

ISO/IEC JTC 1/SC 17  
Cards and personal identification  
Secretariat: BSI (United Kingdom)

**Replaces:** N 4567

**Document type:** Text for DAM ballot

**Title:** Notification of ballot: ISO/IEC 14443-3:2011/DAM6 — Identification cards — Contactless integrated circuit cards — Proximity cards — Part 3: Initialization and anticollision — AMENDMENT 6: Bit rates of 3fc/4, fc, 3fc/2, 2fc

**Status:** **BACKWARD POINTER:**  
N 4255, N 4311 and N 4565  
**STATUS:**  
**Has been posted to the ISO servers for DAM ballot. Ballot start to be confirmed by ITTF.**  
**WORK ITEM: 60113**

**Date of document:** 2012-06-20

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**No. of pages:** 12

**Email of secretary:** [chris.starr@ukpayments.org.uk](mailto:chris.starr@ukpayments.org.uk)

**Committee URL:** <http://isotc.iso.org/livelink/livelink/open/jtc1sc17>



**EXPLANATORY REPORT  
RAPPORT EXPLICATIF**

**ISO/IEC 14443-3:**

ISO/IEC JTC 1/SC 17

Secretariat **BSI**

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- on
- at the meeting of  
à la réunion du
- by postal initiated on  
par un vote par correspondance démarré le

see resolution No. 51.11 in document **WG8 N 1887**  
voir résolution n° dans le

	Number	Countries
P-members in favour: Membres (P) approuvant le projet:	21	Australia, Austria, Belgium, China, Czech Republic, Denmark, France, Germany, Italy, Kenya, Korea, Republic of, Netherlands, Norway, Poland, Russian Federation, Singapore, Slovenia, South Africa, Switzerland, United Kingdom, United States
P-members voting against: Membres (P) désapprouvant:	1	Japan
P-members abstaining: Membres (P) s'abstenant:	9	Armenia, Canada, Finland, India, Israel, Malaysia, Portugal, Spain, Sweden
P-members who did not vote: Membres (P) n'ayant pas voté:	3	Luxembourg, Romania, Slovakia

Remarks/Remarques

I hereby confirm that this draft meets the requirements of part 2 of the ISO/IEC Directives  
Je confirme que ce projet satisfait aux prescriptions de la partie 2 des Directives ISO/CEI

Date

Name and signature of the secretary  
Nom et signature du secrétaire

2012-06-14

**Starr, Chris Mr.**

## Result of voting

### Ballot Information

<b>Ballot reference</b>	ISO/IEC 14443-3:2011/PDAM 6 - 17n4255
<b>Ballot type</b>	CD
<b>Ballot title</b>	Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 3: Initialization and anticollision -- Amendment 6: Bit rates of 3fc/4 and fc
<b>Opening date</b>	2011-07-15
<b>Closing date</b>	2011-09-17
<b>Note</b>	

### Member responses:

<b>Votes cast (31)</b>	Armenia (SARM) Australia (SA) Austria (ASI) Belgium (NBN) Canada (SCC) China (SAC) Czech Republic (UNMZ) Denmark (DS) Finland (SFS) France (AFNOR) Germany (DIN) India (BIS) Israel (SII) Italy (UNI) Japan (JISC) Kenya (KEBS) Korea, Republic of (KATS) Malaysia (DSM) Netherlands (NEN) Norway (SN) Poland (PKN) Portugal (IPQ) Russian Federation (GOST R) Singapore (SPRING SG) Slovenia (SIST) South Africa (SABS) Spain (AENOR) Sweden (SIS) Switzerland (SNV) United Kingdom (BSI) United States (ANSI)
<b>Comments submitted (1)</b>	Ukraine (DSSU)
<b>Votes not cast (3)</b>	Luxembourg (ILNAS) Romania (ASRO) Slovakia (SUTN)

Questions:	
<b>Q.1</b>	"Do you agree with approval of the CD text?"
<b>Q.2</b>	"If you approve the CD text with comments, would you please indicate which type ? (General, Technical or Editorial)"
<b>Q.3</b>	"If you disapprove the draft, would you please indicate if you accept to change your vote to Approval if the reasons and appropriate changes will be accepted?"

Votes by members	Q.1	Q.2	Q.3
<b>Armenia (SARM)</b>	Abstention	Ignore	Ignore
<b>Australia (SA)</b>	Approval as presented	Ignore	Ignore
<b>Austria (ASI)</b>	Approval with comments	All	Ignore
<b>Belgium (NBN)</b>	Approval as presented	Ignore	Ignore
<b>Canada (SCC)</b>	Abstention	Ignore	Ignore
<b>China (SAC)</b>	Approval as presented	Ignore	Ignore
<b>Czech Republic (UNMZ)</b>	Approval as presented	Ignore	Ignore
<b>Denmark (DS)</b>	Approval as presented	Ignore	Ignore
<b>Finland (SFS)</b>	Abstention	Ignore	Ignore
<b>France (AFNOR)</b>	Approval with comments	Editorial	Yes
<b>Germany (DIN)</b>	Approval as presented	Ignore	Ignore
<b>India (BIS)</b>	Abstention	Ignore	Ignore
<b>Israel (SII)</b>	Abstention	Ignore	Ignore
<b>Italy (UNI)</b>	Approval as presented	Ignore	Ignore
<b>Japan (JISC)</b>	Disapproval of the draft	Ignore	Yes
<b>Kenya (KEBS)</b>	Approval as presented	Ignore	Ignore
<b>Korea, Republic of (KATS)</b>	Approval as presented	Ignore	Ignore
<b>Malaysia (DSM)</b>	Abstention	Ignore	No
<b>Netherlands (NEN)</b>	Approval as presented	Ignore	Ignore
<b>Norway (SN)</b>	Approval as presented	Ignore	Ignore
<b>Poland (PKN)</b>	Approval as presented	Ignore	Ignore

<b>Portugal (IPQ)</b>	Abstention	Ignore	Ignore
<b>Russian Federation (GOST R)</b>	Approval as presented	Ignore	Ignore
<b>Singapore (SPRING SG)</b>	Approval as presented	Ignore	Ignore
<b>Slovenia (SIST)</b>	Approval as presented	Ignore	Ignore
<b>South Africa (SABS)</b>	Approval as presented	Ignore	Ignore
<b>Spain (AENOR)</b>	Abstention	Ignore	Ignore
<b>Sweden (SIS)</b>	Abstention	Ignore	Ignore
<b>Switzerland (SNV)</b>	Approval as presented	Ignore	Ignore
<b>United Kingdom (BSI)</b>	Approval with comments	Editorial	Ignore
<b>United States (ANSI)</b>	Approval with comments	Editorial	Ignore

<b>Answers to Q.1: "Do you agree with approval of the CD text?"</b>		
<b>17 x</b>	<b>Approval as presented</b>	<b>Australia (SA)</b> <b>Belgium (NBN)</b> <b>China (SAC)</b> <b>Czech Republic (UNMZ)</b> <b>Denmark (DS)</b> <b>Germany (DIN)</b> <b>Italy (UNI)</b> <b>Kenya (KEBS)</b> <b>Korea, Republic of (KATS)</b> <b>Netherlands (NEN)</b> <b>Norway (SN)</b> <b>Poland (PKN)</b> <b>Russian Federation (GOST R)</b> <b>Singapore (SPRING SG)</b> <b>Slovenia (SIST)</b> <b>South Africa (SABS)</b> <b>Switzerland (SNV)</b>
<b>4 x</b>	<b>Approval with comments</b>	<b>Austria (ASI)</b> <b>France (AFNOR)</b> <b>United Kingdom (BSI)</b> <b>United States (ANSI)</b>
<b>1 x</b>	<b>Disapproval of the draft</b>	<b>Japan (JISC)</b>
<b>9 x</b>	<b>Abstention</b>	<b>Armenia (SARM)</b> <b>Canada (SCC)</b> <b>Finland (SFS)</b> <b>India (BIS)</b> <b>Israel (SII)</b> <b>Malaysia (DSM)</b> <b>Portugal (IPQ)</b> <b>Spain (AENOR)</b> <b>Sweden (SIS)</b>

Answers to Q.2: "If you approve the CD text with comments, would you please indicate which type ? (General, Technical or Editorial)"		
0 x	General	
0 x	Technical	
3 x	Editorial	France (AFNOR) United Kingdom (BSI) United States (ANSI)
1 x	All	Austria (ASI)
27 x	Ignore	Armenia (SARM) Australia (SA) Belgium (NBN) Canada (SCC) China (SAC) Czech Republic (UNMZ) Denmark (DS) Finland (SFS) Germany (DIN) India (BIS) Israel (SII) Italy (UNI) Japan (JISC) Kenya (KEBS) Korea, Republic of (KATS) Malaysia (DSM) Netherlands (NEN) Norway (SN) Poland (PKN) Portugal (IPQ) Russian Federation (GOST R) Singapore (SPRING SG) Slovenia (SIST) South Africa (SABS) Spain (AENOR) Sweden (SIS) Switzerland (SNV)

Answers to Q.3: "If you disapprove the draft, would you please indicate if you accept to change your vote to Approval if the reasons and appropriate changes will be accepted?"		
2 x	Yes	France (AFNOR) Japan (JISC)
1 x	No	Malaysia (DSM)
28 x	Ignore	Armenia (SARM) Australia (SA) Austria (ASI) Belgium (NBN) Canada (SCC) China (SAC) Czech Republic (UNMZ) Denmark (DS) Finland (SFS) Germany (DIN) India (BIS) Israel (SII)

Italy (UNI)  
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Comments from Voters		
Member:	Comment:	Date:
<b>Austria (ASI)</b>	<i>Comment File</i>	2011-09-13 13:40:02
<b>France (AFNOR)</b>	<i>Comment File</i>	2011-09-13 11:15:15
<b>Japan (JISC)</b>	<i>Comment File</i>	2011-08-25 07:02:37
<b>United Kingdom (BSI)</b>	<i>Comment File</i>	2011-09-16 17:09:23
<b>United States (ANSI)</b>	<i>Comment File</i>	2011-09-14 22:35:34

Comments from Commenters		
Member:	Comment:	Date:
<b>Ukraine (DSSU)</b>	<i>Comment</i>	2011-09-13 14:49:57
abstention		

ISO/IEC JTC 1/SC 17/WG8N1894

Date: 2012-04-20

ISO/IEC 14443-3:2011/DAM 6

ISO/IEC JTC 1/SC 17/WG 8

Secretariat: DIN

## Identification cards — Contactless integrated circuit cards - Proximity cards — Part 3: Initialization and anticollision

*Cartes d'identification — Cartes à circuit intégré sans contact - Cartes de proximité — Partie 3: Initialisation et anticollision*

### AMENDMENT 6

Bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$ ,  $2fc$

### AMENDEMENT 6

Débits binaires de  $3fc/4$ ,  $fc$ ,  $3fc/2$  et  $2fc$

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Document subtype: Amendment  
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Document language: E



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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 6 to ISO/IEC 14443-3:2011 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.



## Identification cards — Contactless integrated circuit cards - Proximity cards — Part 3: Initialization and anticollision

### Amendment 6: Bit rates of $3fc/4$ , $fc$ , $3fc/2$ and $2fc$

*Page 5, 6.1*

Add the following after Table 1.

"For bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$  and  $2fc$  see Annex E.1."

*Page 7, 6.2.1.1*

Add the following after Table 2.

"For bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$  and  $2fc$  see Annex E.2."

*Page 24, 7.1.1*

Add the following below Figure 13:

"For bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$  and  $2fc$  see Annex E.3."

*Page 25, 7.1.3*

Add the following paragraph below Figure 14:

"For bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$  and  $2fc$  see Annex E.4."

*After Annex D*

Add the following annex E:

"

## Annex E (normative)

### Amended requirements for bit rates of $3fc/4$ , $fc$ , $3fc/2$ and $2fc$ for PCD to PICC communication

#### E.1 etu

The value of the etu is defined in Table 1.

Table A.1 — etu

Bit rates	etu
$3fc/4$ (~ 10,17 Mbit/s)	$4/fc$ (~ 0,3 $\mu$ s)
$fc$ (~ 13,56 Mbit/s)	$4/fc$ (~ 0,3 $\mu$ s)
$3fc/2$ (~ 20,34 Mbit/s)	$2/fc$ (~ 0,15 $\mu$ s)
$2fc$ (~ 27,12 Mbit/s)	$2/fc$ (~ 0,15 $\mu$ s)

#### E.2 Frame Delay Time PCD to PICC

The frame delay time PCD to PICC shall be at least  $1116/fc$ .

#### E.3 Character transmission format for Type B

The start and stop bits shall be omitted.

#### E.4 Frame format for Type B

The frame shall be delimited by SOC and EOC, as defined in ISO/IEC 14443-2:2010/Amd.5.

"