



**IECEX 01C**

Edition 1.0 2016-08

# **IECEX PUBLICATION**

**IEC System for Certification to Standards relating to Equipment for use  
in Explosive Atmospheres**

**IECEX Terms and Definitions**



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**IECEX Terms and Definitions**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE

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## IECEX Guide 01C - IECEX Definitions & Terminology Summary

### NOTES:

- ISO/IEC 17000 gives the basic definitions
- Definitions specified in Standards managed by IEC TC31 (for example, the IEC 60079 Series and the IEC 61241 Series) are excluded OR included and specifically **referenced** from the Table below for clarity.
- Some definitions below have slightly different meanings to reflect the needs or context of different IECEX Schemes (these are indicated by underlined text and the need or context is derived from the document listed adjacent in the “Source” column)

'Term'	'definition'	Source	Owner
<b>applicant</b>	a manufacturer or a person which acts on behalf of the manufacturer and who applies to an Ex Certification Body for obtaining an <u>IECEX Certificate of Conformity, an IECEX Test Report or an IECEX Quality Assessment Report.</u>	IECEX 02 Ed 5.2	ExMC
<b>Applicant</b>	an organization or a person who applies to an ExCB for an <u>IECEX Service Facility Certificate.</u>	IECEX 03 Ed 2.0	ExMC WG10
<b>Applicant</b>	an organization who applies to an ExCB for an IECEX Service Facility Certificate for <u>Ex design and selection.</u>	IECEX 03-2 Ed 1.0	ExMC WG10
<b>Applicant</b>	an organization who applies to an ExCB for an IECEX Service Facility Certificate for <u>installation and initial inspection.</u>	IECEX 03-3 Ed 1.0	ExMC WG10
<b>Applicant</b>	an organization who applies to an ExCB for an IECEX Service Facility Certificate for <u>Ex inspection and maintenance.</u>	IECEX 03-4 Ed 1.0	ExMC WG10
<b>Applicant</b>	an organization who applies to an ExCB for an IECEX Service Facility Certificate for <u>repair, overhaul and reclamation of Ex equipment.</u>	IECEX 03-5 Ed 1.0	ExMC WG10
<b>applicant</b>	person who applies to an Ex Certification Body for an IECEX Certificate of Personnel Competence.  <i>Editor Note: While 3.13 of ISO/IEC 17024 covers this we propose to retain this wording specific to IECEX CoPC Scheme.</i>	IECEX 05 Ed 3.0	ExPCC

'Term'	'definition'	Source	Owner
<b>competence</b>	demonstrated knowledge and skills [ISO/IEC 17024]	IECEX 05 Ed 3.0	ExPCC
<b>Ex Certification Body (ExCB)</b>	a body which has been accepted according to these Rules and which issues IECEx Certificates of Conformity, IECEx Quality Assessment Reports and also endorses IECEx Test Reports.	IECEX 02 Ed 5.2	ExMC WG1
<b>Ex Competent Person</b>	<p>person who can demonstrate a combination of knowledge and skills to effectively, efficiently and safely carry out activities in or associated with hazardous areas, covered by IECEx requirements.</p> <p>NOTE Competence is specified by activity (e.g. classification, selection of equipment, installation, maintenance, testing and inspection, etc.) and may be limited by types of protection, product types, groups etc. as detailed in IECEx OD 502.</p>	IECEX 05 Ed 2.0	ExPCC
<b>Ex component</b>	part of electrical equipment or a module, marked with the symbol "U", which is not intended to be used alone and requires additional consideration when incorporated into equipment or systems for use in explosive atmospheres.	IEC 60079-0 Ed 6.0, Clause 3.28	TC31
<b>electrical equipment</b>	<p>items applied as a whole or in part for the utilization of electrical energy.</p> <p>NOTE These include, amongst others, items for the generation, transmission, distribution, storage, measurement, regulation, conversion and consumption of electrical energy and items for telecommunications.</p>	IEC 60079-0 Ed 6.0, Clause 3.22	TC31
<b>equipment (for explosive atmospheres)</b>	general term including apparatus, fittings, devices, components, and the like used as a part of, or in connection with, an electrical installation in an explosive atmosphere.	IEC 60079-0 Ed 6.0, Clause 3.25	TC31
<b>Ex equipment</b>	Machines, apparatus, fixed or mobile devices, control components and instrumentation thereof and detection or prevention systems which, separately or jointly, are intended for the generation, transfer, storage, measurement, control and conversion of energy for the processing of material and which are capable of causing an explosion through their own potential sources of ignition.	IEC TC31	IEC TC31

‘Term’	‘definition’	Source	Owner
<b>Ex industries</b>	Industries where flammable gases, liquids and/or combustible dusts are used or maybe present that have the potential for an explosive atmosphere to be present.	IECEX 04 Ed 1.0	ExMarkCo
<b>Ex Management Committee (ExMC)</b>	the body which administers the operation of the IECEx System and is responsible to the Conformity Assessment Board of the IEC.	IECEX 02 Ed 5.2	ExMC
<b>Ex system</b>	an assembly of interconnected items of Ex equipment for which the interconnection has to be carried out in accordance with the descriptive system document in order to comply with the explosion protection requirements.	IECEX 02 Ed 5.2	ExMC
<b>Ex Testing and Assessment Group (ExTAG)</b>	the body which deals with questions of practice relating to assessment and testing under the IECEx System and is responsible to the Ex Management Committee.	IECEX 02 Ed 5.2	ExTAG
<b>Ex Testing Laboratory (ExTL)</b>	a testing laboratory which is accepted according to these Rules and which is either integral with, or under the complete control of, or belongs to or works under a written agreement with at least one Ex Certification Body.	IECEX 02 Ed 5.2	ExMC
<b>examination</b>	mechanism that is part of the assessment, which measures a candidate’s competence by one or more means such as written, oral, practical and observational. [ISO/IEC 17024, 3.9]	IECEX 05 Ed 3.0	ExPCC
<b>examiner</b>	person with relevant technical and personal qualifications, competent to conduct and/or score an examination [ISO/IEC 17024]	IECEX 05 Ed 3.0	ExPCC
<b>IECEX Bulletin</b>	bulletin, issued at intervals decided by the Ex Management Committee, containing detailed information on national differences.	IECEX 02 Ed 5.2	ExMC

<b>IECEX Certificate of Conformity (CoC)</b>	document issued under these Rules indicating that adequate confidence is provided that a duly identified product is in conformity with a specific standard. The certificate can relate to Ex apparatus, an Ex component or an Ex system.	IECEX 02 Ed 5.2	ExMC
<b>IECEX Certificate of Personnel Competence (CoPC)</b>	document issued under these Rules indicating that adequate confidence is provided that a duly identified person has been found to operate procedures that provide confidence that the work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).	IECEX 05 Ed 2.0	ExPCC
<b>IECEX Certification of Personnel Competence Scheme</b>	scheme of the IECEX Certification System for the certification of personnel competence for persons engaged in work and services related to explosive atmospheres.	IECEX 05 Ed 2.0	ExPCC
<b>IECEX Certified Service Facilities Scheme</b>	The IECEX Scheme for the certification of workshops and repair facilities involved in the <u>repair or overhaul of equipment</u> intended for use in explosive atmosphere(s).	IECEX 03 Ed 2.0	ExPCC
<b>IECEX Certified Service Facilities Scheme – Part 2</b>	the IECEX Scheme for the certification of service facilities involved in <u>design of installations and selection</u> of equipment intended for use in explosive atmosphere(s).	IECEX 03-2 Ed 1.0	ExMC WG10
<b>IECEX Certified Service Facilities Scheme – Part 3</b>	the IECEX Scheme for the certification of service facilities involved in <u>Ex installation and initial inspection</u> of equipment intended for use in explosive atmosphere(s).	IECEX 03-3 Ed 1.0	ExMC WG10
<b>IECEX Certified Service Facilities Scheme – Part 4</b>	the IECEX Scheme for the certification of service facilities involved in <u>Ex inspection and maintenance</u> of equipment intended for use in explosive atmosphere(s).	IECEX 03-4 Ed 1.0	ExMC WG10
<b>IECEX Certified Service Facilities Scheme – Part 5</b>	the IECEX Scheme for the certification of workshops and repair facilities involved in the <u>repair, overhaul and/or reclamation</u> of equipment intended for use in explosive atmosphere(s).	IECEX 03-5 Ed 1.0	ExMC WG10
	a document that presents the results of an on-site assessment of a Service		

<b>IECEX Facilities Audit Report (FAR)</b>	Facility's quality control system, equipment, operating procedures and competence of their staff, by an ExCB, to the requirements of the IECEX Scheme.	IECEX 03 Ed 2.0	ExMC WG10
<b>IECEX Facilities Audit Report (FAR)</b>	a document that presents the results of an on-site assessment of a service facility's quality control system, equipment, operating procedures and competence of their staff, by an ExCB, to the requirements of the IECEX Scheme.	IECEX 03-2 Ed 1.0	ExMC WG10
<b>IECEX Facilities Audit Report (FAR)</b>	a document that presents the results of an on-site assessment of a service facility's quality control system, equipment, operating procedures and competence of their staff, by an ExCB, to the requirements of the IECEX Scheme.	IECEX 03-3 Ed 1.0	ExMC WG10
<b>IECEX Facilities Audit Report (FAR)</b>	a document that presents the results of an on-site assessment of a service facility's quality control system, equipment, operating procedures and competence of their staff, by an ExCB, to the requirements of the IECEX Scheme.	IECEX 03-4 Ed 1.0	ExMC WG10
<b>IECEX Facilities Audit Report (FAR)</b>	a document that presents the results of an on-site assessment of a service facility's quality control system, equipment, operating procedures and competence of their staff, by an ExCB, to the requirements of the IECEX Scheme.	IECEX 03-5 Ed 1.0	ExMC WG10
<b>IECEX Mark of Conformity</b>	the IECEX Conformity Mark, licensed for use according to IECEX 04, <i>IECEX Conformity Mark Licensing System – Regulations</i> , and relevant IECEX Operational Documents (ODs).	IECEX 02 Ed 5.2	ExMarkCo
<b>IECEX Newsletter</b>	newsletter, issued at intervals decided by the Secretary of the Ex Management Committee, to promote the IECEX Schemes amongst users and prospective users of the Schemes and to inform users of significant developments of the Schemes.	IECEX 02 Ed 5.2	ExMC
<b>IECEX Personnel Competence</b>	An on-line electronic record that summarises the results of an assessment of a person's competence to the requirements of the IECEX Certification of	IECEX 05 Ed 2.0	ExPCC

<b>Assessment Report (PCAR)</b>	Personnel Competence Scheme.		
<b>IECEX Quality Assessment Report (QAR)</b>	a document that presents the results of an on-site assessment of a manufacturer's quality management system by an ExCB, to the requirements of the IECEX Certified Equipment Scheme.	IECEX 02 Ed 5.2	ExMC WG1
<b>IECEX Register</b>	register, issued at intervals decided by the Ex Management Committee, containing information on all ExCBs and ExTLs and listing all IECEX CoCs.	IECEX 02 Ed 5.2	ExMC
<b>IECEX Service Facility Certificate</b>	a document issued under these Rules indicating that adequate confidence is provided that a duly identified Service Facility has been found to operate procedures that provide confidence that the <u>repair, overhaul or modification</u> work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).	IECEX 03 Ed 2.0	ExMC WG10
<b>IECEX Service Facility Certificate</b>	a document issued under these Rules indicating that adequate confidence is provided that a duly identified Service Facility has been found to operate procedures that provide confidence that the work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).	IECEX 03-2 Ed 1.0	ExMC WG10
<b>IECEX Service Facility Certificate</b>	a document issued under these Rules indicating that adequate confidence is provided that a duly identified Service Facility has been found to operate procedures that provide confidence that the work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).	IECEX 03-3 Ed 1.0	ExMC WG10
<b>IECEX Service Facility Certificate</b>	a document issued under these Rules indicating that adequate confidence is provided that a duly identified Service Facility has been found to operate procedures that provide confidence that the work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).	IECEX 03-4 Ed 1.0	ExMC WG10
<b>IECEX Service Facility</b>	a document issued under these Rules indicating that adequate confidence is provided that a duly identified Service Facility has been found to operate	IECEX 03-5 Ed 1.0	ExMC WG10

<b>Certificate</b>	procedures that provide confidence that the work undertaken complies with IECEX requirements and is under the surveillance of an IECEX Certification Body (ExCB).		
<b>IECEX Technical Guidance Documents (TGDs)</b>	technical documents approved by the ExMC and listed on the IECEX website, that act as a guide to IECEX Assessment Teams when conducting assessments of ExTLs and ExCBs according to Clause 11 of these rules.	IECEX 02 Ed 5.2	ExMC WG4
<b>IECEX Test Report (ExTR)</b>	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. An ExTR may cover complete or partial testing to the relevant Standard.	IECEX 02 Ed 5.2	ExMC WG1
<b>IECEX Certified Equipment Scheme</b>	the IECEX Scheme for the certification of equipment intended for use in, or relating to, explosive atmosphere(s) and applicable to equipment embodying one or more of the types of protection covered by IEC Standards or in the absence of an IEC Standard, ISO Standards.	IECEX 02 Ed 5.2	ExMC WG1
<b>License issued to a Certification Body</b>	A legal body, a manufacturer, that has complied with the requirements of the Mark Licensing System Regulations and has obtained a license to use the IECEX Mark.	IECEX 04 Ed 1.0	ExMarkCo
<b>License issued to a Certification Body</b>	A documented agreement between the IEC and Certification Body to allow the Certification Body to issue licenses to manufacturers meeting the requirements of the IECEX Mark Licensing System.	IECEX 04 Ed 1.0	ExMarkCo
<b>License issued to a manufacturer</b>	A documented agreement between a Certification Body and a manufacturer that permits the manufacturer to use the IECEX Mark in accordance with the Mark Licensing System.	IECEX 04 Ed 1.0	ExMarkCo
<b>Licensed User or</b>	A legal body, a manufacturer, that has complied with the requirements of the Mark Licensing System Regulations and has obtained a license to use	IECEX 04 Ed 1.0	ExMarkCo

<b>Operator</b>	the IECEX Mark.		
<b>manufacturer</b>	an organization, situated at a stated location or stated locations, that carries out or controls such stages in the 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.	IECEX 02 Ed 5.2	ExMC WG1
<b>Member Body of the IECEX System</b>	a body which has been accepted according to the Basic Rules of the IECEX System, Publication IECEX 01 and to these Rules of Procedure, and which is either a National Committee of the IEC or a body notified to the ExMC by the National Committee of the IEC.	IECEX 02 Ed 5.2	ExMC
<b>national differences</b>	<p>those requirements or test parameters in the corresponding national standard which, when applied to equipment complying only with the IEC Standard accepted for use in the IECEX Certified Equipment Scheme, might entail non-compliance of that equipment with the relevant national standard.</p> <p>NOTE 1 When a requirement in the Standard is not implemented in the corresponding national standard, that is also a national difference.</p> <p>NOTE 2 Those restrictive requirements in a national standard that address risk of explosion issues (i.e. other than general safety requirements that address risks such as fire, electric shock and personal injury), which do not deviate from the criteria included in the corresponding standard accepted for use in the IECEX Certified Equipment Scheme, but which limit the possibility to offer the relevant equipment for sale in the country concerned, are also considered to be national differences.</p>	IECEX 02 Ed 5.2	ExMC
<b>Owner</b>	The owner of the IEC Mark, namely the IEC.	IECEX 04 Ed 1.0	ExMarkCo
<b>qualification</b>	demonstrated education, training and work experience where applicable. [ISO/IEC 17024]	IECEX 05 Ed 3.0	ExPCC
<b>Service facility</b>	an organization situated at a stated location or stated locations, that carries out or controls such stages in the <u>repair, overhaul and or modification</u> , as defined in <b>IEC 60079-19</b> , of an Ex product. At the same time the organization accepts responsibility for continued compliance of the product with the relevant requirements and undertakes all obligations in that connection. This definition includes manufacturers of Ex equipment	IECEX 03 Ed 2.0	ExMC WG10

	that offer a <u>repair and overhaul service as well as equipment users with their own repair service facility, and includes reclamation.</u>		
<b>Service facility</b>	an organization that carries out or controls such stages in <u>selection of Ex equipment and design of Ex installations</u> , as required in <b>IEC 60079-14</b> .	IECEX 03-2 Ed 1.0	ExMC WG10
<b>Service facility</b>	an organization that carries out or controls such stages in <u>Ex installation and initial inspection</u> , as required in <b>IEC 60079-14</b> .	IECEX 03-3 Ed 1.0	ExMC WG10
<b>Service facility</b>	an organization that carries out or controls such stages in <u>Ex inspection and maintenance</u> of Ex equipment, as required in <b>IEC 60079-17</b> .	IECEX 03-4 Ed 1.0	ExMC WG10
<b>Service facility</b>	an organization situated at a stated location or stated locations, that carries out or controls such stages in the <u>repair, overhaul and reclamation</u> , as required in <b>IEC 60079-19</b> , of an Ex equipment. At the same time the organization accepts responsibility for continued compliance of the product with the relevant requirements and undertakes all obligations in that connection. This definition includes manufacturers of Ex equipment that offers a repair and overhaul service as well as Ex equipment users with their own repair, overhaul and reclamation service facility.	IECEX 03-5 Ed 1.0	ExMC WG10
<b>type of protection</b>	specific measures applied to equipment to avoid ignition of a surrounding explosive atmosphere.	IECEX 02 Ed 5.2	ExMC WG1
<b>Unit Verification Certificate</b>	an IECEX certificate that covers specific equipment/systems that have been produced with each being uniquely identified on the IECEX Unit Verification Certificate to allow the handling of "one-off" items or limited quantities.	IECEX 02 Ed 5.2	ExMC WG1

### **Document History**

1. A draft of Edition 1.0 was discussed and approved as ExMC/864/CD at the ExMC 2013 Fortaleza meeting
2. This Edition 1.0 includes the comments provided on ExMC/864/CD by Mr Bill Lawrence via email (7<sup>th</sup> August 2013) particularly with respect to the definition included above for “Ex equipment”
3. This edition reflects revisions of documents as approved at the 2015 Christchurch ExMC meeting.