

## PR.EX.05 Procedures for the issuing of an IECEx Test and Assessment Report (ExTR)

### A) DOCUMENT APPROVALS

No	Definition	Action	Created By	Date
1	Document approved	Approval	Nurgül Çınar	28.04.2023

### B) REVISION HISTORY

No	Definition	Reason	Approval Date	Release Date
2	Reference has been made to OD 203 by adding article 8.3.	NCR10 in IECEx audit report.	28.04.2023	28.04.2023
1	Related form references have been added in the procedure.	Improvement work.	28.03.2023	28.03.2023
0	Creation of documentation within the scope of IECEx.	First Publication	16.03.2023	16.03.2023

## 5. Purpose and Scope

The purpose of this document is to compile, approve, issue ExTR packages by issuing ExTLs/SZUTEST and to receive, review, audit ExTR packages by receiving ExTLs/SZUTEST.

An ExTR package always comprises of an ExTR Cover, and often also includes one or more additional ExTR documents. These additional ExTR documents may include individual Ex Test Reports for one or more of the IEC Ex standards, ExTR Addendums, ExTR of National Differences and/or ExTR of Partial Testing documents.

The purpose of an Ex Test Report is to provide a standardized clause-by-clause documentation of the evaluation and testing that verified initial compliance of an item or product with an IEC Ex standard.

According to Table 1 — Building a product certification scheme in ISO/IEC 17067 standard;

**Table 1 — Building a product certification scheme**

Conformity assessment functions and activities (a) within product certification schemes		Types of product certification schemes (b)							
		1a	1b	2	3	4	5	6	N(c) (d)
<b>I</b>	<b>Selection</b> , including planning and preparation activities, specification of requirements, e.g. normative documents, and sampling, as applicable	x	x	x	x	x	x	x	x
<b>II</b>	<b>Determination of characteristics</b> , as applicable, by: a) testing b) inspection c) design appraisal d) assessment of services or processes e) other determination activities, e.g. verification	x	x	x	x	x	x	x	x
<b>III</b>	<b>Review</b> Examining the evidence of conformity obtained during the determination stage to establish whether the specified requirements have been met	x	x	x	x	x	x	x	x
<b>IV</b>	<b>Decision on certification</b> Granting, maintaining, extending, reducing, suspending, withdrawing certification	x	x	x	x	x	x	x	x
<b>V</b>	<b>Attestation, licensing</b>								
	a) issuing a certificate of conformity or other statement of conformity (attestation)	x	x	x	x	x	x	x	x
	b) granting the right to use certificates or other statements of conformity	x	x	x	x	x	x		
	c) issuing a certificate of conformity for a batch of products	x							
	d) granting the right to use marks of conformity (licensing) is based on surveillance (VI) or certification of a batch.	x	x	x	x	x			
<b>VI</b>	<b>Surveillance</b> , as applicable (see 5.3.4 to 5.3.8), by:								
	a) testing or inspection of samples from the open market	x	x	x					
	b) testing or inspection of samples from the factory	x	x	x					
	c) assessment of the production, the delivery of the service or the operation of the process	x	x	x	x				
	d) management system audits combined with random tests or inspections	x	x						

**(a)** Where applicable, the activities can be coupled with initial audit and surveillance audit of the applicant's management system (an example is given in ISO/IEC Guide 53) or initial assessment of the production process. The order in which the assessments are performed may vary and will be defined within the scheme.

**(b)** An often used and well-tried model for a product certification scheme is described in ISO/IEC Guide 28; it is a product certification scheme corresponding to scheme type 5.

**(c)** A product certification scheme includes at least the activities I, II, III, IV and V a).

**(d)** The symbol *N* has been added to show an undefined number of possible other schemes, which can be based on different activities.

This procedure covers the process shown step by step for the preparation of the relevant ExTL in SZUTEST, in case of no obstacles, errors, or non-conformity related to ExTR considering the relevant standards, regulations, and OD documents.

## 6. Terms and Definition

The following terms and definitions is specified in order to good understanding the procedure.

**IECEX:** International Electrotechnical Commission Explosive

**ISO:** International Standard Organization

**OD:** Operational Document

**Ex certification body (ExCB):** A body which has been accepted according to these Rules and to issue IECEx CoCs, IECEx QARs and to endorse IECEx test reports Explosive Certification Body

**Ex Management Committee (ExMC):** The body which administers the operation of the IECEx System and is responsible to the Conformity Assessment Board of the IEC

**IECEX certificate of conformity (CoC):** Document issued under these Rules that conveys the assurance of the conformity of a product with the specified standard or standards

**IECEX test report (ExTR):** A document issued by an ExTL that includes a documented record of the obtained test and assessment results for endorsement by an ExCB, associated with the issuing ExTL, demonstrating that the examined product type is in conformity with specified Standards

**IECEX quality assessment report (QAR):** A document that presents the results of an assessment of the quality management system (QMS) of a manufacturer or manufacturing location by an ExCB, to the requirements of the IECEx Certified Equipment Scheme

**Ex testing laboratory (ExTL):** A testing laboratory which is accepted according to these Rules, and which performs tests and assessments and compiles IECEx test reports for endorsement by the associated ExCB

**Applicant:** A manufacturer or a person which acts on behalf of the manufacturer and who applies to an IECEx certification body (ExCB) for obtaining, suspending, or cancelling an IECEx certificate of conformity, or for obtaining an IECEx test report or an IECEx quality assessment report

**Manufacturer:** An organization, situated at a stated location or stated locations, that carries out or controls such stages in the design, manufacture, assessment, handling, and storage of a product that enables it to accept responsibility for continued compliance of the product with the relevant requirements and undertakes all obligations in that connection

**NCR:** A nonconformance report or NCR is a construction-related document that addresses specification deviation or work that fails to meet quality standards.

**IAF:** The International Accreditation Forum, Inc. is the world association of Conformity Assessment Accreditation bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and other similar programs of conformity assessment.

## 7. Responsibilities

This procedure is operated by the authorized person who is assigned by SZUTEST according to the PR.EX.01 SZUTEST Personnel Procedure and its Associated IECEx Test Laboratories (ExTLs) to ensure a thorough and consistent assessment of applications for either an:

- IECEx Certificate of Conformity

**IECEX OD 009** (Procedure)

**IECEX-OD-011-1** (Stage 1: General Information Creating IECEx COC From Website)

**IECEX-OD-011-2** (Stage 2 : Creating IECEx Equipment COC from Website)

**IECEX-OD-209** (Suspension, Cancellation, Reinstatement of COC)

**IECEX-02** (Rules of Procedure)

**IECEX OD 017** (Drawing and Documentation)

- IECEx Test Report (ExTR)

**IECEX Form F-005** (IECEX Quality Assessment Attendance List)

**IECEX-02** (Rules of Procedure)

**IECEX OD 009** (Procedure)

**IECEX OD 010-1** (Development and posting of blank)

**IECEX OD 010-2** ( Procedures and guidance)

**IECEX-OD-011-1** (Stage 1: General Information Creating IECEx COC From Website)

**IECEX-OD-011-2** (Stage 2 : Creating IECEx Equipment COC from Website)

**IECEX OD 017** (Drawing and Documentation)

**IECEX OD 019** ( Participation and System Fees)

- IECEx Quality Assessment Report (QAR)

**IECEX Form F-001** (Audit Form)

**IECEX Form F-002** (Non-Conformity Report)

**IECEX OD 009** (Procedure)

**IECEX-OD-011-1** (Stage 1: General Information Creating IECEx COC From Website)

**IECEX-OD-011-2** (Stage 2 : Creating IECEx Equipment COC from Website)

**IECEX-OD-025** (Management of Assessment and Surveillance Manufacturer's QS)

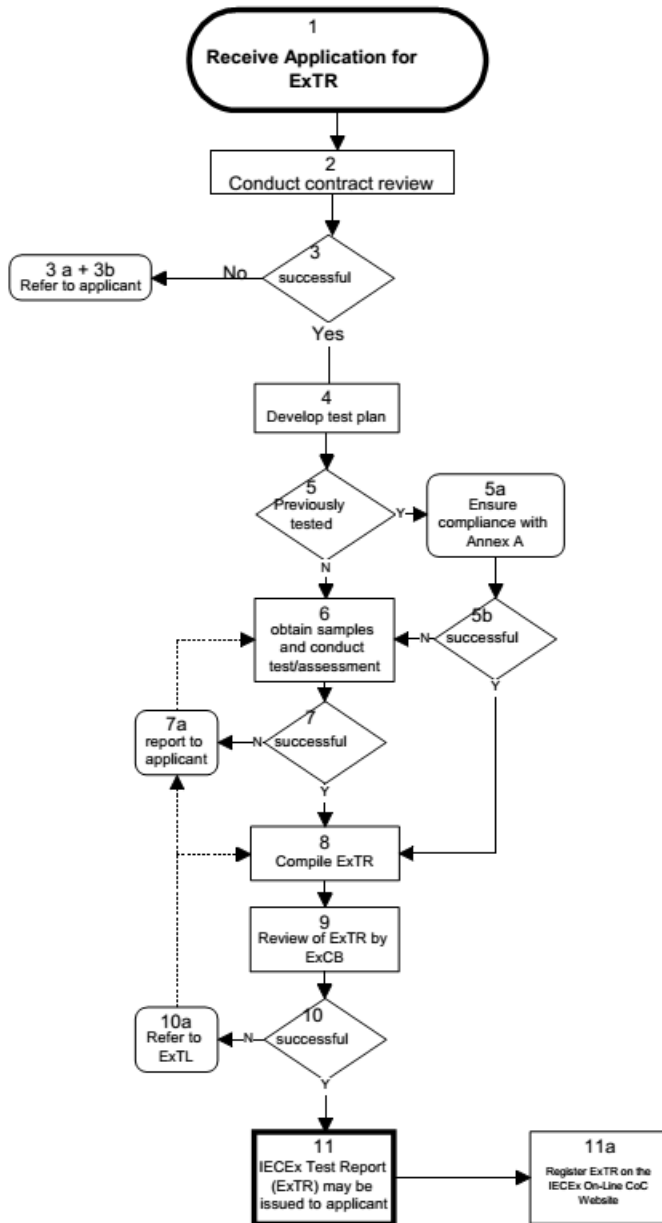
**IECEX-OD-026** (Qualifying Lead Auditors and Auditors)

**IECEX-OD-208** (Audit Checklist for Manufacturer)

IECEX-OD-250 (Management of QAR)  
 IECEX-02 (Rules of Procedure)  
 IECEX-OD-005-3 (QS Requirements for Manufacturer)  
 IECEX OD 017 (Drawing and Documentation)

## 8. Method

### 8.1. Method of the issuing of an IECEX Test and Assessment Report (ExTR)



#### 8.1.1. Step 1 - Receive Application for ExTR

Application received in accordance with PR.EX.02 Evaluation of the Application and Contract Procedure. For applications for IECEX Unit Verification Certificates of Conformity, refer to PR.EX.09 Procedures for the issuing of IECEX Unit Verification Certificate

Application received in accordance with IECEX 02. The scope of testing and assessment covered by an ExTR can cover all or partial requirements of an International Standard.

Applications for an IECEX ExTR can be made for an International IEC or ISO Standard.

**Related Documents :** IECEX 02

**Related Forms:** FR.EX.01 Application Form

## 8.1.2. Step 2 - Conduct Contract Review

Contract review to be conducted by the Technical Manager receiving the application, in accordance with the SZUTEST's own Quality System and as required by ISO/IEC 17065, PR.EX.02 Evaluation of the Application and Contract Procedure.

- A review to ensure that the application is within the scope of acceptance of the SZUTEST and associated ExTLs
- Whether a surcharge applies for manufacturers from non-member countries (Refer IECEX OD 019)
- Estimation of costs and time to complete project
- Agreement on method and system of payment by applicant, in accordance with SZUTEST's own policy and quality system
- Checking the scope of Associate ExTLs and choosing the appropriate ExTL amount the pool of ExTLs.
- Communicating with chosen Associate ExTL about the test prices and Test conditions.

The results of the contract review shall be documented and reported to the applicant.

**Related Documents :** SZUTEST's own Certification procedures as included in their Quality System and required by ISO/IEC 17065

**Related Forms:** FR.EX.02 Contract Form

## 8.1.3. Step 3 - Successful?

SZUTEST shall only proceed where the contract review has been successfully completed..

## 8.1.4. Step 3a - Refer to Applicant

Where unsuccessful, SZUTEST shall communicate in writing to the applicant with the applicant free to amend their application or select another ExCB, when the SZUTEST's scope of IECEX acceptance does not cover the application.

## 8.1.5. Step 3b - Refer to Applicant & Product Certification Auditor & Open the Project in SZUTEST APP System

Where successful, SZUTEST shall provide in writing to the applicant an offer describing the scope of work involved, the applicable technical and IECEX system requirements and certification costs and time until issuing and publishing the ExTR and/or CoC, provided all tests passed satisfactorily

In case that 2 ExTL could cover the tests, the condition of each one including price and test time should be declared to the manufacturer.

Also, SZUTEST Technical Manager assigns the Product certification Auditor to carry out the certification Project.

**Related Form:** FR.EX.25 Audit Team Certification Committee Assigning Form

## 8.1.6. Step 4 - Develop Test & Assessment Plan

The Product Certification Auditor shall prepare the audit plan and record it to FR.EX.27 Audit Plan.

For doing the tests and Issuing ExTR the client will be referred to the suitable SZUTEST Associate technical laboratory.

Develop Test and assessment plan with communication with Associate ExTL, especially where model ranges are involved in the application. The SZUTEST in conjunction with its associated ExTL need to be satisfied that samples selected for testing are representative of models covered by the application.

Associated ExTL shall apply all relevant ExTAG Decisions Sheets, IECEX Operational Documents, relevant Standards and corrigenda, amendments and ISHs that apply to the product or Standard relevant to the application.

A test plan is required for each application even where it is intended to utilise previously obtained test data to ensure that the original test plan is still relevant for this new application.

**Related Form:** FR.EX.27, FR.EX.08

## 8.1.7. Step 5 - Previously tested

Where products, components or systems are covered by the application, have been previously tested without ExTR being issued and the applicant wishes to utilise these tests then steps 5a and 5b may be applied.

**Related Documents :** IECEX-OD-009 ANNEX A

## 8.1.8. Step 5a - Ensure compliance with Annex A

A review of the previous test data and if required with Associated ExTL shall be done to make sure about :

- Determination whether the test requirements, methods and pass/fail criteria used previously are the same as those contained in the standard

for which application is made

- Facilities and methods previously used are still appropriate

Note that it is still essential that an ExTR be completed and registered on the IECEx On-Line Certificate system even when using previously obtained test data.

**Related Documents :** IECEx-OD-009 ANNEX A

#### **8.1.9. Step 5b - Successful?**

A file note is required to act as a record to demonstrate the outcome of the assessment to Annex A.

Such file note shall be retained on the SZUTEST & ExTL's records for possible review by an IECEx Assessment Team conducting surveillance or re-assessment of the ExTL.

**Related Documents :** IECEx-OD-009 ANNEX A

#### **8.1.10. Step 6 - Obtain samples and conduct test/assessment**

Samples to be obtained by the Associated ExTL and tests and assessments conducted as required by the Standard. The requirements of both IECEx 02 and IECEx OD 010 shall be followed.

NOTE: The Associated ExTL should check the list of ExTAG Decision Sheets to see if there are any that relate to the product under test

**Related Documents :** IECEx 02, IECEx OD 010

#### **8.1.11. Steps 7+7a - Report to applicant / Successful?**

Where testing and assessments are unsuccessful, then such results and any non-conformances identified during the assessment shall be reported to the applicant by SZUTEST or Associated ExTL, in writing, requesting corrective action. Such action may include modification of the design and provide new samples for testing or amend their original application or withdrawing their application.

#### **8.1.12. Step 8 - Compile ExTR**

The relevant IECEx Test Report (ExTR) Blank Report Forms for the relevant Standard(s) and Edition(s) thereof shall be used to prepare and compile an ExTR.

An ExTR shall also be compiled by the Associated ExTL when utilising previously obtained test data. This may mean transferring information from a previously issued test report into the ExTR format.

NOTE: ExTRs were previously called ATRs. Old ATR blanks can still be used while they are being updated to reflect the new terminology.

**Related Documents :** IECEx Standard ExTR Blank Forms available from the IECEx Website

#### **8.1.13. Step 9 - Review of ExTR by SZUTEST**

ExTR to be reviewed by the SZUTEST prior to being issued by the SZUTEST, with whom the ExTL is associated.

If successful, the SZUTEST shall prepare the ExTR cover sheet and compile the ExTR package encompassing all ExTRs

#### **The ExTR shall contain:**

- a clear description of the Ex equipment or change to already certified equipment;
- the name and address of the applicant;
- the name and address of the manufacturer; and
- the edition of the Standard, and amendments, if any.

#### **Technical aspects:**

- That the information contained within the ExTR is sufficient to enable a clear conclusion to be drawn that the product is in compliance with the relevant clauses of the Standards listed

#### **Administrative aspects:**

- Use of IECEx Blank ExTR Forms

- Evidence that the ExTL has taken into account relevant ExTAG Decision Sheets
- Product listed on related CoC matches that on the ExTR
- Standards listed on CoC matches that on ExTR and are appropriate
- ExTR registered on IECEx Website
- Drawing list is included
- All parts of the ExTR Blank form have been completed. Noting that clauses of the standard that may not apply to the product have been identified as N/A or other means and that such exclusions are appropriate for the product covered by the ExTR
- Persons listed as conducting the tests and completing the ExTR are those identified by the ExTL as being competent and/or listed on their internal competency matrix.
- The ExTL's associated SZUTEST indicates final approval of the Ex Test Report as part of the overall ExTR package on the associated ExTR Cover

**Related Documents :** IECEx 02, IECEx OD 017

**Related Forms :** FR.EX.05 TEST Report Endorsement for the Report by ExTL, FR.EX.(14-24) IECEx Test Report Checklist, FR.EX.(45-46) IECEx Test Report Checklist, FR.EX.29 Final Report

#### **8.1.14. Step 10+10a - Successfully? / Refer to ExTL**

Where the review by the SZUTEST is unsuccessful, this shall be referred to the ExTL for correction or may be referred back to the applicant for their action, similar to step 7 and 7a, depending on the nature of the problem detected during the SZUTEST's review.

When SZUTEST and ExTLs are within the one organization, the ExTR review shall be conducted by a staff member not involved or responsible for the tests/assessments.

Independent review will be done by SZUTEST technical manager and recorded in FR.EX.30 Review and Certification Decision Form.

**Related Forms:** FR.EX.30 Review and Certification Decision Form

#### **8.1.15. Step 11 - IECEx Test Report (ExTR) may be issued to applicant**

The ExTR Package may now be issued to the applicant or retained for duration of the IECEx CoC procedure.

Where the manufacturer or the applicant is located in a nonmember country, the SZUTEST shall, arrange for payment to the IECEx account of the surcharge, refer to IECEx OD 019, IECEx System Fees.

Where a valid ExTR already exists, this may be used for the purpose of issuing an IECEx CoC without the repeating the tests. ExTRs issued prior to the date of application for an IECEx CoC may only be used where it has been confirmed that the testing requirements are the same as those of the Standard for which a CoC is to be issued and that the product has not included any change in design that may affect the Ex protection.

#### **8.1.16. Step 11a - Register ExTR on the IECEx On-Line COC Website**

SZUTEST to register the ExTR via the creation of an ExTR Summary on the IECEx On-Line Certificate System on the IECExwebsite @ [www.iecex.com](http://www.iecex.com).

The On-Line Certificate System provides a reference source of key information that can be searched by Manufacturer, ExTL, ExTR reference Number, Standards and so on.

This enables the future use of the ExTR for the purpose of issuing an IECEx Certificate of Conformity by linking it and the relevant QAR Summary to the Certificate,

Refer to IECEx OD 011-1 and IECEx OD 011-2 for further information.

IECEx OD 011-2 provides a detailed step by step guide to registering an ExTR on the IECEx OnLine Certificate System. Contact the Secretariat for any assistance.

Also, the projects will be closed on SZUTEST APP System.

**Related Documents :** IECEx OD 011-2, IECEx website, SZUTEST APP System

#### **8.2. Additional information regarding choosing Associated ExTL**

In order to select an ExTL as a subcontractor among 2 ExTLs in each Project below remarks should be considered.

- Scope of the IECEx accreditation of each ExTL.
- Proposed price of each ExTL for the Project.
- The place that we receive the application for reducing transportation costs of the sample products.
- Applicant recommendation.

- The time frame of doing the tests.

**Related Forms :** FR.EX.08 Appointment of Ex Testing Laboratory Form

### **8.3. Complying with the requirements of the latest edition of OD 203**

Complying with the requirements of the latest edition of OD 203 in case of implementation of the projects is required.