

4.4.3. Control of quality (ISO 9000)

It is theoretically possible in a construction company to put all quality systems into one book – the Quality Manual. In some companies quality managers do it, and the resulting quality manual consists of 200-300 pages. They distribute it around the firm (or factory producing building materials or equipment). In this case, however, a procedure that one person may want to refer to is hidden amongst many others. Such documentation gains a bad reputation for being inaccessible and unhelpful and eventually it is not used.

It is much better if the quality documentation is structured in a hierarchical way with policies at the top and records at the bottom, packaged separately in a form suitable for the end users. It should be remembered by the Quality Management Proxy that the target for each level of documentation may be different. For example, policies may need to be written in a different style from work instructions. Policies describe what a Company does to ensure that the quality is maintained in each of the areas covered by the clauses in ISO 9001.

Policies are the overview of the Quality Management System (or Total Quality Management System) of a construction company and usually are put in a separate ring-binder. It is this document that constitutes the Quality Manual of the Company. The Quality Manual can be used to communicate the Company's policy on quality to potential customers and third party assessors. It will inevitably contain Quality Management jargon and it is up to the Quality Management Proxy to assure customers that the company complies with the required standards.

Procedures describe how each work process is to be done and demonstrate how policies are implemented. Procedures are normally issued as a separate document. They can be packaged as sheets in folders or as manuals addressed to the internal users. Here the wording needs to be direct with only internally recognised jargon. The Quality Management Proxy can also use flow charts or other diagrams instead of text where appropriate. Procedures can be also available on-line in the company's computer system if the necessary technology is at the disposal of the Quality Management Proxy but he/she must be aware of people printing out uncontrolled copies which they might keep using when they are out of date.

Work instructions describe how specific work practices should be done (in finer detail and at more local level than procedures usually allow for). In some organisations, especially smaller construction companies, there will be no need to distinguish between procedures and work instructions. These can be one and the same.

Records of work output comprise forms, contracts and checklists. For example, purchase orders, sales order forms, delivery notes and checks on work done. Records may also be technical information describing the products of a Construction Company, and its services (for example, specifications, data sheets, engineering drawings) which have to be maintained.

During preparation of the Quality Management system the Quality Management Proxy should consider how to write the policies and the procedure. First of all, it has to be decided which should be written first – the policies or the procedures. Managers are not able to complete their policies until procedures are written (unless they have already an extremely clear picture of exactly how all working practices operate). Conversely, they ought not to write all the lower level procedures until they have developed some policy on the ISO 9001: 2000 clauses. References to procedures need to be incorporated into each chapter of the policies manual. It is also a good idea to include in each chapter of Company's procedures a reference showing which policy it relates to.

The best way to tackle production is to write the policies and procedures in tandem. In order to attempt this task the Quality Management Proxy in co-operation with other managers should first write the Company's present working practices. When it is written down, attention should be turned to the additional items that are required. This will be the appropriate time to map out and draft the Company's policies.

The main parts of the typical Quality Management functional process in a construction company are:

- responsibility, duties and power division (fragmentation) between managers taking into consideration their scope of work,
- written normalisation of all activities which are important from the quality point of view,
- written confirmation of execution of such activities (all notes and reports should be kept),
- audit preparations,
- quality records,
- permanent controlling of chosen departments,
- proper training of chosen management staff.

Internal Audit and Design Review Procedures are included in most important procedures used in European Construction Companies.