

The Definition Conundrum

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When you, Mr. Project Manager, request a “schedule” for the project, do you expect to be handed a copy of the software files, containing the CPM program for calculating the schedule? Or, as I suspect, do you expect to be handed a tabular or graphic presentation of activity start and finish dates? This brief article is intended to explain the rationale behind the adoption of the scheduling terminology that distinguishes between the tool and the results.

As the Scheduling Practice Standard Team developed a glossary of terms to guide us through the development of the standard, it became rapidly apparent that we, as a profession, have used the term “schedule” to actually mean two distinct items: 1) the tool, program, software, file(s), etc. that contained all the components of a traditional CPM application, and 2) a list of the resulting dates. The usage was dependent on the context of the communication. When used to refer to a set of dates, often we tack a modifier on to the term schedule, such as “early”, “late”, “resource limited”, “baseline”, “target” and so on. Now, it is fairly obvious that this thing we call an “early schedule”, for example, is in deed just a listing of a set of start and finish dates. Similarly, a “resource limited schedule” is a single set of start and finish dates.

Now, if sometimes we refer to a schedule as a set of dates, how then, can we refer to the tool that contains all the components which allow us to calculate the start and finish dates? If we simply call it a schedule also, aren't we introducing ambiguity into our professional communications?

To resolve this ambiguity of terms, the Scheduling Practice Standard Team worked with the PMBOK [“Project Management Body of Knowledge”] Guide Team to develop a suitable set of distinct terms so that we, as a profession, can communicate in a clearer manner. This process was open to the PMI community through the commenting process. The result was the adoption of the following terms, as they appear in the latest edition of the PMBOK Guide:

Project Schedule [Output/Input]. The planned *dates* for performing *schedule activities* and the planned dates for meeting *schedule milestones*.

Schedule Model [Output/Input]. A model used in conjunction with manual methods or *project management software* to perform *schedule network analysis* to generate the *project schedule* for use in managing the execution of a *project*. See also *project schedule*.

This now makes it clear that the tool (schedule model) contains all the logic, constraints, activities (and maybe even resources) and algorithms to do its calculation, while the result (schedule) is the output from the tool's calculation. While I personally had a tough time warming up to the term “model”, after some further analysis and consideration, it made sense to me too. After all, when we “operate” our CPM programs, are we not in deed doing modeling of sorts to generate a certain outcome (a set of dates) driven by the inputs (logic, durations, lags, constraints, resource limits, etc)?

After some research into the English language and common use of terms, we determined that the term “schedule” most often is defined as a table of times (take for example, a train schedule or an airline schedule). When I ask the conductor for a copy of the train schedule, he does not hand me the railroad’s computer program that does all the traffic analysis and equipment location and movement calculations that were used to create the table of arrival and departure times, he hands me just the table. Similarly, on a project, when I want to know what the schedule is to get the work done, I expect a list of start and finish dates (even if it is presented graphically as a bar chart), and not the whole CPM program.

While this may make some people uncomfortable to adopt a new term for this tool we have been calling ambiguously a “schedule”, I also believe that this distinction will lend itself very nicely to translation into other languages than English. I would encourage everyone to read carefully through Chapter 6 of the new PMBOK Guide edition to see how this all hangs together.