FIMEQ

Finnish Methodology
for Qualification of PSI/ISI NDT-Inspection Systems
according to STUK YVL E.5 scheme.

KIWA Sertifiointi Oy
4th issue, 21.4.2026

Contents

1 Foreword

Finnish system for qualification and certification of non-destructive pre- and in-service inspections (PSI/ISI) of nuclear power plants is described based on requirements of the Radiation and Nuclear Safety Authority (STUK) presented in STUK Guide YVL E.5[1].

STUK YVL E.5 does not include a full description of the qualification process. Requirements for qualified inspections systems, qualification bodies, assessment methods and issue of certifications need to be described in more detail. This document is used as the scheme application description defining qualification and certification processes needed to perform PSI/ISI system qualifications according STUK YVL E.5 requirements.

It is acknowledged that YVL E.5 states two different possible requirements the Qualification Body shall fulfil, these being accreditation requirements for either Inspection Body (ISO/IEC 17020[2]) or Personnel Certification Body (ISO/IEC 17024[3]). The qualification and certification process described in this document can be used for either type of these Qualification Bodies.

As required in STUK YVL E.5 this scheme description has been constructed and shall be maintained using the European Methodology for Qualification (EUR 22906[4]) and in its recommendations as a guiding methodology.

This scheme description has been created in co-operation of the Finnish interested parties within Finnish NPP PSI/ISI Qualifications. It is maintained by the ISI Technical Support Group organised by KIWA Sertifiointi Oy Qualification Body. KIWA Sertifiointi Oy publishes this scheme document after approval and endorsement of the Finnish Nuclear Licensees:

Fortum Power and Heat Oyj
Posiva Oy
Teollisuuden Voima Oyj

The Technical Support Group for this issue of the Certification Scheme is represented by the following organisations:

Licensees:
Fortum Power and Heat Oyj
Teollisuuden Voima Oyj
Posiva Oy

Inspection Bodies:
Finnish Testing or Inspection Bodies approved as NDT testing organisation by STUK

Authority:
Radiation and Nuclear Safety Authority (STUK)

Qualification Body:
KIWA Sertifiointi Oy

2 Terms and definitions

STUK YVL E.5 includes an extensive list of definitions concerning Inspection system Qualification. Here under are definitions of some of the terms used in this document and not listed in STUK YVL E.5.

PSI/ISI
Pre-service or in-service NDT-inspection of nuclear power plant components

Authority
Authority stipulating the requirements for PSI/ISI Qualification in Finland is STUK

Licensee
Owner of an operating nuclear power plant or the company building a new NPP

Inspection System
Inspection system shall refer to all those elements of non-destructive testing (NDT) that may influence the quality and outcome of an inspection, such as inspection equipment and their software, inspection procedures and personnel.

Inspection Equipment
Inspection equipment with inspection instruments, manipulators and software

Inspection Personnel
Personnel performing inspection.

Inspection Objectives
The requirements set by Licensee in Input Information for the Inspection system. Typically, these include requirements for detection and sizing of specified flaw types within a specified inspection object and area under specified inspection environment and circumstances.

Qualification Body Assessment Team (QBAT)
Team of assessors named by QB to handle a specific Inspection System Qualification Task

3 Scope

In Finland, nuclear facility components significant for nuclear safety shall be inspected only with non-destructive testing systems that have been qualified by a Qualification Body approved by STUK. This qualification system is created for the qualification of such inspection systems.

This qualification system can be used for all NDT systems using any selection of NDT methods.

4 Requirements for Qualification Bodies

The Qualification Body (QB) shall be approved by STUK for its activities in PSI/ISI qualifications. For approval of the QB to be used, the licensee shall submit an application to STUK.

Approval of Qualification Bodies shall be done according Nuclear Energy Act, 990/1987[5] and Nuclear Energy Decree, 161/1988[6], STUK YVL E.5.

Qualification Body shall be an independent legal entity. It shall have liability insurance. It shall implement an evolved quality system. QB personnel shall be professional and experienced. Its procedures and necessary equipment shall be appropriately qualified.

Prerequisite for approval is QB accreditation against requirements of ISO/IEC 17020 or ISO/IEC 17024. It is expected that this document (FIMEQ) is used as the Scheme document for an accredited QB service for the Finnish Nuclear Licensees. Accreditation shall be issued by FINAS (Finnish Accreditation Service). The statutory requirements for Qualification Body and its activities are stipulated STUK YVL E.5.

Main characteristics of QBs eligible for approval are:

- Impartial
- Independent of design, construction and use of nuclear power.
- Independent of any economical and commercial factors that may influence its activities and decisions
- Possession of necessary technical expertise and resources

The full requirements for QBs are stated in the chosen accreditation requirement standard and STUK YVL E.5. Here below some of the specific requirements of YVL E.5 are listed for convenience.

- QB shall be independent and impartial. Its services shall be available to any licensee in the nuclear field.
- QB shall have a named Technical Manager who is familiar with NDT methods. Technical Manager shall have a named deputy.

- QB personnel shall be qualified for its tasks. Personnel competence requirements shall be based on guidelines given in ENIQ Recommended Practice 7 (ENIQ RP7)[7].
- QB personnel shall include at least one level 3 person in each of the assessed NDT methods. A level 3 person is a person with verified knowledge comparable to ISO 9712 NDT level 3 person.
- QB personnel shall include practical experience in nuclear field PSI/ISI and knowledge of factors that may have influence in the reliability of PSI/ISI.

For each separate qualification task (QT), QB shall name a Qualification Body Assessment Team (QBAT). Each QBAT shall fulfil the following requirements:

- QBAT members shall be independent from the inspection system and personnel being qualified.
- QBAT members shall have individually agreed to a non-disclosure agreement concerning information handled in qualifications.
- QBAT composition shall be according to ENIQ RP7 and have:
    - Previous experience in qualification processes
    - Knowledge in nuclear field PSI/ISI
    - A level 3 person in assessed NDT methods or a person with verified knowledge comparable to ISO 9712 NDT level 3 person
    - NDT method expertise including equipment and procedures
    - Necessary expertise for assessment of Inspection Procedure, Technical Justifications, Inspection Personnel competence and data analysis
    - Knowledge in design and manufacturing of trial specimens with defects

4.1 Technical Support Group for FIMEQ

Technical Support Group shall be maintained by KIWA Sertifiointi Oy and approved by Finnish nuclear licensees. It shall be represented as minimum by the Finnish nuclear licensees and Radiation and Nuclear Safety Authority. In addition PSI/ISI Service providers and NDT Research institutes may be included.

The Technical Support Group is responsible for maintaining this Certification Scheme.

5 Requirements for Inspection Systems to be Qualified

The Inspection Company shall design the Inspection System based on the requirements set in Input Information and other relevant requirements provided by the Licensee. For that task, the Inspection Company shall be capable to:

- Select an applicable inspection method and technique
- Create and document a dedicated Inspection Procedure for the task
- Define the necessary equipment and software
- Define necessary personnel and their competence requirements
- Compile a documented Technical Justification to support the selected Inspection System
- Demonstrate the Inspection System conformity to requirements in Practical Trials as required in the Qualification Process.

6 Requirements for Qualification Process

As required by STUK YVL E.5 the Qualification Process shall be based on the European Methodology for Qualification (EUR 22906) and in its Recommended Practices. This chapter describes the Qualification Process used in Finland. The parties involved in a Qualification Process shall need to define their own processes to fulfil the requirements set here and STUK YVL E.5.

6.1 Input Information

The Licensee shall provide a documented Inspection Input Information according to the requirements set in STUK YVL E.5. This Input Information shall describe the inspection object, inspection conditions and the inspection objectives.

Inspection objectives are the collection of requirements for defect detection and sizing capability under the predefined conditions.

Qualification Body shall assess the adequacy of Input Information on inspection object, inspection conditions and inspection objectives. This information shall be such that the Inspection Company is able to create an applicable Inspection System. Input Information Assessment shall be documented by the QB and communicated to the Licensee, who then will apply for STUK approval for the Input Information.

STUK shall assess the Input Information against requirements set in STUK YVL E.5. QB assessment is used as a part of the assessment and is thus required by STUK before the Input Information assessment can be completed.

The Input Information shall be approved by STUK before any part of Inspection System assessment can be completed.

6.1.1 Deviations from Input Information Inspection Objectives

When inspection objectives cannot be met the deviations to the qualification objectives shall be reported without a delay.

Inspection Company or the qualification body shall be responsible for identifying and reporting such deviations unambiguously.

The evaluation of the significance of the deviation shall be performed by the Licensee. The evaluation shall determine whether the deviation has no impact on the qualification objectives, requires additional practical trials or supplementary justification or affects the qualification scope or acceptance criteria.

Based on the Licensees evaluation, the Qualification Body shall decide on the required actions and on the acceptance of the deviation with respect to the qualification outcome. The decision and its justification shall be recorded as part of the qualification documentation.

No deviation impacting the inspection objectives or qualification scope shall be accepted without documented evaluation and approval by the Qualification Body.

6.2 Qualification Level

The Licensee shall define the Qualification Level (1, 2 or 3) according to requirements set in STUK YVL E.5 and express it in the Input Information.

6.3 Qualification Approach

The Qualification Body shall define the Qualification Approach. Qualification Approach is defined during compilation of the Qualification Procedure (see chapter 6.4). The terms used in determination are Complex or Simple. Inspection Object and the Inspection System complexity shall be assessed separately. When either of them or both are assessed to be Complex the Qualification Approach shall be Complex.

Determination of Qualification Approach shall be based on considerations of at least the following parameters:

- Component
    - Geometry
    - Materials
    - Defects defined in Input Information
- Inspection Technique
    - Known reliability
    - Known uncertainties
    - Level of requirements
    - Novelty of technique and equipment
    - Complexity of technique and equipment
    - Software
    - Artificial Intelligence

Qualification Body shall consider any additional elements when necessary.

Even if the component and inspection technique are generally considered simple in the beginning of Qualification Process the Qualification Body may assess any single element as complex and set appropriate weight on it during the implementation of the qualification. Vice versa, originally complex elements can be assessed as simple if properly justified by the Inspection Company.

The Qualification Level determines the general scope, coverage and requirement level. The Qualification Approach allows the Qualification Body to consider the amount and extent of qualification assessments needed and to set weight on the issues estimated important.

The assessments included normally in a Qualification Process according to the Qualification Level and Approach are presented in Tables 2 and 3.

Table 2. Typical Qualification Process components according to Qualification Level and Approach for surface methods MT, PT or VT. Eddy Current inspection (ET) can in some cases also be considered as a surface method. Additional trials are considered if artificial intelligence has been used (see chapter 6.7 for more information).

Level	Approach	Inspection Procedure and Equipment	Personnel
3	Complex	TJ, OT	TJ, (BT)
3	Simple	TJ, (OT)	TJ
2	Complex	TJ, (OT)	TJ
2	Simple	TJ, (OT)	TJ
1	Complex	TJ	TJ
1	Simple	TJ	TJ

TJ Technical Justification
BT Blind Trial (See Chapter 6.7.3 for more information)
(BT) optional Blind Trial. BT for personnel qualification can be omitted in cases where basic personnel certification is deemed adequate evidence for personnel competence.
OT Open Trial (See Chapter 6.7.2 for more information)
(OT) optional Open Trial according to the decision of the Qualification Body. If the inspection technique or object includes aspects, where the Qualification Body itself wants to verify the fulfilment of objectives, Open Trials can be applied according to its consideration.

Table 3. Typical Qualification Process components according to Qualification Level and Approach for volumetric methods. Additional trials are considered if artificial intelligence has been used (see chapter 6.7 for more information).

Level	Approach	Inspection Procedure and Equipment	Personnel
3	Complex	TJ, OT	TJ, BT
3	Simple	TJ, OT	TJ, (BT)
2	Complex	TJ, OT	TJ, (BT)
2	Simple	TJ, (OT)	TJ, (BT)
1	Complex	TJ, (OT)	TJ, (BT)
1	Simple	TJ	TJ

TJ Technical Justification
BT Blind Trial (See Chapter 6.7.3 for more information)
(BT) optional Blind Trial. BT for personnel qualification can be omitted in cases where basic personnel certification is deemed adequate evidence for personnel competence.
OT Open Trial (See Chapter 6.7.2 for more information)
(OT) optional Open Trial according to the decision of the Qualification Body. If the inspection technique or object includes aspects, where the Qualification Body itself wants to verify the fulfilment of objectives, Open Trials can be applied according to its consideration.

6.4 Qualification Procedure

Qualification Body shall design a Qualification Procedure for each qualification. A Qualification Procedure describes the qualification process and shall include the following information as a minimum:

- Summary of Input Information
- Identification of Inspection Object
- Identification of Inspection Company
- Summary of requirements for the Inspection System
- Composition and members of QBAT
- Qualification Level and Approach
- Assessment Process selection with reasoning
- Qualification requirements
- Description of trial specimens when necessary
- Planned schedule and timetable for the Qualification Task

Due to the necessary information on the Inspection System, a Qualification Procedure can be created only after the Input Information has been provided by the Licensee and Inspection

Company has provided adequate information on the planned Inspection System. A substantial change in the Input Information and/or Inspection System may necessitate an update to the Qualification Procedure. Changes that do not require update to the Qualification Procedure shall be documented in the Qualification Assessment Report.

The Qualification Procedure shall be communicated to the Licensee. Licensee shall communicate the Qualification Procedure to the Inspection Company and STUK.

6.4.1 Kick-off Meeting

The above-mentioned information necessary for deciding on the Qualification Procedure shall be defined in a Qualification Task Kick-off meeting arranged between Qualification Body, Licensee and Inspection Company. Any format of meeting is possible, Qualification Body shall keep minutes of meeting and document results.

6.5 Inspection Procedure

Inspection Company shall create a documented Inspection Procedure according to its own management system.

The Inspection Procedure shall fulfil the requirements set in Input Information and Qualification Procedure. The Inspection Procedure shall be written in such a manner that it can be used by the inspection personnel to perform the inspection without ambiguity and personal preference.

Inspection Procedure shall be assessed by the Qualification Body. The assessment shall be documented by the QB and communicated to the Licensee.

6.6 Technical Justification

The Inspection Company shall create a documented Technical Justification for the selected Inspection System. Technical Justification shall give evidence that Inspection Objectives are achieved and Requirements are met using the Inspection Procedure, equipment and personnel defined by the Inspection Company.

The Technical Justification shall fulfil requirements set in STUK YVL E.5 and Qualification Procedure.

Technical Justification shall be assessed by the Qualification Body. The assessment shall be documented by the QB and communicated to the Licensee.

6.7 Practical Trial

Practical Trials are needed in most Qualification Processes. The purpose of a Practical Trial is to demonstrate that Inspection System performance is adequate for meeting the requirements.

There are three different types of Practical Trials: Laboratory Trials, Open Trials and Blind Trials.

6.7.1 Laboratory Trials

Inspection Company may perform Laboratory Trials to study the Inspection Procedure under development. Results of these Laboratory Trials can be used as partial evidence for the Technical Justification.

Laboratory Trials are performed by the Inspection Company without Qualification Body surveillance.

Specimens used in Laboratory Trials shall be identified in the documented results. They can be any kind of suitable Trial Specimens except Blind Trial Specimens, which can be used only in Blind Trials.

Open Trial Specimens can be used in Laboratory Trials only when no other suitable specimens are available. When Laboratory Trials are based on Open Trial Specimens, Technical Justification shall include justification for why no other specimens are needed.

6.7.2 Open Trials

Inspection equipment and procedure performance is usually demonstrated in an Open Trial. Open Trial shall be planned to provide adequate evidence to show that the Inspection Procedure and equipment fulfil the requirements.

When Open Trial is optional according to tables 2 and 3, OT may be omitted from Qualification Procedure only when there is enough other evidence provided by the Inspection Company about adequate performance of Inspection equipment and Inspection procedure.

Qualification Body shall invigilate the Open Trial performed by the Inspection Company. QB shall assess and document how well the Inspection Procedure and equipment meet the set requirements. The result of this assessment is communicated to Licensee and the Inspection Company.

Inspection Company shall document the Open Trial including report of the results and statement of conformity to Input Information requirements. Open Trial documentation shall be communicated to QB. If the result is not acceptable, Inspection Company may adjust its equipment and Inspection Procedure in order to meet the requirements. When necessary, the updated system shall be demonstrated in a new Open Trial concerning the changes.

6.7.2.1 Open Trials for AI-systems

In addition to the open trials mentioned in Chapter 6.7.2, if artificial intelligence is used, open trials for AI-based inspection systems shall be performed using data that has not been used for training the AI model.

The data analysed by the AI system shall be acquired from a test specimen or specimens representative of the inspection object, using the selected inspection technique. The defect population shall be representative of the intended inspection objectives

6.7.3 Blind Trials

The term “Blind Trial” comes from ENIQ Recommended Practices and is used throughout this document to represent an additional examination of personnel competence to carry out the qualified inspection. Thus, the term Blind Trial shall need to be understood in a generic way and a BT can comprise of any selection of appropriate assessment methods for competence such as a traditional BT, written examination and/or performance demonstration. QB is responsible for defining the appropriate assessment methods in each qualification task.

Inspection personnel performance is usually demonstrated in Blind Trial. When Blind Trial is optional according to tables 2 and 3, BT may be omitted only when there is enough other evidence provided by the Inspection Company about adequate performance of the personnel to be qualified.

A failed Blind Trial can lead to reassessment of the Inspection System even when the Inspection Procedure and Equipment have already been accepted in Open Trial. Scope of necessary reassessments is decided by QBAT.

Blind Trial shall be planned to provide adequate evidence to show that Inspection Personnel fulfil the requirements.

Qualification Body shall invigilate the Blind Trial performed by the Inspection Company. QB shall assess and document how the Inspection Personnel meet the set requirements. The result of this assessment is communicated to Licensee and the Inspection Company.

If Blind Trial result is not acceptable, another Blind Trial can be arranged after Inspection Company has improved the Inspection Procedure or candidate competence.

6.7.3.1 Blind Trials for AI-systems

In addition to the blind trials mentioned in Chapter 6.7.3, when blind trials for AI-based inspection system are required, they shall be conducted such that the inspection personnel and AI-based inspection system do not have prior knowledge of the location, type, size, or number of defects contained in the test specimen(s).

The blind trial data shall not have been used for training, validation, or optimisation of the AI model. The AI system shall be evaluated in the same configuration as intended for use in the qualified inspection system.

The test specimen(s) used in blind trials shall be representative of the inspection object. The defect population shall be representative with respect to defect type, size, orientation, and location relevant to the inspection objectives.

6.7.4 Blind Trial Grouping

Several Inspection Procedures may be grouped under one Blind Trial or a set of different Blind Trials. Grouping shall be based on similarities in inspection objects and objectives, inspection method, technique and equipment including software. Grouping can be used only for inspection procedures of one Inspection Company – every Inspection Company shall need to define their own grouping strategy. Grouping shall be planned and justified by Licensee and Inspection Company. Grouping justification shall be assessed and accepted by the Qualification Body.

6.7.5 Trial Specimens

Inspection Company may freely select Trial Specimens used for Laboratory Trials. If the Laboratory Trials are used as evidence in the Technical Justification, the used Trial Specimens and defects shall be justified in the Technical Justification.

Trial Specimens for Open Trials and Blind Trials shall be capable to provide sufficient evidence for Inspection System capability demonstration. Qualification Body approves OT and BT specimens for use.

The following factors shall be considered when setting requirements for Trial Specimens depending on the inspection method and technique:

- Qualification Level.
- Component complexity in regard to the inspection method and technique

High Qualification Level or complex inspection object require that Trial Specimens shall include specimen(s), which are essentially according to the real component geometry and material or other critical parameter. Open Trial trial specimens should as far as possible include realistic or real defects. Use of artificial defects shall be justified separately. Selection of trial defects used in OT shall be proposed by Inspection Company and approved by QB. BT specimen defects are justified by QB.

Trial Specimens for simple inspection object with low Qualification Level can be simple as long as their use can produce reliable results in the Trials. Test Defects can be artificial.

6.8 Documentation

Qualification Body shall document the Qualification Process in a Qualification Dossier.

For initial qualifications the main assessment document is the Qualification Assessment Report (QAR), which shall describe how the Inspection System fulfils the Inspection Objectives and how this has been verified.

The minimum required contents of a Qualification Dossier of an initial qualification compiled by QB is shown in Table 4.

Table 4. Initial Qualification Dossier minimum contents.

Document	**Provided by**
Input Information with STUK decision	Licensee
Technical Justification	Inspection Company
Inspection Procedure	Inspection Company
Qualification Procedure	QB
QB Assessment Documents (IIA, TJA, IPA, OTA, BTA, etc.)*	QB
Practical Trial Reports (when conducted)	Inspection Company
Qualification Assessment Report (QAR)	QB
Inspection System Certificate issued by QB	QB

*) IIA = Input Information Assessment; TJA = Technical Justification Assessment; IPA = Inspection Procedure Assessment; OTA = Open Trial Assessment; BTA = Blind Trial Assessment

For updated qualifications the main assessment document is the Requalification Assessment Report (RAR), which shall describe how the updated Inspection System fulfils the Inspection Objectives and how this has been verified. The Requalification Assessment Report shall refer to the previous Qualification Assessment Report.

The minimum required contents of a Qualification Dossier compiled by QB for a requalification assessment is shown in Table 5.

Table 5. Requalification Dossier minimum contents.

Document	**Provided by**
Input Information with STUK decision (when updated)	Licensee
Technical Justification concerning changes in the Inspection System (when Inspection Procedure is updated)	Inspection Company
Updated Inspection Procedure (when updated)	Inspection Company
Updated Qualification Procedure (when updated)	QB
QB Assessment Documents (IIA, TJA, IPA, OTA, BTA, etc.)*	QB
Practical Trial Reports (when conducted)	Inspection Company
Requalification Assessment Report (RAR) with STUK decision concerning previous QAR/RAR	QB
Inspection System Certificate issued by QB	QB

*) Included when required: IIA = Input Information Assessment; TJA = Technical Justification Assessment; IPA = Inspection Procedure Assessment; OTA = Open Trial Assessment; BTA = Blind Trial Assessment

7 Issue and Maintenance of Certifications

Inspection Systems shall be qualified according to the qualification process described in Chapter 6. Inspection System certification shall be issued for the whole inspection system including Inspection Procedure, equipment, possible software and Inspection Personnel.

The Licensee does not need to apply for the Certification separately; any Qualification Process shall be considered as an Application for Certification.

Certifying QB shall retain full ownership of the certificates it has issued.

7.1 Inspection System Certification

Inspection System shall be granted certification when it fulfils the requirements set by the licensee in the Input Information and related documentation (amendments to Input Information etc.) and possible additional requirements set by the QB in Qualification Procedure.

Inspection System Certifications are valid from the date of issue to the end of the year, which is five (5) years from date of issue.

Inspection System Certificates shall include the information defined in YVL E.5 clauses 689 and 691.

7.1.1 Changes to Inspection System Certification

Changes to Inspection System Certification shall be applied from the issuing Qualification Body.

Qualification Body shall define the necessary assessments to be done due to changes in the Inspection System. Changes may be:

Changes in the Inspection Procedure:

- Changes in Inspection Objectives
- Changes in inspection equipment
- Changes in inspection software
- Update of Inspection Procedure(s)

Changes in Inspection Personnel:

- Changes in Inspection Objectives
- New Inspection Personnel
- Requalification of Inspection Personnel

If personnel certification is based on Blind Trial, documented personal applicable BT evidence shall not be older than two (2) years at recertification. Recertification may require partial or full renewal of Blind Trials.

The procedure for assessments is basically the same as for any qualification. It is the responsibility of QB to define what assessments are needed to verify that the updated Inspection System is adequately assessed in order to be qualified according to the updated objectives, equipment, procedure and/or personnel.

Inspection System recertification assessment shall be documented in a Requalification Assessment Report (RAR). The RAR is not a part of the original Qualification Dossier, but a separate assessment report justifying recertification of Inspection System.

7.2 Surveillance

No surveillance by the Qualification Body is required during validity of Certification. However, Qualification Body may perform surveillance of Inspection System implementation, if requested by the Licensee to whom the Certification has been granted. In such a case Surveillance Objectives shall be defined by the Licensee. Based on the objectives Qualification Body shall define applied Surveillance Methods.

7.3 Withdrawal

7.3.1 Inspection System Certification Withdrawal

Inspection System Certification may be withdrawn if the Inspection Objectives have been changed by the Licensee in such a way that the original Qualification is compromised.

The Licensee may be able to solve the discrepancies by applying a change to the qualification. If this is not possible or successful, QB shall withdraw the Certification.

Withdrawal of Inspection Procedure Certification shall be communicated to the Licensee, Inspection Company and STUK.

7.3.2 Inspection Personnel Certification Withdrawal

Inspection Personnel Certification shall be withdrawn if competence of the certified person is no longer maintained according to the underlying Qualification. Thus, Inspection Personnel Certification may also be withdrawn if the Inspection Objectives have been changed by the Licensee in such a way that the original Qualification is compromised.

Individual Inspection Person Certification may be withdrawn if the certified person does not fulfil the requirements for maintaining certified status.

Withdrawal of Inspection Personnel Certification shall be communicated to the Licensee, Inspection Company and STUK.

7.4 Issue of Certificates

The Qualification Body shall keep a record of all the Inspection System Certifications it has issued. Certificates shall be issued in paper form. Certificate is delivered to the Licensee and if necessary a copy to Inspection Company.

8 Code of Ethics

Qualification Body shall define Code of Ethics for the personnel involved in confidential information of the Qualification Process.

Qualification Body shall define Code of Ethics for any party involved in design, manufacture and/or handling of Qualification Trial Specimens or any data concerning the Trial Specimens.

9 Security and Confidentiality of Blind Trial Materials

All information concerning blind trial examination materials is confidential, and its distribution shall be strictly limited. The management of confidential information shall be carried out in accordance with licensee's and Qualification Body's own management system.

The blind trial test specimens are property of the licensee. The licensee is responsible for manufacture, management, storage, and shipment of blind trial test specimens. Design of test specimens is done in cooperation between QB and licensee. The licensee is permitted to maintain records of the blind trial test specimens and the associated flaw manufacturing data.

The qualification body shall have access to blind test specimen and test flaw manufacturing records. Blind trial data collected using the inspection system to be qualified is exclusively held by the qualification body. Blind trial test specimens are under the control of the qualification body during practical trial activities conducted in its presence. During other times blind trial test blocks are under responsibility of the licensee.

If blind trial test block flaw information is proven to be leaked to external parties status of the blind trial specimen shall be reclassified as an open test specimen.

10 Procedure for Complaints and Appeals

Complaints against Qualification Body work shall be addressed to Qualification Body directly. Appeals against decision on certification shall also be addressed to QB directly.

As an accredited Inspection or Certification Body the QB is responsible to handle complaints and appeals according to its management system. QB shall inform all parties involved in a qualification process of its procedure for handling complaints and appeals.

11 Referenced Documents

[1] STUK YVL E.5, In-service inspection of nuclear facility pressure equipment with non-destructive testing methods, 15 Feb 2019

[2] SFS-EN ISO/IEC 17020:2012, Conformity assessment. Requirements for the operation of various types of bodies performing inspection

[3] SFS-EN ISO/IEC 17024:2012, Conformity assessment. General requirements for bodies operating certification of persons

[4] EUR 22906 EN, European Methodology for Qualification of Non-Destructive Testing, fourth Issue 4, March 2019

[5] 990/1987, Nuclear Energy Act

[6] 161/1988, Nuclear Energy Decree

[7] ENIQ Recommended Practice 7: Recommended General Requirements for a Body Operating Qualification of Non-Destructive Tests, Issue 2, Dec 2018