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ISO/IEC JTC 1
Information Technology

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 -- Mobile RFID interrogator device protocol**
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 -- Mobile RFID interrogator device protocol**
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 2590

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.

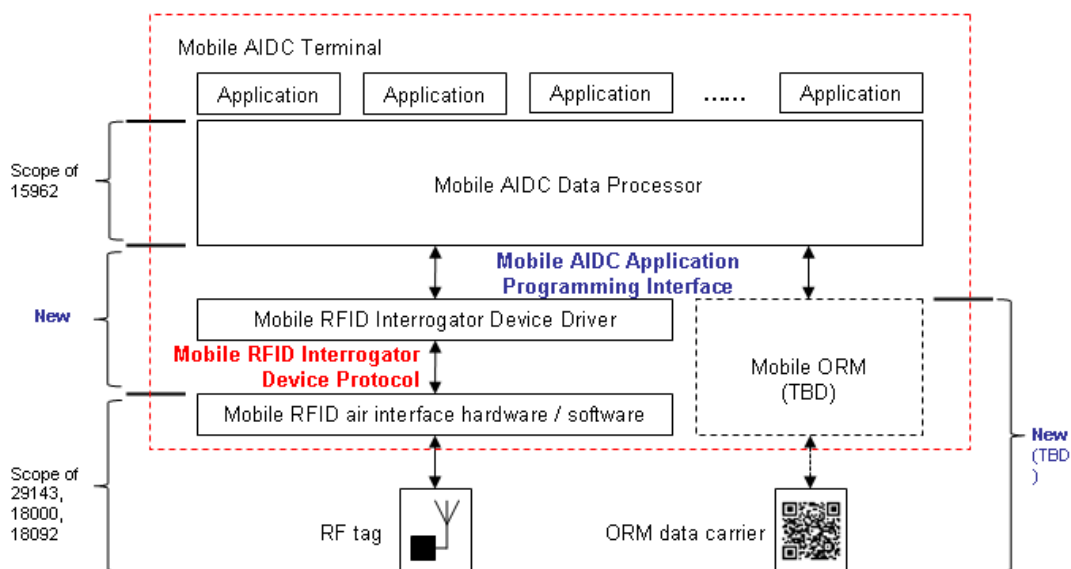**Presentation of the proposal**

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 – Mobile RFID interrogator device protocol

Scope (and field of application)

This work item defines an interface protocol between "Mobile RFID Interrogator Device Driver" and "Mobile RFID air interface hardware/software" within a Mobile AIDC terminal as shown in the following figure.

The proposed "Mobile RFID Interrogator Device Protocol" is positioned to be implemented in both Mobile RFID Interrogator Device Driver and Mobile RFID Interrogator's software. Mobile RFID Interrogator Device Driver is the software allowing the higher-level Mobile AIDC Data Processor to interact with the Mobile RFID air interface.

Without the standardized protocol, manufactures of Mobile RFID air interface hardware should develop multiple Mobile RFID Interrogator Device Drivers for different Mobile AIDC terminal platforms. Moreover, they also should develop a proprietary protocol between Mobile RFID Interrogator Device Driver and Mobile RFID air interface hardware. On the other hand, if both Mobile AIDC terminal manufactures and Mobile RFID air interface hardware manufactures follow the standardized Mobile RFID Interrogator Device Protocol, various independent products will be mutually interoperable without extra costs.
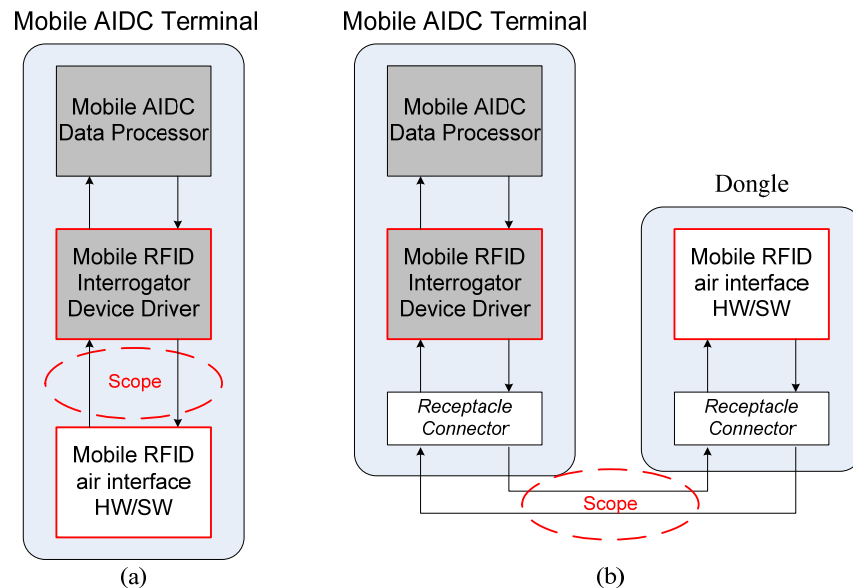
In accordance to the following RFID air interface standards, this work item will be composed of 4 parts:

- Part 1: Mobile RFID Interrogator Device Protocol for ISO/IEC 18000-6B
- Part 2: Mobile RFID Interrogator Device Protocol for ISO/IEC 18000-6C
- Part 3: Mobile RFID Interrogator Device Protocol for ISO/IEC 18000-3
- Part 4: Mobile RFID Interrogator Device Protocol for ISO/IEC 18092

The above multi-part standards will include:

- Types of command / response / notification protocol messages and their usages;
- Protocol message format; and
- Protocol message exchange procedures.

The following diagram shows the scope of this work item in cases where (a) a Mobile RFID air interface hardware is embedded in a Mobile AIDC terminal and (b) a Mobile RFID air interface hardware is connected to a Mobile AIDC terminal as a dongle.

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

This work item is to facilitate the interoperability between various Mobile RFID air interface products with various Mobile AIDC terminal platforms.

In case where a proprietary interface protocol is used, it is hard to expect compatibility between multiple Mobile RFID air interface products and Mobile AIDC terminals. Mobile AIDC terminal developers should develop multiple Mobile RFID Interrogator Device Drivers to interoperate with various Mobile RFID air interface hardware. This will certainly deteriorate development of wide range of Mobile RFID products. If a common and standardized interface protocol is provided, both Mobile RFID air interface hardware manufactures and Mobile AIDC terminal manufactures will save many resources. Therefore, this work item is required to promote Mobile RFID technology worldwide.

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: ....)
__X__ a multi-part International Standard consisting of ....4...... 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 JTC 1/SC 31/WG 6 N 0035 R1

ISO/IEC 29143

ISO/IEC 18000-6B

ISO/IEC 18000-6C

ISO/IEC 18000-3

ISO/IEC 18092

Co-operation and liaison

ISO/IEC JTC 1/SC 6/WG 1 (ISO/IEC 18092)

ISO/IEC JTC 1/SC 31/WG 6

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. JuHyung Son as the project leader/editor of this deliverable.

Contact Details: JuHyung Son, LGE Institute of Technology, 16 Woomyeon-Dong, Seocho-Gu, Seoul 137-724, Republic of Korea, E-mail: jhson777@lge.com, Tel: +82-2-526-4163, Fax: +82-2-526-4104

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 _X__ Desirable ___ Supportive ___	This work item is essential to provide interoperability of various Mobile RFID Interrogator products.
A.2 Regulatory Context	Essential ___ Desirable ___ Supportive ___ Not Relevant _X_	
B. Related Work		
B.1 Completion/Maintenance of current standards	Yes ___ No_X__	
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 _ __ No_X__	Products and trial services are being introduced on the market in some countries.
C.2 Prospective Technology	Yes _X__ No___	This work item will promote adaptation of Mobile RFID Interrogators to Mobile AIDC terminals.
C.3 Models/Tools	Yes ___ No_X__	
D. Conformity Assessment and Interoperability		
D.1 Conformity Assessment	Yes _X__ No___	Criteria might be determined, but this standard would not provide conformance tests.
D.2 Interoperability	Yes ___ No_X__	
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. **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 transformation of characters, dates and measures, sorting and searching rules, coding of national entities (such as country and currency codes), presentation of telephone numbers and keyboard layouts. Related terms are localization, jurisdiction and multilingualism.

E.2 Adaptability to Human Functioning and Context of Use. Indicate here whether the proposed standard takes into account diverse human functioning and diverse contexts of use. If so, indicate how it is addressed in your project plan.

NOTE:

1. **Human functioning is defined by the World Health Organization at <http://www3.who.int/icf/beginners/bg.pdf> as:**
   <<In ICF (*International Classification of Functioning, Disability and Health),* the term functioning refers to all body functions, activities and participation.>>

2. **Content of use is defined in ISO 9241-11:1998 (*Ergonomic requirements for office work with visual display terminals (VDTs) – Part 11: Guidance on usability) as:***
   <<*Users, tasks, equipment (hardware, software and materials), and the physical and societal environments in which a product is used.*>>

3. **Guidance for Standard Developers to address the needs of older persons and persons with disabilities).**

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	*DRAFT – For Comment* **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**

FORM 13B (ISO) 2001-07-01