Quality auditing techniques

The purpose of this chapter is to introduce the most fundamental of all the quality assurance techniques, namely quality assurance auditing. The activities to which quality assurance audit can be addressed are varied. A number of these will be mentioned, but especially audit of the quality management system. Because of its importance and topicality, systems audit will be examined in some detail.

The expression ‘quality auditing’ is sometimes used synonymously with ‘quality management system auditing’ which we shall examine in some depth. However, it is possible to look at many other quality assurance activities as being audits. We shall therefore review some of them in that light before focussing on ‘systems audit’.

THE CONCEPT OF AUDITING

To all non-quality specialists, ‘auditing’ means first and foremost financial auditing. At first sight financial audit and quality audit have little in common, but in principle rather than in application there are strong similarities.

The following analogies can be recognized.

1. (a) A financial audit is performed by independent professionals (the auditors) in the interests of the company and on behalf of its members (the shareholders), to safeguard their investment. The auditors are not experts in the company’s business, but they are experts in accounting matters and the techniques of auditing.

(b) A quality audit is performed by independent professionals (the quality auditors) in the interests of the company and on behalf of the customers, in order to safeguard the quality of their purchases. Quality auditors do not have to be experts in
the processes they are observing, but they do need a thorough understanding of the objectives and techniques of quality assurance.

2. (a) A financial audit cannot hope to witness or examine all the company's financial records but it inspects some records, chosen at random, and looks for errors and inconsistencies.

(b) A quality audit cannot examine all the products or activities, but chooses random samples and examines them for defects or discrepancies.

3. (a) The financial auditors are not responsible for correcting errors or malpractices, merely for reporting them so that others can take the necessary action. They are not censured for exposing inefficiency or malpractice, but they would be criticized if it came to light that they had failed to discover and expose them.

(b) A quality auditor is similarly responsible for reporting a situation so that others can correct it. The 'Quality Auditors', or QA department, do not have to provide the resources for correcting quality problems, but must be capable of discovering them.

WHAT CONSTITUTES A QUALITY AUDIT?

On the strength of the analogy given above, most activities performed by the QA department can be considered as audits, since:

1. They are performed by QA because of their independence and special skills;
2. They are based on sampling, or on checking records;
3. They are intended to report situations on which others must act.

The areas readily acknowledged as audits are:

1. Quality management review;
2. Quality system audit;
3. Process audit;
4. Product audit;
5. Service audit.

These terms will be clarified in the following sections.

MANAGEMENT REVIEW OF THE QUALITY SYSTEM

This is not exactly an auditing exercise, though it is sometimes treated as part of quality system audit, and it a requisite of a quality system