

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Partial Accreditation Certificate** that the testing laboratory

cetecom advanced GmbH
Im Teelbruch 116, 45219 Essen

with Locations:

Im Teelbruch 116, 45219 Essen

Untertürkheimer Straße 6-10, 66117 Saarbrücken

meets the requirements according to DIN EN ISO/IEC 17025:2018 for the conformity assessment activities listed in the annex to this certificate. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided they are explicitly confirmed in the annex to this certificate.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This partial accreditation certificate only applies in connection with the notice of 18.08.2023 with accreditation number D-PL-12047-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 9 pages.

Registration number of the partial accreditation certificate: **D-PL-12047-01-04**

It is a part of the accreditation certificate: D-PL-12047-01-00.



Berlin, 18.08.2023

Florian Burkart
Head of Technical Unit

The certificate together with the annex reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH (www.dakks.de).

Deutsche Akkreditierungsstelle GmbH

Office Berlin
Spittelmarkt 10
10117 Berlin

Office Frankfurt am Main
Europa-Allee 52
60327 Frankfurt am Main

Office Braunschweig
Bundesallee 100
38116 Braunschweig

The Deutsche Akkreditierungsstelle GmbH (DAkKS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkKS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

DAkKS is a signatory to the multilateral agreements for mutual recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Co-operation (ILAC).

The up-to-date state of membership can be retrieved from the following websites:

EA: www.european-accreditation.org

ILAC: www.ilac.org

IAF: www.iaf.nu

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-12047-01-04 according to DIN EN ISO/IEC 17025:2018

Valid from: 18.08.2023

Date of issue: 18.08.2023

This annex is a part of the accreditation certificate D-PL-12047-01-00.

Holder of partial accreditation certificate:

cetecom advanced GmbH
Im Teelbruch 116, 45219 Essen

with Locations:

Im Teelbruch 116, 45219 Essen (ESS)

Untertürkheimer Straße 6-10, 66117 Saarbrücken (SB)

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

Telecommunication (TC) and Electromagnetic Compatibility (EMC) for Canadian Standards

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAKKS, to use standards or equivalent testing methods listed here with different issue dates. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
Electromagnetic Compatibility (EMC)			
EMC	ICES-Gen Issue 1 (July 2018) Amendment 1 (Feb. 2021)	General Requirements for Compliance of Interference-Causing Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-001 Issue 5 (July 2020)	Industrial, Scientific and Medical (ISM) Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-002 Issue 7 (September 2020)	Vehicles, Boats and Other Devices Equipped with Internal Combustion Engines, Traction Batteries or Both	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-003 Issue 7 (October 15, 2020)	Information Technology Equipment (including Digital Apparatus)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-004 Issue 5 (October 28, 2022)	Alternating Current High Voltage Power Systems	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-005 Issue 5 (December 2018)	Lighting Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-006 Issue 3 (July 2018)	AC Wire Carrier Current Devices (Unintentional Radiators)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
EMC	ICES-008 Issue 1 (June 12, 2015)	Cable Distribution Networks	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
Radio Equipment and Systems			
TC	BETS-1 Issue 1 (November 1, 1996)	Technical Standards and Requirements for Low Power Announce Transmitters in the Frequency Bands 525-1,705 kHz and 88-107.5 MHz	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-3 Issue 1 (November 1, 1996)	Technical Standard and Requirements for Radio Apparatus that Form Part of a Master Antenna Television (MATV) Broadcasting Undertaking	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-4 Issue 1 (November 1, 1996) Revised: May 2023	Technical Standards and Requirements for Television Broadcasting Transmitters	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	BETS-5 Issue 1 (November 1, 1996) Revised: May 2023	Technical Standards and Requirements for AM Broadcasting Transmitters	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-6 Issue 2 (August 2005)	Technical Standards and Requirements for FM Broadcasting Transmitters	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-7 Issue 4 (June 9, 2023)	Technical Standards and Requirements for Apparatus Capable of Receiving Television Broadcasting Signals	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-8 Issue 1 (November 1, 1996)	Technical Standards and Requirements for FM Transmitters Operating in Small Remote Communities	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-9 Issue 1 (November 1, 1996)	Technical Standards and Requirements for Television Transmitters Operating in Small Remote Communities	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	BETS-11 Issue 1 (November 1, 1996)	Technical Requirements Respecting the Identification of Broadcasting Stations	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	CS-03, Part V Issue 9, Amendment 3 (August 2021)	Compliance Specification for Terminal Equipment, Terminal Systems, Network Protection Devices, Connection Arrangements and Hearing Aids Compatibility Part V — Requirements and Test Methods for Magnetic Output from Handset Telephones for Hearing Aid Coupling and for Receive Volume Control	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-Gen Issue 5 (April 2018) Amendment 2 (Feb. 2021) Amendment 1 (Mar. 2019)	General Requirements for Compliance of Radio Apparatus	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-HAC Issue 2 (April 1, 2022) Amendment (April 2023)	Hearing Aid Compatibility and Volume Control	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-111 Issue 5 (September 4, 2014)	Broadband Public Safety Equipment Operating in the Band 4940-4990 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-112 Issue 1 (February 2008)	Land Mobile and Fixed Equipment Operating in the Band 1670-1675 MHz	<input checked="" type="checkbox"/> ESS For Fixed and Base Stations special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-117 Issue 3 (January 2016) Amendment (June 4, 2021)	Land and Coast Station Transmitters Operating in the Band 200-535 kHz	<input checked="" type="checkbox"/> ESS For A1A modulation special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-119 Issue 12 (May 2015) Amendment (April 1, 2022)	Land Mobile and Fixed Equipment Operating in the Frequency Range 27.41-960 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-123 Issue 4 (August 2019)	Licensed Wireless Microphones	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-125 Issue 3 (June 2020) Note (November 23, 2021)	Land Mobile and Fixed Equipment Operating in the Frequency Range 1.705 to 30 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-127 Issue 1 (August 2009)	Air-Ground Equipment Operating in the Bands 849-851 MHz and 894-896MHz	<input checked="" type="checkbox"/> ESS For Ground Station Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-130 Issue 2 (February 2019)	Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-131 Issue 4 (Dec.16 , 2022)	Zone Enhancers	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-132 Issue 4 (January 31, 2023)	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-133 Issue 6, Amendment 1 (January 18, 2018)	2GHz Personal Communications Services	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-134 Issue 2 (February 5, 2016)	900 MHz Narrowband Personal Communications Services	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-135 Issue 2 (June 2009)	Digital Scanner Receivers	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-137 Issue 2 (February 2009)	Location and Monitoring Service in the band 902-928 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-139 Issue 4 (Sep. 29, 2022) Amendment (Oct. 2022)	Advanced Wireless Services Equipment Operating in the Bands 1710-1780 MHz and 2110-2200 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-140 Issue 1 (April 2018)	Equipment Operating in the Public Safety Broadband Frequency Bands 758-768 MHz and 788-798 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-141 Issue 2 (June 2010)	Aeronautical Radiocommunication Equipment in the Frequency Band 117.975-137 MHz	<input checked="" type="checkbox"/> ESS For fixed equipment with A3E emissions Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-142 Issue 5 (April 2013)	Narrowband Multipoint Communication Systems in the Bands 1429.5-1432 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-170 Issue 3 (Sep. 29, 2022)	Mobile Earth Stations and Ancillary Terrestrial Component Equipment Operating in the Mobile-Satellite Service Bands	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-181 Issue 2 (August 2019) Amendment (Feb.2020)	Coast and Ship Station Equipment Operating in the Maritime Service in the Frequency Range 1605-28000 kHz	<input checked="" type="checkbox"/> ESS Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-182 Issue 6 (June 4, 2021)	Maritime Radio Equipment Operating in the 156-162.5 MHz Band	<input checked="" type="checkbox"/> ESS Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-191 Issue 3 (April 2008) Note (January 21, 2020)	Local Multipoint Communication Systems in the Bands 25.35-28.35 GHz; Point-to-Point and Point-to-Multipoint Broadband Communication Systems in the Bands 24.25-24.45 GHz and 25.05-25.25 GHz; and Point-to-Multipoint Broadband Communications in the Band 38.6-40.0 GHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-192 Issue 5 (July 2023)	Flexible Use Broadband Equipment Operating in the Band 3450-3900 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-194 Issue 1 (October 2007)	Fixed Wireless Access Equipment Operating in the Band 953-960 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-195 Issue 2 (April 24, 2014)	Wireless Communication Service (WCS) Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz	<input checked="" type="checkbox"/> ESS Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-196 Issue 2 (February 2019)	Point-to-Multipoint Broadband Equipment Operating in the Band 512-608 MHz for Rural Remote Broadband Systems (RRBS) (TV Channels 21 to 36)	<input checked="" type="checkbox"/> ESS For Base station special equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-197 Issue 1 (February 2010)	Wireless Broadband Access Equipment Operating in the Band 3650-3700 MHz	<input checked="" type="checkbox"/> ESS Base station to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-199 Issue 4 (July 2023)	Broadband Radio Service (BRS) Equipment Operating in the Band 2500-2690 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-210 Issue 10 (December 2019) Amendment (April 2020)	Licence-Exempt Radio Apparatus: Category I Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-211 March 6, 2015	Level Probing Radar Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-213 Issue 3 (March 26, 2015)	2 GHz Licence-exempt Personal Communications Services (LE-PCS) Devices	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-215 Issue 2 (June 2009)	Analogue Scanner Receivers	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-216 Issue 2 (January 20, 2016) Amendment 1(Sep. 2020)	Wireless Power Transfer Devices	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-220 Issue 1, Amendment 1 (July 2018)	Devices Using Ultra-Wideband (UWB) Technology	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-222 Issue 3 (October 4, 2021)	White Space Devices (WSDs)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-236 Issue 2 (September 2022)	General Radio Service Equipment Operating in the Band 26.960 to 27.410 MHz (Citizens Band)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-238 Issue 1 (July 5, 2013)	Shipborne Radar in the 2900-3100 MHz and 9225-9500 MHz Bands	<input checked="" type="checkbox"/> ESS Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-243 Issue 3 (February 2010)	Medical Devices Operating in the 401-406 MHz Frequency Band	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-244 Issue 1 (June 14, 2013)	Medical Devices Operating in the Band 413-457 MHz	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-246 Issue 1 (March 2019)	Ultra-Low Power (ULP) Wireless Medical Capsule Endoscopy Devices Operating in the 430-440 MHz Band	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-247 Issue 3 (August 2023)	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-248 Issue 2 (Dec. 20, 2022)	Radio Local Area Network (RLAN) Devices Operating in the 5925-7125 MHz Band	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-251 Issue 2 (July 2018)	Vehicular Radar and Airport Fixed or Mobile Radar in the 76-81 GHz Frequency Band	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-252 Issue 1 (September 2017)	Intelligent Transportation Systems — Dedicated Short Range Communications (DSRC) — On-Board Unit (OBU)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-287 Issue 2 (March 6, 2014) Amendment 1 (Jun 4, 2021) Amendment 2 (May 2022)	Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-288 Issue 1 (January 2012)	Global Maritime Distress and Safety System (GMDSS)	<input checked="" type="checkbox"/> ESS Special auxiliary equipment to be provided externally <input checked="" type="checkbox"/> SB
TC	RSS-310 Issue 5 (January 2020)	Licence-Exempt Radio Apparatus: Category II Equipment	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
Human Exposure to EM-Fields			
TC	RSS-102 (RF Exp) ^{MEAS} Issue 5 (March 19, 2015) Amendment 1 (Feb 2, 2021)	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (RF Exposure)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-102 (NS) ^{MEAS} Issue 5 (March 19, 2015) Amendment 1 (Feb 2, 2021)	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (Nerve Stimulation)	<input checked="" type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Annex to the Partial Accreditation Certificate D-PL-12047-01-04

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
TC	RSS-102 (SAR) ^{MEAS} Issue 5 (March 19, 2015) Amendment 1 (Feb 2, 2021)	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (Specific Absorption Rate)	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB
TC	RSS-102 (LPD) ^{MEAS} Issue 5 (March 19, 2015) Amendment 1 (Feb 2, 2021)	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (Local Power Density)	<input type="checkbox"/> ESS <input checked="" type="checkbox"/> SB

Flexibility according to DAkks SD 0 002_e (Accreditation with flexible scope of testing laboratories, calibration laboratories and medical laboratories) and EA-2/15 M: 2019 (EA Requirements for the Accreditation of Flexible Scopes).

Abbreviations used:

- EMC Electromagnetic Compatibility
- IEC International Electrotechnical Commission
- RSS Radio Standards Specification
- TC Telecommunication