ISO/IEC JTC 1/SC 17

Cards and personal identification

Secretariat: BSI (United Kingdom)

Document type:	Proposed NP (Open)
Title:	Notification of ballot: Proposed NP - Identification cards — Contactless integrated circuit cards - Proximity cards — Part 3: Initialization and anticollision AMENDMENT Alternating PICC and PCD support
Status:	This ballot has been posted to the ISO Electronic balloting application and is available under the Balloting Portal, Committee Internal Balloting. National bodies are reminded particularly to vote both for the proposal to be added to the SC17 work plan (Qu.2.), and also to indicate if they will be prepared to offer experts to contribute to the new work item (Qu.3.). These are the key questions upon which the success of the NP is determined. This ballot has been sent to the secretariat of JTC1 for simultaneous ballot.
Date of document:	2011-10-20
Expected action:	VOTE
Action due date:	2012-01-21
Email of secretary:	chris.starr@ukpayments.org.uk
Committee URL:	http://isotc.iso.org/livelink/livelink/open/jtc1sc17

G3 New Work Item Proposal

PROPOSAL FOR A NEW WORK ITEM

Date of presentation of proposal: 2011-10-20	Proposer: ISO/IEC JTC1/SC17
Secretariat: JTC1/SC17 National Body: BSI	**ISO/IEC JTC 1 N** XXXX ISO/IEC JTC 1/SC 17 N 4365

A proposal for a new work item shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.

Presentation of the proposal - to be completed by the proposer.

Title Alternating support of PICC and PCD roles
Scope (and field of application) This standard is going to define the requirements to optionally enable a device to alternate between roles of PCD and PICC, defined in ISO/IEC 14443. Automatic and manual alternation will be considered. Dedicated test methods to maximise interoperability between existing PICCs and PCDs and devices alternating roles of PCD and PICC will be defined. In addition, metallic environments will be considered and specific tests methods will be defined.
Purpose and justification - attach a separate page as annex, if necessary ISO/IEC 14443 has been widely implemented in a variety of application sectors. However, the 14443 compliant products have mostly been used either in their role as a PICC (contactless card) or as a PCD (contactless reader). New developments are beginning to request products, which are able to operate in both roles PICC or PCD, in an interoperable and user-friendly manner. For example, a mobile phone sensing the presence of a 14443 compliant ticket machine will switch into PICC mode, or vice versa, a mobile phone sensing the presence of a 14443 compliant contactless card will switch into PCD mode. Also the mobile phone is wished to work as a PCD when it should be connected with a 14443 compliant bank card (PICC) and thus is able to provide a secure connection between that bank card via the mobile phone and via a mobile phone network to a remote bank application server. The latter use case is in principle also desired and applicable e.g. for policemen, checking and verifying a 14443 compliant eID card or driving license, etc., against the stored and authenticated data in a remote government server. Many other use cases may be raised using the above described application principles, showing additionally the high market potential for devices which are able to take the role of a PCD or a PICC. The goal of this project shall consider backwards compatibility with existing 14443 compliant systems.

Programme of work

If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed?
____ a single International Standard
___ more than one International Standard (expected number: ....)
____ a multi-part International Standard consisting of .... parts
_**X**__ an amendment or amendments to the following International Standard(s)
....
____ a technical report , type ....

And which standard development track is recommended for the approved new work item?

_**X**_a. Default Timeframe
____b. Accelerated Timeframe
____c. Extended Timeframe

Relevant documents to be considered
ISO/IEC 14443 & Amendments, ISO/IEC 10373-6 & Amendments

Co-operation and liaison

Preparatory work offered with target date(s): WD attached

Signature: Mr C I Starr.

Will the service of a maintenance agency or registration authority be required?
.....**NO**.................
- If yes, have you identified a potential candidate? ....
- If yes, indicate name ....

Are there any known requirements for coding? ......**NO**...............
-If yes, please specify on a separate page

Does the proposed standard concern known patented items? ....**NO**............
- If yes, please provide full information in an annex

Are there any known accessibility requirements and/or dependencies (see:
http://www.jtc1access.org)/?.........**NO**...........
-If yes, please specify on a separate page

Are there any known requirements for cultural and linguistic adaptability?..... **NO**...
-If yes, please specify on a separate page

Comments and recommendations of the JTC 1 or SC 17 Secretariat - attach a
separate page as an annex, if necessary

Comments with respect to the proposal in general, and recommendations thereon:
It is proposed to assign this new item to JTC 1/SC 17/WG 8

Voting on the proposal - Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).

Date of circulation: 2011-10-20	Closing date for voting: 2012-01-21	Signature of Secretary: Mr C I Starr

NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCE CRITERIA		
Criterion	**Validity**	**Explanation**
A. Business Requirement		
A.1 Market Requirement	Essential ___ Desirable _**X**__ Supportive ___	**(see section "Purpose and Justification")**
B. Related Work		
B.1 Completion/Maintenance of current standards	Yes _**X**_ No___	**It is desirable to complete the ISO/IEC 14443 by adopting the functionality that a device is able to switch automatically between PICC and PCD roles.**
B.2 Commitment to other organisation	Yes ___ No_**X**__	
B.3 Other Source of standards	Yes ___ No_**X**__	
C. Technical Status		
C.1 Mature Technology	Yes _**X**__ No___	**The PICC and PCD interface technology has been used for over 10 years. This NP is based on that mature technology and just intends to add the PICC/PCD switching function, which itself is based on a mature technology.**
C.2 Prospective Technology	Yes ___ No_**X**__	
C.3 Models/Tools	Yes ___ No_**X**__	
D. Conformity Assessment and Interoperability		
D.1 Conformity Assessment	Yes ___	

	No_**X**__	
D.2 Interoperability	Yes _**X**__	
	No___	
E. Adaptability to Culture, Language, Human Functioning and Context of Use		
E.1 Cultural and Linguistic Adaptability	Yes ___	
	No_**X**__	
E.2 Adaptability to Human Functioning and Context of Use	Yes ___	
	No_**X**__	
F. Other Justification		

Notes to Proforma

A. Business Relevance. That which identifies market place relevance in terms of what problem is being solved and or need being addressed.

A.1 Market Requirement. When submitting a NP, the proposer shall identify the nature of the Market Requirement, assessing the extent to which it is essential, desirable or merely supportive of some other project.

A.2 Technical Regulation. If a Regulatory requirement is deemed to exist - e.g. for an area of public concern e.g. Information Security, Data protection, potentially leading to regulatory/public interest action based on the use of this voluntary international standard - the proposer shall identify this here.

B. Related Work. Aspects of the relationship of this NP to other areas of standardisation work shall be identified in this section.

B.1 Competition/Maintenance. If this NP is concerned with completing or maintaining existing standards, those concerned shall be identified here.

B.2 External Commitment. Groups, bodies, or for a external to JTC 1 to which a commitment has been made by JTC for Co-operation and or collaboration on this NP shall be identified here.

B.3 External Std/Specification. If other activities creating standards or specifications in this topic area are known to exist or be planned, and which might be available to JTC 1 as PAS, they shall be identified here.

C. Technical Status. The proposer shall indicate here an assessment of the extent to which the proposed standard is supported by current technology.

C.1 Mature Technology. Indicate here the extent to which the technology is reasonably stable and ripe for standardisation.

C.2 Prospective Technology. If the NP is anticipatory in nature based on expected or forecasted need, this shall be indicated here.

C.3 Models/Tools. If the NP relates to the creation of supportive reference models or tools, this shall be indicated here.

D. Conformity Assessment and Interoperability   Any other aspects of background information justifying this NP shall be indicated here.

D.1 Indicate here if Conformity Assessment is relevant to your project. If so, indicate how it is addressed in your project plan.

D.2 Indicate here if Interoperability is relevant to your project. If so, indicate how it is addressed in your project plan

E. Adaptability to Culture, Language, Human Functioning and Context of Use
NOTE: The following criteria do not mandate any feature for adaptability to culture, language, human functioning or context of use. The following criteria require that if any features are provided for adapting to culture, language, human functioning or context of use by the new Work Item proposal, then the proposer is required to identify these features.

E.1 Cultural and Linguistic Adaptability. Indicate here if cultural and natural language adaptability is applicable to your project. If so, indicate how it is addressed in your project plan.

ISO/IEC TR 19764 (Guidelines, methodology, and reference criteria for cultural and linguistic adaptability in information technology products) now defines it in a simplified way:

- "ability for a product, while keeping its portability and interoperability properties, to:
- be internationalized, that is, be adapted to the special characteristics of natural languages and the commonly accepted rules for their se, or of cultures in a given geographical region;
- take into account the usual needs of any category of users, with the exception of specific needs related to physical constraints

Examples of characteristics of natural languages are: national characters and associated elements (such as hyphens, dashes, and punctuation marks), writing systems, correct

F. Other Justification   Any other aspects of background information justifying this NP shall be indicated here.

WG8 N 1835

TF2 N 704

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

AMENDMENT X
Alternating PICC and PCD support

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

AMENDEMENT X
xxx

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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 X 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 X: Alternating PICC and PCD support

Page 1, Clause 1

Add new bullet after last bullet:

"

⸺ optional means to let a device either to enter the role of a PICC or of a PCD for communicating with a PCD, resp. a PICC.

"

Replace last paragraph by:

"

This part of ISO/IEC 14443 is applicable to PICCs of Type A and of Type B, PCDs of Type A and of Type B and EPDs (as described in ISO/IEC 14443-2).

"

Page 2, Clause 4

Add new abbreviated term:

"EPD   Extended Proximity Device"

Page 5, Clause 5

Move existing clause 5 into new sub clause 5.2

Create new clause 5 and sub clause 5.1:

"

5 Initial dialogs

5.1 Alternating PICC and PCD support

An extended proximity device (EPD) may alternately support PICC requirements (PICC mode, either Type A or Type B) and PCD requirements (PCD mode, Type A and Type B).

The alternation between the PICC mode and the PCD mode may be manually selected or automatic.

If the alternation is automatic then:

⸺ the default mode is PICC mode,

⸺ the PICC mode lasts more time than the PCD mode (alternating between Type A and Type B commands),

⸺ the PICC mode duration varies randomly.

The EPD may detect an external operating field greater than 0,1875 A/m (rms) to decide not to enter PCD mode and to stay in PICC mode for a further random PICC mode duration.

"