



**INTERNATIONAL STANDARD ISO/IEC 14443-2:2020**  
**TECHNICAL CORRIGENDUM 1**

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# **Cards and security devices for personal identification — Contactless proximity objects — Part 2: Radio frequency power and signal interface**

## **TECHNICAL CORRIGENDUM 1:**

*Cartes et dispositifs de sécurité pour l'identification personnelle — Objets sans contact de proximité —  
Partie 2: Interface radiofréquence et des signaux de communication*

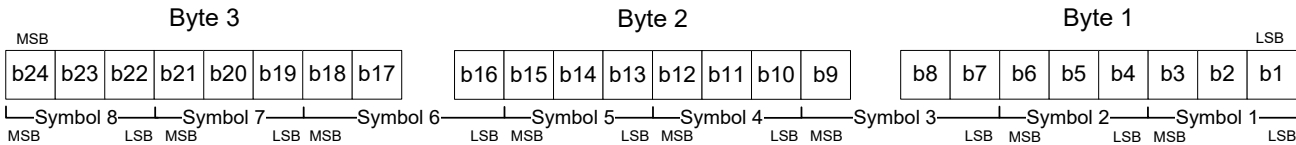
### **RECTIFICATIF TECHNIQUE 1**

Technical Corrigendum 1 to ISO/IEC 14443-2:2020 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information* in collaboration with ITU-T. The identical text is published as Rec. ITU-T H.222.0 (2014)/Cor.1 (03/2017).

At the beginning of 8.1.3.3 insert the first paragraph of 9.1.3.2 and Figure 29 and the third and the fourth paragraphs of 9.1.3.2:

“

For bit rates  $3fc/4$  and  $3fc/2$  binary information shall be transmitted from PCD to PICC in units of 8 logic levels, building an information symbol of 3 bits. The 8 logic levels are represented by 8 NPs. The formation of 3-bit symbols from bytes is illustrated in Figure Cor.1.



**Figure Cor.1 — Binary information from PCD to PICC transmission for bit rates  $3fc/4$  and  $3fc/2$**

If the last transmitted symbol is incomplete, it shall be stuffed with one or two (0)b.

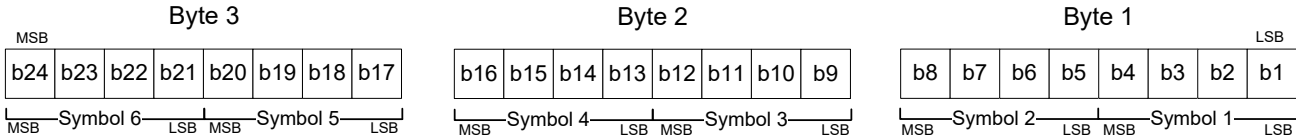
For end of communication, the PCD shall generate a sequence of 8 NPs of  $-180^\circ$ . After the end of communication, the PCD shall generate an unmodulated RF carrier with a NP of  $0^\circ$ .

“

At the beginning of 8.1.3.4 insert the second paragraph of 9.1.3.2 and Figure 30 and the fourth paragraph of 9.1.3.2:

“

For bit rates  $fc$  and  $2fc$  binary information shall be transmitted from PCD to PICC in units of 16 logic levels, building an information symbol of 4 bits. The 16 logic levels are represented by 16 NPs. The formation of 4 bit symbols from Bytes is illustrated in Figure Cor.2.



**Figure Cor.2 — Binary information from PCD to PICC transmission for bit rates  $fc$  and  $2fc$**

For end of communication, the PCD shall generate a sequence of 8 NPs of  $-180^\circ$ . After the end of communication, the PCD shall generate an unmodulated RF carrier with a NP of  $0^\circ$ .

“

Delete the entire subclause 9.1.3.2.

Add the following new subclause 9.1.3.2:

“

**9.1.3.2 Bit representation and coding for bit rates of  $3 f_c/4$  and  $3 f_c/2$**

See 8.1.3.3.

“

Add the following new subclause 9.1.3.3:

“

**9.1.3.3 Bit representation and coding for bit rates of  $f_c$  and  $2 f_c$**

See 8.1.3.4.

“