

Act'Y Short Descr.	Time (weeks)	Immediate Predecessors
4000 prepare final rpt	2	2000, 2122, 3200
2000 monitor system	6	2000: hold group workshops
2000 hold group w'shps	2	2000: obtain approval
2000 prepare final proc	2	2000: monitor system
2000 prepare final proc manual, revise syst	2	2116-2121: approvals
2000 monitor system	8	2000: hold group workshops
2000 prepares for impl'n	2	3100: hold PM&C seminar
2122 get approval	2	2122: define com & supp needs
2122 def comp supp needs	4	3100: hold PM&C sem
3200 hold tech seminars	4	3200: prepare seminars
3200 prepare seminars	8	3200: obtain approvals
3200 obtain approvals	2	3200: def tech sem needs
3200 def tech sem needs	2	3100: hold PM&C sem
3100 hold PM&C seminar	3	3100: integrate proc man in sem
3100 int. proc man in sem	1	2201: revise prel proc man 2201: prel. proc manual
2201 revise prel proc man	.6	2201-2300: get approval

Note: Because of space limitations, the network is given in the form of a precedence table. An activity-on-node diagram may be directly constructed from this table. Numerical designations refer to the WBS in Figure 5.

FIGURE 7 Network of PM&C program.

In the Heublein PM&C system, managerial networks are use in their own management process and which the staff of the project can use to self-direct where appropriate. For this reason, the view toward the network is that no one network should exceed 50 nodes. The top-level network represents the highest level of aggregation. Each activity on that network may well represent someone else's next lower-level network consisting of not more than 50 nodes. This is not to say that there are not thousands of activities possible in a Heublein project, but that at the working managerial level, each manager or project staff person responsible for a networked activity is expected to work from a single network of a scope that can be easily comprehended. It is not an easy task to aggregate skillfully to reduce network size, but the exercise of this discipline has value in planning and execution in its own right. The precedence table shown reflects the interdependencies of activities for Heublein's PM&C Program; they are dependent on the design of the Program and the needs of the organization. Each organization must determine them for themselves. But what is important is that institution of a PM&C Program be planned this way. There is a great temptation in such programs to put all activities on one path and not to take advantage of parallel

activities and/or not to see just what is the critical path and to focus efforts along it.

**Schedule and Resource Allocation**

The network defines the mandatory interdependency relationships among the tasks on a project; the schedule is the realization of the intent of the PM, as it shows when the manager has determined that tasks are to be done. The schedule is constrained in a way that the network is not, for the schedule must reflect calendar limitations (vacations, holidays, plant and vendor shutdowns, etc.) and also the limitations on resources. It is with the schedule that the project manager can develop the resource loadings and it is the schedule which ultimately is determined by both calendar and resource constraints.

**Organization and Accountability**

Who is responsible for what? Without clear, unambiguous responses to this question there can be no assurance that the task will be done. In general, committees do not finish projects and there should be one organizational unit responsible for each element in the WBS and one person in that organizational unit who holds final responsibility. Thus responsibility implies a single

ed in accor-  
level totals. At  
project—and  
the PM&C  
ne reader an  
carrying out  
ce a project-  
ut-of-pocket  
ation wish-  
to so withi  
that in the  
ing indirect  
costs—both  
the General  
-half days  
nal process  
their work;  
ing with a  
e opposite.  
termine the  
consultant/  
costs) and  
, etc.) are  
only for  
projects.  
(used to  
ual prin-  
cal path,  
er to the  
consider-  
chiques  
ause the  
ented, is  
concepts

40,000
50,000
40,000
20,000
10,000
0,000
0,000