

Checklist	Remarks	Action (X)				
<p style="text-align: center;">Project System Audit</p> <p style="text-align: center;">Planning and Scheduling Group</p> <p>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.</p> <p>1. Project Definition</p> <p>1.1 Has the Lead Planning Engineer received a copy of the “unpriced” contract?</p> <p>1.2 Is the Project Procedure and Execution Manual (PPEM) available? What is the status, issue and date?</p> <p>1.3 Does the PPEM properly describe the scope of work and services expected from your discipline to execute the work?</p> <p>1.4 Have Company/client, standards/norms/ guides/practices/procedures/ forms and specifications, applicable and to be used by planning been listed in the PPEM?</p> <p>1.5 Does the PPEM indicate the type of planning, i.e.: barchart, network, discipline schedules etc? To what extent is this planning approach driven by contractual obligations?</p> <p>1.6 Has a "planning scope" document been prepared and approved by the project manager?</p> <p>1.7 Has the project calendar been developed and issued?</p> <p>1.8 Does the PPEM contain an instruction how to handle project variations?</p> <p>Did the client approve the instructions?</p> <p>1.9 Has the applicable scope of work for each discipline been defined in the PPEM?</p> <p>1.10 Have the deliverables for each discipline been defined in the PPEM?</p>						
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<p>1.11 Have the authority requirements been established and listed in the PPEM, i.e. which authorities are involved, which documents have to be submitted for approval and by whom?</p> <p>Has sufficient time been allowed for presentation and approval time?</p>		
<p>2. Engineering Technical</p>		
<p>2.1 How has the discipline project file been organized?</p> <p>Are electronic files stored in an organized manner?</p>		
<p>2.2 Computer calculations:</p> <ul style="list-style-type: none"> • have your programs been certified by the discipline manager? • is it expected that our standard computer programs need to be updated to comply with the requirements of this project? • are any computer interfaces required with the client or other third parties? • have these been defined? 		
<p>2.3 Are the equipment lists available?</p> <p>Are you using the latest revision?</p>		
<p>2.4 Is Documentum deliverable tracking used on the project?</p> <p>Are the interfaces with PEC and Planning satisfactory?</p> <p>If Documentum is not used, what system is used instead?</p>		
<p>3. Planning and Scheduling</p>		
<p>3.1 Has the applicable work breakdown structure been defined and approved by the project manager and the client?</p>		
<p>3.2 Have contractual milestones been specified for preparation of planning documents and for presentation of these to the client for</p>		
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<p>approval?</p> <p>3.3 Has a level 2 master (barchart) schedule been issued?</p> <p>3.4 Have the planning methods (level 1 through 3) been defined in the PPEM? What is the current status?</p> <p>3.5 Have level 3, (network based) schedules been issued for comments and/or approval as required by the PPEM?</p> <p>3.6 Have level 3 schedules been finalized and issued for each discipline?</p> <p>3.7 Has the network been resourced and used for progress planning and manpower planning?</p> <p>3.8 How has the interface between level 3 and the detailed level 4 discipline schedules been defined?</p> <p>3.9 Have level 4 schedules been made by each discipline?</p> <p>3.10 Have the project manpower loading curves been issued?</p> <ul style="list-style-type: none"> • Home Office? • HO disciplines? • Construction Management? • Field Labor disciplines? <p>3.11 Are planning documents:</p> <ul style="list-style-type: none"> • numbered? (ref. BN-W-UL001) • correctly checked/approved and signed by all disciplines? • correctly distributed? (PPEM/DDS) <p>3.12 Is there a clear critical path? How is it tracked and communicated?</p> <p>3.13 Have critical documents requiring multi-discipline reviews been included in the schedule?</p>		

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<p>3.14 To what extent are the following reviews included in the planning schedules:</p> <ul style="list-style-type: none"> • model? • HAZOP? • multi-discipline P&ID / EFD? <p>3.15 Has the impact of changes and project deviations been incorporated?</p> <p>3.16 How are the results of the expediting, inspection and supplier print groups been incorporated in the planning documents?</p> <p>3.17 Has a planning schedule been made for each subcontract?</p> <p>3.18 Have construction schedules been identified by subcontract?</p> <p>3.19 Have all subcontract bid key dates been included in the schedules?</p> <p>Do we have for each SC a schedule/progress curve and manpower loading histogram?</p> <p>How was this information obtained?</p> <p>3.20 Have back-up data for schedules, etc. been clearly recorded and filed?</p> <p>3.21 Are previous issues of planning documents kept with the lead planning engineer?</p> <p>3.22 Is the Project Execution Control (PEC) system used on the project and is its data up-to-date at the cut-off date of each progress report?</p> <p>If PEC is not used, what "system" is used in stead?</p> <p>3.23 Are the home office manhours, curves and progress updated at each progress report cut-off date?</p> <p>3.24 Does the monthly reporting system include:</p> <ul style="list-style-type: none"> • all milestones (to be) achieved? • manhour/progress curves or histograms per discipline? 			
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<ul style="list-style-type: none"> • separate construction progress curves per subcontract and over-all construction progress achieved? 						
<p>3.25 Are there currently any indications of unfavorable conditions or trouble areas in your group or any other discipline, with manufacturers, subcontractors, client or any other party involved in the execution of the project?</p> <p>Think of milestones and end dates as well as problems that could result in additional cost to the project?</p>						
<p>3.26 Is there a client restriction for the % agencies on the job?</p>						
<p>3.27 Is client approval required for new people on the job?</p> <p>If yes, who monitors?</p>						
<p>4. Manpower/Miscellaneous</p>						
<p>4.1 Have manpower requirements for HO disciplines been adequately planned?</p>						
<p>4.2 Is the planning engineer involved in:</p> <ul style="list-style-type: none"> • weekly, bi-weekly or monthly project coordination meetings? • problem solving meetings if any? 						
<p>4.3 What is the perception of the communication quality between the planning group and other disciplines?</p>						
<p>5. Job Control</p>						
<p>5.1 Has a budget for the planning group been defined?</p>						
<p>5.2 Has the planning/scheduling group prepared a forecast, planning and manpower curve in executing the scope of work and services required by planning for the project?</p>						
<p>5.3 What is the current relationship between spent and planned planning manhours?</p>						
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<p>5.4 Is the manhour forecast for planning vs budget being updated and maintained?</p>		
<p>5.5 Were any manpower problems experienced in:</p> <ul style="list-style-type: none"> • fulfilling all project planning requirements? • assigning sufficient qualified people? • changes in personnel? 		
<p>5.6 Is there evidence of good communication with other disciplines/departments?</p>		
<p>5.7 What is the perception of the communication within the Project Controls group?</p>		
<p>6. Additional Questions</p>		