

| Cmt # | Organization | Point of Contact | Comment Type (G-General, E-Editorial, T-Technical) | Section,Annex,etc and Page Nbr | Comment(Include rationale for comment)   |
|-------|--------------|------------------|--|--------------------------------|--|
| 1     | R223         | scluthe          | T  | 1.1 page 9                     | SP800-73 specifies an obsolete version of GlobalPlatform Version 2.0.1   |
| 2     | R223         | scluthe          | E  | 2.2 page 11                    | Acronym PIV is given twice with different meaning  |
| 3     | R223         | scluthe          | E  | 2.3 page 12                    | inconsistent use of capital letters in "Mandatory (M), optional (O) or conditional (C)."   |
| 4     | R223         | scluthe          | E  | 3.0 page 13                    | extra word "is" in last sentence of the section: "program interface is may be different"   |
| 5     | R223         | scluthe          | T  | 3.2.2 page 16                  | This section introduces the concept of an "organization-specific card application" but could go further and introduce the concept of organization-specific application domains whereby GlobalPlatform Security Domains are utilized to create separate areas on the card for groupings of organization-specific applications and data. |
| 6     | R223         | scluthe          | T  | 3.2.4 page 16                  | "At most one card application shall be active on the PIV integrated circuit card at any time." seems to indicate that logical channels as defined in ISO 7816-4 are not supported.   |
| 7     | R223         | scluthe          | T  | 3.2.7 page 17                  | Figure 1 & associated discussion leave out the possibility that an application F might utilize a sharable interface (in the JavaCard sense) provided by application E. These applications might interact but not through their respective data repositories as shown with Applications A & B.  |
| 8     | R223         | scluthe          | E  | 3.3 page 17                    | "The individuals mentioned in an access control must be authenticated by the card before the operations by the rule are allowed." doesn't make sense.  |
| 9     | R223         | scluthe          | E  | 3.4.1 page 19                  | spelling error: connetion  |

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| 10    | R223         | scluthe          | T  | 3.4.1 page 19                  | "The other method secures a single card command. This method called secure messaging and is used with card commands other than card commands for content management." is a misrepresentation of the capabilities of the ISO-7816-4 feature. Specifically the cryptographic checksum capability calls out that the changing block comes from the final check block of the previous command or response. Also, the reason secure channels are only good for content management is that there is no security in existing secure channel protocols for the response APDUs. |
| 11    | R223         | scluthe          | E  | 3.6 page 20                    | "Chapter xxx of this FIPS." is incomplete and also this is not a FIPS, it is a special publication   |
| 12    | R223         | scluthe          | E  | 4.2 page 22                    | Algorithm identifiers are not specified.   |
|       | R223         | scluthe          | T  | 4.2 page 22                    | Insufficient algorithms/key sizes are specified  |
| 13    | R223         | scluthe          | E  | 4.4 page 23                    | Meaning of M/O not specified in Table 4.2  |
| 14    | R223         | scluthe          | E  | 4.5 page 23                    | Meaning of M/O not specified in Table 4.3  |
| 15    | R223         | scluthe          | E  | 4.8 page 23                    | Meaning of M/O not specified in Table 4.4  |
| 16    | R223         | scluthe          | E  | 4.11 page 24                   | Meaning of M/O not specified in Table 4.5, 4.6, 4.7  |
| 17    | R223         | scluthe          | T  | 5.2 page 33                    | The API for application management doesn't appear to support the concept of "organization specific application domains" see comment #5 above.  |
| 18    | R223         | scluthe          | T  | 6 page 51                      | Table 6.1 allows for the security of all commands except for DELETE FILE. This deficiency could be used to create a denial of service through a man-in-the-middle attack by removing valuable data from the card.  |
| 19    | R223         | scluthe          | T  | 6.2.1 page 59                  | Table 6.9 needs to include EC-256 & EC-384 for National Security Systems   |



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| Proposed change   |
| specify current GlobalPlatform 2.1.1  |
| change first PIV (Integrated Circuit Card for Identification) to PIV-ICC  |
| change to all capital or all lowercase letters.   |
| remove word "is"  |
| introduce security domains to contain organization-specific versions of the card applications for interoperable use.                |
| Clarify if logical channels are supported.  |
| Clarify if inter-application communication is supported, optional, or prohibited.   |
| rewrite as: "The individual mentioned in an access control rule must be authenticated by the card before the operation is allowed." |
| change to connection  |

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| Proposed change   |
| Change to specify that secure messaging can be used to secure a sequence of commands and responses as well as a single command/response pair. |
| rewrite.  |
| Additional algorithms should be specified to support National Security Systems: AES-128, AES-192, AES-256, ECC 256, ECC 384.                  |
| include legend  |
| include legend  |
| include legend  |
| include legends   |
| Add capability to add an application under another application (security domain).   |
| Add secure messaging to DELETE FILE.  |
| Add EC-256 & EC-384 fields for National Security Systems  |

