IECEE OPERATIONAL DOCUMENT

IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System)

Requirements for IECEE-Factory Inspectors
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Requirements for IECEE-Factory Inspectors
FOREWORD

Document Owner
CFS

History of changes

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<tr>
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<th>Brief summary of changes</th>
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<tr>
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<td>OD content completely reworked in order to clarify previous</td>
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1. Scope: Requirements for IECEE-Factory Inspectors in the IECEE Factory Surveillance Services (IECEE-FSS)

The following information describes the common minimum requirements for IECEE-Factory Inspectors (Factory Inspectors) in the IECEE-FSS. Following the modular structure of the IECEE-FSS requirements, rules and documents, additional requirements might apply for some NCBs because of legal requirements in their country or special requirements in their own certification program.

The information provided below details requirements for surveillance personnel performing factory surveillance in general. As product testing and certification staff also may conduct surveillances in the product areas of their technical specialties these requirements also apply.

Both – the full time Factory Inspectors as well as the product testing- and certification staff performing surveillances – are referred to as “Factory Inspector” in the following paragraphs of this document.

The IECEE FSS will be covered by the IECEE Peer Assessment Program.

2 Definitions and Requirements Authorizations

For Definitions refer to “IECEE Definitions”

2.1 IECEE-Factory Inspector

The Factory Inspector is authorized for carrying out initial assessments of factories (both pre-certification and post-certification) as well as routine surveillances in accordance with the appropriate documented requirements, rules, guidelines, and procedures.

2.2 IECEE-Factory Inspection Trainer

The Factory Inspection Trainer is authorized for training of Factory Inspectors. A Factory Inspection Trainer must successfully meet the following:

- Be trained at a Regional Inspectors Training provided by IECEE
- Pass the exam provided by the IECEE Secretariat

2.1.1 Factory Inspector

The Factory Inspector is responsible for carrying out initial assessments of factories (both pre-certification and post-certification) as well as routine surveillances in accordance with the appropriate documented requirements, rules, guidelines, and procedures.

The Factory Inspector has the authority to handle complete surveillances of products and processes. The Factory Inspector must successfully meet the requirements, which include, but are not limited to:

- Satisfy the NCB-FSB qualification process in order to be authorized as Factory Inspector.
- Passing the minimum qualification requirements as per item 2 of this document.
- Successfully passing the supervision and training as per item 4 of this document.

The term Factory Inspector throughout this document, is applicable for an IECEE Factory Inspector registered by the IECEE secretariat only.

2.2 Factory Inspector Trainee

The Factory Inspector Trainee is engaged in job specific training and is in the process of completion of the qualification process. The Factory Inspector Trainee is entitled to carry out, whilst under supervision of a Factory Inspector, initial assessments (both pre-certification and post-certification) as well as routine surveillances in accordance with the appropriate documented requirements, rules, guidelines and procedures.

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Only the version on the IECEE Website is the current document version.
2.3 Factory Inspectors Scope

The Factory Inspectors Scope covers one or more IECEE categories (see IECEE01) within the NCB scope.

3 Responsibilities for Training, Qualification, Authorization and registration of Factory Inspectors

The FSB is responsible for training and qualifications of Factory Inspectors and Factory Inspection Trainers. The FSB regulates in its Quality Management System the responsibilities for providing training and authorization for the applicable surveillance Sectors. This includes but is not limited to:

1) Identification of training needs
2) Identification of training contents, e.g. special knowledge, test or surveillance needs according to the supported IECEE categories.
3) Training procedures.
4) Authorization procedures including authorization if deviations from the requirements are applied.
5) Establishing, maintaining, and documenting of training and authorization files ("competence matrix").

Responsibility for Qualification and registration of the Factory Inspectors at the IECEE secretariat rests with the NCB.

To increase the mutual acceptance of factory surveillance reports and to take care for a common and equal understanding and implementation the responsibility for the FSS training program (curriculum and exam) rests with the IECEE secretariat.

Under the responsibility of the IECEE secretariat:

- Central training courses and workshops for Factory Inspection Trainers in the IECEE system are organized and held.
- Registration and maintaining a list of Factory Inspectors.
- Develop exam for Factory Inspectors and Factory Inspection Trainers.
- At least one Factory Inspection Trainer per FSB must attend the subsequent training course.
- Participants who pass the written qualification exam will receive or withheld the registration as "Factory Inspection Trainer".
- Subsequent qualification and update training courses to be held every three years.

The CB FSB (CB Scheme Factory Surveillance Body) regulates in its Quality Management System the responsibilities for providing training and authorization for the applicable surveillance Scope. This includes but is not limited to:

1) Identification of training needs.
2) Identification of training contents, e.g. special knowledge, test or surveillance needs according to the supported IECEE categories.
3) Training procedures.
4) Authorization procedures including authorization if deviations from the requirements are applied.
5) Establishing, maintaining, and documenting of training and authorization files ("competence matrix").

Responsibility for Qualification and registration of the Factory Inspectors at the IECEE secretariat rests with the NCB.

To increase the mutual acceptance of factory surveillance reports and to take care for a common and equal understanding and implementation the responsibility for the CB-FSS training program rests with the IECEE secretariat.

Under the responsibility of the IECEE secretariat:

- Central training courses and workshops for Factory Inspectors in the IECEE system are organized and held.
Participants who pass the written qualification exam will receive or withheld the registration as “IECEE Factory Inspectors.”

Subsequent qualification and update inspector training courses to be held every three years.

Factory Inspectors registered at the IECEE secretariat between the IECEE organized training courses, are obliged to participate at the first regional upcoming training session.

At least one IECEE Factory Inspector per CB-FSB must attend the subsequent training course.

4 Minimum qualification requirements

These requirements apply to all Factory Inspectors. In special documented cases deviations from these regulations are possible, especially for existing Factory Inspectors who gained experience within their professional career.

4.1 Educational background

a) Either a University degree / College diploma in the relevant discipline (e.g. electrotechnical, mechanical, chemical) or certified / licensed master craftsman, technician or engineer in the relevant technical working field.

b) Two years experience in the relevant inspection scope according to the IECEE categories e.g. HOUS, HS, EMC).

c) Preferable auditor qualification (e.g. ISO 9001 auditor, ISO/IEC 17025 and/or ISO/IEC 17065 assessor).

4.2 General inspection training

a) One year of surveillance experience in FSS or similar to FSS with a minimum of 10 surveillances.

b) In addition the first 10 FSS surveillance reports shall be reviewed by an experienced inspector.

c) ISO/IEC 17025 – “Surveillance” and “Management system requirements”

d) ISO/IEC 17025 – “Management System”

e) Inspection Methods and Procedures

• Handling Inspection Samples and Items

• Records

• Inspection Reports and Inspection Certificates

4.3 Specific FSS training as outlined in

Specific FSS training as outlined in:

• Overview of the CB scheme and the FSS

• The document structure of FSS and the specific documents needed to perform FSS

• Product review according to PID documents

• Decisions or other additional requirements of the FSS (e.g. CTL, CFS decisions, AD006)

• Requirements for surveillance sample testing and test results

• Evaluation as needed during the performance of factory surveillances

• Examination as provided by the IECEE Secretariat
4.4 Other skills

Communication in English.

4.2 Initial training and passing a written qualification exam covering

a) ISO/IEC 17025 (relevant clauses) e.g.:
   - Technical Requirements
   - Quality System
   - Personnel

b) Inspection Methods and Procedures e.g.:
   - Product review according to PID documents
   - Handling Inspection Samples
   - Records
   - Inspection Reports and Inspection Certificates

c) Surveillance procedures according to the relevant requirements of the applied scheme.

d) Decisions or other additional requirements of the applied scheme (e.g. CTL, CFS decisions).

e) Requirements for surveillance sample testing and test results evaluation as needed during the performance of factory surveillances in the applicable product categories.

4.3 Other skills

a) Computers skills relevant to the filling in surveillance reports and e-mail communication.

b) Communication in English.

4.4 Mentorship program (witnessed by a Factory Inspector)

a) Carrying out 5 initial assessments and 10 routine surveillances.

b) Carrying out sample testing and test results evaluation as needed during the performance of factory surveillances in the applicable product categories as well as routine tests required by the applied schemes (e.g. PVT, surveillance sampling, appointed tests) for all surveillances in a) as applicable.

5 Maintenance of qualification

5.1 To maintain their qualification the Factory Inspectors must:

- Perform a minimum of 5 factory inspections annually in the FSS or similar to FSS.
- Attend annual training performed by an Factory Inspector Trainer and supervision programs which cover but are not limited to the minimum qualification requirements as outlined in clause 3 "Minimum qualification requirements."

5.2 To maintain their qualification the Factory Inspection Trainer must:

- Attend Regional Inspection Training at least each 3 years if provided by IECEE in the region (See note 1)

Note 1: The period of three years might be extended due to lack of Regional training courses provided by IECEE
5.3 The FSB must perform on an annual basis a review of:

   a) Surveillance reports on a sampling basis
   b) Feedback from manufacturers and other certification bodies
   c) Results from internal and external audits
   d) Verify if the conditions of 4.1 and 4.2 are met

5 Consecutive Factory Inspector’s supervision and training (maintenance of the qualification)

The CB-FSB is responsible to carry out annual training and supervision programs which cover but are not limited to:

5.1 Retraining and written test – which has to be passed by the Factory Inspector – covering

   a) ISO/IEC 17025 (relevant clauses) e.g.:
      - Technical Requirements
      - Quality System
      - Personnel
   b) Inspection Methods and Procedures e.g.:
      - Handling Inspection Samples and Items
      - Records
      - Inspection Reports and Inspection Certificates
   c) Surveillance procedures according to the relevant requirements of the applied scheme.
   d) Decisions or other additional requirements of the applied scheme (e.g. CTL, CFS decisions).
   e) Requirements for surveillance sampling, sample testing and test results evaluation as needed during the performance of factory surveillances in the applicable product categories.
   f) Training updates from the last IECEE training performed under the responsibility of the IECEE secretariat. This part shall be held by a Factory Inspector that participated and passed the exam of the last IECEE training.

5.2 Review of

   a) Surveillance reports on a sampling basis.
   b) Feedback from manufacturers and other certification bodies.
   c) Results from internal and external audits.

6 Extension of the Factory Inspectors Scope

For scope extensions the Factory Inspectors have to meet the above mentioned requirements.

The IECEE secretariat is to be updated.

7.6 Registration of factory inspectors

The following information has to be passed through the NCB to the IECEE secretariat for registration of a factory inspector:

- Name of the Factory Inspector to be registered.
- Name of the CB-FSB-FSB and related NCB.
- Statement that the minimum qualification requirements are fulfilled as per item C.
7 Documentation

All qualification and training measures need to be documented and made available during IECEE Assessments of FSB.