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EN 9100 internal audit

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Annexes

- Goal of the module:** To perform an audit according to ISO 19011 so as to be able to:
- improve the capacity to satisfy stakeholders
 - verify the conformity to practices and effectiveness of the processes
 - determine the effectiveness of the EN 9100 aerospace quality management system

1 Scope

The word audit comes from Latin "audire" = to listen.

Audit: *systematic and independent survey to determine whether activities and results comply with pre-established measures and are able to achieve the objectives*

Audits are mostly either internal or external.

The internal audits, called also first party audits, are a requirement of the EN 9100 standard (cf. sub clause 8.2.2).

The external, customer (or supplier) and certification audits, called also of second and third parties, are not within the scope of this module.

The internal audit is the most widespread tool to check and evaluate the effectiveness of an aerospace quality management system (AQMS). Its purpose is in no way to find the weak points in personnel. It has entered a company daily life as an inherent part of the aerospace quality management system.

It's only through other people's eyes that one can really see one's weakness. Chinese proverb

An internal audit is of (cf. figure 1-1):

- the management system
- a process
- a product (service, project)

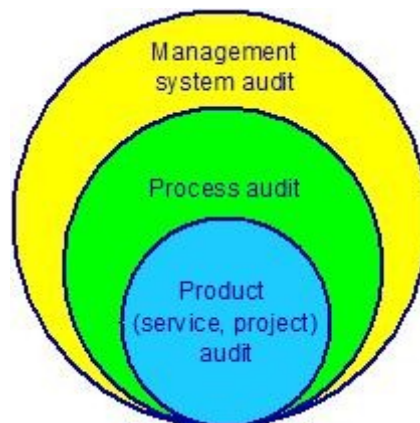


Figure 1-1. Internal audit types

Process: *activities which transform inputs into outputs*

The effectiveness audit is a mixed audit - to check whether the quality management system and its processes are efficient.

The internal audit results are part of the inputs of the management review and allow the identification of fields in which to improve the aerospace quality management system as

No system is perfect

As shown in figure 1-2, for the conduct an audit process, top management (via the management review) is considered as a customer with needs and expectations, which are themselves related to the processes and various requirements. At the same time top management is often the audit client.



Figure 1-2. Conduct an audit process

2 Normative references

The advices given by the ISO 19011 standard can be summarized in the following fields:

- audit principles - clause 4
- audit programme - clause 5
- audit activities - clause 6
- auditor competences - clause 7

A good knowledge of the EN 9100 standard is required to understand and follow this module.

This module is based on the following generic and international standards:

- **ISO 19011 (2002): Guidelines for quality and/or environmental management systems auditing**
- **ISO 9000 (2005): Quality management systems - Fundamentals and vocabulary**
- **ISO 9004 (2009): Managing for the sustained success of an organization - A quality management approach**
- **EN 9100 (2010): Aerospace series - Quality management systems – Requirements for Aviation, Space and Defence Organizations**

All these standards and many others can be ordered on the [ISO](http://www.iso.org) web site, ISO store services.

3 Definitions

The beginning of wisdom is calling things by their right names. Confucius

Some terms and definitions currently used in this module:

AQMS: Aerospace Quality Management System

Audit criteria: *everything against which audit evidence is compared*

Audit findings: *every deviation from audit criteria*

Auditee: *everyone who is audited*