



Overview

- Introduction to ISO and the technical committees responsible for ISO 19011
- Development process and schedule
- Review of the contents of 19011
- Pros and Cons



Canadian Standards Association

- CSA is a leading standards development body, product certification agency and the largest quality registrar in North America
- Private, not-for-profit organization
- Accredited by the Standards Council of Canada for standards development, product safety certification and quality/environmental registration services
- Manages the ISO Secretariats for TC176 Quality and TC207 - Environment (held by the Standards Council of Canada)



ISO

- International Organization for Standardization
- Central Secretariat in Geneva
- Member based Standards Council of Canada is our official member
- Published over 12,800 standards to end of 2000
- ISO TC207 Environmental Management Committee



ISO/TC 207 - Environmental Management

- **Scope:** Environmental Management tools and systems.
- **Vision:** Facilitate world trade and contribute to sustainable development.
- Membership (75): 60 Participating Countries, 15 Observing Countries, 43 Liaison organizations
 - > ISO's largest committee!



ISO/TC 207 - Structure Subcommittees

- SC1: Environmental Mgmt Systems
- SC2: Environmental Auditing *
- SC3: Environmental Labeling
- SC4: Environmental Performance Evaluation
- SC5: Life Cycle Analysis



ISO/TC 207 Structure

ISO Council

ISO
Technical Management Board

ISO Technical Committee 207 (ISO-TC207) Secretariat: SCC Managed by CSA International

ISO-TC207 Subcommittee 2
Environmental Auditing and Related
Investigations

Other TC207
Subcommittees

Joint Working Group
Auditing 19011
(linked to ISO TC176 Subcommittee 3)



Canadian Advisory Committee and ISO/TC 207

Industry Canada
Federal Government

Canadian National Committee
to ISO
Administered by
Standards Council of Canada

Canadian Advisory Committee to ISO-TC207
(CAC ISO-TC207)
Administered by
Canadian Standards Association

CAC to ISO-TC207 SC2
Environmental Auditing and Related
Investigations

CAC's to Other TC207
Subcommittees

CAC to the ISO Joint Working Group
Auditing 19011



ISO Joint Working Group (JWG)

- Responsible for the development of ISO 19011
- Reports to 2 Committees (TC176/SC3 and TC207/SC2)
- Has 2 Co-convenors (Germany + France)
- Secretariat is NEN (Netherlands)
- Includes 40 experts nominated by TC176 and TC207 member bodies



Canadian Advisory Committee to ISO TC176-TC207 JWG

- Responsible for providing Canadian input to the development of ISO 19011
- Reports to 2 Committees (CAC TC176/SC3 and CAC TC207/SC2)
- Has 2 Co-Chairs (Andrew Noden and John Reed)
- Includes over 30 members from both quality and environmental auditing committees
- Secretariat is CSA



ISO 19011 Standard Development

- Project Plan prepared by ISO January 1999; replace the ISO 10011-1, -2, -3, 14010, 14011 and 14012
- Working Draft #1 completed June 1999
- Committee Draft #2 completed in April 2000
- Committee Draft #3 completed in September 2000



ISO 19011 Standard Development cont'd

- Draft International Standard (DIS) completed in April 2001
- Final Draft International Standard ballot issued June 2002
- International Standard November 2002



Basic Issues of ISO 19011

- Recognition of need for harmonization of QMS and EMS auditing.
- Auditing Joint Working Group between ISO/TC176 and ISO/TC207
- Intended to provide guidance only ("should", no "shall" language)
- Covers both internal and external auditors
- Includes "combined" and "joint" audits



ISO 19011 Document Structure

- 0. Introduction, 1. Scope, 2. References
- 3. Terms and definitions
- 4. Principles of auditing
- 5. Audit programme management
- 6. Audit activities
- 7. Competence of auditors



19011 Clause 3 Terms and definitions

- Current policy is to not change definitions already provided by the 9000:2000 or 14001series
- Exceptions must be documented and justified
- New terms: audit plan, audit scope



19011 Clause 4 Principles of auditing

Personal characteristics of auditors:

- Ethical conduct trust, integrity, confidentiality, discretion
- Fair presentation report truthfully and accurately
- Due professional care apply diligence and judgment
- Independence free from bias and conflict of interest

Audit process:

Evidence-based – verifiable evidence

"The guidance given in the remaining sections of the present International Standard is based on the principles set out above"



19011 Clause 5 Managing an audit programme (1 or more audits)

- 5.1 General (includes plan-do-check-act figure and concept of combined or joint audits)
- 5.2 Objectives (why? & what?) and extent (scope and criteria)
- 5.3 Responsibilities, resources and procedures
- 5.4 Implementation
- 5.5 Records
- 5.6 Monitoring and reviewing (continual improvement)



19011 Clause 6 Audit activities

- 6.1 General (includes flow diagram)
- 6.2 Initiating the audit (team leader, define OSC, feasibility, team, contact auditee)
- 6.3 Conducting document review
- 6.4 Preparing for the on-site activities (audit plan, work to team, work documents)



19011 Clause 6 Audit activities (cont'd)

- 6.5 Conducting on-site activities (opening meeting, communication team, auditee, client, R & R of guides, collect and verify info, generate findings, conclusions, closing meeting) (**Note**: conclusions can include recommendations)
- 6.6 Preparing, approving and distributing the audit report
- 6.7 Completing the audit
- 6.8 Conducting audit follow-up (verify completion and effectiveness of corrective actions in next audit)



19011 Clause 7 Competence and Evaluation of auditors

- 7.1 General (includes Competence figure specific and generic for Quality & Environment)
- 7.2 Personal attributes
- 7.3 Knowledge and skills (general, leader's, specific to QMS and EMS auditors)
- 7.4 Education, work experience, auditor training and audit experience (includes table on examples)
- 7.5 Maintenance and improvement of competence
- 7.6 Auditor evaluation process(includes flowchart, tables of evaluation methods and evaluation examples)



Clause 7.2 Personal Attributes

14012

- Competence in expressing concepts/ideas
- Interpersonal Skills
- Independence/Objectivity
- Organization skills
- Judge based on evidence
- Cultural sensitivity

19011 DIS

- Ethical
- Open-minded
- Diplomatic
- Observant
- Perceptive
- Versatile
- Tenacious
- Decisive
- Self-reliant



Clause 7.3 Knowledge and Skills

- 7.3.1 General Knowledge for Auditors
 - Audit principles, procedures and techniques
 - Management system and reference documents
 - Auditee's organization: structure, processes
 - Applicable laws and related requirements
- 7.3.2 Specific Knowledge for Audit Team

 - **Leaders** Planning and effective use of resources
 - Communicating with client/auditee
 - Leading audit team to reach audit conclusions
 - preventing and resolving conflicts
- Expansion of 14012 text



Clause 7.3 Knowledge and Skills

Cont'd

7.3.4 - Specific Knowledge for EMS Auditors

- Environmental Mgmt methods and techniques
- Environmental science and technology
- Technical and environmental aspects of operations

Combined with Clause 7.3.1, there is little change from 14012 to 19011



Clause 7.4 Education, Work Experience

- Requirements for an auditor
 - education needed for knowledge and skills
 - work experience requiring exercise of judgement, prob. solving, communication
 - experience in quality/environmental field
 - auditor training/experience
- Requirements for an audit team leader
 - refers to 7.3.2 knowledge and skills
 - experience should be gained under supervision of a competent audit team leader



Clause 7.4 cont'd Education, Work Experience

- Auditors of both Quality and Environment MS's
 - additional training and work experience
 - perform audits under supervision of an auditor competent in the extra discipline
- This also applies to Audit Team Leaders



Education, Work Experience

(excludes QMS/EMS auditor)

14012 - Auditors

19011 (Table 1)

- Secondary Education or equivalent
- 5 years work experience (4 for auditor w/ degree)
- 20 audit days during at least 4 audits
- Training equivalent of 20 days on the job
- Lead Auditor additional 15
 audit days during at least 3
 additional audits

- Secondary Education or equivalent
- 5 years work experience (4 for auditor w/ degree)
- 20 audit days during at least 4 audits
- Training 40 hours
- Lead Auditor additional 15
 audit days during at least 3
 additional audits within the
 last 2 years



Clause 7.5 - Maintenance and Improvement of Competence

14012

19011

- environmental science + technology
- technical and env. aspects of operations
- environmental laws
- EMSs
- audit processes

- More general language for training, etc. for "changes in the needs of ... the organization, practice of auditing, standards and other requirements"
- refers to continual participation in auditing to maintain ability



7.6 Auditor Evaluation

- 7.6.1 General introduction (relationship diagram between stages)
- 7.6.2 Initial evaluation process
 - Set evaluation criteria
 - Select the appropriate evaluation method
 - Conduct the evaluation
- Table 3 Evaluation Process of Auditor in Hypothetical Internal Audit Program)



ISO 19011 Pros

- More comprehensive than former docs
- Better relevancy for both internal and external audits
- Programme element
- Enhances potential for integrated audits



ISO 19011 Cons

- "Harmonization" of QMS and EMS, but still distinct – adds limited value (may be more value-added to Registrars)
- Concept of risk substantially missing audit risk, assessing risk of issues, control deficiencies
- "Conclusions" in some instances reference should be to "findings" (we'll see)



CAC Members - Environment

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Thank You!