WG8/TF3 16th meeting   *23-24th September 2013*

To prepare standards for: ISO/IEC 15693 series
Identification cards - Contactless Integrated Circuit(s) cards - Vicinity cards

Venue: **Grand Copthorne Waterfront Hotel Singapore**
                392 Havelock Road
                Room: Riverfront 2
                Singapore 169663

Agenda:

**Acting   Reinhard Meindl (reinhard.meindl@nxp.com)
Convener**

23-24th September - each day 18:00 to 21:00 – Room. Riverfront 2

1. Roll call

    Y. Kaneko (JP), K. Finkenzeller (DE), J. Perez (CH), M. Stark (AT), D. Orsatti (FR), S. Fidelis (FR), M. Hegenbarth (DE)

    By telephone: F. Amtmann (AT), J-M.Gaultier (FR)

2. Introduction and approval of proposed agenda

    TF3 approved the agenda.

3. Approval of minutes of last meeting

    ISO-IECJTC1-SC17-WG8_N2114_TF3_N171_TF3_Freising_minutesv5.pdf

    TF3 approved the minutes.

4. ISO/IEC 15693-3/Amd.2 Clarif of DataEl

    ISO-IECJTC1-SC17-WG8_N2116_Draft_text_ISO-IEC_CD_15693-3_Amd.pdf

    ISO-IECJTC1-SC17-WG8_N2099_Proposed_NP_ISO_IEC_15693-3_Amd2_.pdf

    Daniel questions whether all questions from NFC Forum (in doc Number wg8n1989) are answered by this Amd.
    Franz reminds that we should answer the liaison statement with a clear reference to our new amendment.
    Decision for NP-CD postponed until Franz will provide a draft LS to respond to NFC Forum.
    Compliant VCDs may not be able to write or lock compliant VICCs with opposite option flag support as defined in 15693.
    TF3 agrees on the Liaison response in wg8n2148 to be sent to NFC Forum and submit wg8n2116 together with wg8n2099 for combined NP+CD ballot.

Agenda:

5. ISO/IEC 15693-3/Amd.3 Memory Extension

ISO-IECJTC1-SC17-WG8_N2117_Updated_proposed_NP_ISO_IEC_15693.pdf

TF3_N173_SGP_Mem_Comp.pdf

Sylvain proposes to make more due diligence on legacy use of DSFID with the objective to reclaim this field for ISO use as requested by FR.
Why are optional opcodes different from RFU bits -> because the reception of RFU opcodes is already well defined.
Sylvain thinks that RFU opcodes may cause the same problem as RFU bits.
M1 shall look identical for VCD1 and VCD2
Daniel questions whether VCD1 and VCD2 use the same command. Answer is yes.
Daniel thinks that side effects may be caused which could be controlled by application but still may confuse certain legacy VCDs.

New Contributions to be posted\TF3_N0174v2_SGP_Mem_extv2.pptx

Daniel thinks that there is no need for 4 byte addressing – commonly shared.
Sylvain would prefer to extend breath of existing commands as opposed to introducing new commands.

New Contributions to be posted\ExtendedMemory_TF3_Singapore.pdf

VCD may use legacy **or** new addressing mode

VICC may or shall support both addressing -> to be clarified

There is no more 3 and 4 byte addressing proposed. For 2 byte addressing the max memory capacity would be 2 Mbytes. Open for discussion; more bits at inventory could indicate more addressing bytes.

Whether or not the protocol extension flag may be used is disputed:

2 proposals existent:

P1.FR: indicates extended memory with a flag

   May be not necessary and similar to P2 it could be dropped

P2. CH+AT+DE: indicates extension by **trying** a new command

Mixed population of VICC1 and VICC2 -> Daniel questions if this is a real use case

Franz proposes to separate memory access mechanism from signaling mechanism (find out the VICC capatibilities).

Table of proposals:

	Memory access	Signaling (indication)
P1: FR	Extending existing commands (same opcodes)	Protocol extension flag Trying approach would also be acceptable
P2: AT-CH-DE	One optional new command	Trying new optional command
Alternatives (not so appreciated)		In the UID each manufacturer could find a way to differentiate
P3: Alternatives (possible compromise)	3 or 4 optional NEW commands (new opcodes) - avoid protocol_ext flag - read, write , lock - same structure+longer address field	Try new optional command

FR provides a new contribution in wg8n2147 summarising the received proposals and adds a new alternative to be discussed on the last slide. (P4).

Signalling mechanism need to be discussed in respect of 1. Whether it is needed and 2. How to accomplish

Get_system_information command could be a way; however it would also involve RFU bits (info flags); that is not appreciated by Franz because the reaction of legacy PCDs is not known.

P4

Same commands are used for 1 byte and 2 bytes addressing

How can VICC distinguish ? Answer: by addressing with the protocol_extension_flag.

What happens if there is a mixed population of VICC1 and VICC2. To be explored because could cause undefined states.

P3 (last line in table of proposals)

Indication of 2 byte addresses by changing only 1 bit in the opcode is attractive. Signalling to be discussed but could be achieved by simple get_info command extension.

Drawback is the duplication of commands for the same purpose which seems not to be significant.

At the end of discussion of all pro and con, P3 gets consensual support from the group.

Conclusion and next steps:

TF3 agrees that P3 with new optional commands + signalling mechanism shall move ahead!

The project editor kindly offers to provide a WD based on P3 + signal mechanism which will be the basis for progressing the work item.

TF3 agrees on NP in wg8n2117 to be submitted for ballot.

6.   ISO/IEC 15693-3/Amd.4 Security Framework

ISO-IECJTC1-SC17-WG8_N2118_Updated_proposed_NP_ISO_IEC_15693.pdf

TF3 reviewed ft3n176 from CH.

The general security requirements and survey should go into a new clause.

The new commands will go into the clause for optional commands including the new error codes.

Challenge command misses the payload and should not get a response.

The state diagram will be updated -> Jose

Timing will be added -> Jose with inputs from Franz

TF3 member are encouraged to provide comments preferably within the next 6 weeks to the project editor who kindly offers to post the working draft before December 2013..

Klaus reminds the group that this amd should be compatible to a future amd of the same security interface of 18000-63 (UHF) which again is related to epc Gen2 V2 standard.

TF3 approves the NP in wg8n2118 for submission to ballot.

7. Liaison post entrance/outlet

    ISO-IECJTC1-SC17-WG8_N2107_TF3_N167_Security_in_15693_e-mail.pdf

    TF3 discusses and agrees on the following essence of the response:

    Ask SC31 whether these opcodes are still necessary in the light of the NP in wg8n2118 and the corrected working draft provided by the project editor before Friday.

    TF3 intends to develop a complete interface for 15693 to 29167.

    TF3 invites SC31 member to review and provide comments and additional contributions to develop this amendment.

    Outsourcing command codes will affect 15693 compliant systems whereas TF3 feels responsible for 15693 completeness and consistency.

    The full LS is posted as wg8n2147 to be submitted to sc17 secretariat.

8. AOB

    Patents declaration

    Members did not declare any patents.

9. Confirm dates, venues, focus topics for further meetings

    TF3#17   End of Nov either F2f meeting co-located with Cartes in Paris or via Webex to be confirmed.

    TF3#18   28.-29.1.2014 at G&D Munich

10. **Close meeting**