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BUSINESS PLAN FOR JTC1/SC17

Cards and Personal Identification

PERIOD COVERED: October 2015 – September 2016

1.0 Executive Summary

SC 17 continues to deliver card standards that are ubiquitous in their use by the worldwide cards industry. Perhaps the biggest issue facing the cards world and particularly payments cards, is the need to expand the Issuer Identification Numbering scheme (IINs) from its present 6-digit IIN to an 8-digit IIN going forward. Support from ISO to spread the word in this regard would be very much appreciated by the experts in SC17.

2.0 Chairman's Remarks

2.1 Market Requirements, Innovation

The work programme of SC17 is distributed across 7x extant working groups having just closed an eighth, i.e. WG9 Optical memory cards. These breakdown into card technology WGs, i.e. WGs 1, 4, 8 and 11, two application based WGs – WGs 3 and 10 – and WG5 the Registration Management Group for the Issuer Identification Number (IINs) scheme. SC17 continues to maintain a significant and active work programme across these WGs.

2.2 Accomplishments

WG3 working closely with ICAO (International Civil Aviation Organisation) has helped ICAO fully revise its Document No 9303 on Machine Readable Travel Documents and reformat this 7th Edition into 12-parts. SC17/WG3 will now start the transposition of Document No. 9303 via the short-form endorsement process into the ISO/IEC 7501 Series of standards.

WG5 has resolved to address the chronic shortage of IINs by extending the Issuer Identification Number from its present 6-digits to 8-digits. This will be a truly mammoth undertaking for the global cards industry to undertake and implement. It is anticipated the transition could take upto 20 years to effect.

WG8 has started to see results from its liaison with the NFC Forum. The Forum has proposed an adaptation to one of WG8's test methods so the NFC Smartphone and 14443 card devices can both be tested. This is seen as a major first step for substantial harmonization between ISO/IEC 14443 and the NFC Forum specifications.

WG10 has a PWI investigating 'Mobile Driving Licence'.

2.3 Resources

The work programme of SC17 continues to be well supported by experts although there is a noticeable shift away from representation from the payments cards industry, i.e. application users, towards manufacturers and infrastructure providers. This is only to be expected given that smart cards are a mature product and the early trail blazers and application developers have deskilled now they are able to rely on the manufacturers and card fabricators to provide them with commoditized products which in part, at least, is due to the success of standardization in which SC17 has played a major role.

2.4 Competition and Cooperation

SC17 does not see any major competitors producing standards within its scope in competition with SC17's standards. Rather the different card application producers, card systems infrastructure providers and card fabricators build upon SC17's stable base of standards.

The liaison with the NFC Forum, as a consortium with overlapping interests to SC17/WG8's Contactless technology, is also encouraging.

3.0 Working Groups

There are 8x Working Groups covered in turn below. The full work programme of SC17 can be found at :

http://www.iso.org/iso/home/store/catalogue_tc/catalogue_tc_browse.htm?commid=45144&development=on

3.1 WG1 – Physical Characteristics and Test Methods

WG1 manages six groups of standards covering:

- Physical Characteristics and Test Methods;
- Embossing and TIM (Tactile Identifier Mark);
- Magnetic Stripe Cards;
- Thin Flexible Cards;
- Card Service Life; and,
- ICC Managed Devices.

3.1.1 WG1 Accomplishments

TR 18781 'Laundry Test' awaiting publication by ISO.

Embossing – 7811-1 published in 2014.

Tactile Identifier Mark (TIM) – alternate TIM position added to 7811-9 to facilitate co-existence of embossing and antennae. DIS passed in 2015-09 with no negative votes. Intention is to proceed directly to publication.

Magnetic Stripe Cards - revisions of the following standards published in 2015:

- 7811-2 Low Coercivity;
- 7811-6 High Coercivity;
- 7811-7 High Coercivity, High Density;
- 7811-8 Coercivity of 51.7 kA/m (650 Oe);
- 8484 Magnetic Stripes on Savings Books; and,
- 10373-2 Test Methods Part 2: Magnetic stripe technologies.

Devices on Cards – 18328-2 Physical Characteristics, part 2 of a three part standard on ICC Managed Devices (parts 1 and 3 under management of WG4 below), awaiting publication by ISO. This part now contains the new definition for ID-T, the so called 'Thick' card.

3.1.2 WG1 Deliverables

7810 Physical Characteristics and its associated test methods standard 10373-1 Test Methods Part 1: General Characteristics, to commence formal revision process. CD ballot planned for 2016.

Card Service Life – 24789 parts 1 and 2 – being revised with new unified approach, i.e. no longer two concurrent approaches ('Standalone' and 'Sequential'). 1st CD in 2017.

3.1.3 WG1 Risks, Opportunities and Issues

The 7811 Series at 3.1.1 above were published with errors introduced by ISO Project Editors. Corrections are slowly progressing. 8484 and 10373-2 also contained errors introduced by ISO Project Editors but these were caught before publication and corrected.

3.2 WG3 – Machine Readable Travel Documents

WG3 works closely with ICAO (International Civil Aviation Organization) on its Document No 9303 which then gets transposed as ISO/IEC 7501

3.2.1 WG3 Accomplishments

Working closely with SC17/WG3, ICAO published its new 7th Edition of Document No. 9303 in July 2015 in a new 12-part format.

3.2.2 WG3 Deliverables

WG3 plans to complete the short-form endorsement of ICAO Document 9303 as ISO/IEC 7501 through 2016. ISO/IEC 18745 'Test Methods for machine readable travel documents (MRTD) and associated devices' multi-part standard continues to be developed. Part 1, published in 2014, is under revision. Part 2 'Test methods for contactless interface' is being developed by SC17/WG8. Parts 3 'Test methods for the LDS and security protocols' and Part 4 'Tests for Inspection Systems' are planned for balloting as ISO standards through 2016.

3.2.3 WG3 Risks, Opportunities and Issues

Short-form endorsement of new 12 part 9303 is a potential procedural issue as 9303 and the transposed 7501 have both hitherto only been 3-parts.

WG3 would like to record its thanks to SC31 for the highly successful collaboration resulting in SC31 developing ISO/IEC 30116 for measuring the quality of OCR Characters used on passports, thereby significantly improving the readability of the characters

The development of a 3rd generation of 19794 by SC37, specifically parts 4, 5 and 6, is of concern to SC17 which references these standards. SC17/WG3 continues to liaise closely with SC37 on their concerns.

3.3 WG4 – Integrated Circuit Cards with Contacts

WG4 originally produced standards for Integrated Circuit Cards (ICCs) with contacts. This work was subsequently divided into work on commands for ICCs which both WG4 and WG8 (Contactless cards) use and WG4's continued work on the logical interface of ICCs independent of the physical interface, e.g. contactless or with contacts. Since 2004 WG4 has produced new standards to facilitate the interfacing of ICCs with both user (ISO/IEC 12905) and systems through a standard middleware (ISO/IEC 24727). And since 2010 has been working to standardize the logical interface of applications on an IC which supports the usage of electronic devices, e.g. keypad, electronic display (ISO/IEC 18328). Furthermore since 2013 has been working to standardize privacy-enhancing protocols and services involving an ICC (ISO/IEC 19286).

3.3.1 WG4 Achievements

7816-6 'Interindustry Data Elements' – FDIS ballot June 2015.

7816-8 'Security architecture and related interindustry commands' - FDIS in September 2015.

7816-15 'Cryptographic information application' – Publication of 2nd edition in May 2016.

18328-1 'General Framework' – Publication of 1st.

18328-2 'Physical characteristics and test methods for cards with devices' – Publication of 1st in November 2015.

18328-3 'Organization, security and commands for interchange' – FDIS ballot September 2016.

3.3.2 WG4 Deliverables

7816-9 'Enhanced interindustry commands'- to go for DIS ballot.

7816-11 'Personal verification through biometric methods' – to go for DIS ballot.

Work on services and protocols to enhance privacy (ISO/IEC 19286) has reached CD which is to be discussed with a view to going for a DIS ballot.

3.3.3 WG4 Risks, Opportunities and Issues

One preliminary work items (PWIs) authorised on 'Extension of functionalities in 7816-4'.

Having managed WG4 for over 20 years, France has served notice that they are giving up the convenorship of WG4. In the future the convenorship will be handled by Germany.

3.4 WG5 – Issuer Identification Numbers (IINs)/Application Provider Identifiers (RIDs)

WG5's primary role is as the Registration Management Group (RMG) managing the Issuer Identification Numbering scheme (IINs). It also has the job of maintaining ISO/IEC 7812; part1 of which defines the IIN numbering scheme itself and part 2 the management processes for that scheme.

3.4.1 WG5 Accomplishments

7812-1:2015 and 7812-2:2015 published. The FDIS were approved by NBs in 2012 but publication held up by ISO Project Editors as the standard did not comply with new guidelines on RAs which were introduced by ISO during the development of the revision.

3.4.2 WG5 Deliverables

WG5 is working on a major revision of the IINs scheme introducing 8-digit IINs as they are rapidly running out the current 6-digit IINs.

3.4.3 WG5 Risks, Opportunities and Issues

ISO/CS Legal services have issues with the Registration Authority Agreement entered into by ISO with the American Bankers Association (ABA) in 1986 and would like to see the adoption by the ABA of the new RAA introduced in 2011/2012. This is now the subject of a TMB Task Force on ISO/IEC 7812 but it is imperative these procedural/administrative matters do not delay the introduction of 8-digit IINs as the migration to a longer number worldwide is urgently required by the industry as it runs out of 6-digit IINs.

3.5 WG8 – Contactless Integrated Circuit(s) cards

WG8 produces standards for Contactless ICCs; the ISO/IEC 14443 Series for Proximity Cards and 15693 Series for Vicinity Cards. WG8 also supports WG3 whose Machine Readable Travel Documents (MRTDs) have adopted the 14443 contactless technology for epassports (and evisas).

3.5.1 WG8 Accomplishments

14443-2 'Radio frequency power and signal interface' – DIS approved for FDIS.

10373-6 'Test Methods – Part 6: Proximity Cards' – DIS approved for FDIS.

10373-6/DAM1 'Test Methods – Part 6: Proximity Cards – Amendment 7: Frame with error correction' – DIS approved for FDIS.

3.5.2 WG8 Deliverables

14443-1/Amd2 'Low Power Class' – new project.

14443-1/Amd3 'Clarification of classes of antenna zones'

14443-2/PDAM1 'Radio frequency power and signal interface – Amendment 1: PICCs with external power supplies' – CD ballot closed 2015-07-30.

14443-2:2015/Amd2 'Radio frequency power and signal interface – Amendment 2: EMD levels for PICC classes 2-6'.

14443-3:2011/DAM4 'Proximity cards – Part 3: Initialization and Anticollision – Amendment 5: Handling rules of RFU bits' – DIS ballot closed.

14443-4:2008/DAM5 'Proximity cards – Part 4: Transmission Protocols – Amendment 5: Handling rules of RFU bits' – DIS ballot closed.

14443-4:2015/PDAM6 'Proximity cards – Part 4: Transmission Protocols – Amendment 6: S (Parameters) clarification' – CD ballot closed.

10373-6/DAM2 'Test Methods – Part 6: Proximity Cards – Amendment 2: Extension of PICC and PCD test methods' – DIS ballot closed.

10373-6/PDAM3 'Test Methods – Part 6: Proximity Cards – Amendment 3: Active and passive PICC and PCD transmissions' – CD ballot closed.

10373-6:2015/PDAM4 'Test Methods – Part 6: Proximity Cards – Amendment X: Conformance test plan' – CD ballot closed.

10373-6:2015/AmdX 'Test Methods – Part 6: Proximity Cards – Amendment X: Definition of minimum achievable times'.

10373-7:2008/Amd1 'Test Methods – Part 7: Vicinity cards – Amendment 1: New test methods for Vicinity cards'.

15693-1 'Vicinity Cards – Part 1: Physical characteristics'- 3rd edition being developed.

15693-3:2009/PDAM4 'Vicinity Cards – Part 3: Anticollision and transmission protocol – Amendment 4: Adding security framework' - CD ballot closed.

18745-2 'Test methods for machine readable travel documents (MRTD) – Part 2: Test methods for contactless interface' – 2nd DIS ballot with FDIS to follow.

3.5.3 WG8 Risks, Opportunities and Issues

The NFC Forum has sent a technical proposal to WG8 which proposes an adaptation of a test method in ISO/IEC 10373-6 so that the NFC smartphone and 14443 card devices can both be tested. WG8 is optimistic this is a major first step for substantial harmonization between ISO/IEC 14443 and NFC Forum specifications.

3.6 WG9 – Optical Memory Cards

WG9 managed standardization for Optical Memory Cards. This is now a mature technology and WG9's body of standards are to be stabilized and the WG stood down.

3.6.1 WG 9 Accomplishments

11693-3 'Optical memory cards (OMC) – Part 3: Authentication techniques' published as IS.

11695-1 'Optical memory cards (OMC) holographic recording – Part 1: Physical characteristics' published as IS.

3.7 WG10 – Motor Vehicle Drivers Licence and Related Documents

WG10 develops standards for Motor Vehicle Driver Licences.

3.7.1 WG10 Accomplishments

TR 19446:2015 'Differences between the driving licences based on the ISO/IEC 18013 series and the European Union specification' - published.

3.7.2 WG10 Deliverables

18013-1 is under revision – submitted for DIS ballot at end-October 2015.

18013-2 is under revision.

18013-3:2009/Amd3 DIS ballot.

18013-4:2011/Amd1 DIS ballot.

3.7.3 WG10 Risks, Opportunities and Issues

Preliminary Work Item (PWI) authorised on 'Mobile Driving Licence'.

3.8 WG11 – Application of Biometrics to Cards and Personal Identification

WG11 develops standards for the application of biometrics to Cards and Personal Identification.

3.8.1 WG11 Accomplishments

17839-2 'Biometric System-on-card – Part 2: Physical characteristics and test methods for cards with devices' – removal of ID-T from annex, replace by reference to ISO/IEC 18328-2 'ICC-manged devices – Part 2: Physical characteristics and test methods for cards with devices' from SC17/WG1. To progress from FDIS to IS.

18584 'Conformance test requirements for on-card biometric comparison applications' – DIS with no negative votes, published as IS.

3.8.2 WG11 Deliverables

17839-3 'Biometric System-on-card – Part 3: Logical information interchange mechanism' under 2nd DIS. To progress to publication.

24787.rev1 'On-Card biometric comparison' to 2nd WD and thence to CD.

3.8.3 WG11 Risks, Opportunities and Issues

As with SC17/WG3 above, the development of a 3rd generation of 19794 by SC37 is a cause for concern in

SC17/WG11. Again as with SC17/WG3, WG11 continues to liaise closely with SC37 on their concerns. WG11 is also in close liaison with SC17/WG4 as well as SC37 for work alignment and work collaboration.

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