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## Flexible Scope of Accreditation to Certificate D-PL-20557-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 16.05.2023

Date of issue: 16.05.2023

Holder of certificate:

**Funkwerk Systems GmbH  
Im Funkwerk 5, 99625 Köllda**

Applicable Documents:

- [RD 01] DAKKS Rule **R-17025-PL** | Revision: 1.0 | 31. January 2023
- [RD 02] ILAC Guide **ILAC-G18:12/2021**
- [RD 03] European Accreditation **EA-2/15 M: 2019** | Revision 1 | 16. April 2019

Tests in the fields:

**Telecommunication, Environmental Tests**

**Within the accreditation areas marked with \*, the testing laboratory is permitted to use the standardized or equivalent test methods listed here with different output levels without the need for prior information and consent of the DAKKS.**

**The testing laboratory has an up-to-date list of all test procedures in the flexible accreditation area.**

**The areas marked with \*\* are not subject to flexibility.**

*The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.*

*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 at <https://www.dakks.de/en/content/accredited-bodies-dakks>.*

Department	Standard / In house procedure / Version	Title of standard or in house procedure	Test area / Reductions
<b>Mobile Communication*</b> (flexible)			
Telecommunication	3GPP TS 51.010-2 V13.11.0 (2020-06)  ETSI TS 151 010-2 V13.11.0 (2019-07)	Digital cellular telecommunications system (Phase 2+) (GSM); Mobile Station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification	
Telecommunication	ETSI EN 301 511 V12.5.1 (2017-03)	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonized Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	Not supported: 4.2.2, 4.2.3, 4.2.7, 4.2.8, 4.2.16-4.2.19, 4.2.33, 4.2.37, 4.2.39, 5.3.3, 5.3.7, 5.3.8, 5.3.16-5.3.19, 5.3.30, 5.3.31, 5.3.36, 5.3.37, 5.3.39,
Telecommunication	ETSI TS 102 933-1 V2.1.1 (2015-06)	Railway Telecommunications (RT); GSM-R improved receiver parameters; Part 1: Requirements for radio reception	
Telecommunication	ETSI TS 102 933-2 V2.1.1 (2015-06)	Railway Telecommunications (RT); GSM-R improved receiver parameters; Part 2: Radio conformance testing	
<b>Telecommunication Railway Systems *</b> (flexible)			
Telecommunication	EIRENE SRS Version 15.4.0 27.04.2014	UIC Project EIRENE System Requirements Specification <b>Standard test procedure</b> - O-3001 Rev. 1.5.0, 28.01.2015 <i>In-house procedure</i> – Add-On O-3001 Version 6.0, 28.01.2015	
Telecommunication	EIRENE FRS Version 8.0 18.12.2015	UIC Project EIRENE System Requirements Specification <b>Standard test procedure</b> - O-3001 Part 1 – Cab Radio, Version 1.0.0, July 2017 Part 2 – EDOR, Version 1.0.0 July 2017 Part 3 – SIM cards, Version 1.0.0 July 2017 Part 4 – Network, Version 1.1.0, Nov. 2017 <i>In-house procedure</i> – Add-On O-3001 Version 8.0, 28.04.2016	

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Telecommunication	EIRENE SRS Version 16.0 18.12.2015	UIC Project EIRENE System Requirements Specification <b>Standard-Test-Procedure - O-3001</b> Part 1 – Cab Radio, Version 1.0.0, July 2017 Part 2 – EDOR, Version 1.0.0 July 2017 Part 3 – SIM cards, Version 1.0.0 July 2017 Part 4 – Network, Version 1.1.0, Nov. 2017 <i>In-house procedure – Add-On O-3001</i> Version 8.0, 28.04.2016	
Telecommunication	<b>Change Remark:</b> EIRENE FRS version 8.1.0 and EIRENE SRS version 16.1.0 (both not yet published; publication within the framework of the TSI ZZS 2023)	UIC Project EIRENE System Requirements Specification <b>Standard-Test-Procedure - O-3001</b> Part 1 – Cab Radio, Version 1.1.1, Jan 2023 Part 2 – EDOR, Version 1.1.0 Jan 2023 Part 3 – SIM cards, Version 1.1.0 Apr 2021 Part 4 – Network, Version 1.2.0, Apr. 2021 <i>In-house procedure – Add-On O-3001</i> Version 8.02, 16.01.2023	Evaluation and amendments to UIC for public consultation in February 2023;  No final release yet; indicated status applicable in the laboratory
Telecommunication	UIC Code 751-3, 4. Issue, July 2005	<i>In-house procedure</i> Test hand book ATR Germany Austria Version 6.0 26.03.2020	No support of Semi-Duplex-Procedure.
Telecommunication	UIC Code 568, 3. Issue, 01.01.1996	<i>In-house procedure</i> Test hand book ATR Germany Austria Version 6.0 26.03.2020	Relevant for the connection of the train radio system, compliance with the control signals in accordance with sections 2.2, 6.1, 6.2, and 7.1, 7.6, 7.7 and 7.8 shall be checked.
Telecommunication	UIC O-2475 Version 3.0 19.02.2007	Standardised test method for ERTMS / GSM-R Quality of Service Test Specification	
Telecommunication	<b>Change Remark:</b> UIC O-2475 Version 4.0 March 2022	Standardised test method for ERTMS / GSM-R Quality of Service Test Specification	New Release of the test procedure by UIC ERTMS/GSM-R OFG UNITEL; applicable in the laboratory

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Telecommu- nication	UIC O-2875 Version 0.37 22.11.2015  Version 4.0 in preparation (2020- 08)	Standardised test method for ERTMS / GSM-R Quality of Service Test Specification for (MI) EIRENE QoS requirements Voice and non-ETCS data	
Telecommu- nication	<b>Change Remark:</b> UIC O-2875 Version 2.0 23.11.2017	Standardised test method for ERTMS / GSM-R Quality of Service Test Specification for (MI) EIRENE QoS requirements Voice and non-ETCS data	New Release of the test procedure by UIC ERTMS/GSM-R OFG UNITEL; applicable in the laboratory

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<b>Environmental Tests *</b> (flexible)			
Environ- mental tests	DIN EN 60068-2-1	Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1:2007); German version EN 60068-2-1:2007	
Environ- mental tests	DIN EN 60068-2-2	Environmental testing - Part 2-2: Tests - Test B: Dry Heat (IEC 60068-2- 2:2007); German version EN 60068-2- 2:2007	
Environ- mental tests	DIN EN 60068-2-14	Environmental testing - Part 2-14: Tests - Test N: Change of temperature (IEC 60068-2-14:2009); German version EN 60068-2-14:2009; Test Nb	
Environ- mental tests	DIN EN 60068-2-30	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) (IEC 60068-2-30:2005); German version EN 60068-2-30:2005	

**Abbreviations used:**

DIN Deutsches Institut für Normung e.V.

NDS In house method of the CAB