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JTC1 SC17 Cards and Personal Identification

# Business Plan

Oct 2012 – Oct 2013

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2012-2013

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## **1 Management summary**

### **1.1 Chairman's Remarks**

Will be contained in the chairman's report to the JTC1 plenary.

### **1.2 JTC1 SC17 Statement of scope**

Standardization in the area of:

- a) Identification and related documents,
- b) Cards and devices associated with their use in inter-industry applications and International interchange

### **1.3 Project report**

Contained in document SC17 N 4741.

## **Working group reports**

### **Working group 1 – Physical Characteristics and Test methods for ID cards**

## **2 Co-operation and competition**

## **3 Period review**

### **3.1 Market requirements**

### **3.2 Achievements**

24789-1 AND 24789-2 "CARD SERVICE LIFE"

24789-1 was published in April 2012 and 24789-2 was published November 2011.

### **3.3 Resources**

Internationally renowned experts in the core areas participate regularly in the WG1 meetings. The level of expertise is outstanding and probably unique in this area in the card world.

WG1 relies heavily on two project editors doing the vast majority of the editing work. While, thanks to their substantial commitment, all the necessary work is being done, loss of either of these two would propose a substantial problem for WG1.



### **3.4 Participation metrics**

WG1 has had 3 meetings since the last plenary in October 2011. March 2012 in Queenstown, New Zealand. June 2012 in La Ciotat, France and October 2012 in New Orleans USA. WG1 meetings are typically attended by 20 to 30 experts. In 2012 attendees were present from the following member national bodies. USA, France, Germany, Japan, UK, New Zealand, China, Korea and Malaysia. External liaisons were also present from Visa (on behalf of EMVCo) and the ICMA.

WG1 actively participates with the following SC17 working groups.

#### **WG3**

WG1 has offered support for the development and maintenance of physical test methods related to passports as deemed suitable and politically achievable.

#### **WG4**

WG1 has implemented test methods transferred from 10373-3 into an amendment to 10373- 1 and the majority of the corresponding requirements from 7816-1 into an amendment to 7810. Requirements and test methods are now being integrated into the main parts of these standards.

#### **WG8**

WG1 has implemented test methods transferred from 10373-6 and 10373-7 into an amendment to 10373-1 and the majority of the corresponding requirements from 14443-1 into an amendment of 7810. Requirements and test methods are now being integrated into the main parts of these standards.

The equivalent requirements and methods from the 15693 series analogue to those from the 14443 series are also now being integrated into the new versions of 7810 and 10373-1.

#### **WG10**

There has been valuable input from WG10 to improve 24789. WG1 much appreciates WG10"s regular, constructive and scrutinizing comments related to 24789, which are very valuable to WG1 to improve 24789 for its users.

## **4 Focus next work period**

### **4.1 Deliverables**

#### **7810 "PHYSICAL CHARACTERISTICS"**

WG1 is now substantially reviewing ISO/IEC 7810 and plans to ballot it in 2014.

The review includes the implementation and on-going development of physical requirements for contact and contactless IC-Cards.

WG1 has conferred with WG11 to accommodate WG11"s application specific needs related to the use of an ID-1 card and possibly an additional form factor for WG11"s recent work item.

## **7811 “RECORDING TECHNIQUE”**

### *7811-1 “Embossing”*

WG1 has completed the review of 7811-1 and the document is out for CD ballot.

### *7811-2 “Magnetic stripe - Low Coercivity”*

WG1 has completed the review of 7811-2 and the document is out for CD ballot.

There is an ongoing discussion around a recently observed issue with some stripes that may result in the need to an amendment.

### *7811-6 “Magnetic stripe - High Coercivity”*

WG1 has completed the review of 7811-6 and the document is out for CD ballot.

### *7811-7 “Magnetic stripe - High Coercivity, High Density”*

WG1 has completed the review of 7811-7 and the document is out for CD ballot.

### *7811-8 “Magnetic stripe – Coercivity of 51,7 kA/m (650 Oe)”*

WG1 has completed the review of 7811-8 and the document is out for CD ballot.

The issue reported under 7811-2 may affect also 7811-8.

### *7811-9 “Tactile Identifier Mark”*

This new part of 7811 was initially published at the end of 2008

WG1 is currently reviewing the standard for options to improve the options for co-existence of a TIM with contactless antenna. This may also affect 7811-1.

### *8484 “MAGNETIC STRIPES ON SAVINGSBOOKS”*

WG1 has completed the review of 8484 and the document is out for CD ballot.

The issue reported under 7811-2 may affect also 8484.

### *10373-1 “TEST METHODS – PART 1: GENERAL CHARACTERISTICS”*

WG1 is currently substantially reviewing 10373-1 and plans to ballot it together with 7810 in 2014.

### *10373-2 “TEST METHODS – PART 2: CARDS WITH MAGNETIC STRIPES”*

WG1 has completed the review of 10373-2 and the document is out for CD ballot.

### *15457 “THIN FLEXIBLE CARDS”*

#### *15457-1: “Physical Characteristics”*

A revised version was published in 2008. The standard is stable.

#### *15457-2: “Magnetic Recording Technique”*

A revised version was published in 2007. The standard is stable.

#### *15457-3: “Test Methods”*

A revised version was published in 2008. The standard is stable.

## **4.2 Strategies**

### **4.2.1 Risks**

Not reported.

#### 4.2.2 Opportunities

Not reported.

### 4.3 Work programme priorities

#### DISPLAY ON CARDS

WG1 produced two revisions of a working draft containing physical requirements for cards with a display during this business period.

This draft and the on-going work will be adjusted now to the newly approved NP covering input devices on ICC.

## Working group 3 - Machine Readable Travel Documents

### 1 Co-operation and competition

WG3 works collaboratively with ICAO, the Secretariat of ICAO TAG/MRTD and the two working groups established to advance the work programme of the TAG/MRTD, the New Technologies Working Group (NTWG) and the Implementation and Capacity Building Working Group (ICBWG). Furthermore WG3 supports the work of the ICAO PKD Board with technical expertise.

The co-operation concerns the release of a range of Machine Readable Travel Document Standards; i.e. ICAO Doc 9303 Part 1 (Machine Readable Passport), ICAO Doc 9303 Part 2 (Machine Readable Visa), and ICAO Doc 9303 Part 3 (Machine Readable Official Travel Documents), covering a range of travel documents which can be used in lieu of a Passport or Visa to seek entry to a sovereign State.

Each part of ICAO Doc 9303 has been endorsed through a related publication of a short-form endorsement version of ISO/IEC 7501-1, ISO/IEC 7501-2 and ISO/IEC 7501-3 respectively.

To address its work program WG3 works, besides with ICAO, extensively with Working Groups within SC17, SC27, SC31, SC37, ISO/IEC 3166-MA and international organizations such as INTERPOL, International Organization for Migration (IOM), and Organization for Security and Co-operation in Europe (OSCE).

ISO IEC JTC1 SC17 WG's

WG3 maintains a strong and productive working relationship with several Working Groups within SC17. Beside contributions from WG1 and WG4, specifically WG8 and its Convenor have been major contributors to the work program of WG3.

ISO IEC JTC1 SC31

Members of WG3 work together with SC31 on drafting a standard for OCR-B quality testing.

ISO IEC JTC1 SC37

A number of delegates monitor SC37 for WG3, given the importance of biometrics to eMRTDs.

## 2 Period review

### 2.1 Market requirements

Issuance of eMRTDs and use of the associated specifications, in whole or in part, to enhance and secure a wide variety of identification documents and ID cards continues to grow. As with any large scale implementation numerous maintenance issues require continuous attention.

With validity periods of eMRTDs of 5 to 10 years the implementation of new and revised specifications is a long term effort. As a result security evaluations and revising specifications need to be initiated in a timely fashion, recognizing these implementation time frames.

Critical requirements revolve around the myriad of issues associated with Evidence of Identity and the overall identity management matters confronting all issuing authorities world-wide.

### 2.2 Achievements

The following achievements were recorded in the business year now ending:

- The technical report in which the requirements for a Logical Data Structure Version 2 (LDS2) have been specified was finalized and endorsed by the ICAO TAG-MRTD.
- The work on a technical report on best practices in Identity Management continued after endorsement of the status report on this activity by the ICAO TAG-MRTD.
- The Supplement to Doc 9303 Release 11 was published on November 17 2011.
- A technical report “Machine Assisted Document Security verification” was endorsed by the ICAO TAG-MRTD and published on the ICAO website.
- Working Papers on Arabic and Turkish Transliteration in the MRZ and VIZ have been endorsed by the ICAO TAG/MRTD.
- Support Capacity-Building Work in Identity Management and Border Security. A number of symposia and seminars have been supported.
- A technical report “Placement of essential data on td-1 cards” has been endorsed by ICAO TAG/MRTD and published on the ICAO website.
- A technical report “LDS/PKI Maintenance” has been endorsed by ICAO TAG/MRTD and published on the ICAO website.

### 2.3 Resources

All work is carried out with voluntary and pro bono resources. This establishes a substantial constraint on the nature of the work that can be accomplished as well as the timeframes. Despite these limitations a significant level of work has been achieved on a year to year basis.

ISO Delegates from Australia, Austria, Canada, France, Germany, Japan, Korea, Luxembourg, Malaysia, Netherlands, Singapore, United Kingdom and the United States support the work of WG3.

Government experts from Australia, Canada, France, Germany, Japan, Netherlands, New Zealand, United Kingdom and the United States support the work of WG3. ICAO experts participate as well.

## **2.4 Participation metrics**

The work of WG3 is very much a collaboration involving Delegates from National Bodies and experts from ICAO, Governments and International Organizations. All participants work together to realize a common set of goals which underpin and ensure global interoperability of Machine Readable Travel Documents.

## **3 Focus next work period**

### **3.1 Deliverables**

The following will form the focus for WG3 over the business period ending September 2013:

- Support LDS2 specifications development based on LDS Version 2 Requirements Technical Report.
- Publish New Release(s) of the Doc 9303 Supplement.
- The restructuring of ICAO Doc 9303.
- Technical Report Standards for Emergency/Temporary Passports
- Progress work into Better Practice in National Identity Management.
- Advance Test Methodologies towards published Standards.
- Progress Test Methodologies for eMRTD inspection systems.
- Progress Test Methodology to include OCR Quality test specifications.
- Progress work on Facial Image Quality.

### **3.2 Strategies**

The most important aspect of the WG3 strategy is to ensure the continuing interest and support of the voluntary resource base that contribute to the WG3 work program; whether those are delegates from National Bodies, experts from ICAO, Governments or International Organizations.

#### **3.2.1 Risks**

The major risks to WG3 accomplishing the objectives it has set for itself in the business period ending September 2013 are:

- Availability of resources and unique skills;
- Time required to address the significant number of tasks in its work program; and
- Timely contributions by Governments and ICAO to establish overall policy direction.

#### **3.2.2 Opportunities**

Many of the tasks relate specifically to maintenance of an on-going, globally implemented program, i.e. issuance and inspection of Machine Readable Travel Documents. MRTDs typically have validity

periods of 5 or 10 years. As a consequence, many of these tasks must be undertaken with a view to the future and the results must stay effective over a 20 years period (10 years issuance period + 10 years lifetime) to ensure that the Program continues successfully.

### **3.3 Work programme priorities**

The following are the priorities for WG3 in the coming 12 months period:

- Support MRTD Standards Development:
- Preparation of an ICAO Technical Report Standards for Emergency/Temporary Passports
- Support LDS2 specifications development based on LDS Version 2 Requirements Technical Report.
- Publish New Release(s) of the Doc 9303 Supplement.
- Work on the restructuring of ICAO Doc 9303.
- Support Capacity Building.
- Progress work into Better Practice in National Identity Management.
- Advance Test Methodologies towards published Standards.
- Progress Test Methodologies for eMRTD inspection systems.
- Progress Test Methodology to include OCR Quality test specifications.
- Progress work on Facial Image Quality.
- Support Capacity Building
- Support the ICBWG in the initiative towards a MRTD and eMRTD Certification.
- Provide Guidance on non-conforming certificates.

## **Working group 4 - Integrated Circuit Cards with Contacts**

### **1 Co-operation and competition**

ISO JTC1/SC17/WG4 is the central working group responsible for the creation and maintenance of standards used by applications requiring smart card services. Whilst originally focused on the card architecture and the card terminal interface, since 2004 the WG4 has enlarged its perimeter by producing new standards to facilitate the interfacing of the smart card with both the user (ISO/IEC 12905) and the system through a standard middleware (ISO/IEC 24727).

WG4 is also providing up-to-date testing methodologies (ISO 10373-X and ISO/IEC 24727-5) in order to improve interoperability and facilitating adoption of its standards by the different card industry sectors.

Moreover, WG4 has started to work on Electronic Display on IC cards to standardize logical interface of application which supports the use of a display.

Next sections explain the collaborations and links set out by WG4 with ISO, CEN and other relevant standards bodies in the period 2011/2012.

#### ISO IEC JTC1 SC17 WG's

##### WG1

For electronic displays on IC cards, WG1 is responsible for defining the physical characteristics for such cards. As the subject covers several aspects, WG4 will participate in the coordination of the work with WG1.

##### WG8

During the revision of ISO/IEC 7816-4 some new services has been developed or enhanced which are of interest for different interface-specific protocols such as contactless interface for proximity cards (ISO/IEC 14443); one of them is the link between interface and security attributes. As other parts of ISO/IEC 7816 series are being revised, particularly ISO/IEC 7816-8 - commands for security operations -, his will be done in close cooperation with WG8.

WG11: The revision of ISO/IEC 7816-8 and ISO/IEC 7816-11 has started and shall be done in close cooperation with WG11 to avoid gaps and overlaps with ISO/IEC 24787. Moreover, the work to standardize a biometric sensor on card cover several aspects. WG4 will participate in the coordination of the work with WG11.

#### ISO TC68/SC7

The work on Mobile Banking/Payments is on progress. The secure element storing the payment application should be supporting ISO/IEC 7816 commands and data structures for interoperability and legacy purposes. One of the items to be standardized is an API for access to mobile financial services in the mobile handset.

#### CEN TC224

At the moment there are no items of work which could impact WG4.

#### ETSI SCP

ETSI SCP elaborates the SIM card standards based on ISO/IEC 7816.

#### Consortium/forum

##### EMVCo

EMVCo has started a work to design a new generation of EMV specification. It could include new transport protocols and impact the WG4 work.

The last enhancement of GP specifications for platform and contactless applications on mobile relies on ETSI and 7816 standards. GlobalPlatform has issued in June 2012 a document which proposes a framework based on GP Card Specification that is compliant with ISO specifications ISO/IEC 7816-13, ISO/IEC 7816-4 and ISO/IEC 24727-2.

## 2 Period review

### 2.1 Market requirements

The main market requirements identified by the group may be summarised as follows:

- Standards to enhance the communication abilities of the card in order for the card:
  - to manage Data Objects in a more efficient way,
  - to send/receive a large volume of data ( chaining mechanisms),
  - to support different communication channels, both contact and contactless.
- A standard card security architecture for contactless transactions
- Enhance the accessibility of card services to both application providers and cardholders by:
  - using a middleware standard,
  - adapting the User Interface to cardholder personal needs.
- Enhance Privacy by further protecting the confidentiality of the sensitive data sent or read out of the card.
- Develop testing methodologies that facilitate the interoperability of cards with different form factors; especially for contactless transactions (NFC, contactless payment and ID cards).
- Facilitate the emergence of new technologies such as electronic display, key button, and keyboard on IC cards.

### 2.2 Achievements

- ISO/IEC 7816-4: DIS ballot
- Amendments on ISO/IEC 24727: DIS ballots

### 2.3 Resources

There was a big involvement of editors and experts particularly due to an important workload.

### 2.4 Participation metrics

France, Germany, Japan, Spain and USA have participated to all the meetings from the last SC17 meeting.



## 3 Focus next work period

### 3.1 Deliverables

We expect ISO/IEC 7816-4 and ISO/IEC 24272 amendments will have the IS status by the end of 2012.

### 3.2 Strategies

Strategic issues include:

- To standardise mechanisms taking into account the security and functional requirements of different industries to enable the issuance of new card platforms providing multi-services (eg. Mobile Payment, contactless authentication protocols).
- To revise/amend published standards and expand the range of interoperable mechanisms for the management of logical data structures and cryptographic objects into the card (e.g data object), for flexibility implementation purposes.
- To make WG4 work more visible by a more active participation in forums and conferences to facilitate adoption of WG4 cross-sectorial standards (Governments, Banks, Telecommunication Operators, Public Transport Operators, E-Commerce service providers).
- To further enhance the collaboration with sector-oriented technical committees by promoting the creation of active liaisons to avoid duplication of work or inconsistent specifications.

#### 3.2.1 Risks

- The lifecycle of the standard process is longer than lifecycle of the technology.
- The multiplicity of standardisation initiatives makes it difficult the cross-sectorial approach of WG4.
- Technical complexity of new standards might impair adoption.
- Difficulty of publishing and maintaining test standards.

#### 3.2.2 Opportunities

- WG4 provides the industry with a set of standards required for the specification and testing of smart card based solutions.
- The card security architecture and mechanisms defined by ISO/IEC 7816 are increasingly adopted by different industries.
- Adoption of WG4 standards facilitate business arrangements between industries (eg, Banking and Telco) for the common offer of services ( eg, Mobile Payment).
- New ISO/IEC 7816-4 provides with a great deal of flexibility for the efficient implementation of interoperable cards both file and data-object oriented.
- Standardisation of electronic display, buttons and keyboards on logical as well as physical aspects could facilitate the proposal for new services (PIN checking for contactless transactions, remote authentication ...).
- Boost the contactless card market by standardizing the secure and application layers

### 3.3 Work programme priorities

The main priorities for 2012/2013 are:

- Publish the new IS of 24272-1
- Issue the first CD of Electronic Display.
- Progress on the revision of ISO/IEC 7816-6, 8, 9, 11.

## **Working group 5 - Issuer Identification Numbers (IINs)/ Application Provider Identifiers (RIDs)**

### **1 Co-operation and competition**

Nothing to report.

### **2 Period review**

#### **2.1 Market requirements**

Continued demand for IIN's for card issuers is not diminishing. WG5 continues to be the guardian of the continuity and use of this valuable resource.

#### **2.2 Achievements**

ISO/IEC 7812 parts one and two are ready for FDIS ballot and should be published in 2013.

#### **2.3 Resources**

The American Bankers Association continues to operate the international registration authority. It is well resourced and continues to provide an outstanding service.

#### **2.4 Participation metrics**

There is concern over the level of participation of member national bodies particularly in the block balloting process. The secretariat is actively seeking to provide sufficient information to enable P members to vote without resorting to abstention. Responses to questions to the applicant will be published to all members during the block balloting process.

### **3 Focus next work period**

#### **3.1 Deliverables**

New edition of ISO/IEC 7812 parts one and two.

#### **3.2 Strategies**

##### **3.2.1 Risks**

Continued poor participation in the block balloting process.

##### **3.2.2 Opportunities**

Publication of best practice documents to assist in the efficient use of the IIN.

#### **3.3 Work programme priorities**

The publication of the new edition of ISO/IEC 7812 parts one and two.

## Working group 8 - Contactless integrated circuit cards

### 1 Co-operation and competition

Internally to SC17, WG8 cooperates on projects across all working groups where the contactless interface is utilised.

### 2 Period review

#### 2.1 Market requirements

#### 2.2 Achievements

##### **ISO/IEC 14443-2:2010/Amendment 1**

*ISO/IEC 14443-2:2010, Identification cards - Contactless integrated circuit cards - Proximity cards - Part 2: Radio frequency power and signal interface - **Amendment 1: Limits of electromagnetic disturbance levels parasitically generated by the PICC** was published on 2011-10-14.*

##### **ISO/IEC 14443-3:2011/Amendment 1**

*Identification cards - Contactless integrated circuit cards - Proximity cards -Part 3: Initialization and anti-collision - **Amendment 1: Electromagnetic disturbance handling and single size UID** was published on 2011-10-14.*

##### **ISO/IEC 10373-6:2010/Amendment 9**

*Identification cards - Test methods - Part 6: Proximity cards - **Amendment 9: Test methods for electromagnetic disturbances** is under publication.*

##### **ISO/IEC 14443-1:2008/Amendment 1**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 1: Physical characteristics - **Amendment 1: Additional PICC classes** was published on 2012-04-19.*

##### **ISO/IEC 14443-2:2010/Amendment 2**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 2: Radio frequency power and signal interface - **Amendment 2: Additional PICC classes** was published on 2012-07-23.*

##### **ISO/IEC 10373-6:2011/Amendment 1**

*Identification cards - Test methods - Part 6: Proximity cards - **Amendment 8: Additional PICC classes** was published on 2012-04-19.*

##### **ISO/IEC 14443-4:2008/Amendment 1**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 4: Transmission protocol - **Amendment 1: Exchange of additional parameters** was published on 2012-03-02.*

### **ISO/IEC 10373-6:2011/Amendment 3**

*Identification cards - Test methods - Part 6: Proximity cards - **Amendment 11: Exchange of additional parameters, block numbering, unmatched AFI and TR2*** was published on 2012-07-24.

### **VHBR-ASK (Amplitude Shift Keying)**

### **ISO/IEC 14443-2:2010/Amendment 3**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 2: Radio frequency power and signal interface - **Amendment 3: Bit rates of fc/8, fc/4 and fc/2*** was published on 2012-03-05.

### **ISO/IEC 14443-3:2011/Amendment 2**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 3: Initialization and anticollision - **Amendment 2: Bit rates of fc/8, fc/4 and fc/2 and frame size from 512 to 4096 bytes and minimum TR0*** was published on 2012-03-05.

### **ISO/IEC 14443-4:2008/Amendment 2**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 4: Transmission protocol - **Amendment 2: Bit rates of fc/8, fc/4 and fc/2, protocol activation of PICC Type A and frame sizes from 512 to 4096 bytes*** was published on 2012-09-07.

## **2.3 Resources**

## **2.4 Participation metrics**

Three WG8 meetings have been held since the last SC17 Plenary Meeting:

- 51st meeting of WG8 in Graz, Austria, 2012-04-18/20

Participation: 28 delegates from 8 countries and 1 Liaison Organizations, in detail: Austria 5, France 8, Germany 5, Israel 1, Japan 4, Slovenia 1, Spain 1, U.K. 2 and Visa Europe 1.

- WG8 Webex meeting 51.1 held on 2012-06-25, 13:00-15:30 (UTC+02) Participation: 18 delegates from 5 countries and 1 Liaison Organization

- 52nd meeting of WG8 in New Orleans, U.S.A., 2012-09-26/28 Participation: 25 delegates from 11 countries, in detail: Austria 4, China 4, France 5, Germany 2, Israel 1, Japan 2, Kenya 1, Singapore 1, Slovenia 1, U.K. 1 and U.S.A. 3.

During that period the Task Force TF2 of WG8, with its Convener Pascal Roux (France), has held three meetings:

- 36th meeting of WG8/TF2 in Aix-en-Provence, France, 2012-01-31/02-03. Participation: 22 delegates from 6 countries and 1 Liaison Organization.

- 37th meeting of WG8/TF2 in Graz, Austria, 2012-04-16/18. Participation: 28 delegates from 8 countries.

- 38th meeting of WG8/TF2 in New Orleans, U.S.A., 2012-09-24/25. Participation: 22 delegates from 10 countries.

## 3 Focus next work period

### 3.1 Deliverables

#### **ISO/IEC 10373-6:2011/Amendment 4**

Identification cards - Test methods - Part 6: Proximity cards - Amendment 4: Bit rates of  $fc/8$ ,  $fc/4$  and  $fc/2$  and frame size from 512 to 4096 bytes under FDIS ballot (FDAM) until 2012-11-29. Publication will likely be by the end of 2012.

#### **ISO/IEC 14443-2:2010/Amendment 5**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 2: Radio frequency power and signal interface - Amendment 5: Bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$ ,  $2fc$  will be balloted as DIS by November 2012.*

#### **ISO/IEC 14443-3:2011/Amendment 6**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 3: Initialization and anti-collision - Amendment 6: Bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$ ,  $2fc$  being under DIS ballot until 2012-11-20.*

#### **ISO/IEC 14443-4:2008/Amendment 3**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 4: Transmission protocol - Amendment 3: Bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$ ,  $2fc$  being under DIS ballot until 2012-11-20.*

#### **ISO/IEC 10373-6:2011/Amendment 5**

*Identification cards - Test methods - Part 6: Proximity cards - Amendment 5: Bit rates of  $3fc/4$ ,  $fc$ ,  $3fc/2$ ,  $2fc$  will be balloted as DIS by November 2012.*

#### **ISO/IEC 14443-3:2011/Amendment 3**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 3: Initialization and anti-collision - Amendment 3: Alternating between PICC and PCD functionalities is under DIS ballot. Publication in spring 2013.*

#### **ISO/IEC 10373-6:2011/Amendment 6**

*Identification cards - Test methods - Part 6: Proximity cards - Amendment 6: Alternating between PICC and PCD functionalities is under DIS ballot. Publication in spring 2013.*

#### **ISO/IEC 14443-4:2008/Amendment 4**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 4: Transmission protocol - **Amendment 4: Frame with error correction*** will be DIS balloted by November 2012.

### **ISO/IEC 14443-2:2010/Amendment 6**

*Identification cards - Contactless integrated circuit cards - Proximity cards - Part 2: Radio frequency power and signal interface - Amendment 6: Parameters supporting active and passive PICC transmissions* will be balloted as CD these days.

### **Technical Report PDTR xxxxx on “Multiple PICCs in a single PCD field”**

*Identification cards — Contactless integrated circuit cards — Proximity cards — **Multiple PICCs in a single PCD field*** has successfully passed the PDTR ballot and will go for the next voting step by November 2012.

TF2 is currently developing the following topics:

- Test methods for “Frame with error correction”
  - Parameters supporting active and passive PICC transmissions
  - Attenuation factors if in 2 parts (e.g. SD card + mobile phone)
  - Test methods (active modulation, attenuation factors)
- Maximum PCD field strength measurement
- Using the 6 Reference PICCs representing the 6 classes
- Applying for each Reference PICC a loading effect corresponding to the minimum expected PICC loading effect
- Improvement of logical PICC and PCD tests in ISO/IEC 10373-6, annexes G and H
  - RFU values and meanings in WG8 standards
  - Clarification of PICC and PCD behaviour when receiving RFU
  - General RFU guidelines for any SC17 standard
- Test plan for PCDs and PICCs
  - Including tables with "Pass/Fail/NA" column for all PCD and PICCs requirements defined in ISO/IEC 14443
  - Either an annex to ISO/IEC 10373-6 or a technical report

## **3.2 Strategies**

### **3.2.1 Risks**

Not reported.

### **3.2.2 Opportunities**

Not reported.

## **3.3 Work programme priorities**

WG8 have requested a NP for Test Methods for Machine Readable Travel Documents (WG3) shall be raised. The NP will be for a multipart standard, three parts of which will undergo concurrent NP and CD ballot, as follows:

Part 1: Durability of the ePassport Booklets

Part 2: Contactless interface

Part 3: Logical Data Structure and PKI protocols

Further parts of this standard will also be developed in the future. Contributors to the work on the above NP includes SC17/WG1, WG4, WG8, SC37.

## **Working group 9 - Optical memory cards and devices**

### **1 Co-operation and competition**

HID Global

Certego GmbH

Challenge Card Design Plastikkarten GmbH

LaserCard Europe

HID and Certego are developing Optical Memory Standards that are of a complimentary nature which we believe currently, not to be in direct competition with any other SC17 working groups.

WG8 is engaged in harmonisation activities with JTC1/SC6 respecting SC17's standardization activities regarding the usage of ISO/IEC 14443 for mobile phones, in either its role as a "card" or as a "card reader". SC6 has meanwhile submitted to SC17 constructive comments to the standardization process of ISO/IEC 14443-3/Amd.3, so that that amendment might be used as supplementing standard to ISO/IEC 21481 (also named NFCIP 2) in the future.

### **2 Period review**

#### **2.1 Market requirements**

We live in a dangerous world and secure identification documents are becoming increasingly important. The total world market for Government ID cards has been estimated to be in excess of \$1 billion. Optical Memory Card Systems, which the WG9 standards address, currently account for less than 10% of this market but both the market share and total market are anticipated to increase with demands for more secure identification cards. Optical Memory Card Systems provide governments secure ID solutions utilising a decade of technical and program expertise using a combination of technologies to achieve a stable and secure ID System.

#### **2.2 Achievements**

WG9 5year Review of its portfolio of Optical Memory Card Standards in both the Linear and Holographic Recording Methods. This work is on-going and current, target and response dates have been met.

## **2.3 Resources**

Within the Optical Memory Card group of experts there are two project editors that ensure WG9 work is both progressive and up-to-date in meeting the targets agreed for the current work period.

## **2.4 Participation metrics**

WG9 has received active participation and support by Germany; USA; UK; Canada; Switzerland and Japan in attendance with a high percentage of 'P' Members responding for the SC17 balloting process.

# **3 Focus next work period**

## **3.1 Deliverables**

WG9 has the following Standards 11694-1/ 11694-2/ 11694-5/ 11694-6 in the final stage of FDIS Ballot and 10373-9 at FCD Ballot. These will be completed on- time.

## **3.2 Strategies**

### **3.2.1 Risks**

None perceived.

### **3.2.2 Opportunities**

WG9 believes the development for an 'add-on optical element' Standard will widen the functionality and market opportunities utilising the basic holographic recording methods with other elements to service newly identified market applications.

## **3.3 Work programme priorities**

WG9 continues to explore the potential for development of a standard for 'add-on optical elements' to ID-1 cards with a view to submitting an NWP in the next Business Plan 2012-2013.

# **Working group 10 - Motor vehicle driver license and related documents**

## **1 Co-operation and competition**

WG10 has cooperated and is cooperating with other work groups as necessary. An example includes continuing interaction with WG3 regarding IDL durability. In addition, other work groups are also represented in WG10 (via members with dual work group participation), including WG3, WG4, WG9, and WG11.

WG10 also has a Category C liaison relationship with the Economic Commission for Europe (ECE) Inland Transport Committee Work Party on Road Traffic Safety (WP.1). WP.1 is responsible for the maintenance of the UN Conventions on Road Traffic, which among others cover international driving licenses. WG10 has been actively using this relationship to try and resolve incompatibilities in driving licence category codes prescribed by WP.1 and by the European Commission.



## 2 Period review

### 2.1 Market requirements

The three published parts of ISO/IEC 18013 (i.e. Parts 1, 2 and 3) are already being followed/referenced by a number of countries, including South Africa, Namibia and the United States. The 3rd EU Directive controlling driving licences also now officially references ISO/IEC 18013, specifically as it pertains to the use of "chip cards".

### 2.2 Achievements

ISO/IEC 18013-4 was published in November, 2011. Due to the detailed nature of ISO/IEC 18013-4 (test methods), certain corrections were also identified for parts 2 and 3 of ISO/IEC 18013.

Corrigenda for both these standards were successfully published in November 2012.

An Amendment to enhance ISO/IEC 18013-3 was successfully published in July 2012. The area of interest deals with the use of a one-line machine-readable string ("MRZ") using standard MRZ readers to read a Basic Access Protection input string.

### 2.3 Resources

All formal WG10 positions are currently filled. Resource availability is commensurate with the work being undertaken.

### 2.4 Participation metrics

| Country        | Meeting                            |   |                          |
|----------------|------------------------------------|---|--------------------------|
|                | Incheon, South Korea, October 2011 | Stellenbosch, South Africa, February 2012 | Graz, Austria, June 2012 |
| Austria        | 1                                  |   | 3                        |
| France         | 2                                  | 2   | 6                        |
| Germany        | 1                                  | 2   | 4                        |
| Japan          | 3                                  | 4   | 6                        |
| Malaysia       | 1                                  |   | 2                        |
| Netherlands    | 2                                  | 4   |                          |
| South Africa   | 1                                  | 2   | 1                        |
| South Korea    | 6                                  |   |                          |
| Switzerland    |                                    | 1   | 1                        |
| United Kingdom | 1                                  | 2   | 1                        |

| Country       | Meeting                               |  |                             |
|---------------|---------------------------------------|--|-----------------------------|
|               | Incheon, South Korea,<br>October 2011 | Stellenbosch, South Africa,<br>February 2012 | Graz, Austria,<br>June 2012 |
| United States | 4                                     | 4  | 3                           |

### 3 Focus next period

#### 3.1 Deliverables

The following deliverables are being planned for the next work period:

- Proceed to the first ballot of the second amendment on ISO/IEC 18013-3 for Extended Access Control as an optional mechanism. This topic has enjoyed extended discussions. It is envisioned that recent developments in this area will support publication of the ballot.
- As a result of the systematic review of ISO/IEC 18013-1, publish a CD ballot for a new version of ISO/IEC 18013-1. It is anticipated that the primary focus areas will be IDL security features, durability guidelines, and potentially driving licence codes.

#### 3.2 Strategies

##### 3.2.1 Risks

No immediate risks are known at this time.

##### 3.2.2 Opportunities

WG10 remains committed to publicize the workings and benefits of the ISO/IEC 18013 series of standards using its own "marketing" documentation. This material is available to all driving licence issuing authorities.

#### 3.3 Work programme priorities

The priorities of WG10 for the next year are as follow:

- Proceed to the first ballot of the second amendment on ISO/IEC 18013-3 for Extended Access Control as an optional mechanism.
- As a result of the systematic review of ISO/IEC 18013-1, publish a CD ballot for a new version of ISO/IEC 18013-1. It is anticipated that the primary focus areas will be IDL security features, durability guidelines, and potentially driving licence codes.
- Continue discussions with the relevant entities within the United Nations and within the European Commission to resolve the incompatibilities in the vehicle category codes defined by each of these bodies (as are reflected in ISO/IEC 18013-1).

# Working group 11 - Application of Biometrics to cards and personal Identification

## 1 Co-operation and competition

Over the years, WG11 has seen active participation from countries like – Australia, Austria, China, France, Germany, Japan, Korea, Singapore, South Africa, Spain, Sweden, UK, and USA. Many of the active participants are also members of SC17 WG4, SC37 “Biometrics” and SC27 “IT Security techniques”. Thus formally and informally, we have active liaison with SC17 WG4, SC27 and SC37. During the development of 24787 “On-card biometric comparison”, we received useful comments from SC37 and SC27. At the same time, 24787 also makes references to standards published by SC17 WG4, SC27 and SC37.

## 2 Period review

### 2.1 Market requirements

### 2.2 Achievements

Produced Defect Report and Technical Corrigendum for ISO/IEC 24787. When finalized, the documents will be submitted to SC17 for ballot. If the Corrigendum is approved, some the changes will need to be incorporated into the revision of ISO/IEC 19794-2 (work item in SC37).

Progress ISO/IEC TR 30117 "Guide to on-card biometric comparison standards and applications" to **PDTR ballot**.

Progress ISO/IEC 17839 "Biometric System-on-Card – Part 1 : Functional Architecture" to **CD ballot**.

Progress ISO/IEC 17839 "Biometric System-on-Card – Part 2 : Physical Characteristics" to WD3. This document will be distributed to SC17 national bodies for comment. In particular, WG11 will work closely with WG10 to improve the text.

### 2.3 Resources

Resources are adequate for the work currently being undertaken.

### 2.4 Participation metrics

The following countries have participated from 2005 to 2012:

Australia, Austria, China, France, Germany, Japan, Korea, Singapore, South Africa, Spain, Sweden, UK and the USA.

## 3 Focus next period

### 3.1 Deliverables

Development of the revised version of ISO/IEC 7816-4 has just been finished and revision of ISO/IEC 7816-11 has been started. In addition to these standards, the NWI on "Input Devices on ICC and enhancements of electronic displays" has been approved. These three projects have an important

impact on the "Logical Information Interchange Mechanism" of Biometrics System-on-Card. Therefore the extension is requested to allow a better alignment of ISO/IEC 17839-3 with these three projects, prior to entering the CD stage.

## **3.2 Strategies**

### **3.2.1 Risks**

Not reported.

### **3.2.2 Opportunities**

Not reported.

## **3.3 Work programme priorities**

Launch a NP ballot on "Test Methods for ISO/IEC 24787 based Applications". Version 3 of the Table of Contents has been finalised and will be attached to this NP ballot.

Produce a liaison statement for SC27. WG11 sees synergy in a number of the work items in SC27 WG5.

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

**Document type:** Programme of Work

**Title:** JTC1/SC17 Programme of work 2012

**Status:** Programme of SC17 active projects held on the ITTF project portal.  
For information.

**Date of document:** 2012-10-11

**Source:** SC17 Secretariat

**Expected action:** INFO

**No. of pages:** 8

**Email of secretary:** [Chris.Starr@ukcards.org.uk](mailto:Chris.Starr@ukcards.org.uk)

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

| Reference           | Document title   | Reg. date  | Crnt stage  | Stage date | Limit date | Time frame | Committee                |
|---------------------|--|------------|---|------------|------------|------------|--------------------------|
| ISO/IEC 4909:2006   | Identification cards -- Financial transaction cards -- Magnetic stripe data content for track 3            | 2005-07-04 | 90.60   | 2011-10-17 |            | 36         | ISO/IEC JTC 1/SC 17      |
| ISO/IEC NP 7501     | Identification cards -- Machine readable travel documents -- Physical Test Methods for Passport Books      | 2012-08-14 | 10.99   | 2012-08-14 | 2014-02-14 | 36         | ISO/IEC JTC 1/SC 17/WG 3 |
| ISO/IEC 7501-2:1997 | Identification cards -- Machine readable travel documents -- Part 2: Machine readable visa                 | 1997-04-28 | 90.60   | 2011-03-17 |            |            | ISO/IEC JTC 1/SC 17/WG 3 |
| ISO/IEC CD 7811-1   | Identification cards -- Recording technique -- Part 1: Embossing   | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC CD 7811-2   | Identification cards -- Recording technique -- Part 2: Magnetic stripe                                     | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC CD 7811-6   | Identification cards -- Recording technique -- Part 6: Magnetic stripe -- High coercivity                  | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC CD 7811-7   | Identification cards -- Recording technique -- Part 7: Magnetic stripe -- High coercivity, high density    | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC CD 7811-8   | Identification cards -- Recording technique -- Part 8: Magnetic stripe -- Coercivity of 51,7 kA/m (650 Oe) | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |

| Reference            | Document title  | Reg. date  | Crnt stage | Stage date | Limit date                                    | Time frame | Committee                |
|----------------------|---|------------|------------|------------|---|------------|--------------------------|
| ISO/IEC DIS 7812-1.2 | Identification cards -- Identification of issuers -- Part 1: Numbering system   | 2010-06-01 | 40.99      | 2012-09-24 | 2012-12-01<br>(Cancellation date: 2013-06-01) | 36         | ISO/IEC JTC 1/SC 17/WG 5 |
| ISO/IEC DIS 7812-2.2 | Identification cards -- Identification of issuers -- Part 2: Application and registration procedures  | 2010-06-01 | 40.99      | 2012-09-24 | 2012-12-01<br>(Cancellation date: 2013-06-01) | 36         | ISO/IEC JTC 1/SC 17/WG 5 |
| ISO/IEC 7813:2006    | Information technology -- Identification cards -- Financial transaction cards   | 2005-02-08 | 90.60      | 2011-10-17 |   | 36         | ISO/IEC JTC 1/SC 17      |
| ISO/IEC 7816-3:2006  | Identification cards -- Integrated circuit cards -- Part 3: Cards with contacts -- Electrical interface and transmission protocols            | 2003-04-01 | 90.60      | 2012-03-17 |   | 36         | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC DIS 7816-4.2 | Identification cards -- Integrated circuit cards -- Part 4: Organization, security and commands for interchange                               | 2009-05-25 | 40.60      | 2012-09-22 | 2013-11-25                                    | Extended   | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-5:2004  | Identification cards -- Integrated circuit cards -- Part 5: Registration of application providers   | 2000-02-10 | 90.60      | 2010-03-17 |   |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-7:1999  | Identification cards -- Integrated circuit(s) cards with contacts -- Part 7: Interindustry commands for Structured Card Query Language (SCQL) | 1996-08-22 | 90.60      | 2010-06-17 |   |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-10:1999 | Identification cards -- Integrated circuit(s) cards with contacts -- Part 10: Electronic signals and answer to reset for synchronous cards    | 1998-04-24 | 90.60      | 2010-06-17 |   |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-11:2004 | Identification cards -- Integrated circuit cards -- Part 11: Personal verification through biometric methods                                  | 1998-11-27 | 90.60      | 2012-09-19 |   |            | ISO/IEC JTC 1/SC 17/WG 4 |

| Reference                     | Document title   | Reg. date  | Crnt stage  | Stage date | Limit date | Time frame | Committee                |
|-------------------------------|--|------------|---|------------|------------|------------|--------------------------|
| ISO/IEC 7816-12:2005          | Identification cards - Integrated circuit cards -- Part 12: Cards with contacts -- USB electrical interface and operating procedures                           | 2002-01-31 | 90.60   | 2011-03-17 |            |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-13:2007/CD Cor 1 | Identification cards -- Integrated circuit cards -- Part 13: Commands for application management in a multi-application environment -- Technical Corrigendum 1 | 2009-06-05 | 30.99   | 2009-09-08 |            |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 7816-15:2004          | Identification cards -- Integrated circuit cards -- Part 15: Cryptographic information application   | 2000-02-09 | 90.60   | 2012-09-19 |            |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC CD 8484               | Information technology -- Magnetic stripes on savingsbooks   | 2012-08-11 | 30.20<br>(Start date:<br>2012-08-11<br>End date:<br>2012-11-11) | 2012-08-11 | 2014-02-11 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC 10373-1:2006/FDAmD 1  | Identification cards -- Test methods -- Part 1: General characteristics -- Amendment 1   | 2009-09-21 | 50.20<br>(Start date:<br>2012-08-20<br>End date:<br>2012-10-21) | 2012-08-20 |            | 48         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC CD 10373-2            | Identification cards -- Test methods -- Part 2: Cards with magnetic stripes  | 2012-06-22 | 30.20<br>(Start date:<br>2012-08-03<br>End date:<br>2012-11-03) | 2012-08-03 | 2013-12-22 | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC 10373-3:2010/CD Cor 1 | Identification cards -- Test methods -- Part 3: Integrated circuit cards with contacts and related interface devices -- Technical Corrigendum 1                | 2012-02-21 | 30.60   | 2012-05-23 | 2013-08-21 | 36         | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 10373-5:2006          | Identification cards -- Test methods -- Part 5: Optical memory cards   | 2004-06-02 | 90.60   | 2011-06-17 |            | 36         | ISO/IEC JTC 1/SC 17/WG 9 |



| Reference                    | Document title  | Reg. date  | Crnt stage  | Stage date | Limit date                                    | Time frame | Committee                |
|------------------------------|---|------------|---|------------|---|------------|--------------------------|
| ISO/IEC 10373-6:2001/DAM 11  | Identification cards -- Test methods -- Part 6: Proximity cards -- Amendment 11: Exchange of additional parameters  | 2010-12-22 | 40.98   | 2011-12-21 | 2013-06-22<br>(Cancellation date: 2013-12-22) | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 10373-6:2011/Amd 2   | Identification cards -- Test methods -- Part 6: Proximity cards -- Amendment 2: Test methods for electromagnetic disturbance                                  | 2011-02-21 | 60.00   | 2012-07-11 |   | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 10373-6:2011/FDAmd 4 | Identification cards -- Test methods -- Part 6: Proximity cards -- Amendment 4: Bit rates of $fc/8$ , $fc/4$ and $fc/2$ and frame size from 512 to 4096 bytes | 2011-07-08 | 50.20<br>(Start date: 2012-09-28<br>End date: 2012-11-29) | 2012-09-28 |   | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 10373-6:2011/PDAM 5  | Identification cards -- Test methods -- Part 6: Proximity cards -- Amendment 5: Bit rates of $3fc/4$ and $fc$   | 2011-07-08 | 30.60   | 2012-09-23 | 2013-01-08<br>(Cancellation date: 2013-07-08) | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 10373-6:2011/PDAM 6  | Identification cards -- Test methods -- Part 6: Proximity cards -- Amendment 6: Alternating between PICC and PCD functionalities                              | 2012-04-23 | 30.60   | 2012-07-26 | 2013-10-23                                    | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 11693-1              | Identification cards -- Optical memory cards -- Part 1: General characteristics   | 2011-02-03 | 60.00   | 2012-09-26 |   | 36         | ISO/IEC JTC 1/SC 17/WG 9 |
| ISO/IEC 11694-1              | Identification cards -- Optical memory cards -- Linear recording method -- Part 1: Physical characteristics   | 2011-02-03 | 60.00   | 2012-09-26 |   | 36         | ISO/IEC JTC 1/SC 17/WG 9 |
| ISO/IEC FDIS 11694-2         | Identification cards -- Optical memory cards -- Linear recording method -- Part 2: Dimensions and location of the accessible optical area                     | 2011-02-03 | 50.60   | 2012-05-11 |   | 36         | ISO/IEC JTC 1/SC 17/WG 9 |

| Reference                   | Document title  | Reg. date  | Crnt stage  | Stage date | Limit date                                    | Time frame | Committee                |
|-----------------------------|---|------------|---|------------|---|------------|--------------------------|
| ISO/IEC CD 11694-4          | Identification cards -- Optical memory cards -- Linear recording method -- Part 4: Logical data structures  | 2011-12-07 | 30.60   | 2012-04-28 | 2013-06-07                                    | 36         | ISO/IEC JTC 1/SC 17/WG 9 |
| ISO/IEC CD 11694-5          | Identification cards -- Optical memory cards -- Linear recording method -- Part 5: Data format for information interchange for applications using ISO/IEC 11694-4, Annex B            | 2011-12-07 | 30.99   | 2012-05-02 | 2013-06-07                                    | 36         | ISO/IEC JTC 1/SC 17/WG 9 |
| ISO/IEC CD 11694-6          | Identification cards -- Optical memory cards -- Linear recording method -- Part 6: Use of biometrics on an optical memory card  | 2011-12-07 | 30.99   | 2012-05-02 | 2013-06-07                                    | 36         | ISO/IEC JTC 1/SC 17/WG 9 |
| ISO/IEC DIS 11695-4         | Identification cards -- Optical memory cards -- Holographic recording method -- Part 4: Logical data structures   | 2009-04-15 | 40.99   | 2010-01-12 | 2012-10-15<br>(Cancellation date: 2013-04-15) | 48         | ISO/IEC JTC 1/SC 17      |
| ISO/IEC 14443-2:2010/PDAM 5 | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 2: Radio frequency power and signal interface -- Amendment 5: Bits rates of 3fc/4 and fc      | 2011-07-08 | 30.60   | 2012-07-22 | 2013-01-08<br>(Cancellation date: 2013-07-08) | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 14443-3:2011/PDAM 3 | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 3: Initialization and anticollision -- Amendment 3: Alternating support of PICC and PCD roles | 2012-01-26 | 30.60   | 2012-07-26 | 2013-07-26                                    | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 14443-3:2011/DAmD 6 | 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     | 2011-07-08 | 40.20<br>(Start date: 2012-06-20<br>End date: 2012-11-21) | 2012-06-20 | 2014-01-08                                    | 36         | ISO/IEC JTC 1/SC 17/WG 8 |

| Reference                     | Document title   | Reg. date  | Crnt stage  | Stage date | Limit date                                    | Time frame | Committee                |
|-------------------------------|--|------------|---|------------|---|------------|--------------------------|
| ISO/IEC 14443-4:2008/CD Cor 1 | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 4: Transmission protocol -- Technical Corrigendum 1                            | 2011-11-01 | 30.98   | 2012-04-24 | 2013-05-01<br>(Cancellation date: 2013-11-01) | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 14443-4:2008/DAmD 3   | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 4: Transmission protocol -- Amendment 3: Bit rates of 3fc/4, fc, 3fc/2 and 2fc | 2011-07-08 | 40.20<br>(Start date: 2012-06-20<br>End date: 2012-11-21) | 2012-06-20 | 2014-01-08                                    | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 14443-4:2008/NP Amd 4 | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Part 4: Transmission protocol -- Amendment 4: Frame with error correction           | 2012-08-10 | 10.99   | 2012-08-10 | 2014-02-10                                    | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC 15457-2:2007          | Identification cards -- Thin flexible cards - Part 2: Magnetic recording technique   | 2004-12-08 | 90.60   | 2012-09-19 |   | 36         | ISO/IEC JTC 1/SC 17/WG 1 |
| ISO/IEC 15693-2:2006          | Identification cards -- Contactless integrated circuit cards -- Vicinity cards -- Part 2: Air interface and initialization   | 2005-05-06 | 90.60   | 2012-03-17 |   | 36         | ISO/IEC JTC 1/SC 17/WG 8 |
| ISO/IEC WD 17839-1            | Information technology -- Identification cards -- Biometric system on card -- Part 1: Functional architecture  | 2012-01-26 | 20.20<br>(Start date: 2012-06-11<br>End date: 2012-09-14) | 2012-06-11 | 2013-07-26                                    | 36         | ISO/IEC JTC 1/SC 17      |
| ISO/IEC WD 17839-2            | Information technology -- Identification cards -- Biometric system on card -- Part 2: Physical characteristics   | 2012-04-09 | 20.20<br>(Start date: 2012-06-11<br>End date: 2012-09-14) | 2012-06-11 | 2014-04-09                                    | 48         | ISO/IEC JTC 1/SC 17      |

| Reference                     | Document title  | Reg. date  | Crnt stage  | Stage date | Limit date | Time frame | Committee                 |
|-------------------------------|---|------------|---|------------|------------|------------|---------------------------|
| ISO/IEC WD 17839-3            | Information technology -- Identification cards -- Biometric system on card -- Part 3: Logical information interchange mechanism   | 2012-04-09 | 20.20<br>(Start date: 2012-06-11<br>End date: 2012-09-14) | 2012-06-11 | 2014-04-09 | 48         | ISO/IEC JTC 1/SC 17       |
| ISO/IEC 18013-1:2005          | Information technology -- Personal identification -- ISO-compliant driving licence -- Part 1: Physical characteristics and basic data set   | 2004-07-26 | 90.60   | 2010-12-17 |            | 36         | ISO/IEC JTC 1/SC 17/WG 10 |
| ISO/IEC 18013-3:2009/NP Amd 2 | Information technology -- Personal identification -- ISO-compliant driving licence -- Part 3: Access control, authentication and integrity validation -- Amendment 2: Extended Access Control "EAC" v1.11 | 2011-11-04 | 10.99   | 2011-11-04 | 2013-05-04 | 36         | ISO/IEC JTC 1/SC 17       |
| ISO/IEC 18013-4:2011/CD Cor 1 | Information technology -- Personal identification -- ISO-compliant driving licence -- Part 4: Test methods -- Technical Corrigendum 1   | 2012-09-27 | 30.20<br>(Start date: 2012-09-27<br>End date: 2012-12-28) | 2012-09-27 | 2014-03-27 | 36         | ISO/IEC JTC 1/SC 17/WG 10 |
| ISO/IEC PDTR 18268            | Identification cards -- Contactless integrated circuit cards -- Proximity cards -- Multiple PICCs in a single PCD field   | 2012-04-13 | 30.60   | 2012-07-16 | 2014-10-13 | 36         | ISO/IEC JTC 1/SC 17       |
| ISO/IEC NP 18328              | Input Devices on ICC and enhancements of electronic Displays  | 2012-09-05 | 10.99   | 2012-09-05 | 2014-03-05 | 36         | ISO/IEC JTC 1/SC 17       |
| ISO/IEC CD 24727-1            | Identification cards -- Integrated circuit card programming interfaces -- Part 1: Architecture  | 2012-06-20 | 30.99   | 2012-09-24 | 2013-12-20 | 36         | ISO/IEC JTC 1/SC 17       |
| ISO/IEC 24727-2:2008/D Amd 1  | Identification cards -- Integrated circuit card programming interfaces -- Part 2: Generic card interface -- Amendment 1: .  | 2010-01-27 | 40.99   | 2012-09-26 |            |            | ISO/IEC JTC 1/SC 17       |

| Reference                   | Document title   | Reg. date  | Crnt stage  | Stage date | Limit date | Time frame | Committee                |
|-----------------------------|--|------------|---|------------|------------|------------|--------------------------|
| ISO/IEC 24727-3:2008/DAmD 1 | Identification cards -- Integrated circuit card programming interfaces -- Part 3: Application interface -- Amendment 1: .                                  | 2010-01-27 | 40.60   | 2012-09-25 |            |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 24727-4:2008/DAmD 1 | Identification cards -- Integrated circuit card programming interfaces -- Part 4: Application programming interface (API) administration -- Amendment 1: . | 2010-01-27 | 40.60   | 2012-09-25 |            |            | ISO/IEC JTC 1/SC 17/WG 4 |
| ISO/IEC 24787:2010/CD Cor 1 | Information technology -- Identification cards -- On-card biometric comparison -- Technical Corrigendum 1  | 2012-07-26 | 30.20<br>(Start date: 2012-07-26<br>End date: 2012-10-26) | 2012-07-26 | 2014-01-26 | 36         | ISO/IEC JTC 1/SC 17      |
| ISO/IEC PDTR 30117          | Information Technology -- Guide to on-card biometric comparison standards and applications   | 2011-06-28 | 30.20<br>(Start date: 2012-06-11<br>End date: 2012-09-14) | 2012-06-11 | 2014-12-28 | 48         | ISO/IEC JTC 1/SC 17      |