



# ENIQ REPORT

Study on Maintenance of Inspection Qualifications pending  
Changes of Input Data

Issue 2

ENIQ Report No. 71

January 2024

**ENIQ**  
European Network for  
Inspection & Qualification  
NUGENIA Technical Area 8

SNETP Association

c/o EDF

Avenue des Arts 53B, 1000 Brussels, Belgium

Email: [secretariat@snetp.eu](mailto:secretariat@snetp.eu)

Website: [www.snetp.eu](http://www.snetp.eu)

This document was prepared by the SNETP Association.

#### LEGAL NOTICE

Neither SNETP nor any person acting on behalf of SNETP is responsible for the use which might be made of this publication.

Additional information on SNETP is available on the Internet. It can be accessed through the SNETP website ([www.snetp.eu](http://www.snetp.eu)).

Brussels: The SNETP Association

ISBN 978-2-919313-40-2 (pdf)

ISBN 978-2-919313-40-2 (print)

## Executive Summary

The European Methodology for Inspection Qualification [1] consists of a framework to enable each country to establish its own detailed practices to match the specific national requirements (regulatory, plant type, resources, etc.). Whilst being successful in achieving this objective, the inevitable specific nature of the qualification processes has introduced differences between countries in approach to both establishment of qualifications and maintenance. Changes to source documentation, equipment configuration or software programmes all lead to potential need to update qualifications.

This report documents a benchmark review of approaches undertaken in different jurisdictions / countries to maintain validity of qualifications under changes. The summary tables with all the received answers per jurisdiction / country (in the form of an Excel spreadsheet) provide the opportunity to both compare and contrast approaches. This allows users of the ENIQ methodology to be aware of the approaches, taken and provide opportunity for alignment, enhancement and harmonization across organizations. The Excel spreadsheet with the received answers per jurisdiction / country, anonymised, is provided by the SNETP secretariat upon request. Non-anonymised version of the Excel spreadsheet is accessible to ENIQ members only.

This report contains the full questionnaire with a summary of all received answers per question in the appendix. The first issue of this report, ENIQ report no. 68 published in July 2022, only contains the questions of the questionnaire.

## Index

Executive Summary .....	1
1. Introduction.....	1
2. Scope of Work .....	1
3. Results of the Questionnaire.....	2
References.....	3
Appendix: Questionnaire & Summary of Answers.....	4

## 1. Introduction

The European Methodology for Inspection Qualification [1] was initially designed as a framework that would enable each country to establish its own detailed practices that match the specific national requirements (regulatory, plant type, resources, etc.). Whilst being successful in achieving this objective, the inevitable specific nature of the qualification processes has introduced differences between countries in their approach to both establishment of qualifications and the maintenance of the qualifications. For example, changes to source documentation, equipment configuration or software programmes all lead to potential requirements to update qualifications.

This report includes the results of an exercise undertaken as a benchmark review of approaches in differing jurisdictions to maintain validity of qualifications under various changes. The summary tables (in the form of an Excel spreadsheet only accessible to ENIQ members) provide the ability to both compare and contrast approaches used in differing jurisdictions. The report allows users of the ENIQ methodology and others to be aware of differing approaches taken and potentially to consider alignment across different organizations as a means to harmonize the approaches taken.

The primary purpose of this document is to present the results of the questionnaire allowing representatives of ENIQ to see how countries are using the methodology for maintenance of qualifications.

The qualification requirements, guides and regulatory expectations recognise that all parts of an NDT system can affect its performance. Equipment, techniques, procedures, as well as NDT personnel, should thus be included in the qualification process.

The extent and type of required qualifications varies from country to country. Nevertheless, the most important similarity is that in all countries the licensee has the full legal responsibility for the safety of its plants and must take all measures that are necessary to maintain safety. Responsibilities for inspection qualification activities in any country must be consistent with its legal system and regulatory practices.

Appropriate actions that can follow from review of this document could include closer co-operation between the qualification bodies (QBs) in terms of systematic exchange of experience. This could also extend to discussion with respective countries' regulatory authorities to consider options for further harmonization of approaches.

## 2. Scope of Work

ENIQ has developed a questionnaire with the objective to summarize approaches utilized by countries to maintain qualification under changing conditions. The aim of this project is to clarify and summarize the commonalities and differences in qualification maintenance approach between countries.

Following is a list of questions in comparison between the member's country requirements and another country's requirements of inspection qualification. Completing the questionnaire will result in a gap table that can assist in optimal maintenance of qualifications in each jurisdiction, considering local prevailing experience.

- The first action is to answer the questions based on your own national requirements. This will then form a template for future activities.
- The second action is to compare responses with other answer sets and determine if there are benefits from alternative approaches in terms of efficiency, degree of control or harmonization between countries.
- In the third column actions can be described that can be considered to improve alignment, efficiency or compliance to your country requirements.

Appendix 1 contains the full questionnaire with a summary of all received answers per question.

### 3. Results of the Questionnaire

16 jurisdictions / countries replied to the questionnaire and the responses have been summarised in a spreadsheet. The spreadsheet with all the responses, anonymised, is separately available to any interested party / organisation and may be requested from the SNETP secretariat. Non-anonymised version of the spreadsheet is accessible to ENIQ members only.

The spreadsheet sections are as follow:

- General requirements that lead to the need for update of qualifications:
  - Do qualifications expire?
  - Under what conditions?
- Specifics of changes
  - Editorial
  - Mechanical changes
  - Software changes
  - Code or Standard changes
- Graduation of changes
  - Are there methods of graduated requalification?
  - Is there a graduated process?
  - Is this different from a new qualification?
  - Can a certificate be valid even with changes?
- Accountability for Changes
  - Who prepares support documents?
  - Who updates the documents?
  - Who owns the requalified procedure?
  - What is the role of the QB in the requalification?
  - How are changes to Inspection Specifications and to the applicable standards impacted?
  - How are requirements for requalification of procedures defined?

The format of the spreadsheet permits each organisation to compare how countries are managing maintenance of qualifications. One way of performing such a comparison can for example be by placing the user's country first and then using a code (Green/Yellow/Red) to highlight degree of similarity to approach.

The spreadsheet containing individual countries' responses on the questionnaire are available via SNETP FLEXX (ENIQ members only) and upon request to the SNETP Secretariat (non-ENIQ members, anonymised version). The collected responses are for information purposes only, and individual organizations should be contacted for formal verification.

## References

- [1] *The European Methodology for Qualification of Non-Destructive Testing – Issue 4*, ENIQ Report no. 61, The NUGENIA Association, 2019.

## Appendix: Questionnaire & Summary of Answers

Section One - General	
Question	Summary of answers (national requirements)
Does the qualification of a procedure and its corresponding certificate ever expire?	12 countries: NO expiry without change 4 countries: Fixed validity or time to review (2 to 5 years)
What circumstances require re-issue of a procedure qualification certificate?	Typically when there is a revision to any supporting input.
Which circumstances require revision of a document? (Clarification: Documents include IP, TJ, Instructions)	Change of input data; in some cases fixed period review.

Section Two - Specific Changes	
Question	Summary of answers (national requirements)
How are editorial changes handled?	Typically, they do not drive certificate update unless they have a significant impact. They are normally held for a general update on a periodic basis or due to technical changes.
How are mechanical equipment changes handled?	Generally, they are treated as for any other change unless its impact can be shown to be negligible.
How are software changes handled?	Any potential impact on essential parameters requires a review and may drive a need for a new revision. Minor software changes can be allowed to proceed, if they have been already demonstrated on similar systems to have no impact.
How are changes of regulatory code or standards requirements handled?	Evaluated on a case by case basis. Regulatory changes do not typically have an immediate effect on current qualifications. They may not impact on the licensee until a new license is issued, unless the regulator specifies immediate compliance.



<b>Section Three - Graduation of Changes</b>	
<b>Question</b>	<b>Summary of answers (national requirements)</b>
Are there methods of graduated requalification?	8 countries: some flexibility 8 countries: seem to have a "one approach" system for all qualifications and requalifications.
Is a full review required for requalification, or is there a graduated process?	10 countries require a full review even for requalification. 6 countries have an option of a graduated process.
For submission of a requalification request, is there a different process than a new qualification?	Generally, only one process exists, but there may be minor options, such as defining new versus requalification or update.
Are there circumstances where a certificate can be used even though support information has changed? (Clarification: If some of the referenced docs have changed, can the user still use the certificate, if they have evidence on hand that the changes do not affect the certificate validity?)	8 countries do not permit use. 8 countries may consider use with review and approval.

<b>Section Four - Accountability for Change</b>	
<b>Question</b>	<b>Summary of answers (national requirements)</b>
What organisations are responsible for preparing the support documentation for a requalification?	Licensee usually submits scope of change. The qualification may be owned by the Licensee or by the inspection service provider (ISP) on behalf of the licensee.
What organisations are responsible to update document for requalification?	Responsibility lies with the document owner (which must be clearly spelled out and unambiguous).
How is the owner of the qualified procedure affected after requalification? (Clarification: Is the ownership affected by the requalification?)	Ownership is not affected by requalification.
What is the role of the QB when inspection procedures are revised?	The QB typically reviews the changes and accepts once questions are satisfied.
How is the requalification approached, if a different organization is re-qualifying an existing procedure?	Does not happen in most organizations as the vendor owns the procedure and it is not usually transferred.
Summarise the role of the QB in relation to changes to the Inspection Specification.	Inspection Specification is an engineering document that belongs to the licensee. The QB reviews it to ensure it includes necessary information but has no accountability for its content. Normally QB does not "approve" such documents. They may "accept" as including the applicable elements of the scope.
Beside the ENIQ Methodology what other standards (e.g. ASME, RSE-M, etc.) are used as part of the requalification process?	Depending on jurisdiction, there may be no external standards used. Typically it will remain as for the original qualification. A change to a new standard or requirement may trigger a review of change of essential parameters.
How are the requirements for requalification of procedures defined?	Requirements are to record all changes of documents, hardware, software and training programmes, and to provide evidence of the scope of change(s) and how they may impact the essential parameters.

## Contributors to Drafting and Editing

Jeff Weed	CANDU Owners Group (COG Inc.)	Canada
Heikki Myöhänen	KIWA	Finland
Chris Curtis	Jacobs / Inspection Validation Centre (IVC)	Great Britain
Oliver Martin (ed.)	European Commission – Joint Research Centre	European Commission

# ENIQ

European Network for  
Inspection & Qualification  
NUGENIA Technical Area 8

## ABOUT ENIQ AND NUGENIA

The **European Network for Inspection and Qualification (ENIQ)** is a utility driven network working mainly in the areas of qualification of non-destructive testing (NDT) systems and risk-informed in-service inspection (RI-ISI) for nuclear power plants (NPPs). Since its establishment in 1992, ENIQ has issued over 70 documents. Among them are the “European Methodology for the Qualification of Non-Destructive Testing” and the “European Framework Document for Risk-Informed In-Service Inspection”. ENIQ is recognised as one of the main contributors to today’s global qualification guidelines for in-service inspection.

ENIQ is the Technical Area 8 of NUGENIA, one of the three pillars of the Sustainable Nuclear Energy Technology Platform (SNETP) that was established in September 2007 as an R&D&I platform **to support technological development for enhancing safe and competitive nuclear fission in a climate-neutral and sustainable energy mix**. Since May 2019, SNETP has been operating as an international non-profit association (INPA) under the Belgian law pursuing a networking and scientific goals. It is recognised as a European Technology and Innovation Platform (ETIP) by the European Commission.

The international membership base of the platform includes industrial actors, research and development organisations, academia, technical and safety organisations, SMEs as well as non-governmental bodies.



[secretariat@snetp.eu](mailto:secretariat@snetp.eu)



[www.snetp.eu](http://www.snetp.eu)



[SNETP](https://www.linkedin.com/company/snetp)



[SNE\\_TP](https://twitter.com/SNE_TP)



9 782919 313402