ISO 17024 Mapping

Certification Logo

Abstract: The ECQA Association issues certificates based on the ISO 17024 International Standard for the certification of persons.

In this chapter the architecture, processes and standards of the ECQA Guideline are mapped against the requirements outlined by the ISO 17024 standard. His will form the basis for a ISO 17024 certification of the association.

1. Mapping Strategy

Each chapter of ISO 17024 is mapped against the architecture, processes and standards of the ECQA Guideline. A rating is done in form of green (full coverage), blue (further refinements required) and red (no coverage).

2. Mapping Onto Each ISO 17024 Chapter

1. ISO 17024 - Scope

ECQA has been funded under the LLP (Life Long Learning Program) of the EU to establish joint quality criteria and a certification process for a pool of professions in the IT & Services area.
Future professions developed under the LLP scheme falling into that sectors will be offered ECQA certification.

Coverage Rating: **Green**

2. ISO 17024 – Normative References

The ISO 17024 standard does not enforce a specific standard but expects that the applicant for certification refers to standards.

ECQA implements the EU strategies for job role based qualifications in the IT & Services sector in the Life Long Learning Program. To be accepted under these EU regulations certain quality criteria must be fulfilled. These criteria are outlined in the ECQA guideline chapter 2 part 2 – certification of new job roles.

Coverage Rating: **Green**

3. ISO 17024 – Terms and Definitions

ISO 17024 gives the following definitions:

Accredited certificate: A certificate issued by a certification body in accordance with the conditions of its accreditation and bearing an accreditation mark or statement.

ECQA defined a common set of certificates for different learner levels which are applied across the whole pool of IT & Service professions using the same standard procedures.

Four defined types of certificates are applied and issued:

Attendance Certificate
- A person attended the course

Test Certificate
- A person attended the course and passed the test (based on a European pool of test questions to be applied across all European regions leading to comparable exams)

Summary Test Certificate
- A person attended a set of courses and passed the test for all skill criteria of a whole profession / job role (based on a European pool of test questions to be applied across all European regions leading to comparable exams)

Professional Certificate
- A person who achieved a summary test certificate applied the sills in industry and demonstrated the skills by evidence which is assessed by a committee of experts (experts apply defined performance and skill criteria which have been agreed Europe wide in job role committees)

Coverage Rating: **Green**

4.1   ISO 17024 – Certification Body Requirements

Quality control procedures with defined roles, responsibilities, quality criteria, and templates have been defined to regulate the work of the certification body.

The ECQA association is an independent association (different from the training providers) based on defined processes and computer supported testing procedures.

Any non compliance with procedures is being controlled by the management board of the certification association. For non conformances there is a defined workflow which is virtually controlled by an NQA (Network Quality Assurance) system.

Coverage Rating: **Green**

4.2   ISO 17024 – Organisational Structure

ISO 17024 Requirement G.4.2.1

The ECQA Association is founded as an independent body and the legal text and statutes clearly define the certification scope. See the legal statutes in the ECQA guide chapter 2 part 1 (legal statutes).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.2

The comments in clause G.4.2.1 apply and the ECQA Association has a clear distinctive name and scope.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.3

In case of universities being members of ECQA a specific model has been agreed. University students are offered the independent ECQA tests (like the Microsoft certified professional tests). Students passing the test get an ECQA certificate (separate from the university exam papers / certificate).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.4

In the ECQA guideline we defined the quality control and the business work flows. It is clearly outlined that in the first place ECQA acts as a quality control unit applying the same quality standards across Europe, no exceptions will be made.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.5

The development of the current certification association and concept has been funded under the Leonardo da Vinci Program, ECQA, 2005 – 2007. In a follow up strategy initiative EU Cert (2008 – 2010) the European Union supports with further 700000 Euro the establishment of these exam and certification processes in all European regions. In addition about 45 training organisations signed papers to commit to approx. 2 man years effort

annually to run the association administration (beside the project EU Cert). In addition there is already a pool of 105 certified trainers and approx. 3000 certified learners / managers.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.6

Members of the certification association have to commit effort to collaborate in the job role (annual upgrade of skills set / syllabus) and the exam committees (annual upgrade of the European pool of test questions).

There is a defined agreement template with duties and benefits for job role committees, exam committees (in the contractual templates in chapter 3 part 1 of the guide), and membership rules (in the legal statutes (in chapter 2 part 1 of the guide).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.7

Conflicts are avoided by a clear set of quality criteria and defined processes to which every member complies hen joining ECQA.

In case that still conflicts arise the managing board of the association will solve the issue (solutions need a majority vote).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.8

A role model has been defined in chapter 2 part 1 of the guide. Partners are assigned to specific roles and roles have specific duties and tasks. Misunderstandings and conflicts are avoided by these defined procedures.

The chapter 2 part 1 describes defined architecture, roles, responsibilities, work flows and business flows.

The managing board is responsible to solve any conflicts and to refine the existing models to react upon any conflicts in half annual board meetings.

Coverage Rating: **Blue – there should be a risk management procedure**

ISO 17024 Requirement G.4.2.9 – Structural Requirement

ECQA represents different professions / job roles in the IT & Services sector. For each profession a job role committee consisting of experts from different national training institutes and training bodies is created to act as an independent committee to represent this profession certificate in Europe.

ISO 17024 Requirement G.4.2.10 – Structural Requirement

To accept a further profession in the KKP pool a set of quality criteria have to be met (see chapter 2 part 2 of the guideline). Some of the criteria relate to the fact that they need to prove a European interest (with defined set of rating criteria to evaluate that) and not just the interest of a single major provider or region.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.11 – Structural Requirement

The work of the ECQA association and the job role committees is shared in an EU Teamwork knowledge server environment. Information is fully transparent to the whole membership and controlling bodies.

The exams and test certificates are managed via online central EU exam portals which have full transparency of students, tests, test results and certificates issued.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.12 – Structural Requirement

Decisions of withdrawal are managed on a two level control system.

The management board of the association performs a quality control of the defined procedures and templates and the use of the agreed quality criteria (see ECQA guideline).

The job role committee (not a single person or organisation decision !) decides the withdrawal of a certificate for a specific profession.

The withdrawal must be granted by the management board, before it becomes valid.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.13 – Structural Requirement

The job role committees comprise experts from different organisations from different countries. They cannot be driven by a single organisation or single body or single region in Europe.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.14 – Structural Requirement

The schemes are managed by a pool of professions where for each profession (fulfilling defined quality criteria – see ECQA guide chapter 2 part 2) a job role committee and an exam committee are being set up.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.15 – Structural Requirement

All professions, job role committees and exam committees commit to the same standards, procedures and certification and test portals maintained and set up by the international ECQA Association.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.16 – Independence Requirement

The ECQA association has been created to provide an independent organisation above all professions in the pool to act as a quality control body and to implement the defined certification processes in the ECQA guideline.

The Job role committees are international task forces in which through a majority rule no single organisation or person can influence the overall certification process.

Through European test portals which generate tests by random generators none can influence any test content or test results.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.17 – Independence Requirement

The legal statutes in chapter 2 part 1 of the ECQA guide clearly outline that ECQA only implements the certification processes and clearly defines roles and responsibilities.

Impartiality is controlled by controlling that organisations keep the defined roles in the standard agreed process models.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.18 – Independence Requirement

No person employed by ECQA will be issued certificates. ECQA members will achieve certification but will have to follow defined processes, quality criteria and the work is controlled by the committees (job role based).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.19/20/21/22/23 – Independence Requirement

This is totally avoided by a set of European exam portal systems. Inside European exam portals systems European test question pools are maintained. In case of a test the system generates different test questions per participant and automatically corrects the test.

Single persons or bodies cannot influence this automatic procedure.

The European Union further supports now by 700000 Euro the extension of these independent testing portals across regions of Europe.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.24/25/26/27 – Training of Certification Personnel

The additional training is not required because when joining ECQA all are bound to a defined set of processes (see ECQA guide) and a set of European exam portals and user guides.
Without that knowledge it will not be allowed to enter the association (= entrance requirement).

Coverage Rating: **Green**

ISO 17024 Requirement G.4.2.28/29/30/31 – Training of Certification Personnel

Decisions on complaints and appeals are managed on a two level control system.

The management board of the association performs a quality control of the defined procedures and templates and the use of the agreed quality criteria (see ECQA guideline).

The job role committee (not a single person or organisation decision !) decides the compliant or appeal for a specific profession.

The withdrawal must be granted by the management board, before it becomes valid.

For complaints an online NQA (Network Quality Assurance System) is used. (= Result of EU Teamwork project).

Coverage Rating: **Green**

4.3   ISO 17024 – Development and Maintenance of a Certification Scheme

ISO 17024 Requirement G.4.3.1/2 – Training Courses

The ECQA guideline chapter 2 part 1 describes clear set of criteria and pre-requesites for training providers.

The ECQA guideline chapter 2 part 2 describes clear set of criteria and pre-requesites for acceptance of specific course materials.

Coverage Rating: **Green**

ISO 17024 Requirement G.4.3.3/4/5/6 – Systematic Process (Tool supported in ECQA)

A defined process supported by European testing portals (see www.ecqa.org – European exam portals) is used for the exams. Students receive unique certification registration numbers and test data are kept and maintained. Certificates are generated and maintained in the European exam portals.
All test results are traceable down to single answers to specific questions.

Coverage Rating: **Green**

4.4 ISO 17024 – Management System

No guidance provided by the standard.

The management is done in the NQA (Network Quality Assurance) system.

4.5 ISO 17024 – Subcontracting Certification

ISO 17024 Requirement G.4.5.1/2/3 – Subcontracting Certification Work

This type of framework contract is included as a template in the chapter 3 of the ECQA guideline.

Coverage Rating: **Green**

4.6 ISO 17024 – Records

ISO 17024 Requirement G.4.6.1/2 – Maintaining Records

The exam portal system automatically assigns unique registration and test numbers. Persons and their tests and certificates are maintained in a database inside the European exam portal systems.

The tests and certificates are traceable down to single questions answered by persons in a test.

Coverage Rating: **Blue – we need to more clearly outline when a certificate needs to be renewed**

4.7 ISO 17024 – Confidentiality

The access control is managed by the European exam portal systems. Access control differentiates levels of users (e.g. assessor, tester, participant, content admin, certification organisation, ..) and depending on the user level the system gives access.

ECQA management board is the body which decides about granting access.

Coverage Rating: **Blue – a standard NDA (Non Disclosure Agreement) shall be created and added in chapter 3 of the ECQA guide.**

4.8 ISO 17024 – Security

The principles of the e-security manager (one of the certified professions in the pool) have been used to secure the European exam portals. This includes

- Server pool with firewalls, IDS/IPS Sstems
- Backups
- RAID systems
- Testing
- Etc.

Coverage Rating: **Green**

5. ISO 17024 – Personnel Duties and Competencies

5.1 ISO 17024 – General

The duties and responsibilities are defined in the role descriptions of the ECQA guide in chapter 2 part 1. Personnel fulfilling the role requirements will be selected.

At the start we only use already experienced personnel from Danube who are active in EU programs and training for more than 10 years.

Coverage Rating: **Green**

5.2 ISO 17024 – Examiners

This is clearly outlined in the ECQA guide in
- Chapter 2 part 1 – role of exam committees
- Chapter 3 – framework contract for examiners / exam bodies

Coverage Rating: **Green**

6. Certification Process

This is outlined in the ECQA strategy paper and is described in the certification process (European Qualification Framework) on the web site.

Four defined types of certificates are applied and issued:

Attendance Certificate
- A person attended the course

Test Certificate
- A person attended the course and passed the test (based on a European pool of test questions to be applied across all European regions leading to comparable exams)

Summary Test Certificate
- A person attended a set of courses and passed the test for all skill criteria of a whole profession / job role (based on a European pool of test questions to be applied across all European regions leading to comparable exams)

Professional Certificate
- A person who achieved a summary test certificate applied the sills in industry and demonstrated the skills by evidence which is assessed by a committee of experts (experts apply defined performance and skill criteria which have been agreed Europe wide in job role committees)

Coverage Rating: **Green**

6.1 ISO 17024 – Application

Each job role and the required competencies are online for browsing a skills tree. People interested can register online and receive a Life Long Learning account for the profession. Inside that they can do a self assessment. If they are interested they can proceed to a course and enter the certification process.
Coverage Rating: **Green**

6.2 ISO 17024 – Evaluation

For each profession there are student exam guides. Exams are done computer supported in the European exam portal systems. All results are maintained and students in heir private learning accounts can see the results as well.

Coverage Rating: **Green**

6.3 ISO 17024 – Decision on Certification

The decision is done by the European Job Role Committee (see definitions in chapter 2 part 1 of the ECQA guide).

The information about the person is maintained in the EU exam portals and can be accessed by the job role committee for making objective evaluations.

In addition the ECQA guide clearly outlines checklists and evaluation forms for the certification of trainers, training bodies, new professions and students.

Coverage Rating: **Green**

6.4 ISO 17024 – Surveillance

Decisions about certification are managed on a two level control system.

The management board of the association performs a quality control of the defined procedures and templates and the use of the agreed quality criteria (see ECQA guideline).

The job role committee (not a single person or organisation decision !) decides the certificates for a specific profession.

The European exam portals allow online surveillance of tests, of assessments and of certificates issued at any time.

Coverage Rating: **Green**

6.5 ISO 17024 – Re-Certification

In ECQA we granted certificates for 2 years, after that the person must upload evidences of competences (is part of the EU exam portals). The job role committees can then assess the evidences and provide a status active again. Otherwise the person will loose the certificate.

Coverage Rating: **Blue – this process must be better elaborated and included in the ECQA guide chapter 2 part 1.**

6.6   ISO 17024 – Use of Certificates and Logos

The use of logos is clarified in the framework contracts provided in the ECQA guideline in chapter 3.