KPIs and other measurements must be selected carefully to serve the company's best interests

TIMES ARE

According to Qualidoc's quality management consultant, **Jean White**, quality managers preparing for AS9100 certification should be aware that significant changes in auditing standards are in the pipeline.

escribed by the International Aerospace Quality Group (IAQG) as 'An enhanced audit approach for evaluating processbased management systems', IAQG expects to issue Aerospace Standard 'Quality Management Systems, Audit Requirements for Aviation, Space and Defence Organisations' (AS9101 Rev E) later this year.

With the introduction of Rev E it is clear that successful audit results will depend on the judgement of the auditor (based on objective evidence) as to whether or not 'process effectiveness' has been measured appropriately and objectives ('planned results') achieved. The focus will be on the actual processes and the extent to which quality objectives have been achieved in line with those processes.

Rev E is a further move away from audits focused on recognising apparent or incubating nonconformances. According to the revision 'the following Audit Approaches shall be used to conduct each on-site audit: Customer focus; Organisational leadership; Quality management system performance and effectiveness; Process management; Process performance and effectiveness; Special processes and Continual improvement.'

Auditors will intensify their focus on process management. They will expect to find that quality and business performance objectives determined by the client organisation are monitored, measured and the results analysed, keeping in mind the critical objective of continual improvement. Quality managers will need to identify, with senior management, which processes and critical success factors can be usefully measured by key performance indicators (KPIs) or other convincing measurements. Financial information, however, is not included in the scope of 9101. KPIs are defined in the standard as: 'Goals or targets that measure how well an organisation is doing on achieving its operational objectives or (identifying) critical success factors for a particular project.'

No time to lose

At this point are you intrigued, but think you have plenty of time? You will need time to consider the status of your current KPIs and other measurements such as those for customer satisfaction and continual improvement. Are they redundant or obsolete because the business objectives, scope or processes have changed? What would you need to do to meet the auditor's requirements and ensure the maximum benefit to the company? Where can you find opportunities to introduce new KPIs? I would consider as a KPI any process

SUPPLY CHAIN I QUALITY MANAGEMENT SYSTEMS

that affects the customer directly or indirectly and decide whether or not it is a critical success factor in its effect on the customer.

I am the first to say that measurement for the sake of it is bad business, and will be resisted by experienced executives. KPIs and other measurements must be selected carefully and serve the company's best interests. Rev E does, however, present an opportunity to review the business scope and quality objectives as expressed in the company quality policy. The policy should reflect the current status of company objectives, processes, commitment to the quality management system and the required standard. The quality policy may look good on paper, but can KPIs be extracted from it? If so, what would they be? Which critical success factors would be affected? The quality policy should be the first stage in defining quality objectives in clear terms that can be used to identify the relevant KPIs.

The quality policy will be the gateway to the processes and procedures which will be examined by the auditors. Auditors will focus on processes such as: marketing & sales, purchasing, production planning, parts manufacturing, assembly, warehousing (incoming material and finished products), maintenance, design & development, delivery, incoming goods, product support, training, management responsibility and resource management.

The AS9100 standard also identifies verification, validation, monitoring, measurement, inspection and testing

inspection and testing as activities which can be part of organisation processes.

All processes from quotation to delivery can be examined for their effect on quality objectives, the required planned activities and their planned results. The auditors will pay particular attention to the Product Realisation processes defined within AS9100, Clause 7.

All roads above lead to auditors looking for evidence of continual improvement. This means acting on trends at the earliest opportunity rather than bringing them up via the Management Review agenda once a year. It might pay to look at processes which produce continually acceptable audit results, identify what makes them acceptable against well-defined criteria and see if these attributes can be transferred to less successful processes. This is particularly appropriate when considering customer satisfaction levels because it provides an opportunity to be closer to the customer's implied needs as well as specifications.

As part of their top management interview auditors might ask the following questions: Who are the key customers? What is the level of management focus on product conformity and on-time delivery? How is this focus measured and within which time period and frequency? With which targets or objectives are they compared? If off target, what are the actions taken? Are the measurement methods discussed with customers? Are there customer requirements for this?

Shopfloor realities

From my experience, working as I do with the day-to-day shopfloor realities of quality standard development and

management, I fear the continued emphasis on customer satisfaction measurements might mean that customers will be subjected to even more frequent, poorly-expressed surveys. It might be difficult to get a useful or even prompt response from customers, since most of them are overburdened

> The AS9100 checklist: Significant changes in auditing standards are underway for the next AS9100 audit



Jean White (right) joins her happy clients as they celebrate ISO9001:2008 certification

and couldn't be bothered anyway. All they want is what they ordered, on time and as cheaply as possible with the best quality possible in line with their requirements. My question is: how valuable is this measurement when the response is indifference? Much depends on the questions, how much inconvenience to the customer is involved and (most important) how the resulting information is going to improve service to the customer.

Despite the indigestible language, however, companies can interpret the standards to their advantage if they concentrate on producing clear, specific, relevant and verified policies, processes and procedures describing a logical sequence of events managed by carefullyassigned responsibilities and authorities.

The standards do not require that bureaucracy has to be exchanged for good judgement based on experience and the ability to make imaginative connections. Good judgement means considering the implications of Rev E for the entire business sooner rather than later.

Rev E is an opportunity for a new look at how the company operates at all levels. If the effect of the enhanced auditing approach is considered well in advance, the unanticipated allocation of time and resources (which are already under stress) can be avoided. **I** www.qualidoc.co.uk

AEROSPACEMANUFACTURING | APRIL 2013 19