

IATF AUDITOR COMPETENCE CRITERIA BOOKLET

In developing the ongoing training and evaluation process for certification body auditors, it became apparent, that despite ISO19011 defining an outline of auditor competence requirements, no one document clearly defined what knowledge an ISO/TS16949 auditor should have, and how they are expected to apply this knowledge within an audit.

The IATF training commission, which Rob Brown from SMMT facilitates, and Paul Hardiman from SMMT IF participates set about addressing this by developing an auditor competence criteria booklet.

The booklet is structured around the ISO/TS16949 registration process, with section 3 covering Essential Auditing Competence Criteria and General Auditing Competency Criteria.

The format of the booklet is shown below:

For the "process approach" in the essential auditing competence criteria section, the competency requirement defined is:

"An auditor demonstrates priority is given to questioning the organisation's identification of processes, their sequence and interactions, and performance against the objectives / measures defined, with focus on the processes which directly impact the customer".

To do this successfully the auditor needs knowledge (which could be tested by written exam), and skills which demonstrate the knowledge can be applied (could be tested by application exam or witness audit).

The booklet will be formally issued to the certification ISO/TS16949: 2002 bodies in November 2006.

ISO/TS16949: 2002, 8.2.2.5, requires organisations to "have internal auditors who are qualified to audit the requirements of this technical specification".

Many organisations have not clearly defined under what criteria the auditor is qualified.

The criteria in the booklet can be used to help organisations define internal auditor competency criteria.

If you would like more details, or would like a PDF file copy of the booklet contact Paul Hardiman at paul.hardiman@industryforum.co.uk

Knowledge (able to ...)	Skills (able to ...)
<ul style="list-style-type: none"> Describe what a process is. Describe how processes interact and how interactions can be shown within a quality management system. Describe the Rules' requirements related to automotive process approach auditing. Describe what is meant by the automotive process approach versus an elemental, "departmental" or "functional" approach. Define the 8 management principles. Describe how to integrate the ISO/TS16949: 2002 requirements into a process based audit. Describe how to plan and carry out an audit based upon the organisations processes not clauses. 	<ul style="list-style-type: none"> Demonstrate the planning and conduct of an audit using the automotive process approach principles, guidelines and tools (i.e. use of "turtles" or an equivalent tool). Use an audit plan in conjunction with the organisation's defined processes, including sequence and interaction. Ensure that the organisation's process definition accurately describes reality. Conduct interviews, etc. with auditees at appropriate locations (where the process occurs). Refrain from employing a clause/checklist driven auditing style. (Means not just turning "shalls" into questions, but asking questions from the organisation's process definitions and process performance.) Verify the identification and application of the appropriate ISO/TS16949: 2002 requirements in the context of an audit of the organisation processes.

IATF RULES FOR ACHIEVING IATF RECOGNITION

As some of you will be aware, since the release of the second edition of the rules in July 2004, there have been many sanctioned interpretations and frequently asked questions (see www.iaob.org). This makes understanding of the rules difficult, especially for certification body auditors who need to make reference

to them on a regular basis.

It is likely that the third edition of the rules will be issued in mid 2007, taking into account the content of ISO17021.

We will keep you informed of any changes as they evolve.

SMMT IF ISO/TS16949: 2002 NEWSLETTER

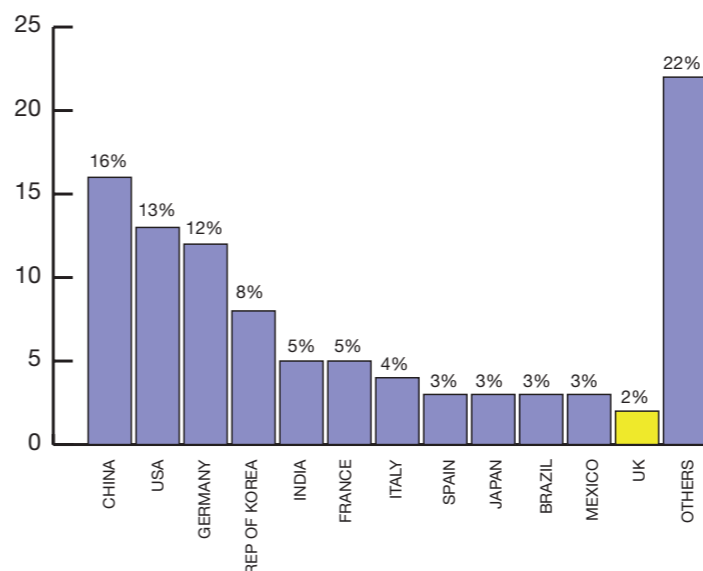
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"Welcome to this sixth edition of the SMMT IF ISO/TS16949: 2002 newsletter. This regular publication is aimed to keep readers up to date with developments with ISO/TS16949 and SMMT IF services. Any comments and suggestions for future editions would be welcomed, addressed to paul.hardiman@industryforum.co.uk"

GROWTH IN ISO/TS16949: 2002 REGISTRATIONS

At the end of August over 27000 registrations had been issued. The graph below shows the % distribution of registrations by country. Not surprisingly China now leads with 16% of the total registrations. The UK is 12th in the ranking, with approximately 550 organisations registered.



CUSTOMER SPECIFIC REQUIREMENTS

Finally a move has been made to try to centralise a source of customer specific requirements (CSR)

A central repository for ISO/TS 16949-related CSR is being established on the AIAG Web site.

Developed by the Customer Specific work group, this Web page will be a resource for subscribing organizations to post links to their customer specific requirements for ISO/TS 16949. Using this newly established central repository will ensure the current revision level is available and communicated to the supplier and auditing community.

To date, Delphi, Visteon, Timken, Freudenburg and Automotive Holding Group have established links on the AIAG Web site for their ISO/TS 16949 customer specific requirements. To view, visit www.aiag.org/quality/index.cfm.

IATF FOCUS ON PERFORMANCE

IATF are mandating that third party auditor's focus more on the actual customer satisfaction metric (ppm / delivery etc) during an audit, through review of customer scorecards and feedback. The auditor should challenge the organisation on actions taken where customer objectives or targets are not being met, and how any issues are being communicated to top management to ensure adequate resources are being allocated.

IATF Oversight witness auditors have been directed to assess the auditors planning and audit activity based on prioritization against customer satisfaction measures.

IATF OEM (vehicle manufacturers) members are now

using Oversight offices to undertake special audits of certification bodies undertaking audits at organizations performing badly compared to customer measures/scorecards.

The bottom line is the vehicle manufacturers want to see the TS scheme being effective, evidenced by organisations registered to ISO/TS16949 demonstrating measurable continual improvement and improvement in customer satisfaction.

This will be taken into account in deciding the future direction of the scheme, which is likely to be when the next revisions are due in 2010.

FEEDBACK FROM RECENT ISO/TS16949: 2002 AUDITS

In reviewing reports from recent ISO/TS16949 audits some common areas of concern have been identified. Two of these are explored below:

Measurement System Analysis: Visual inspection

7.6.1 states, "Statistical studies shall be undertaken to analyse the variation present in the results of each type of measuring and test equipment system. This requirement applies to measurement systems referenced on the control plan".

The question is: Are visual inspection systems a measurement system, and as such is a statistical study required?

The answer has to be yes. Visual inspection is used to accept or reject a product, just as a go- no go gauge should be able to differentiate between good and bad product.

In addition 8.2.4.2 "Appearance items" states, " The organisation shall provide verification that personnel making appearance evaluations are competent and qualified to do so".

Under the second edition of the AIAG MSA reference manual, organisations could have use the short study attribute study method, which involved taking twenty samples, some known to be nonconforming and then ask three appraisers to evaluate then and make a decision on acceptance/rejection.

The acceptance criteria for the study are there had to be total agreement between appraisers.

In the third edition MSA manual, issued in 2005, the short study option disappeared.

In addition customer specific requirements, such as Ford, mandates attribute studies utilise 50 parts, three appraisers, and three trials.

Firstly, before embarking on any trial, an organisation needs to verify that there is a clearly defined accept/reject criterion in place for the attribute being checked. In many cases this is not clearly defined, and often triggers communication with the customer to clarify/confirm.

Once confirmed, 50 samples have to be selected from product from the normal production process, with a number of samples known not to meet the defined acceptance criteria for all common types of defects, and some borderline samples. Each sample should be discretely numbered and the decision on pass/fail confirmed by the responsible person (expert).

This decision should be entered into the attribute agreement spreadsheet under "standard" column.

The operators who normally inspect the attribute being studied should all have been trained in a common inspection method.

The facilitator then presents the samples to the appraisers in random order and records the decisions.

How are results interpreted?

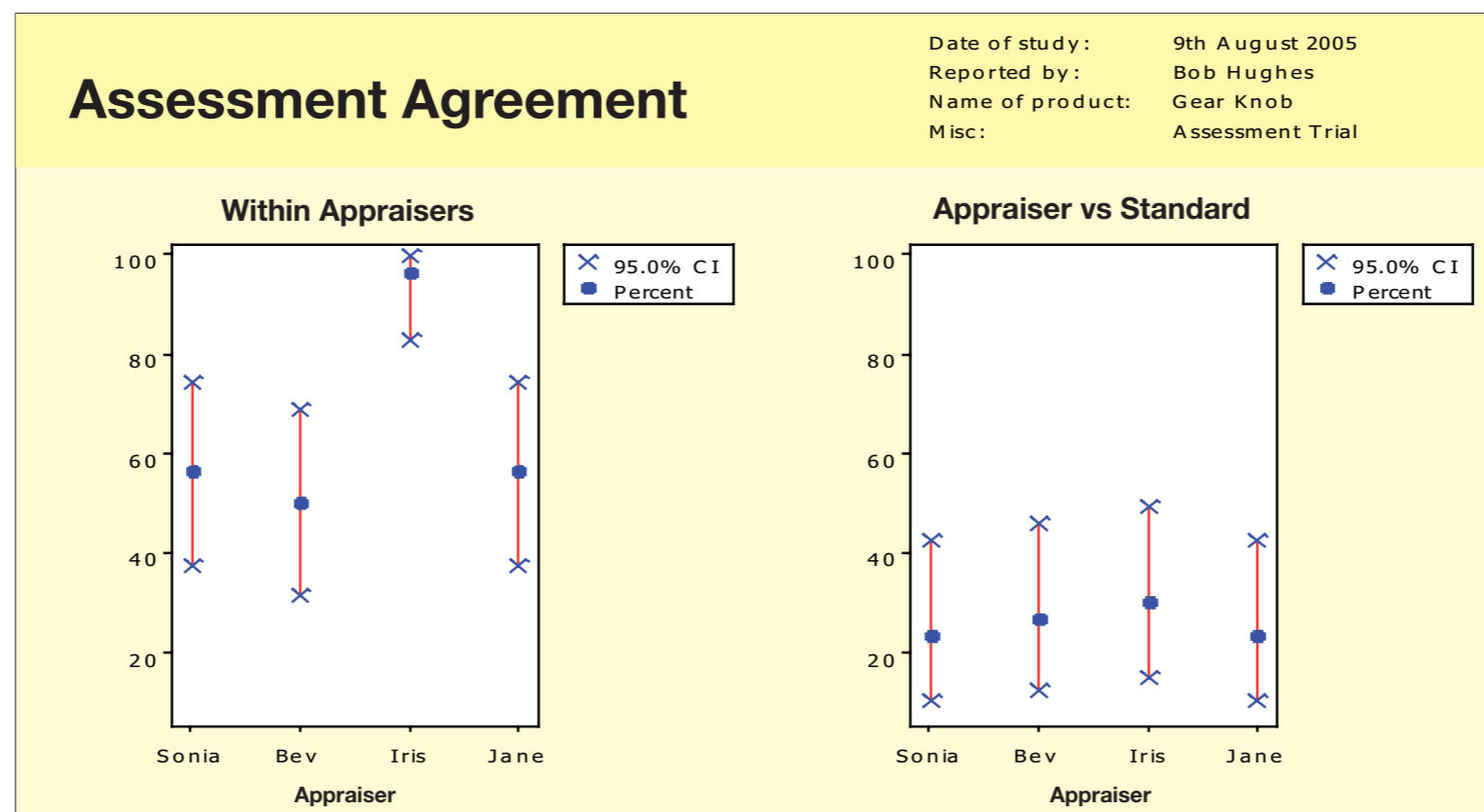
Results are presented as within appraiser variation graph (see below) that shows how each appraiser repeatedly evaluates each sample (repeatability). It also shows how appraisers results compare with each other (reproducibility).

The round plot point shows the % consistency for each appraiser. The vertical lines show the calculated 95% confidence interval (i.e. the true position of the plot is the point is expected to be somewhere within this interval).

The overlapping confidence interval shows there is no significance difference between Sonia, Bev and Jane, who only agree with themselves about 50% of the time, but a significant difference with Iris, who has a much higher % agreement.

The appraiser verses standard graph shows the extent to which each appraiser decisions to accept/reject conform to the reference decision established by the "expert".

All appraisers had very poor levels of agreement with the standard. (Even though Iris nearly always agreed with herself she only agreed with the standard decision less than half the time.)



The software or spreadsheet will calculate a Kappa value from the data. Kappa is a statistic that describes the consistency of each appraiser results for a specific item, across all their trials. If Kappa is 1 there is perfect agreement. If Kappa is 0 the agreement is the same as would be expected due to pure chance.

Some general guidance that can be applied is that if Kappa is less than 0.7 the measurement system needs improvement.

If Kappa is >0.9 the measurement system may be considered excellent.

In the above case the Kappa value fell well below the acceptable value, and as such there is very little confidence that the visual measuring system is capable to differentiate between good and bad product, and hence there is considerable risk to the customer.

This should instigate actions to improve the "measurement system".

This could include:

- Better define/communicate the acceptance criteria to all concerned
- Display visual samples of acceptable/unacceptable standard
- Re-train operators in the acceptance standards
- Improve lighting in the inspection area

Once the improvement actions have been completed the study needs to be performed again to verify effectiveness of the actions taken.

It should not stop here. The process should be robust, for example:

- The visual samples should be maintained in a state of order
- There should be a process to re-evaluate operators at a defined period
- There should be a defined process for training new employees
- Any lighting standards should be monitored/maintained
- Performance should be continually monitored, taking into account customer feedback and concerns

Whereas some organisations may be frightened off by the complexity of this method, it can pay back massive financial benefits.

Trials have shown that operators/inspectors may be rejecting perfectly acceptable product, and letting reject product through to the customer, resulting in customer dissatisfaction and incurred costs.

SUPPLIER PART APPROVAL

ISO/TS16949: 2002 requires that "the organisation shall conform to a product and manufacturing approval procedure recognised by the customer. This product and manufacturing approval procedure shall also be applied to suppliers".

The key word here is "This".

For example if the customer requirement is PPAP, then PPAP requirements have to be applied to supplies of any product that is to be incorporated into customer product.

Depending on customer requirements, it may be required that supplier PPAP warrants and supporting information be supplied as part of the submission to the customer.

If the customer has no particular product approval procedure (which may be the case lower down the supply chain) the organisation should agree what procedure will be applied (maybe a simple Initial Sample Inspection Report (ISIR)).

This ISIR requirement would be applied to the relevant suppliers.