

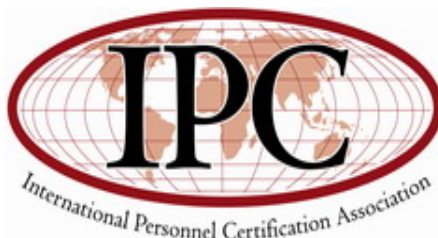
International Personnel Certification Association



I P C
CERTIFICATION SCHEME

“IPC QUALITY/ENVIRONMENTAL MANAGEMENT SYSTEM AUDITORS”

ISSUE 1

International Personnel Certification Association**I P C CERTIFICATION SCHEME****“IPC QUALITY/ENVIRONMENTAL MANAGEMENT SYSTEM AUDITORS”****Classification**

This document is classified as an IPC Criteria Document.

IPC certification scheme lays down the standard framework which all members of IPC undertake to adhere to in the operation of their auditor certification programs. The certification scheme will be the primary standards against which members will be assessed for membership in the IPC Multilateral Recognition Agreement (MLA). Members of IPC seeking membership of the IPC MLA must conduct their operations in a way which conforms to all the requirements of the relevant IPC Certification scheme.

IPC Certification scheme is published on the authority of the Members of IPC.

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AVAILABILITY

Copies of this document in English can be accessed on the IPC Website at: www.ipcaweb.org
Members of IPC may obtain an electronic version of this document from the Secretariat.

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PREFACE

This IPC Certification scheme for Quality/Environmental Management System Auditors have been prepared by the International Personnel Certification Association (IPC) to provide a common basis for the certification of QMS and EMS auditors. This Certification scheme can be applied by any PCB that has become a member of IPC by signing the IPC Memorandum of Understanding. It can also be utilized as an endorsed scheme for the operation of IAF MLA on ISO 17024.

IPC Certification scheme have been developed using ISO 19011 and ISO 17021 as reference standards, taking into account the collective wisdom of the members of IPC, and the requirements of both industry and certification bodies/registrars. This Certification scheme may be the basis upon which QMS or EMS auditors can be certified as IPC-graded QMS/EMS auditors.

This endorsed IPC certification scheme may be used freely by Accreditation Bodies, signatories of IAF MLA to ISO 17024, to accredit Personnel Certification bodies. Still those accredited Personnel Certification Bodies and Certified Professionals are not permitted to use IPC name and/or logo, unless being authorized by IPC. (For more details contact IPC secretariat at: secretary@ipcaweb.org)

The two certification grades that IPC recognises are IPC QMS/EMS Auditor, and IPC QMS/EMS Lead Auditor.

The certification of an IPC-graded auditor only indicates the individual's competence to perform MS audits. The IPC scheme does not identify the area of technical competence that an individual may have. The responsibility for identifying that an auditor has the necessary knowledge and understanding of the technical environment to perform an audit of a specific organisation will still rest with those responsible for managing the audit process.

All IPC documents are published in English. The English version with the most recent issue and version number and date of each IPC document is the definitive version. Members of IPC whose language of operation is not English have the right to translate all IPC documents into their own language of operation.

For further information on the application of IPC Certification scheme, contact your local member of the Association or the IPC Secretariat at:

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TABLE OF CONTENTS

AVAILABILITY	2
PREFACE	3
SECTION 1 OVERVIEW	5
1.1 Introduction	5
1.2 IPC MSs Auditor Grades	5
1.3 Definitions	5
1.4 References	6
SECTION 2 - PREREQUISITES OF THE APPLICANT TO BE ADMITTED TO THE COMPETENCE EVALUATION	7
2.1 Education	7
2.2 Work Experience	7
2.3 Quality/Environmental Experience	7
2.4 Formal Training	7
2.5 Auditing Experience	7
2.5.1 Audits for IPC QMS Auditor	7
2.5.2 Audits for IPC QMS Lead Auditor	8
2.5.3 Audits for IPC EMS Auditor	8
2.5.4 Audits for IPC EMS Lead Auditor	8
2.6 Eligible Audits	8
SECTION 3 - COMPETENCE REQUIRED FOR EACH GRADE OF IPC MANAGEMENT SYSTEMS AUDITORS AND EVALUATION METHODS	10
3.1 Personal behaviour and their evaluation	10
3.1.2 Examination of Personal behaviour	10
3.2 Knowledge	10
3.2.1 Knowledge Competence common to all Management Systems Auditors and evaluation methods	10
3.2.2 Knowledge for all QUALITY Management System Auditors and Lead Auditors grade certification	11
3.2.3 Knowledge for all ENVIRONMENTAL Management System Auditors and Lead Auditors grade certification	12
3.3 Skills	13
3.3.1 Skills common to all management systems auditors	13
3.3.2 Skills common to all Management Systems Lead Auditors	13
SECTION 4 EXAMINERS	15
4.1 Selection Criteria for Examiner	15
SECTION 5 MAINTAINING CERTIFICATION	166
5.1 Maintaining Certification	16
5.1.2 For IPC QMS or EMS Auditor	16
5.1.3 For IPC QMS or EMS Lead Auditor	16
5.1.4 Professional Development	16

SECTION 1 OVERVIEW

1.1 Introduction

1.1.1 This certification scheme has been developed by the IPC - International Personnel Certification Association for the purpose of harmonising the practice of Management Systems (MSs) Auditors certification worldwide.

1.1.2 The principal objective of this IPC certification scheme is to provide a uniform approach to the certification of MSs Auditors as the basis for a multilateral recognition framework within IPC.

1.1.3 The process used in developing this certification scheme was to establish firstly the key competence for MSs Auditors and then determine the methods by which those competence are able to be demonstrated and evaluated.

1.1.4 In taking a competence-based approach to certification, there is a much greater dependence on the process used to assess individual applicants. This approach is designed to enable applicants for certification to demonstrate their attainment of the requisite knowledge, the application of the required skills and the personal behaviour in a number of ways. This approach places a greater emphasis on the methods used to evaluate an applicant and the effectiveness of the personnel evaluation.

1.1.5 This document is divided into five sections:

Section 1. Overview, with introduction, auditor grades, definitions and references.

Section 2. Competence required for each grade of IPC management systems auditors and evaluation methods

Section 3. Prerequisites of the applicant to be admitted to the competence evaluation

Section 4. Examiners

Section 5. Maintaining certification and obtaining recertification

1.2 I P C QMS/EMS Auditor Grades

1.2.1 The certification scheme described in this document is for:

IPC QMS/EMS Auditor Certification;

IPC QMS/EMSLead Auditor Certification

1.2.2 I P C QMS/EMS **MSs Auditor** grade is awarded by Accredited Personnel Certification Bodies to applicants who have demonstrated the competence required to perform all or any part of a QMS/EMS audit as a member of a team

1.2.3 I P C QMS/EMS **Lead Auditor** grade is awarded by Accredited Personnel Certification Bodies to applicants who have demonstrated the competence required for I P C QMS/EMS Auditor certification and, in addition, the competence required to effectively manage an audit team in all the aspect of a complete QMS/EMS audit.

1.3 Definitions

For the purpose of this certification scheme, the terms and definitions given by ISO 19011 and the following ones apply:

PCB: Personnel Certification Body

Desk-Top Review:	the evaluation by the auditor certification body of documentary evidence submitted by the applicant in support of the application.
Examiner:	a person designated to evaluate the competence of applicants for certification to IPC QMS/EMS Auditors/Lead Auditors grades.
Candidate:	applicant who has fulfilled specified prerequisites, allowing his/her participation in the certification process for persons.
Roleplay Simulation:	a way of constructing an approximation of a real audit experience, but under controlled conditions, to facilitate skill competence assessment
Multiple Choice Question:	a form of assessment in which the candidates (examinees) are asked to select the one correct answer out of the choices from a list.

1.4 References

Applicable documents: Valid versions of ISO 19011; ISO 17024; ISO 17021, ISO 9000 family, ISO 14001 family, ISO 17007.

SECTION 2 - PREREQUISITES

2.1 Education

2.1.1 Applicants should have completed at least secondary education (typically all the years full-time schooling prior to university entrance). Documentary evidence of the education claimed will be required.

2.1.2 As an alternative, applicants may be considered for certification if they can demonstrate 10 years full time work experience and satisfy the PCB (by an interview or other means) that they have achieved a satisfactory level of knowledge relevant to Management Systems auditing.

2.2 Work Experience

2.2.1 Applicants for all grades with post-secondary education degree shall have at least 4 years full-time (or part time work that totals 4 years) work experience in a technical, professional or management position of accountability involving the exercise of judgement. This period shall be increased to 5 years for applicants with secondary education. Two years of the above periods shall be related to the specific management system for which the certification is required (see point 3.3. below).

2.2.2 Applicants shall provide documentary evidence of work experience; this evidence may be presented in the form of employer or costumer references giving information on work actually carried out, positions held, reporting levels and areas of responsibility. This evidence must be signed by the applicant's employer or customer.

Alternatively, the applicants can provide a signed self-declaration, giving information on work actually carried out, positions held, reporting levels and areas of responsibility completed with detailed information useful to verify its reliability.

2.3 Quality/Environmental Experience

2.3.1 Applicants shall have a minimum of 2 years relevant experience in the implementation, operation, and/or auditing of QMS or EMS, which provides the practical knowledge necessary to effectively audit such QMS or EMS. The QMS or EMS experience required may be concurrent with work experience.

2.4 Formal Training

2.4.1 Applicants shall have completed a QMS or EMS auditor training course. The training targets shall be defined and shall comply to actual knowledge competence required for QMS/EMS auditors. The training course shall consist of a sum of at least 40 hours clearly defined learning units (Including on-site training, self-learning, distance learning, e-learning).

2.5 Auditing Experience

To be eligible for certification, all auditing experience shall have been gained in the three- year period immediately prior to application.

2.5.1 Audits for IPC QMS Auditor

2.5.1.1 The totality of auditing experience for an applicant's IPC QMS auditor grade shall include:

- i. Each element of a QMS standard, e.g. ISO 9001 or an acceptable alternative QMS standard;
- ii. the entire audit process from preparation to reporting in accordance with ISO 19011 or ISO/IEC 17021;

2.5.1.2 The applicant shall have acted as a member of an audit team under the direction of a competent QMS lead auditor on at least 4 complete QMS audits the total duration of which shall be a minimum of 20 days auditing with a minimum of 16 days on site.

2.5.2 Audits for IPC QMS Lead Auditor

2.5.2.1 Applicants for IPC QMS Lead Auditor grade shall satisfy all auditing and competence evaluation requirements for IPC QMS Auditor, and shall have satisfactorily performed as a team leader under the direction of a competent QMS lead auditor.

- i. conducting and managing 3 complete QMS audits, with a total duration of at least fifteen (15) days with a minimum of 12 days on site., and
- iii. the entire audit process from preparation to reporting in accordance with ISO 19011 or ISO/IEC 17021;

2.5.3 Audits for IPC EMS Auditor

2.5.3.1 The totality of auditing experience for an applicant’s IPC EMS auditor grade shall include:

- iv. Each element of a EMS standard, e.g. ISO 14001 or an acceptable alternative EMS standard;
- v. the entire audit process from preparation to reporting in accordance with ISO 19011 or ISO/IEC 17021;

2.5.3.2 The applicant shall have acted as a member of an audit team under the direction of a competent EMS lead auditor on at least 4 complete EMS audits the total duration of which shall be a minimum of 20 days auditing with a minimum of 16 days on site.

2.5.4 Audits for IPC EMS Lead Auditor

2.5.4.1 Applicants for IPC EMS Lead Auditor grade shall satisfy all auditing and competence evaluation requirements for IPC EMS Auditor, and shall have satisfactorily performed as a team leader under the direction of a competent EMS lead auditor:

- ii. conducting and managing 3 complete EMS audits, with a total duration of at least fifteen (15) days with a minimum of 12 days on site., and
- vi. the entire audit process from preparation to reporting in accordance with ISO 19011 or ISO/IEC 17021;

2.6 Eligible Audits

2.6.1 Only independent audits will satisfy the QMS or EMS auditing experience requirements. The auditor and the auditor’s organization shall have independent management and operating structure from the audited organization. Examples of acceptable relationships are:

- i. a head office audit of a plant or division;
- ii. one division or plant auditing another division or plant;

- iii. a customer organization auditing a supplier;
- iv. a third party certification audit;
- v. a consultant contracted to provide an independent audit;

2.6.2 All audits shall involve the entire audit process from preparation to reporting.

2.6.3 All audits shall be for the purpose of determining conformity, not combined with advice for developing/improving the QMS or EMS.

2.6.4 An audit day shall be not less than 6 hours on site and no more than one audit day being claimed in each 24 hour period.

SECTION 3 COMPETENCE AND ASSESSMENT

3.1 Personal behaviour

3.1.1. Applicants for certification shall be able to demonstrate the personal behaviour necessary for the effective and efficient performance of the audit as defined in clause 7.2.2 of ISO 19011:2011 and Annex D of ISO 17021:2011:

3.1.2 Examination of Personal behaviour

The Applicant's Personal behaviour can be examined through:

- an appropriate "Psychological Test Examination" preferentially by a face to face meeting or by an e-based examination (in this case the PCB must guarantee the certainty of the applicant identity)

or

- the direct observation by the PCB Examiner under auditing (on-site) conditions during a MS audit or during a MS audit simulation.

3.2 Knowledge

3.2.1 Knowledge Competence common to all Management Systems Auditors and evaluation methods

- The Applicants for all Management Systems Auditor grade certification **shall know and understand** the following Competence Units:
 - a) Types of audits: management system audits, process and product audits;
 - b) Principles, procedures and techniques of auditing;
 - c) How to relate the auditee management system to the audit criteria;
 - d) How to conduct an effective audit in the context of the auditee's organisational situation;
 - e) How to evaluate a process approach based management system;
 - f) Regulations, and other specific considerations that are relevant to the management system to be audited;
 - g) Personal behaviour necessary for the effective and efficient conduct of a management system audit;
 - h) Statistical methods: sampling techniques, basic statistical methods (bar-charts, pie-charts, line-charts and trend-charts), Statistical Process Control, e.g. FMEA;
 - i) Audit related risks;
 - j) How to communicate effectively with the auditee and audit client;
 - k) How to consider the procedures common to the other management systems;
 - l) How to interpret an integrated management system;
 - m) How to interpret the financial statements and ratios.

- The Applicants for all Management Systems Lead Auditor grade certification **shall know and understand** the following Competence Units:

- a) All the skills and knowledge listed above for the Management Auditor and
- b) How to communicate with senior management;
- c) How to establish, plan and task the activities of an audit team;
- d) How to organize and direct audit team members;
- e) How to read and evaluate an organizational business plan;
- f
- g) How to determine appropriate business improvement tools;
- h) How to evaluate the management system effectiveness;
- i) How to prepare and complete the audit report.

3.2.1.1 Examination of knowledge common to all Management Systems Auditors and Lead Auditors

The above knowledge competence shall be evaluated through written exams. The written exams can be carried out by the examiners appointed by the PCB and selected according to the following Section 4.

The written exams shall be composed, from the appropriate number, of:

- multiple choice questions,
- open questions,

in order to cover the knowledge requirements of clause 3.2.1.

The written exams can also be carried out through an e-based examination: in this case the PCB must guarantee the certainty of the candidate identity and that he works without any aid.

3.2.2 Knowledge for all QUALITY Management System Auditors and Lead Auditors grade certification

- The Applicants for all Quality Management Systems Auditor grade certification **shall know and understand** the following Competence Units:
 - a) Certification standards and guidelines: ISO 9000, ISO 9001, ISO 9004 and ISO 19011
 - b) Quality Management Principles in the context of ISO 9001
 - c) How to relate the quality management system to the organizational products, including services, and operational processes
 - d) How to determine the suitability and effectiveness of the Quality Management System

Note: Annex A.4 of ISO 19011:2011 should be also considered

3.2.2.1 Examination of knowledge for QUALITY Management Systems Auditors, and Lead Auditors

The above knowledge shall be evaluated through written exams provided by an accredited PCB. The written exams can be carried out by the examiners appointed by the PCB and selected according to the following Section 4.

The written exams shall be composed at least of:

- 40 multiple choice questions based on the above knowledge c. Duration: 60 min. Each question shall have a minimum of 4 answers.
- Additionally, open questions may be added based on the knowledge related to different topics from the multiple choice questions.

The written exams can also be carried out through an e-based examination: in this case the PCB must guarantee the certainty of the candidate identity and that he works without any aid.

3.2.3 Knowledge for all ENVIRONMENTAL Management System Auditors and Lead Auditors grade certification

- The Applicants for all Environmental Management Systems Auditor grade certification **shall know and understand** the following Competence Units:
 - a) The application of the certification standards and guidelines: ISO 14001, ISO 14004 and ISO 19011
 - b) Environmental management principles
 - c) Environmental science and technology
 - d) How to implement an environmental management system considering different operational processes
 - e) How to assess the risk of significant environmental impacts and activities identified in the context of the organization's Environmental Management System
 - f) How to assess the methodologies and techniques to control environmental hazards
 - g) How to assess the Environmental Management System roles and responsibilities within the context of the organizational environment
 - h) How to determine the suitability and effectiveness of the Environmental Management System

Note: Annex A.3 of ISO 19011:2011 should be also considered

3.2.3.1 Examination methods of knowledge for ENVIRONMENTAL Management Systems Auditors and Lead Auditors,

The above knowledge shall be evaluated through written exams provided by an accredited PCB. The written exams can be carried out by the examiners appointed by the PCB and selected according to the following clause Section 4.

The written exams shall be composed at least of:

- 40 multiple choice questions based on the above knowledge . Duration: 60 min. Each question shall have a minimum of 4 answers.

- Additionally, open questions may be added based on the knowledge related to different topics from the multiple choice questions.

The written exams can also be carried out through an e-based examination: in this case the PCB must guarantee the certainty of the candidate identity and that he works without any aid.

3.3 Skills

3.3.1 Skills common to all management systems auditors

- The applicants for **all Management Systems Auditor** grade certification **shall provide evidence of** the skills related to the following tasks:
 - a) Audit implementation
 - b) Maintain communication during audit
 - c) Conduct interviews
 - d) Collect and verify information
 - e) Generate audit findings
 - f) Prepare audit conclusions
 - g) Keep discretion between the auditee, client and audit team members

3.3.1.1 Examination methods of skills common to all management systems auditors

The above skills shall be evaluated through one of the following methods of examinations provided by an accredited PCB.

The examination shall be carried out by the examiners appointed by the PCB and selected according to the following clause Section 4.

- a) On site witnessing of an auditor during an actual audit. Duration at least 4 hours.
or
- b) Auditing simulation. This may include:
 - a written exercise related to the phase of the audit planning.
 - case studies related to actual audit situations (audit findings, recommendations, nonconformities and their grades, audit conclusions, final report).
 - Role playing simulation

3.3.2 Skills common to all Management Systems Lead Auditors

- The Applicants for **all Management Systems Lead Auditor** grade certification **shall provide evidence of** the skills related to the following tasks:
 - a) Audit implementation
 - b) Maintain communication during audit
 - c) Collect and verify information
 - d) Conduct interviews

- e) Generate audit findings
- f) Prepare audit conclusions
- g) Conduct the closing meeting
- h) Represent the audit team with audit client and auditee
- i) Organize and direct audit team members
- j) Provide direction and guidance to team members
- k) Lead the audit team to reach audit conclusions
- l) Prevent and resolve conflicts

3.3.2.1 Evaluation methods of skills common to all management systems lead auditors

The above skills shall be examined through one of the following methods by an accredited PCB.

The examination shall be carried out by the examiners appointed by the PCB and selected according to the following clause Section 4.

- a) On site witnessing of a lead auditor during an actual audit. Duration at least 4 hours.

or

- b) Auditing simulation. This may include: a written exercise related to the phase of the audit planning.

- case studies related to actual audit situations (audit findings, recommendations, nonconformities and their grade, audit conclusions, final report).
- role playing simulation related to the specific tasks of the lead auditor

3.3.2.2 Up-grade from IPC auditor to IPC lead auditor

If an IPC QMS/EMS auditor applies for QMS/EMS lead auditor grade certification, he shall demonstrate the requirements mentioned at clauses 2.5.2. or 2.5.4. and he shall be evaluated on site only during auditing activities in the role of lead auditor. The closing meeting shall be witnessed by the examiner.

Where the on site evaluation cannot be arranged, the PCB can evaluate the above skills through a role playing simulation related to the specific tasks of the lead auditor

SECTION 4 EXAMINERS

4.1 Selection Criteria for Examiners

4.1.1 Persons who can demonstrate a broad range of auditing experience may apply for approval as PCB Examiner to the PCB. The information to be supplied with the application shall substantiate the following:

i. Lead Auditors who have been certified to the IPC Lead Auditor grade or comparable for a minimum of 12 months.

4.1.2 In addition to the above qualification, applicants for PCB Examiner are required to demonstrate experience of a minimum of 10 complete MS audits as Lead Auditor in the last 3 years,

4.1.3 In the establishment of new programs other competent persons approved by the PCB may act as Examiner.

4.1.4 Examiners' ability to assess the performance of applicants shall be demonstrated through various means such as supervisory and/or management experience involving performance assessment of other people.

4.1.5 Examiners shall be required to have an understanding of IPC criteria for certification, including the role as an Examiner. This may be obtained through a training provided by the PCB.

4.1.6 The PCB shall qualify the Examiners through on-site observation during their first activity in this role

SECTION 5 MAINTAINING CERTIFICATION

5.1 Maintaining Certification

5.1.1 All IPC QMS/EMS certified auditors shall provide evidence of maintaining their competence periodically by re-certification. Certification and re-certification period is three years. Each applicant for re-certification shall maintain the record of each audit undertaken, and details of professional development undertaken as described in clause 5.1.4.

5.1.2 For each re-certification period, IPC QMS/EMS Auditors shall submit documentary evidence either of having performed a minimum of 3 complete QMS or EMS audits with at least 10 audit days on-site. All audits shall be conducted in accordance with the principles and practices described in ISO 19011.

5.1.3 For each re-certification period, IPC QMS/EMS Lead Auditors shall submit documentary evidence either of having performed a minimum of 3 complete QMS audits with at least 10 audit days on-site. During at least one (1) of the audits required for re-certification the auditor shall have performed in the capacity of lead auditor, leading a team of at least one other auditor. All audits shall have been conducted in accordance with the principles and practices described in ISO 19011.

5.1.4 Professional Development

5.1.4.1 Each IPC QMS/EMS Auditor and IPC QMS/EMS Lead Auditor shall, in each year of the re-certification period, undertake at least 8 hours of appropriate continuing professional development. Evidence of that professional development, confirmed by the provider, or the applicant's employer, shall be submitted as part of the application for re-certification.

5.1.4.2 The professional development records shall show the duration and type of activity undertaken and details of the provider.

5.1.4.3 In the selection of appropriate professional development, auditors should consider their personal strengths and weaknesses and identify areas for personal improvement. Professional development activities undertaken shall be related to quality/environmental principles and practices; or improving auditing methodologies.
