

X-Sieve: CMU Sieve 2.2  
To: drafftips201@nist.gov  
Subject: Comments on Public Draft FIPS 201  
From: Steve Everhard <Steve.Everhard@multos.com>  
Date: Thu, 23 Dec 2004 10:09:21 +0000  
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X-MailScanner-From: steve.everhard@multos.com

Incorrectly titled and so resent. Apologies

----- Forwarded by Steve Everhard/LON/MASTERCARD on 23/12/2004 09:51 -----

Steve Everhard

22/12/2004 16:49

To: drafftips201@nist.gov  
cc:  
Subject:

MAOSCO, the consortium of companies that develops smart card products based on the openly licensed and managed operating system specification, MULTOS, would like to provide comment upon the recently published draft document, draft-FPIS\_201-110804-public1.pdf [FIPS201]. Attached file 04-12-22\_SP800-73\_FIPS201\_MAOSCO\_Comments.xls

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[04-12-22\\_SP800-73\\_FIPS201\\_MAOSCO\\_Comments1.xls](#)

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	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	G	NIST Special Publication SP800-73 V1.0 Overall	The SP800-73 document implies that only GlobalPlatform (GP) compliant smart cards may provide interoperable PIV cards. MAOSCO's opinion is that any smart card may provide application level interoperability and this specification should not mandate any particular form of smart card operating system.
2	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 3.2.1 Page 15	The Card Manager Application is only relevant to GP compliant OS smart cards. Others such as MULTOS, do not implement such an Application - card management is processed directly by the OS
3	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 3.2.2 Pages 15/16	Reference to "mandatory card manager application" again implies the use of GP compliant OS smart cards
4	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 3.2.3 Page 16	Card Platform Commands are implementation technology specific and are only implemented by GP compliant OS smart cards.
5	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 3.2.6, Page 17	This section requires that applications are added and deleted using the content management card commands - again this is GP compliant OS smart card specific.
6	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 3.2.7 Page 17	The card platform commands and card manager application is GP compliant OS smart card specific.

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7	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 6, Pages 51-81	Card Platform Command Interface is GP compliant OS smart card specific.
8	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 6 Table 6-1, Page 52	Notes 1 and 2 are GP compliant OS smart card specific
9	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 6.1, Pages 53-58	Card Platform Commands for Card Content Management is GP compliant OS smart card specific
10	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 6.6, Page 80	Secure Channel. This applies only to GP compliant OS smart cards.
11	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhard@multos.com">steve.eve@rhard@multos.com</a>	T	NIST Special Publication SP800-73 V1.0, Section 8.6, Page 97	reference to "GlobalPlatform, Open Platform Card Specification, Version 2.0.1 April 7th 2000" is not required and is technology dependent

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12	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhaid.com">steve.eve@rhaid.com</a> <a href="mailto:rhaid@multos.com">rhaid@multos.com</a>	G	FIPS PUB 201 v1.0, Annex F: References	Card Management would appear to be out of place in an application level specification such as FIPS 201. Specifically the inclusion of a commercial specification, such as GlobalPlatform Open Platform Card Specification Version 2.0.1, that is managed outside of a National Standards body and so is subject to the commercial control by a few corporations is problematic and exclusive. The limiting of card management keys to symmetric Triple DES and AES techniques further limits the specification from exploiting more secure and advanced PKI based approaches.
13	MAOSCO for the MULTOS Consortium of Companies	<a href="mailto:steve.eve@rhaid.com">steve.eve@rhaid.com</a> <a href="mailto:rhaid@multos.com">rhaid@multos.com</a>	E	FIPS PUB 201 v1.0, Section 4.1.6.2	[GP] Reference no longer required if GP not referenced in the body text as in Cmt# 12

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Proposed change
Remove GP specific elements from this specification (details below).
This section implies only GP compliant OS smart cards may be used. The AID should only apply if a GP compliant card is used.
Remove this requirement.
Card Platform Commands should be removed from this specification.
Remove this requirement.
Remove the sentence "Application C share..." thru "rooted at ADF#2." in paragraph 1. Remove final paragraph. Remove Application C and Card Manager Application from the illustration.

Proposed change
All Entries for Card Commands for Card Content Management should be removed.
Remove Notes 1 and 2
Remove section 6.1 and subsections.
Remove section 6.6
Remove section 8.6



Proposed change
Modify section 4.1.6.2 to read only as follows: " PIV cards may support card activation by a card management system to support card personalisation and post-issuance card updating. When cards are personalized, card management keys shall be set to be specific to each PIV card. That is, a card issuer may not use a single cryptographic key to activate more than one card". Remove paragraph 2 beginning "If supported..." and remove table 4-1
Remove [GP] Entry

Proposed change

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1	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	G	NIST Special Publication SP800-73 V1.0 Overall	The SP800-73 document implies that only GlobalPlatform (GP) compliant smart cards may provide interoperable PIV cards. MAOSCO's opinion is that any smart card may provide application level interoperability and this specification should not mandate any particular form of smart card operating system.	Remove GP specific elements from this specification (details below).
2	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 3.2.1 Page 15	The Card Manager Application is only relevant to GP compliant OS smart cards. Others such as MULTOS, do not implement such an Application - card management is processed directly by the OS	This section implies only GP compliant OS smart cards may be used. The AID should only apply if a GP compliant card is used.
3	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 3.2.2 Pages 15/16	Reference to "mandatory card manager application" again implies the use of GP compliant OS smart cards	Remove this requirement.
4	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 3.2.3 Page 16	Card Platform Commands are implementation technology specific and are only implemented by GP compliant OS smart cards.	Card Platform Commands should be removed from this specification.
5	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 3.2.6, Page 17	This section requires that applications are added and deleted using the content management card commands - again this is GP compliant OS smart card specific.	Remove this requirement.
6	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 3.2.7 Page 17	The card platform commands and card manager application is GP compliant OS smart card specific.	Remove the sentence "Application C share..." thru "rooted at ADF#2." in paragraph 1. Remove final paragraph. Remove Application C and Card Manager Application from the illustration.
7	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 6, Pages 51-81	Card Platform Command Interface is GP compliant OS smart card specific.	All Entries for Card Commands for Card Content Management should be removed.
8	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 6 Table 6-1, Page 52	Notes 1 and 2 are GP compliant OS smart card specific	Remove Notes 1 and 2
9	MAOSCO for the MULTOS Consortium of Companies	steve.ewe rhard@m ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 6.1, Pages 53-58	Card Platform Commands for Card Content Management is GP compliant OS smart card specific	Remove section 6.1 and subsections.

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10	MAOSCO for the MULTOS Consortium of Companies	steve.eve@hard@ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 6.6, Page 80	Secure Channel. This applies only to GP compliant OS smart cards.	Remove section 6.6
11	MAOSCO for the MULTOS Consortium of Companies	steve.eve@hard@ultos.com	T	NIST Special Publication SP800-73 V1.0, Section 8.6, Page 97	reference to "GlobalPlatform, Open Platform Card Specification, Version 2.0.1 April 7th 2000" is not required and is technology dependent	Remove section 8.6
12	MAOSCO for the MULTOS Consortium of Companies	steve.eve@hard@ultos.com	G	FIPS PUB 201 v1.0, Annex F: References	Card Management would appear to be out of place in an application level specification such as FIPS 201. Specifically the inclusion of a commercial specification, such as GlobalPlatform Open Platform Card Specification Version 2.0.1, that is managed outside of a National Standards body and so is subject to the commercial control by a few corporations is problematic and exclusive. The limiting of card management keys to symmetric Triple DES and AES techniques further limits the specification from exploiting more secure and advanced PKI based approaches.	Modify section 4.1.6.2 to read only as follows: "PIV cards may support card activation by a card management system to support card personalisation and post-issuance card updating. When cards are personalized, card management keys shall be set to be specific to each PIV card. That is, a card issuer may not use a single cryptographic key to activate more than one card". Remove paragraph 2 beginning "If supported..." and remove table 4-1
13	MAOSCO for the MULTOS Consortium of Companies	steve.eve@hard@ultos.com	E	FIPS PUB 201 v1.0, Section 4.1.6.2	[GP] Reference no longer required if GP not referenced in the body text as in Cmt# 12	Remove [GP] Entry

Submitted by: \_\_\_\_\_  
Date: \_\_\_\_\_

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