

Rules and Process Steps for Certification of Job Roles



Certification Logo

Abstract: This paper describes the rules and steps to be applied for the certification of new job roles. According to the ECQA Framework this has to be applied by the ECQA Board members to review the acceptance of a certification proposal.

1. Criteria for Certification of EU Job Roles

1.1 Required Skills Set Coverage

Certification Rule *ECQA-Job-Role 1* - To be acceptable for the European skills portals the job role descriptions must comply with the European standards for skills descriptions.

Each skill unit team describes the skill unit, learning elements and performance criteria following the standards for skills descriptions.

A DOMAIN contains
JOB ROLES, which contain
UNITS, which contain
ELEMENTS, which contain
PERFORMANCE CRITERIA,
 which must be proven by
EVIDENCES.

Figure 1: Skill Card / Skills Set Structure

1.1.1 Description Template for a Skill Unit

Each partner shall use the following structure when describing a skills unit:

Skill Unit Name
Skill Unit Acronym
Skill Unit Description

For each element of a skill unit each partner shall use the following structure when describing a learning element:

Learning Element Title
Learning Element Acronym
Learning Element Element Note

Learning Element – List of Performance Criteria:

The student must be able to show evidence of competencies for the following performance criteria (PC):

Performance Criterion	Evidence Check: The student can demonstrate -
Identifier	<ul style="list-style-type: none"> • What the student must be able to demonstrate
	<ul style="list-style-type: none"> •
	<ul style="list-style-type: none"> •
	<ul style="list-style-type: none"> •

Figure 2: Performance Criterion Table Template

1.1.2 Example Description

Unit EE – DB : E-Commerce Engineer – E-Commerce Databases

Acronym: EE-DB

Title: E-Commerce Databases

Description:

This course unit consists of 4 elements: Database Models, Database Design, Database Management, Doing First Implementations, Setting Up Your Own Database.

Unit EE-DB-Element 1: Database Models

Acronym: EE-DB-DM

Element Title: E-Commerce Database Models

Element Note:

In this element the student must show competencies regarding database design covering customer databases, sales databases, product databases, etc. The student must be able to design Entity Relationship Diagrams (ERD) outlining on a practical example what tables a usual e-commerce database contains, what attributes the tables in usual e-commerce databases contain and what relationships are built between the tables.

Performance Criteria:

The student must be able to show evidence of competencies for the following performance criteria (PC):

Performance Criterion	Evidence Check: The student can demonstrate -
EE.DB.DM.PC1	<ul style="list-style-type: none"> • She/he knows the principles of relational database design
EE.DB.DM.PC2	<ul style="list-style-type: none"> • She/he knows what the third normal form in relational databases means
EE.DB.DM.PC3	<ul style="list-style-type: none"> • She/he knows the typical attributes and structure of customer tables
EE.DB.DM.PC4	<ul style="list-style-type: none"> • She/he knows the typical attributes and structure of product and services tables
EE.DB.DM.PC5	<ul style="list-style-type: none"> • She/he knows the typical attributes and structure of tables keeping sales and stock information
EE.DB.DM.PC6	<ul style="list-style-type: none"> • She/he has experience with combining all the tables into a consistent relational database model (third normal form) with all required relationships

Table 1: Performance Criteria Example for the Element EC-EE-DB-DM

1.2 Required Test Descriptions / Test Pool

Certification Rule *ECQA-Job-Role 2* - To be acceptable for the European skills portals a pool of test questions must be provided using a specific standard description format (so that the test questions can be entered into the exam portals)

1.2.1 Description Template for a Test Question

Element <Element Title from Skill Card>			
<Performance Criteria Identifier>		<Performance Criteria Text>	
Number	Correct?	Question	Possible answers
1		<Question Text>	A Possible answer 1 B Possible answer 2 C Possible answer 3 D Possible answer 4
2		<Question Text>	A Possible answer 1 B Possible answer 2 C Possible answer 3 D Possible answer 4

Figure 3 : Test Question Format - Option 1: Any set of answers

<Performance Criteria Identifier>		<Performance Criteria Text>	
Number	Correct ?	Question	
1	YES/NO	<Question Text>	
2	YES/NO	<Question Text>	
3	YES/NO	<Question Text>	
4	YES/NO	<Question Text>	
5	YES/NO	<Question Text>	

Figure 4 : Test Question Format - Option 2 - Assuming always yes/no

1.2.2 Example Test Question Descriptions

Corporate Wide Innovation Management

... and MCQs per performance criteria. Use one of the formats below.

MGM.E3.PC1		She/he knows how to professionally formulate and establish corporate innovations missions	
Number	Correct?	Question	Possible answers
1	C	The following is true for a mission.	A Holds 1 year B Holds at least 2 years C Holds at least 3-5 years D Holds forever
2	A,C,D	What are the main criteria for a corporate innovation mission?	A Long term focus B Single project focus

MGM.E3.PC1	She/he knows how to professionally formulate and establish corporate innovations missions
	C Target group definition D Purpose definition

Figure 5 : Example for a correct use of the template for test questions

1.3 Criteria for Test System Compliance

Certification Rule *ECQA-Job-Role 3* - To establish an independent and computer controlled test and certification centre all professions must use the European skills portals to administer a test pool and run all exams through it (with an independent objective board controlling the test servers and procedures).

The test questions are entered into a computer supported certification and test portal. The test portal includes

- Student accounts
 - Self assessment
 - Receiving learning references
 - Potential to attend online courses
 - Performing computer supported test
- Examination body accounts
 - Administration of students
 - Administration and configuration of tests
 - Test results generation
 - Student lists and exam overview functions
 - Automatic (in work) generation of certificates in pdf design

For the self assessment and learning guide look at

http://www.iscn.com/projects/piconew_skill_portal/images/eqn-users-self-assessment-learning-guide-v1.pdf

For the student exam guides look at:

<http://www.ecqa.org/>

- menu – Examination Services

The exam body guides are not public and will be sent by the test system administrator to the accepted exam organisations / bodies.

- The training organisation during or latest at the end of the course asks all students to register with an examination organisation at the test and certification portal.
- The training organisation agrees with the students and the examination organisation a date to perform the test.
- At this date the tests will be available online / computer based and results will be calculated automatically.
- The system finally (ECQA) allows to automatically generate the certificates based on the test results.

1.4 Criteria for Sufficient Test Pool Size

Certification Rule *ECQA-Job-Role 4* - To be acceptable for the European skills portals the pool of test questions must contain at least 5 different test questions per performance criterion so that a test per participant can be generated generically.

Note: A skill unit contains learning elements and a learning element contains approx. 7-10 performance criterions, which each needs above 5 potential test questions. (in case of automated multiple choice test)

The test questions are entered into a computer supported certification and test portal. The test portal (when an examination body creates a test) randomly generates a test from the test questions pool based on the selected learning elements (which parts of the profession the training covered). Normally the server generates 10 questions per element and so that the likelihood to get the same questions again is sufficiently low experience showed that we need approx. 5 test questions per performance criterion in the skills card.

1.5 Criteria for Covering a European Dimension

Certification Rule *ECQA-Job-Role 5* – To be accepted as a profession with a cross-regional and cross-national European scope the job role must additionally satisfy the following European dimension criteria:

How would you rate the job role / profession in the following areas?

Available in English (training materials plus test questions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Proven demand in different EU regions (not only one)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Available in at least 1 (preferred more) local languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Actuality and Value of the Course Content for the European Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent

Table 2 : European Dimension Criteria

If in any of the above criteria a rating “poor” is done , this will be a failure criteria for the job role acceptance.

1.6 Criteria for Providing Sufficient Quality

Certification Rule *ECQA-Job-Role 6* – To be accepted as a profession of high quality the job role must additionally satisfy the following content related quality criteria:

How would you rate the job role / profession in the following areas?

Presentation quality	○	○	○	○
	Poor	Fair	Good	Excellent
Training method (exercises included ?)	○	○	○	○
	Poor	Fair	Good	Excellent
Relevance and actuality of the content	○	○	○	○
	Poor	Fair	Good	Excellent
References provided	○	○	○	○
	Poor	Fair	Good	Excellent
Re-usable case studies included	○	○	○	○
	Poor	Fair	Good	Excellent
Did a cross national team already review and agree the content	○	○	○	○
	Poor	Fair	Good	Excellent

Table 3 : Content Related Quality Criteria

If in any of the above criteria a rating “poor” is done , this will be a failure criteria for the job role acceptance.

1.7 Criteria for sustainability

Certification Rule *ECQA-Job-Role 7* – To be accepted as a profession with impact on a European level there must be a partnership agreement available (examples are consortium agreements, exploitation agreements, qualification boards) which assures that the profession and its skills card will be maintained for a number of years (minimum is 3)

2. Application Form – Job Role Proposal

Application for <Company Name / Consortium Name> concerning the Job Role <job role name>:

Name of the organisation in national language (<i>full and abbreviated if applicable</i>)	
Name of the organisation in EN, FR or DE (<i>if available</i>)	
Short Company Description: (max. 100 words)	
Short Description and Web sites of the Development Consortium: (max. 200 words)	

Head Office

Street	
Number	
Postcode	
Town/city	
Country	

Contact person

Name	Mr <input type="checkbox"/> Ms <input type="checkbox"/>	
Department		
Position		
Street		
Number		
Postcode		
Town/city		
Country		
Telephone		
Fax		
E-mail		
Website		

Declaration of Compliance with skill set and test systems requirements	I hereby declare that our organisation will fully cover the defined quality criteria for job role definition and the establishment of European test portals.
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Authorised signatory

Name	Mr <input type="checkbox"/> Ms <input type="checkbox"/>	
Position		

Please attach to the general data and signed declaration the following data package:

- The elaborated skills set
- The elaborated set of test questions
- A proof that courses covering the skills set are required in a number of European regions
- A link to the development consortium / EU project

3. Evaluation Form – Job Role Proposal

Evaluation for <Company / Consortium Name> concerning the Job Role <job role name>:

Summary Evaluation / Decision:

Regulation	yes	No
Certification Rule ECQA-Job-Role 1 - To be acceptable for the European skills portals the job role descriptions must comply with the European standards for skills descriptions. Is the skills set structured according to the outlined criteria (unit, element, performance criteria, etc.)		
Certification Rule ECQA-Job-Role 2 - To be acceptable for the European skills portals a pool of test questions must be provided using a specific standard description format (so that the test questions can be entered into the exam portals) Have test questions been provided for each of the performance criteria ?		
Certification Rule ECQA-Job-Role 3 - To establish an independent and computer controlled test and certification centre all professions must use the European skills portals to administer a test pool and run all exams through it (with an independent objective board controlling the test servers and procedures). Has the declaration been signed in the application form ?		
Certification Rule ECQA-Job-Role 4 - To be acceptable for the European skills portals the pool of test questions must contain at least 5 different test questions per performance criterion so that a test per participant can be generated generically. Note: A skill unit contains learning elements and a learning element contains approx. 7-10 performance criterions, which each needs above 5 potential test questions. (in case of automated multiple choice test) Is there really a minimum of 5 test questions per performance criterion ?		
Certification Rule ECQA-Job-Role 5 – To be accepted as a profession with a cross-regional and cross-national European scope the job role must additionally satisfy the following European dimension criteria. Does the checklist “European Dimension” show no poor rating ?		
Certification Rule ECQA-Job-Role 6 – To be accepted as a profession of high quality the job role must additionally satisfy the following content related quality criteria. Does the checklist “Quality Criteria” show no poor rating ?		
Certification Rule ECQA-Job-Role 7 – To be accepted as a profession with impact on a European level there must be a partnership agreement		

available (examples are consortium agreements, exploitation agreements, qualification boards) which assures that the profession and its skills card will be maintained for a number of years (minimum is 3)		
Is there an exploitation plan proving that the skills set will be used for a longer period (minimum 3 years) ?		

A rating “YES” is required in all of the above summary criteria.

Compliance with European Dimension Criteria of the Skill Set <job role name>

How would you rate the job role / profession in the following areas?

Available in English (training materials plus test questions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Proven demand in different EU regions (not only one)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Available in at least 1 (preferred more) local languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Actuality and Value of the Course Content for the European Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent

Table 4 : European Dimension Criteria

Compliance with Quality Criteria

How would you rate the job role / profession in the following areas?

Presentation quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Training method (exercises included ?)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Relevance and actuality of the content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
References provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Re-usable case studies included	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent
Did a cross national team already review and agree the content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poor	Fair	Good	Excellent

Table 5 : Content Related Quality Criteria

