

ISO/IEC JTC 1 N 9222
ISO/IEC JTC 1
Information Technology

2008-07-31

Document Type: Proposed NP

Document Title: SC 31 Proposal for a New Work Item, Information technology -- Automatic identification and data capture techniques -- Mobile item identification and management -- Consumer privacy-protection protocol for Mobile RFID services

Document Source: SC 31 Secretariat

Reference:

Document Status: This document is circulated to JTC 1 National Bodies for concurrent review. If the JTC 1 Secretariat receives no objections to this proposal by the due date indicated, we will so inform the SC 31 Secretariat.

Action ID: ACT

Due Date: 2008-10-31

No. of Pages: 10

ISO/IEC JTC 1/SC 31

Automatic Identification and Data Capture Techniques

Secretariat: ANSI (USA)

DOC TYPE: New Work Item Proposal

TITLE: Information technology -- Automatic identification and data capture techniques -- Mobile item identification and management -- Consumer privacy-protection protocol for Mobile RFID services

SOURCE: National Body of the Republic of Korea

PROJECT:

STATUS: Per Resolution 5 of the Seoul Plenary Meeting, P-Members are requested to use the attached form (SC031 - Form 13B Comment Document.doc) for submission of comments on any project ballot.

P-Members are requested to review the referenced documents and cast a vote via the SC 31 Balloting System (LiveLink) by the due date indicated.

ACTION ID: COM

DUE DATE: 2008-10-30

DISTRIBUTION: ISO/IEC JTC 1/SC 31 members

MEDIUM: ISO TC Portal (LiveLink)

NO. OF PAGES: 8 (including this cover)

New Work Item Proposal

July 2008

PROPOSAL FOR A NEW WORK ITEM

Date of presentation of proposal: 2008-07-21	Proposer: KATS National Body of Republic of Korea
Secretariat: ANSI	ISO/IEC JTC 1 N XXXX ISO/IEC JTC 1/SC 31 N 2593

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

Title (subject to be covered and type of standard, e.g. terminology, method of test, performance requirements, etc.)

Information technology – Automatic identification and data capture techniques – Mobile item identification and management – Consumer privacy-protection protocol for Mobile RFID services

Scope (and field of application)

Mobile AIDC services aims for consumers and privacy protection is an important issue to be taken into account more. This work item defines a standard for lightweight functions and relevant parameters to provide consumer privacy-protection services, and specifies requirements to provide conformance with ISO/IEC 29143 interrogator and ISO/IEC 18000-6 Type C tag.

This work item focuses on technical solutions for protecting consumer privacy. Interrogator-to-host and host system (back-end enterprise) security issues are out of scope and covered by a variety of other best practices.

The scope of the work includes the followings:

- Requirements of consumer privacy-protection services for Mobile RFID
- Functions and parameters for UI hiding
- Functions and parameters for User memory data confidentiality
- Functions and parameters for access password management

This standard doesn't conflict with ISO/IEC 29143 and ISO/IEC 18000-6 Type C air interface. That is, the consumer privacy-protection services defined in this standard are accomplished by using the existing operation capability, command/response messages and access password.

This standard has to be treated as an optional specification because Mobile RFID services may be provided without privacy protection.

Purpose and justification - attach a separate page as annex, if necessary

Consumer privacy issues may be a critical barrier to deploy Mobile RFID services on a commercial field. Unless the Mobile RFID system is properly developed in aspects of consumer privacy-protection, it may cause unexpected invasion of privacy for Mobile RFID users.

For example, as shown in Figure 1, an attacker can easily read UII, TID, and User memory because there is no read-protection for these memory banks. In this case, the attacker can infer the product information if the attacker can analyze the UII encoding rules.

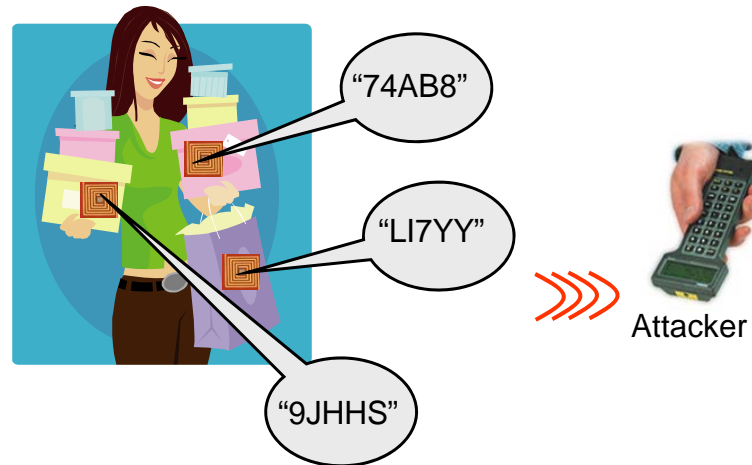


Figure 1. Attack Example against Mobile RFID Services

Therefore, if necessary, the Mobile RFID system should include consumer privacy-protection functions such as UII hiding, User memory data confidentiality, and access password management. And, it is necessary to define a consumer privacy-protection protocol suitable for the ISO/IEC 29143 interrogator and ISO/IEC 18000-6 Type C tag without conflict with the existing standards. The consumer privacy-protection feature is optional, while this work item does not affect the existing and upcoming products conforming to ISO/IEC 29143 and ISO/IEC 18000-6 Type C.

Programme of work

If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed?

- ☒ X_ a single International Standard
- ☐ more than one International Standard (expected number:)
- ☐ a multi-part International Standard consisting of parts
- ☐ 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 18000-6 REV1 Parameters for air interface communications at 860 MHz to 960 MHz
ISO/IEC 29143 Air interface specification for Mobile RFID interrogators
ISO/IEC JTC 1/SC 31/WG 6 N 0035 R1

Co-operation and liaison

ISO/IEC JTC 1/SC 31/WG 4

ISO/IEC JTC 1/SC 31/WG 4/SG 3

ISO/IEC JTC 1/SC 31/WG 6

ITU-T SG17 Q.9 Secure Communication Services

ISO/IEC JTC 1/SC 27

Preparatory work offered with target date(s)

The Republic of Korea is pleased to be the sponsoring member for this work item and proposes Mr. You Sung KANG as the project leader/editor of this deliverable.

Contact Details: You Sung KANG, ETRI, Gajeongno 138, Yuseong-gu, Daejeon City, 350-700, Republic of Korea; Email: youskang@etri.re.kr; Tel: +82 42 860 5960; Fax: +82 42 860 1472

Signature: Raymond Delnicki, ISO/IEC JTC 1/SC 31 Secretariat

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 31 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 31/WG 6.

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:

2008-07-30

Closing date for voting:

2008-10-30

Signature of Secretary:

Lisa Rajchel

**NEW WORK ITEM PROPOSAL -
PROJECT ACCEPTANCE CRITERIA****Criterion****Validity****Explanation****A. Business Requirement**

A.1 Market Requirement	Essential <input checked="" type="checkbox"/> Desirable ____ Supportive ____	There is a growing concern on consumer privacy issues. Consumer privacy-protection services mentioned in this work item are essential for some applications.
A.2 Regulatory Context	Essential ____ Desirable ____ Supportive ____ Not Relevant <input checked="" type="checkbox"/>	
B. Related Work		
B.1 Completion/Maintenance of current standards	Yes ____ No <input checked="" type="checkbox"/>	
B.2 Commitment to other organisation	Yes ____ No <input checked="" type="checkbox"/>	
B.3 Other Source of standards	Yes ____ No <input checked="" type="checkbox"/>	
C. Technical Status		
C.1 Mature Technology	Yes ____ No <input checked="" type="checkbox"/>	There are no products with functions of consumer privacy-protection. But concerns and requirements regarding consumer privacy-protection services are increasing in some countries.
C.2 Prospective Technology	Yes <input checked="" type="checkbox"/> No ____	The work item is expected to contribute on the spread of Mobile RFID technology, and to make Mobile RFID technology even more versatile for future applications.
C.3 Models/Tools	Yes ____ No <input checked="" type="checkbox"/>	
D. Conformity Assessment and Interoperability		
D.1 Conformity Assessment	Yes <input checked="" type="checkbox"/> No ____	Criteria will be determined, but this standard would not provide conformance tests.

D.2 Interoperability	Yes <input checked="" type="checkbox"/> X___ No___	This work item will be developed in alignment with existing air interface specifications.
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 fora 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. Cultural and Linguistic Adaptability Indicate here if cultural and linguistic adaptability is applicable to your project. If so, indicate how it is addressed in your project plan.

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

MB ¹	Clause/ subclause (e. g. 3.1)	Para- graph/ Figure/ Table (e. g. Table 1)	Type of com- ment ² (e. g. ed)	Comments: Justification for change	Proposed change	<i>DRAFT – For Comment</i> Observations of the secretariat on each comment submitted

¹ MB = Member body (Enter two-letter country code, e. g. CN for China)
² Type of comment: ge = general te = technical ed = editorial

NB Columns 1, 2, 4, 5 are compulsory