INTERNATIONAL STANDARD

ISO/IEC 10373-6

Fourth edition
2020-07

AMENDMENT 1
2021-05

Cards and security devices for personal identification — Test methods —

Part 6: Contactless proximity objects

AMENDMENT 1: Dynamic power level management

Cartes et dispositifs de sécurité pour l'identification personnelle — Méthodes d'essai —

Partie 6: Objets sans contact de proximité

AMENDEMENT 1: Gestion dynamique de niveau de puissance

Reference number
ISO/IEC 10373-6:2020/Amd.1:2021(E)

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Published in Switzerland

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and security devices for personal identification*.

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Cards and security devices for personal identification — Test methods —

Part 6: Contactless proximity objects

AMENDMENT 1: Dynamic power level management

Page 3, 3.2

Add the following symbols:

"H_0 PCD field strength during power level management test procedures"

Page 7, 4.7, Table 3

Add the following two rows after the row for "Optional PICC classes":

"

Parameter	Description	Unit
Support of PLI_{ATQ} handling	Ability to change power level (and therefore field strength) after receiving PLI_{ATQ} from a PICC	
Support of PLI_{CID} handling	Ability to change power level (and therefore field strength) after receiving PLI_{CID} from a PICC	

"

Page 8, 4.8, Table 6

Replace Table 6 with the following table:

"

Table 6 — PICC manufacturer information

Parameter	Description	Unit
Location, center and size of the antenna	Drawing with dimensions of the PICC outside shape and the position of the external rectangle/circle of the claimed PICC class.	
PICC class (optional) [a]	Claimed PICC class	
Resonance frequency range (optional)	Minimum and maximum resonance frequency	MHz
Communication signal interface	Supported communication signal interface(s): — Type A — Type B — Type A and Type B	
[a] If not provided, test methods for Class 1 shall be used		

Table 6 *(continued)*

Parameter	Description	Unit
Temperature range	Minimum and maximum temperature values	°C
Supported PLI_{ATQ} values	List of supported optional PLI_{ATQ} values in Answer to Request	
Supported PLI_{CID} values	List of supported optional PLI_{CID} values in CID field	
PCD to PICC supported bit rates	List of supported optional PCD to PICC bit rates	
PICC to PCD supported bit rates	List of supported optional PICC to PCD bit rates	
Same bit rate for both directions	Indication if only same bit rate from PCD to PICC and from PICC to PCD is supported	
Random or fixed UID (Type A) or PUPI (Type B)	Indication whether the UID (Type A) or PUPI (Type B) is random or fixed	
Maximum frame size supported	Maximum frame size in reception	bytes
PCD to PICC frame with error correction supported	Frame with error correction from PCD to PICC	
PICC to PCD frame with error correction supported	Frame with error correction from PICC to PCD	
TEST_COMMAND_SEQUENCE1	See O.2.1	
TEST_COMMAND1	See O.2.1	
TEST_COMMAND2	See O.2.1	
TEST_COMMAND3	See O.2.1	
TEST_COMMAND4	See O.2.1	
[a] If not provided, test methods for Class 1 shall be used		

"

Page 38, 7.1.9

Add the following subclause after 7.1.8.3:

"

7.1.9 Procedures for PCD supporting optional PLI_{ATQ} or PLI_{CID} handling

7.1.9.1 Scope

These tests apply only to PCDs which support PLI_{ATQ} or PLI_{CID} handling.

If the PCD supports optional PLI_{ATQ} or PLI_{CID} handling, the additional procedures specified in 7.1.9.2, 7.1.9.3, 7.1.9.4 and H.5 shall be used to verify that, for every power level used by the PCD:

a) the PCD complies with the field strength requirements specified in ISO/IEC 14443-2:2020/Amd 1, ISO/IEC 14443-3:2018/Amd 1 and ISO/IEC 14443-4:2018/Amd 1;

b) the PCD complies with modulation index and waveform requirements specified in ISO/IEC 14443-2;

c) the PCD complies with load modulation reception requirements specified in ISO/IEC 14443-2;

d) the PCD complies with EMD immunity requirements specified in ISO/IEC 14443-2.

7.1.9.2 Modulation index and waveform

The steps c) to g) of the procedure specified in 7.1.4.2 shall be repeated for every power level between minimum and maximum power level obtained by PLI_{ATQ} or PLI_{CID}.

For each power level, the test report shall be as specified in 7.1.4.3.

