		
<p>4.9</p> <p>How is the Subcontract Manager kept up-to-date with the expended manhours in his discipline?</p> <p>What is the frequency?</p>		
<p>4.10</p> <p>Is there a regular coordination meeting with the project/ engineering management and other lead engineers, including planning and cost control?</p>		
<p>4.11</p> <p>Is there evidence of good communication with other disciplines/departments?</p>		
<p>4.12</p> <p>Has the necessary manpower been adequately provided in a timely manner?</p>		
<p>4.13</p> <p>Have new subcontracting staff been hired to work on this project?</p> <p>If so, what training has been provided to familiarize them with specific Company requirements?</p>		
<p>4.14</p> <p>Has a planning schedule been issued covering all Subcontracting group activities?</p> <p>To what extent have contractually agreed milestones been included in the planning chart?</p>		
<p>4.15</p> <p>Are planned milestones met in time?</p>		
<p>4.16</p> <p>To what extent and by whom are the planning, cost and engineering managers informed when changes are/or slippages are encountered?</p>		

Checklist

Remarks

**Action
(X)**

4.17 What is currently the percentage of agency personnel on the job within the subcontracting group?

5. Additional Questions