

ment of the project and the completion of the project handbook.

The practical completion and handover procedures should be detailed by the project manager in the project closure plan covering aspects of acceptance of works, completion of unfinished or deficient works, commissioning and test reports, maintenance schedules and working instructions. Proposals for training project operators and users should also be included.

A key activity of the project closure stage is ensuring that a plan for 'post-completion project evaluation' is in place to allow feedback from those that took part in the project. The post-implementation review process is designed to examine the entire project retrospectively, with the purpose of identifying what lessons can be learned through its management and the process followed, and whether or not the original client requirements were met in full, or in part. The results of the review are usually put into a report. In many cases, a review cannot examine whether the strategic or business objectives have been met, since many of these are long-term objectives spanning several years. However, the strengths and weaknesses of key project plan elements can be assessed, so that future benefits for other projects can be derived. However, the most important aspect of this final stage of the project cycle is to ensure that the project closure is properly celebrated in order to acknowledge the efforts of everyone who contributed to defining, planning and implementing the project. Celebrating achievements demonstrates that people's work is valued.

### **THE ROLE AND USE OF PROJECT MANAGEMENT SOFTWARE**

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The extensive use of computer applications as tools to assist most project management functions has become a usual occurrence. It is therefore essential to keep abreast of developments in this area in order to select and recommend appropriate packages for use on a project. It is particularly

important to make sure that systems used by project team members are compatible to facilitate electronic exchange of data. E-mail and teleworking are examples of new ways of facilitating and accelerating communications exchange between parties.

Project management software can assist in managing time and cost aspects of projects. It can provide a consistent approach to project planning and can provide management focus by illustrating the various stages of the project in graphical form. When selecting a particular software package, it is necessary to consider how user-friendly and functional the application is and to what extent staff training is necessary. Consideration should also be given to quality and performance standards and the value for money that it provides.

The most popular project management software currently available in the market includes CA Superproject, Microsoft Project, Timeline, Project Manager Workbench and Scheduler. Most of these packages offer good value for money and provide useful function cover. Microsoft Project is probably the most user-friendly and provides the ability to visualize projects very effectively. It links to spreadsheets, databases and it is powerful enough to deal with complex projects. Software is updated regularly and new versions can offer improvements, therefore the buying of software requires much thought and research. Before committing a project to a particular software package, it is important to ensure that a number of packages have been tried and demonstrated and that the training and support offered is to the project manager's satisfaction.

### **MANAGEMENT OF PROJECTS: THE NEW MODEL**

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As described earlier in this chapter, the evolution of project management has been closely related to engineering management processes and the development of system engineering in the defence and aerospace industry. These systems have been complemented by developments in modern management