

Introduction

It's a question of competence

Good morning, everyone.

Firstly, I'm delighted to be presenting here at the SMMT Quality Management Division's 2nd annual conference. Thanks to Niall Keeley for the invitation. I'm also particularly pleased to be talking to you about the question of competence, something I've been involved with all my working life. Initially for me as I looked to develop my own competence by building knowledge and honing skills that would go with me through my career.

As I've grown older, and hopefully wiser, I've looked to build competence in others, even from before I had line manager responsibility working with colleagues who I thought were receptive or at least needed to know. Then as a manager, you learn all about people and how they learn, you look to develop the overall competence of your team to be able to deliver benefits for the organization. That remains the case for everyone in this room.

My current career combines a number of roles. For the day job, I run my own company providing consultancy, training and audit. I'm also active in a number of professional membership institutions helping ensure their offerings align with members' needs and that standards of professional competence are maintained across the Institute, and finally, I work as a technical expert for our national and international standards bodies, and that is the main reason I am here today.

Firstly a **question** for the audience, who here has heard of Annex L? A show of hands, please.
(Summary of visual assessment of results)
(Depending on the result might ask a supplementary question about Annex SL)

Annex L is one part of the ISO Directives that run to a couple of hundred pages and describe how ISO and IEC manage their standards development programme. It's a really confusing term. More and more now, ISO talks about the 'Harmonized Approach' to management systems standards (MSS) development.

In essence, this audience, as users of standards, does not need to know about Annex L (or its predecessor, Annex SL) because it is aimed at standards developers like me and describes what we need to do when we develop our MSS, in my case ISO 9001. The reason I am here talking about Annex L is that whatever goes into the harmonized approach ends up in ISO 9001 and then into IATF 16949.

Quality Competence

I've chosen to break competence down into the 3 key areas below:

- Requirements - This is primarily standards and specifications that your organization has to meet. Many of these will be well known to us. We can think of a hierarchy with:
 - Annex L - the core of all MSS
 - ISO 9001 - the global standard for quality management
 - IATF 16949 - the international automotive quality management standard referencing ISO 9001 in its entirety and containing automotive specific requirements

- Expectations - What do your customers expect when they buy:
 - The cars you produce?
 - The components they need to build those cars? Form, fit and function. The packaging the components come to the line in
 - Services they require to manufacture or provide those components, cars and services that the end-user requires? Those services include product design, marketing, retail and service dealership network and even third party management systems certification to some of those requirements standards I mentioned earlier?

- Organization - This is all personal to you and to the organizations you work for. I can only talk in general terms about competence here. I can bring in examples of organizations I have worked for and I may have to hide some names to protect my sources and to not pour scorn on companies I have worked for and with.
 - If there is a requirement or a customer expectation that has to be met there is only one way you can meet it, and that is by working with colleagues and other functions in your company.
 - Policies - what does your organization say about meeting requirements and customer expectations? There are plenty of policies out there that look perfect on paper but practice doesn't match.
 - Behaviours - how does actual practice match the words that you preach?

Annex L - Wordcloud

So this word cloud has been produced from the words of Annex L. I'd like to highlight a couple of the significant areas of Annex L. In this word cloud significance is reflected in the size of the word described by the number of times it is used in Annex L which, to remind you, is at the heart of ISO 9001 and all other management systems standards.

- Management - unsurprising when we are dealing with a **Management** Systems Standard. This gives us a focus on where our efforts have to be focussed.
- Organization - similarly we need to be concentrating on how the company is structured and operates.
- Shall - I'm going to jump over this but will only emphasize that these are absolute requirements. The means of achieving the 'shall' are up to you.
- System - as for organization and management, system refers to the 'big picture' of the organization and how it operates
- Competence - (Bottom line of the word cloud - towards the left-hand side) a brief mention that Annex L does make specific requirements for competence for individuals carrying out specific roles

In the time available I'm just going to pick on one element of Annex SL and go into some detail. This element is 'Context' and I could offer a prize for the first person to spot it on the slide ...

... it is actually in the centre of the 'O' of organization - which is quite appropriate, as we will see.

4. Context of the organization

Bit of a busy slide. Don't expect to read it out to you. These are the first two requirements clauses of Annex L and hence ISO 9001.

4.1 Understanding the organization and its context

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s) of its XXX management system.

4.2 Understanding the needs and expectations of interested parties

The organization shall determine:

- the interested parties that are relevant to the XXX management system;
- the relevant requirements of these interested parties.

What does this requirement for Context tell us about the competence of quality professionals? If we consider those three elements of requirements, expectations and organization.

- The requirements under clause 4 look simple enough. I'm not going to read them out from the slide, you can all do that. Looks fairly straightforward, doesn't it? What's important is not the words, it's the meaning behind them.
 - Let me first tackle the 'XXX' question. When the standard writer uses this text they start with a 'find and replace' to take XXX and replace with (in our case) 'Quality'. But just a note here, the same text applies if you are talking about environmental management, occupational health & safety management, information security etc. At the time of writing, there are 47 requirements standards that use Annex L and a further around 40 that provide guidance.
 - It talks about the organization
 - It relates to external and internal issues
 - The issues have to be relevant, what does that mean?
 - The issues have to affect the organization's ability to achieve its intended outcomes of the quality management system
 - It points us towards identifying relevant interested parties and their relevant needs and expectations.

All of these points relate to requirements but what about expectations and the organizations where we all work?

This is where your competence as quality professional kicks in. We each need to be able to demonstrate our organization has processes in place to pick up on these interested parties and their needs and expectations. This is all tailored to you, your organization and your supply network, including the customers you serve.

Let's take this into the automotive sector briefly. Customers are always a significant and relevant interested party, what do they bring? Starting at the top they require Tier 1 suppliers to be IATF 16949 certified, so another set of requirements above the vanilla ISO 9001 comes into play. For the two clauses I have highlighted on the slide the IATF standard doesn't add anything but if we look further in Clause 4.3.2 brings in customer-specific requirements. How much work is that?

Without labouring the point, later on, the IATF standard invokes:

- product safety (Clause 4.4.1.1/2),
- anti-bribery, employee code of conduct and whistle-blowing (Clause 5.1.1.1),
- contingency planning (Clause 6.1.2.3)
- MSA (Clause 7.1.5.1.1)
- Laboratory requirements (Clause 7.1.5.3)
- You get the point ... and that's without getting into the IATF certification scheme requirements.

To my mind these are all context issues so straight away 2 simple sentences bring into play a vast array of additional requirements your QMS has to meet.

“No man is an island, entire of itself; every man is a piece of the continent, a part of the main.”

— John Donne

John Donne was an English poet alive at the end of the 16th and the beginning of the 17th century. He could have been a writer of ISO Standards with this quote and it just goes to show that there is nothing new in standards - as we might expect. More of this later.

The Future

Changes - constant

Don't ask me to quote you the original Ancient Greek saying, but **Heraclitus**, a Greek philosopher, has been quoted as saying "change is the only constant in life." This is so true.

On this slide, I've highlighted three areas that we've already talked about.

- Annex L - currently there is an ISO task force running. They have reviewed the current version and, with the agreement of the national standards bodies including BSI in the UK, have decided to make changes to the harmonized approach. Some of the contentious points being debated at the moment are:
 - The definition of 'Risk' - currently - effect of uncertainty. For an audience of quality professionals used to FMEA we are more used to the 'negative' side of risk. Not everyone thinks the same.
 - Management of Change - TC 176 already have an ISO 9001 clause here and the automotive industry knows only too well how changes that aren't effectively managed can result in huge problems for the OEMs.
 - Organizational knowledge - trying to deal with the need for a balance in requirements for documents and relying on the competence of individuals.
 - Incidents, non-compliance, nonconformity - the need for further work here - likely to fall short of the automotive 8D approach
 - Emergency preparedness - again likely to fall short of IATF requirements for contingency planning
 - Outsourcing
 - Governance, leadership, culture
 - Communication
- ISO 9001
 - Systematic review next year - under ISO procedures required every five years for published standards so due next year
 - Future concepts task group is currently discussing the impact of new technology and ways of working on quality management
 - Current plan is for limited change as the 2015 edition is considered a significant change.
 - Will follow revised Annex L that should be published by the time we start work on ISO 9001:2023 or 24

- IATF 16949
 - There is continuing development - in the 2016 edition, apart from the ISO 9001 changes there was further consolidation of customer specific requirements
 - Currently follows ISO 9001
 - Currently follows Annex L
 - By all accounts is working for the industry

- Your organizations
 - Products? Electric Vehicles, increased technology, sustainability etc.
 - Processes
 - Industry developments AI, Big Data

Implications for competence

Quality professionals in the automotive sector need to be able to address all of these changes. SMMT was a key driver for BS 5750 in the UK. In 1987 the British Standard went on to become the vast bulk of content of ISO 9001 internationally.

The automotive industry through IATF and SMMT have been at the heart of quality management (including standards) for years. Continuing competence of professionals in this room today will ensure automotive needs are addressed in international quality standards. Pleased to hear Chris, in his piece, talk about SMMT's influence of standards such as PAS 1040.

Get involved, stay involved. If anyone wants to contact me over the next two days to find out a bit more about how to go about this then please approach me.