Specification Update Bulletin No. 58
Fourth Edition May 2008

This Specification Update Bulletin describes editorial corrections to the EMV Common Payment Application (CPA) Specification for Payment Systems. These corrections fix editorial errors and clarify ambiguous text.

Editorial Errors in Release 1.0 of the CPA Specification

The changes added in this version of the bulletin will be incorporated into version v1.0.d of the CPA Card Type Approval documentation (that is, Test Cases, Card Images, and Implementation Conformance Statement). CPA cards will be tested against the requirements of this version of the bulletin commencing 1 November 2008.

Applicability

This Specification Update Bulletin applies to:

- *EMV Integrated Circuit Card Specifications for Payment Systems Common Payment Application Specification Version 1.0 December 2005*

Related Documents

This bulletin should be read in conjunction with:

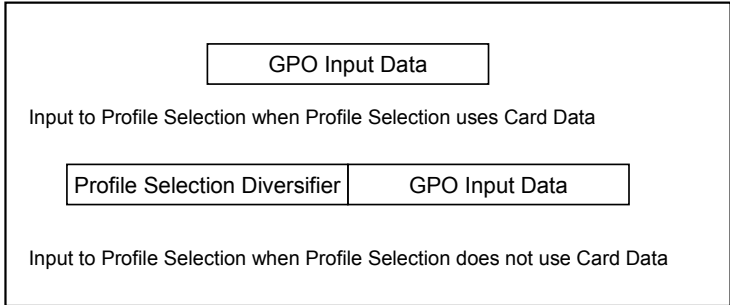- *EMVCo Specification Update Bulletin No. 56 – CPA Corrections and Changes*

Purpose

This Specification Update Bulletin provides clarification, and identifies and corrects editorial errors that have occurred in release 1.0 of the CPA Specification. The clarifications are provided in response to queries submitted to EMVCo. The corrections are due to simple typographical errors and inaccurate incorporation of updates to the draft CPA specification. Modifications from the previous edition are change-marked in the left margin.

Description

Please identify and correct the editorial errors as per the following table:

#	Page	CPA Reference	Change	Reason
1	xix	Flow 15-7 title	Change "Authentication Token" to "Token Authentication"	Editorial correction
2	xiii	Table 15-9 title	Change "Authentication Token" to "Token Authentication"	Editorial correction
3	xix	Flow 15-16 line	Right-align page reference 15-118 to correspond with other entries in the table.	Editorial correction
4	xix	Title	should be "First Card Action Analysis Flow Charts"	Editorial correction
5	xx	Flow 17-6 title	Change to "Issuer Authentication Passed" as in the associated text	Editorial correction
6	1-1	1.1	Delete the second sentence of section 1.1.	Clarification- removes implication that the CPA specification takes precedence over EMV.
327	2-1	2.1	Delete "version 4.1, " and ", May 2004" from the titles for EMV Book 1, EMV Book 2, EMV Book 3, and EMV Book 4; and delete "version 1.0, " and ", June 2003" from the title for EMV CPS.	Editorial correction – allows latest versions of specifications to apply.
337	2-1	2.1	Change "*EMV Card Personalization Specification*, version 1.0, June 2003." to "*EMV Card Personalization Specification.*"	Editorial correction – allows latest versions of specifications to apply.
7	5-13	Figure 5-1	In the Cardholder Verification block in the middle of the flow, the Verify command should be *immediately* preceded by the GET CHALLENGE command, as described in requirement 12.29. Swap the positions of the GET CHALLENGE and GET DATA commands and associated processing.	Editorial correction
8	6-3	6.2.1	In the description for SELECTED, second bullet, change the status word from "6285" to "6283"	Correction, the status word for a blocked command is 6283.
9	8-6	Table 8-1	Change "GPO Command Data Length" to "GPO Input Data Length" (2 instances)	Editorial clarification – clarify that GPO Input Data does not include template tag '83' and the template length (GPO Command Data could be mistaken for PDOL Related Data which does include the template tag and length)
10	8-7	8.3 below Table 8-1	Change "GPO Command Data, GPO Command Data Length" to "GPO Input Data, GPO Input Data Length"	Editorial clarification
11	8-8	Table 8-2	Replace Table 8-2 with the following:	Editorial clarification

Table for row 11:

Data	Description	Template	Tag
GPO Input Data	The application may use any of the data elements that can be requested from the terminal (using the PDOL) for Profile Selection Processing.	'83'	—
VLP Terminal Support Indicator	A data element which, if present in the terminal, indicates that the terminal supports VLP processing.		

#	Page	CPA Reference	Change	Reason
12	8-10	Table 8-4	Change "GPO Command Data" to "GPO Input Data"	Editorial clarification
13	8-10	Req 8.1 label	Change "GPO command data" to "PDOL Related Data"	Editorial clarification
14	8-11	Req 8.5	Change "GPO Command Data" to "GPO Input Data" (2 instances: 1 in label, 1 in requirement text)	Editorial clarification
15	8-13	8.5.3, 2nd paragraph	Change "GPO command data" to "GPO Input Data"	Editorial clarification
16	8-14	8.5.3.1, 2nd note	Change "GPO Command Data" to "GPO Input Data"	Editorial clarification
17	8-15	Req 8.9	Change "GPO Command Data" to "GPO Input Data" (4 instances)	Editorial clarification
18	8-16	8.5.3.2, 3rd line	Change "GPO Command Data" to "GPO Input Data"	Editorial clarification
19	8-16	8.5.3.2	In the second sentence (starting "When the Profile…") remove the second comma.	Typographical correction
20	8-16	8.5.3.2	Split the first paragraph of the section into two paragraphs, starting the new paragraph with the sentence beginning, "The Profile ID identifies". Add the following before the new paragraph created by the split: GPO Input Data Input to Profile Selection when Profile Selection uses Card Data Profile Selection Diversifier | GPO Input Data Input to Profile Selection when Profile Selection does not use Card Data **Figure 8-2: Input to Profile Selection**	Editorial clarification
21	8-17	Req 8.14	Change second paragraph to "*If AIP/AFL Entry x is not present, then the application shall discontinue processing the GPO Command, and shall respond with SW1SW2 = '6985' (Conditions of use not satisfied).*"	Clarification – consistency with req 21.63 which requires the SW1SW2 be '6985'.
22	8-18	Fig 8-1, Initiate Application Processing Flow	Change the note on page 8-18 to the following: "Note: Support for VLP is an implementer-option. If the option is not implemented, this bit is not required to be checked."	Clarification.
23	8-20	Fig 8-1	Add a label at the top of the flow with value 8.5.3	Editorial clarification
24	8-21	Fig 8-1	Add a label on the box containing text beginning "build GPO response", with value 8.5.4	Editorial clarification
25	8-22	Fig 8-1	In the "Insert AID-…" rectangle, change "GPO Command Data" to "GPO Input Data"	Editorial clarification
26	8-24	Fig 8-1	In the topmost diamond, change "GPO Command Data Length" to "GPO Input Data Length"	Editorial clarification
27	8-24	Fig 8-1	In the sidebar text attached to the topmost diamond, change "GPO Command Data Length" to "GPO Input Data Length"	Editorial clarification

#	Page	CPA Reference	Change	Reason
28	8-24	Fig 8-1	In the third rectangle from the top, change "GPO command data" to "GPO Input Data"	Editorial clarification
29	9-8	9.7.1	last line – reference should be "21.3.4"	Editorial correction
30	9-10	Table 9-4, row for Byte 1	Change the value for Byte 1 to the following: "bits 8-4: SFI containing Profile Selection File bits 3-1: RFU"	Clarification that the SFI is coded on bits 8-4 of byte 1.
31	10-12	10.7.1	Change the cross-reference at the beginning of the last sentence from "20.3" to "20.4"	Editorial correction
32	12-9	Req 12.7, 2nd bullet	Just before the period at the end of the sentence, add " (see Annex G)"	Annex G provides clarification of the contents for the response to GET DATA for CPA templates
33	12-9	Req 12.8, 2nd bullet	Just before the period at the end of the sentence, add " (see Annex G)"	Annex G provides clarification of the contents for the response to GET DATA for CPA templates
124	12-16	Req 12.13	Change "P!" tp"P1"	Typographical correction
34	12-18	12.7.2.1	Add "(see also figure 18-8 in section 18.7.2.2)" to the end of the sentence immediately above Req 12.25	Editorial clarification
35	15-11	Table 15-1	In fifth row, change "Cyclic Accumulator X" to "Cyclic Accumulator x"	Typographical correction
36	15-23	15.5.3	Change "Authentication Token" to "Token Authentication"	Editorial correction
318	15-24	Table 15-6	in the column for section, row for Additional Check Table x Check, change "0" to "15.5.3.1"	Typographical correction
37	15-32	Req 15.32	Change 'Number of Issuer Script Commands Containing Secure Messaging Processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging'.	Editorial correction to match CCD update bulletin
302	15-36	15.5.3.15, paragraph 1	Change "a cumulative amount of offline transactions has been exceeded" to "a cumulative amount of transactions has been exceeded"	Editorial correction
303	15-36	15.5.3.15, paragraph 2	Change "may accumulate transactions approved offline" to "may accumulate approved transactions"	Editorial correction
304	15-36	15.5.3.15, 2nd note	Change "amount of offline transactions" to "amount of transactions"	Editorial correction
305	15-39	15.5.3.16, paragraph 1	Change "a cumulative amount of offline transactions has been exceeded" to "a cumulative amount of transactions has been exceeded"	Editorial correction
306	15-39	15.5.3.16, paragraph 2	Change "Accumulator x accumulates transactions approved offline where" to "Accumulator x may accumulate approved transactions where"	Editorial correction
307	15-39	15.5.3.16, 2nd note	Change "amount of offline transactions" to "amount of transactions"	Editorial correction
38	15-45	Table 15-7	Move the table to follow the line "set the 'Lower Offline Transaction Count Limit Exceeded' bit in the CVR to 1b" (moves the table to the end of the requirement).	Editorial clarification – prevents reader confusion resulting from separating two parts of the requirement around the table.
39	15-68	Req 15.80 header	Change "Token Authentication profile" to "Token Authentication Profile"	Typographical correction

#	Page	CPA Reference	Change	Reason
40	15-68	Table 15-9 title	Change "Authentication Token" to "Token Authentication"	Editorial correction
322	15-75	Flow 15-1	In the off-page connector at the bottom of the flow, change "Auth. Token" to "Token Auth."	Editorial correction
41	15-78	Flow 15-1.3	Change 'Number of Issuer Commands Containing Secure Messaging Successfully Processed' to 'Number of Successfully Processed Issuer Commands Containing Secure Messaging' in the box labeled 15.5.3.8.	Editorial correction to match CCD update bulletin
42	15-101	Flow 15-6.3	In the detail for Build Issuer Application Data, change "CCI" to "CCI from Issuer Options Profile Control"	Editorial correction
43	15-101	Flow 15-6.3	In the detail for Build Issuer Application Data, change "DKI" to "DKI from Issuer Options Profile Control"	Editorial correction
323	15-103	Flow 15-7	In the off-page connector at the top of the flow, change "Auth. Token" to "Token Auth."	Editorial correction
44	15-103	Flow 15-7	Change "Authentication Token" to "Token Authentication" in two places: the caption in the flow, and the title at the bottom of the page	Editorial correction
324	15-103	Flow 15-7	Change "CCI, 'A5' " to "CCI from Issuer Options Profile Control"	Editorial correction
325	15-103	Flow 15-7	Change "DKI, issuer-discretionary' " to "DKI from Issuer Options Profile Control"	Editorial correction
45	15-103	Flow 15-7	In the detail for Build Issuer Application Data, change two instances of "Length" to "Length Indicator"	Editorial correction
46	15-103	Flow 15-7	In the last item in the detail for Build Issuer Application Data, change "Issuer-discretionary" to "Issuer Discretionary Data"	Editorial correction
47	15-103	Flow 15-7	Change the value of the top label to 15.5.2	Typographical correction
326	15-110	Flow 15-12	In the top box of the flow, change "table" to "Table"	Editorial correction
48	15-110 & 15-111	Flow 15-12 and flow 15-12.1	Add in first diamond in flow 15-12: "or Number of Blocks<2, or (Block Size+3)>length of Additional Check Table" Add new diamond in flow 15-12.1, first action in the loop: "Index + Block size – 1> length of Additional Check Table", return (error condition) if yes, continue if no	Clarification that ensures defined behaviour with a poorly-configured Additional Check Table
49	15-118	Flow 15-16	At bottom of page change ""(No more records)" to "(No more entries)"	Editorial correction – Currency conversion entries are not records.
301	15-119	Flows 15-16.1	Change the decision diamond text from "Conversion exponent > 128 [bit 8 set] ?" to "Conversion exponent ≥ 128 [bit 8 set] ?"	Ensures correct handling of a Currency Conversion Exponent of with value 128.
50	15-125	Flows 15-20.1	Replace the text in the box on the branch from "Overflow?" labelled Y with text saying "Set Amount in MTA currency to '999999999999' (max)". The output of the modified box is moved to point into the decision diamond "Amount in MTA currency > MTA Limit?"	editorial correction to align flow with text
51	15-127	Flow 15-21.1	Add a label at the top of flow with value 15.5.8.3	Editorial clarification
52	15-128	Flow 15-21.2	Add a label at the top of flow with value 15.5.8.3.	Editorial clarification
53	15-129	Flow 15-21.3	Add a label at the top of flow with value 15.5.8.3	Editorial clarification
54	15-131	Flow 15-22.1	Add a label at the top of flow with value 15.5.3.22	Editorial clarification

#	Page	CPA Reference	Change	Reason
55	17-16	Flow 17-1	Change "Issuer Authentication successful?" to "Issuer Authentication Passed?", as it is in the text in 17.5.3.1	Editorial clarification
56	17-27	Req 17.30	Change "Velocity-Checking Indicators and Counters" to "Velocity-Checking Counters"	Editorial correction of a bit name
57	17-28	Req 17.31	Correct to the following: **Req 17.31 (Reset Last Online Transaction Date when Issuer Authentication failed):** *If **all** of the following are true:* • *the 'Issuer Authentication Required to Pass when performed' bit in the Application Control has the value 0b,* • ***and** the 'Issuer Authentication Requirements Apply to Resetting of Velocity-Checking Counters' bit in the Application Control has the value 0b,* • ***and** the terminal requested a TC type Application Cryptogram in the second Generate AC command,* • ***and** the 'Reset Maximum Number of Days offline with online response' bit in the Issuer Options Profile Control has the value 1b,* *then:* • *if the Transaction Date format is valid (see Req 17.13), the application shall reset the Last Online Transaction Date to the value of the Transaction Date.* • *if the Transaction Date format is not valid, the application shall set the 'Check Failed' bit in the CVR to the value 1b*	Editorial correction. In the published draft, the last bullet before "then" should have been part of the first bullet after "then". The new text corrects this, and also corrects a bit name.
58	17-31	Req 17.37	Delete 'set the' duplicated in last bullet	Typographical correction
59	17-42	Req 17.52	Change req 17.52 to the following: If **both** of the following are true: • the 'Issuer Authentication Required to be Performed' bit in the Application Control has the value 0b, • **and** the terminal requested an AAC type Application Cryptogram in the second Generate AC command, then after completing the other processing in this section, the application shall decline the transaction as described in section 17.5.6 and section 17.5.8.	Correction of mismatch between flow and text
308	17-47	17.5.4.1.2, paragraph 1	Change "a cumulative amount of offline transactions has been exceeded" to "a cumulative amount of transactions has been exceeded"	Editorial correction
60	17-48	17.5.4.1.2	Remove footnote 11.	Editorial correction
309	17-49	17.5.4.1.3, paragraph 1	Change "a cumulative amount of offline transactions has been exceeded" to "a cumulative amount of transactions has been exceeded"	Editorial correction
310	17-51	17.5.4.1.4, paragraph 1	Change "a count of offline transactions has been exceeded" to "a count of transactions has been exceeded"	Editorial correction
311	17-53	17.5.4.1.5, paragraph 1	Change "an upper limit for the count of offline transactions has been exceeded" to "the upper limit for a count of transactions has been exceeded"	Editorial correction
61	17-65	Req 17.86	Change 'Number of Issuer Script Commands Containing Secure Messaging Processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging'.	Editorial correction to match CCD update bulletin
62	17-75	Flow 17-3	Change exit point labelled "issuer auth ok" to "issuer auth. passed"	Editorial correction to match associated text

#	Page	CPA Reference	Change	Reason
63	17-78	Flow 17-6	Change entry point in flow to "issuer auth. passed"	Editorial correction to match associated text
64	17-78	Flow 17-6	Change title to "Issuer Authentication Passed"	Editorial correction to match associated text
65	17-79	Flow 17-6.1	Change title to "Issuer Authentication Passed, continued"	Editorial correction to match associated text
66	17-80	Flow 17-6.2	Change title to "Issuer Authentication Passed, continued"	Editorial correction to match associated text
67	17-81	Flow 17-6.3	Change title to "Issuer Authentication Passed, continued"	Editorial correction to match associated text
68	17-82	Flow 17-6.4	Change title to "Issuer Authentication Passed, continued"	Editorial correction to match associated text
69	17-83	Flow 17-6.5	Change title to "Issuer Authentication Passed, continued"	Editorial correction to match associated text
70	17-91&92	Flow 17-9.5&17-9.6	Add a label at the top of flow with value 17.5.4.2.2	Editorial clarification
71	17-96	Flow 17-11.2	Move label with value 17.5.8.4 at the top of flow	Editorial clarification
72	17-100	Flow 17-13.1	Add a label at the top of flow with value 17.5.3.1.3	Editorial clarification
73	17-103	Flow 17-15.1	Add a label at the top of flow with value 17.5.3.1 and 17.5.3.2	Editorial clarification
74	17-105 &106	Flow 17-16.1&2	Add a label at the top of flow with value 17.5.8.1	Editorial clarification
75	17-108	Flow 17-17.1	Add 17.5.3.2 to the label at the top of the flow	Editorial error
76	17-109 &110	Flow 17.18 & 17-18.1	Add a label at the top of flow with value "Subsections of 17.5.3 and 17.5.4"	Editorial clarification
77	17-115	Flow 17-19.4	Change 'Number of Issuer Script Commands Containing Secure Messaging Processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging' in the box labeled 17.5.7.8.	Editorial correction to match CCD update bulletin
78	17-117	Flow 17-20.1	Add a label at the top of flow with value 17.5.4.1.6	Editorial clarification
79	17-120	Flows 17-22	Add a "?" at the end of the text in the decision diamond with text "Currency Conversion Table ID = 'F' "	Typographical correction
80	17-120	Flows 17-22	Modify the following three arrows to point into a box with text "set 'MTA limit exceeded' bit in the ADR to 0b" which then has an arrow out of it pointing into the "return" symbol: • the "Y" arrow out of the decision diamond with text "Currency Conversion Table ID = 'F'?" • the "N" arrow out of the decision diamond with text "MTA Currency Code = Target Currency Code of Currency Conversion Table?" • the "not convertible" arrow out of the decision diamond with text "Transaction Currency found in one of Currency conversion table entries (convertible)?"	Editorial correction to align flow with text

#	Page	CPA Reference	Change	Reason
81	17-120	Flows 17-22	On the "Y" output branch from the "Overflow" decision diamond, modify the text in the "Set 'MTA limit exceeded bit' in ADR to 1b" box to read "Set Amount in MTA currency to '999999999999' (max)". The output from this box should point into the off-page connector "R", instead of to the "Return" symbol.	Editorial correction to align flow with text
82	17-121	Flow 17-22.1	Add a label at the top of flow with value 17.5.4.1.1	Editorial clarification
83	17-128	Flow 17-27	Add a label on the decision diamond at the top of flow with value 17.5.2	Editorial clarification
84	17-132	Flow 17-30.1	Add a label at the top of flow with value 17.5.8.3	Editorial clarification
85	17-132	Flow 17-30.1	In Flow 17-30.1, "Position + Block Size >" will be changed to "Position - 1 + Block Size >" . The decision diamond in which the change is made will be preceded by a decision diamond with "Position = 0?", with an N arrow pointing into the previously corrected decision diamond, and a Y arrow pointing into the box labeled "Index=Index+2"	Editorial error
86	18-3	Section 18.2.2 (two occurrences)	Change 'Number of issuer script commands containing secure messaging processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging' in the first bullet for both Second Card Action Analysis (current transaction) and Card Action Analysis (subsequent transaction)	Editorial correction to match CCD update bulletin
87	18-4	Table 18-1	Change 'Number of issuer script commands containing secure messaging processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging' in the description for CVR.	Editorial correction to match CCD update bulletin
88	18-15	Fig 18-2	In the top box of the first page of the flow, add below the existing text: "Set 'Script Received' flag to 1b"	Editorial correction – The flag is used in chapter 17, so should have been set with the PTH bit.
89	18-15	Flow	Add label on the ('Script Failed' Flag..) decision diamond with value 18.5.4.	Editorial clarification
90	18-15	Flow	Add a label on the "New Lc = '06' " diamond with value 18.6.2.	Editorial clarification
91	18-15	Flow	Add a label on the 'Script Received'… box at the top of the flow with value 18.6.1.	Editorial clarification
92	18-16	Flow	Add label at top of flow with value 18.6.2	Editorial clarification
93	18-23	18.7.2.2	Add the following figure immediately above Req 18.29: | C	N	P	P	P	P	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	F	F | where: C = Control field – 4 bit binary number with value of '2' N = PIN length – 4 bit binary number with value in the range from '4' to 'C' P = PIN Digit – 4 bit binary number with value in the range from '0' to '9' P/F = PIN Digit or Filler – determined by the PIN length F = Filler – 4 bit binary number with value of 'F' **Figure 18-8: New PIN Block Format**	Editorial clarification

#	Page	CPA Reference	Change	Reason
95	18-24	Flow	Add a label at the top of flow with value 18.7.1	Editorial clarification
94	18-24	Fig 18-4	In the top box of the first page of the flow, add below the existing text: "Set 'Script Received' flag to 1b"	Editorial correction – The flag is used in chapter 17, so should have been set with the PTH bit.
96	18-24	Flow	Add label between 'Script Failed' decision diamonds (below the note) with value 18.5.4	Editorial clarification
97	18-27	Flow	Move label (18.7.2.2) to top of flow	Typographical correction
98	18-28	Flow	Add a label at the top of flow with value 18.7.2.2	Editorial clarification
334	18-30	Reg 18.33	Change "should respond with SW1 SW2 = '6A86' (Incorrect Parameters P1 P2)." to "should respond with SW1 SW2 = '6A88' (Referenced data object not found)."	Editorial correction to align text with flow – response is appropriate for updates to both primitive data and template data
100	18-35	Flow	Add a label at the top of flow (Set 'Script Received' bit…) with value 18.8.1	Editorial clarification
99	18-35	Fig 18-6	In the top box of the first page of the flow, add below the existing text: "Set 'Script Received' flag to 1b"	Editorial correction – The flag is used in chapter 17, so should have been set with the PTH bit.
101	18-35	Flow	Change the top label from "18.8.2" to "18.8.1.1"	Typographical correction
102	18-35	Flow	Add a label on decision diamond ('Script Failed' Flag…) with value 18.5.4	Editorial clarification
103	18-35	Flow	Change the label '"18.8.3" to "18.8.2"	Typographical correction
104	18-36	Flow	Add a label at the top of flow with value 18.8.2	Editorial clarification
105	18-37	Flow	Change the label '"18.8.3" to "18.8.2"	Typographical correction
107	18-45	Flow	Add a label at the top of flow with value 18.9.1	Editorial clarification
106	18-45	Fig 18-8	In the top box of the first page of the flow, add below the existing text: "Set 'Script Received' flag to 1b"	Editorial correction – The flag is used in chapter 17, so should have been set with the PTH bit.
108	18-45	Flow	Add a label on decision diamond ('Script Failed' Flag…) with value 18.5.4	Editorial clarification
109	18-45	Flow	Add a label on decision diamond (SFI=?) with value 18.9.1.1	Editorial clarification
110	18-46	Flow	Add a label at the top of flow with value 18.9.2	Editorial clarification
111	18-47	Flow	Add a label at the top of flow with value 18.9.2	Editorial clarification
112	21-5	Table 21-3	Add a footnote to the text in the Condition Column for both the PIN Try Counter and PIN Try Limit rows with the following text, "If both the 'Offline Plaintext PIN Verification Supported' and the 'Offline Enciphered PIN Verification Supported' bits in the Application Control have the value 0b, this data element does not need to be personalised.	Clarification that the PIN-related data elements need not be personalised if the application is personalised not to support offline PIN verification.
113	21-8	Table 21-9	Change the size for Accumulator Data to: N * (24 or 36) Add a footnote after the ")" with text: N * (x or y) should be interpreted as (M1 * x) + (M2 * y), where N=M1+M2, x is the number of elements with length M1, and y is the number of elements with length M2.	Editorial correction – include the length of the tags and lengths of sub-data elements within a template in the value for the length of a template

#	Page	CPA Reference	Change	Reason
114	21-8	Table 21-9	Change the size for Accumulator Profile Controls to: N * 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
115	21-8	Table 21-9	Change Accumulator x Controls to Accumulator Controls	Editorial correction
116	21-8	Table 21-9	Change the size for Accumulator Controls to: N * 6	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
117	21-8	Table 21-9	Change the size for Additional Check Tables to: Sum of (3 + var.) [i]	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
118	21-8	Table 21-9	Change the size for CIACs Entries to: N * 21	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
119	21-8	Table 21-9	Change the size for Counter Data to: N * (9 or 11) Add a footnote after the ")" with text: N * (x or y) should be interpreted as (M1 * x) + (M2 * y), where N=M1+M2, x is the number of elements with length M1, and y is the number of elements with length M2.	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
120	21-8	Table 21-9	Change the size for Counter Profile Controls to: N * 4	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
121	21-8	Table 21-9	Change Counter X Controls to Counter Controls	Editorial correction
122	21-8	Table 21-9	Change the size for Counter Controls to: N * 4	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
123	21-9	Table 21-9	Change the size for Currency Conversion Tables to: N* Sum of (5 + (n * 5))	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
125	21-9	Table 21-9	Change the size for Cyclic Accumulator Profile Controls to: N * 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
126	21-9	Table 21-9	Change "Cyclic Accumulator X Controls" to "Cyclic Accumulator Controls", and change the size for Cyclic Accumulator Controls to: N * 6	Editorial correction – delete typo and include the length of the tags and lengths of sub-data elements within the template

#	Page	CPA Reference	Change	Reason
127	21-9	Table 21-9	Change the size for Issuer Options Profile Controls to: N * 10	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
128	21-9	Table 21-9	Change the size for Limits Entries to: N * 9	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
129	21-10	Table 21-9	Change the length for Maximum Transaction Amount Profile Controls to: N * 7	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
130	21-10	Table 21-9	Change the length for GPO Parameters to: N * 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
131	21-10	Table 21-9	Change the length for Profile Controls to: N * 11	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
132	21-10	Table 21-9	Change the length for AIP/AFL Entries to: N * Sum of (3 + var.)	Editorial correction – include the length of the tags and lengths of sub-data elements within the template. The var. includes the 3 bytes for AIP and AFL Length.
133	21-11	Req 21.13	Change "Table 21-11" to "Table 21-10"	Editorial correction
139	21-13	Table 21-11	Add a footnote to the column heading for "Length" with text: "The length for each TLV-coded profile resource in a template includes the lengths of the tag, length, and value fields for each profile resource in the template."	Editorial clarification
134	21-13	Table 21-11	Change the value in the Max # column for Accumulators to 15.	Correction, the value 'F' is also valid.
135	21-13	Table 21-11	Change the length for Accumulator Controls to 6	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
136	21-13	Table 21-11	Change the value in the Max # column for Accumulator Controls to 15.	Correction, the value 'F' is also valid.
137	21-13	Table 21-11	Change the length for Accumulator Profile Controls to 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template

#	Page	CPA Reference	Change	Reason
138	21-13	Table 21-11	Change the length for Accumulators Data to "24 or 36".	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
140	21-13	Table 21-11	Change the value in the Max # column for Accumulators Data to 15.	Correction, the value 'F' is also valid.
141	21-13	Table 21-11	Change the value in the Max # column for Additional Check Tables to 15.	Correction, the value 'F' is also valid.
333	21-13	Table 21-11	Add a footnote to the "Var." in the Additional Check Tables row with the following text: "Each Additional Check Table supports at a minimum up to 18 bytes in the value field for each tag in the template."	Clarification of related requirement in section 15.5.3.1.
142	21-13	Table 21-11	Change the value in the Max # column for AIP/AFL Entries to 15.	Correction, the value 'F' is also valid.
143	21-13	Table 21-11	Change the length for CIACs Entries to 21	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
144	21-13	Table 21-11	Change the value in the Max # column for CIAC Entries to 15.	Correction, the value 'F' is also valid.
145	21-14	Table 21-11	Add a footnote to the column heading for "Length" with text: "The length for each TLV-coded profile resource in a template includes the lengths of the tag, length, and value fields for each profile resource in the template."	Editorial clarification
146	21-14	Table 21-11	Change the value in the Max # column for Counters to 15.	Correction, the value 'F' is also valid.
147	21-14	Table 21-11	Change the length for Counter Controls to 4	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
148	21-14	Table 21-11	Change the value in the Max # column for Counter Controls to 15.	Correction, the value 'F' is also valid.
149	21-14	Table 21-11	Change the length for Counter Profile Controls to 4	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
150	21-14	Table 21-11	Change the length for Counters Data to "9 or 11".	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
151	21-14	Table 21-11	Change the value in the Max # column for Counters Data to 15.	Correction, the value 'F' is also valid.

#	Page	CPA Reference	Change	Reason
152	21-14	Table 21-11	In Currency Conversion Tables row, change the value in Min # column from "3" to "2". Add a footnote on the new value 2 with the following text: "Each table shall support at a minimum up to 5 currency conversion parameters (that is, at a minimum up to 10 currency conversion parameters can be personalized)."	Clarification
153	21-14	Table 21-11	Change "Cyclic Accumulator x Data" to "Cyclic Accumulators".	Typographical correction
154	21-14	Table 21-11	Change the value in the Max # column for Cyclic Accumulators to 15.	Correction, the value 'F' is also valid.
155	21-14	Table 21-11	Change the length for Cyclic Accumulator Controls to 6	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
156	21-14	Table 21-11	Change the value in the Max # column for Cyclic Accumulator Controls to 15.	Correction, the value 'F' is also valid.
157	21-14	Table 21-11	Change the length for Cyclic Accumulator Profile Controls to 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
158	21-14	Table 21-11	Add the following row into the table above the row for GPO Parameters: tag 'BF42' in the row for Cyclic Accumulator Cyclic Accumulators Data / Tag 'DF0x' = Cyclic Accumulator x / Tag 'DF1x' = Cyclic Accumulator x Reference Date / Tag 'DF2x' = Cyclic Accumulator x Reference Day 'BF42' 20 2 15	Correction – addition of missing row, plus include the length of the tags and lengths of sub-data elements within the template
159	21-14	Table 21-11	Change the length for GPO Parameters to 5	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
160	21-14	Table 21-11	Change the value in the Max # column for GPO Parameters to 15.	Correction, the value 'F' is also valid.
161	21-14	Table 21-11	Change the length for Issuer Options Profile Controls to min. 10	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
162	21-14	Table 21-11	Change the value in the Max # column for Issuer Options Profile Controls to 15.	Correction, the value 'F' is also valid.
163	21-14	Table 21-11	Change the length for Limits Entries to 9	Editorial correction – include the length of the tags and lengths of sub-data elements within the template

#	Page	CPA Reference	Change	Reason
164	21-15	Table 21-11	Change the length for MTA Profile Controls to 7	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
165	21-15	Table 21-11	Change the length for Profile Controls to "Min. 11"	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
332	21-30	Paragraph before Table 21-25	Change the paragraph to the following: "For DGIs with the first byte equal to 'ss', where the value of 'ss' is the value coded on bits 8-4 of the first byte of Profile Selection File Entry; the first byte indicates the SFI in which the data is to be stored, and the second byte indicates the record number within the SFI. 'ss' ranges in value from '15' to '1E' and 'rr' ranges in value from '01' to the maximum number of Profile Selection Entries supported by the application (at least '0F', see Req 9.10)."	Correction related to items 30 and 298 (an SFI is coded on bits 8-4 in the first byte of Profile Selection File Entry, but for personalisation the SFI is coded on bits 5-1 in the first byte of the DGI) and clarify that more than 15 Profile Selection Entries are allowed (but not required)
166	21-31	Table 21-26	Add the following row: '3F42' Template 'BF42': Cyclic Accumulators Data – No CPA	Correction – addition of missing item
167	21-36	Req 21.33 and 21.34 headers	Change "Token Authentication profile" to "Token Authentication Profile"	Typographical correction
168	21-37	Req 21.35	In the 1st bullet, change "If the Profile processes domestic transactions, at least" to "If the Profile processes domestic transactions which could be approved offline, then at least" In the 2nd bullet, change "then the transactions that would not be accumulated" to "then the offline approved transactions that would not be accumulated"	Clarification that CCD only requires offline approved transactions to be counted. CCD minimum counters do not require accumulation or counting of transactions for online-only cards.

#	Page	CPA Reference	Change	Reason

338	21-37	Req 21.35	In the 1st bullet and the associated sub-bullets, change "at least one Accumulator x Control ID shall be personalized to a value y, where **all** of the following are true:
			
			   – y does not equal 'F'
			   – **and** the 'Allow Accumulation' bit in Accumulator Control y has the value 1b
			   – **and** the 'include Offline Approvals' bit in Accumulator Control y has the value 1b.
			
			to: "at least one Accumulator Profile Control ID for Accumulator x shall be personalized to a value y, where **all** of the following are true:
			   – y does not equal 'F'
			   – **and** the 'Allow Accumulation' bit in Accumulator Profile Control y has the value 1b
			   – **and** the 'include Offline Approvals' bit in Accumulator x Control has the value 1b.
				Editorial correction – some of the options are in an Accumulator Profile Control, not an Accumulator x Control.

169	21-40	Req 21.38	Modify the first bullet to the following: "At a minimum, the issuer shall be able to request up to 2k (2048) bytes of memory to store EMV records for CPA if the Dynamic-RSA implementer-option is supported by the application." And add the following new bullet after the first bullet: "At a minimum, the issuer shall be able to request up to 1.5k (1536) bytes of memory to store EMV records for CPA if the Dynamic-RSA implementer-option is not supported by the application."	Clarification that the minimum memory supported for EMV record data depends on whether the application supports the dynamic RSA implementer-option.
170	21-43	Req 21.50	Add the following to the end of the requirement: "*If Profile Control x is not present in the application (where x is the value of the Profile Control ID selected for the transaction); then the application shall discontinue processing the GENERATE AC command, shall respond with an SW1 SW2 that indicates an error, and should respond with SW1 SW2 = '6A88' (Referenced data not found).* **Note:** The Profile Control might be missing for the second Generate AC command if there was an error in a script update to the Profile Control template."	Clarification
171	21-43	Req 21.51	Add the following to the end of the requirement: "*If the Application Control is not present in the application; then the application shall discontinue processing the GENERATE AC command, shall respond with an SW1 SW2 that indicates an error, and should respond with SW1 SW2 = '6A88' (Referenced data not found).* **Note:** The Application Control might be missing for the second Generate AC command if there was an error in a script update to the Application Control."	Clarification
172	21-45	Requirement 21.64	Delete ", and the Profile ID selected for the transaction does not have the value '7E' " from the requirement text.	Correction – the Issuer Options Profile Control is also needed for Profile '7E'.

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#	Page	CPA Reference	Change	Reason
173	A-2	Table A-1	Position in GPO Command Data row, Data Element Column: Change "Position in GPO Command Data" to "Position in GPO Input Data". Change Description to the following: "Indicates the starting position (in bytes) of the portion of data extracted from GPO Input Data[1] and optional Profile Selection Diversifier that is compared to the Comparison Value(s) in this Profile Selection Entry. If the first byte of GPO Input Data is checked against the Comparison Value(s), then the value of Position in GPO Input Data is '01'." Add footnote 1 text, "If the Profile Selection Using Card Data implementer-option is supported by the application, then the Profile Selection Diversifier is concatenated before the GPO Input Data before the data is extracted for Profile Selection Entry processing. In this case, if Position in GPO Input Data has the value '01', then the Profile Selection Diversifier is the first byte of the extracted data. See section A3."	Editorial clarification
174	A-2	Table A-1	Comparison Block Length row, Description column: Change "GPO Command Data" to "GPO Input Data"	Editorial clarification
175	A-2	Table A-1	Number of Comparison Blocks row, Description column: Change "GPO Command Data" to "GPO Input Data (and optional Profile Selection Diversifier)".	Editorial clarification
176	A-2	Table A-1	Comparison Value row in Comparison Blocks, Description column: Change "GPO Command Data" to "GPO Input Data (and optional Profile Selection Diversifier)".	Editorial clarification
177	A-3	Table A-1	Check Type row, Description column: Change four instances of "GPO command data" to "GPO Input Data and optional Profile Selection Diversifier".	Editorial clarification
178	A-4	Table A-1	Positive Action row, Description column: Change "Indicates the action to be taken by the application if the Check Type test with the masked data extracted from the GPO Command Data and the Comparison Value(s) is …" to "Indicates the action to be taken by the application if the result of the Check Type test with the Comparison Value(s) and the masked data extracted from the GPO Input Data and optional Profile Selection Diversifier is …"	Editorial clarification
179	A-4	Table A-1	Negative Action row, Description column: Change "Indicates the action to be taken by the application if the Check Type test with the masked data extracted from the GPO Command Data and the Comparison Value(s) is …" to "Indicates the action to be taken by the application if the result of the Check Type test with the Comparison Value(s) and the masked data extracted from the GPO Input Data and optional Profile Selection Diversifier is …"	Editorial clarification
180	A-6	A2	Item 1: Change "GPO command data" to "GPO Input Data". Change "Position in GPO Command Data" to "Position in GPO Input Data".	Editorial clarification
181	A-6	A2	Item 3: Change three instances of "GPO command data" to "GPO Input Data and optional Profile Selection Diversifier" (in the first sentence of each check type description).	Editorial clarification
182	A-7	A2.1, 1st paragraph	Change three instances of "GPO Command Data" to "GPO Input Data".	Editorial clarification
184	A-7	A2.1, note	Change "GPO Command Data" to "GPO Input Data".	Editorial clarification
183	A-7	Fig A-3	Change "GPO command data" to "GPO Input Data".	Editorial clarification
185	A-8	A3, 1st note	Change "GPO Command Data" to "GPO Input Data".	Editorial clarification

#	Page	CPA Reference	Change	Reason
186	C-3	C2	Correct the end result for Conversion Parameter 1 from: " = '000000047222' ($472.22)" to " = '000000047221' ($472.21)"	Typographical correction
187	D-12	Table D-14	In the Source column, "Terminal Data (received as part of the first GENERATE AC command)" row, delete the data elements ATC and CID.	Editorial correction related to item 319
319	D-12	Table D-14	Add the following row below the modified Terminal Data row: Card Data — ATC — '001C' CID — '40' or '00'	Editorial correction related to item 187
188	D-13	Table D-16	In the Source column, "Terminal Data (received as part of the second GENERATE AC command)" row, delete the data elements ATC and CID.	Editorial correction related to item 320
320	D-13	Table D-16	Add the following row below the modified Terminal Data row: Card Data — ATC — '001C' CID — '40'	Editorial correction related to item 188
312	G-8	Figure G-5	Change the value in Figure G-5 from 'DF0102EC01DF0202FC02FFFFFFFFFF…FFFFFFFFFFFF' to 'DF0102E001DF0202F0020000000000…00000000000'	Editorial correction – incorrect values were used for the Accumulator Profile Controls and '00' is used for filler bytes instead of 'FF'
313	G-8	Table G-5	Modify Table G-5 to the following: **Data Element** — **Value** Accumulator Profile Control 1 — 'E001' Accumulator Profile Control 2 — 'F002'	Editorial correction – the wrong data element was illustrated
314	G-8	Table G-6	Change the Data in Table G-6 from '810ADF0102EC02DF0302FC028E04675B0CCA' to '810ADF0102E002DF0302F0028E04675B0CCA'	Editorial correction – the wrong data element was illustrated
315	G-8	Bullets following Table G-6	Change the two bullets at the bottom of page G-8 to the following: Accumulator Profile Control 1 (tag 'DF01') is to be updated to the value 'E002'. Accumulator Profile Control 3 (tag 'DF03') is to be added with value 'F002'.	Editorial correction – the wrong data element was illustrated
316	G-9	Figure G-6	Change the value in Figure G-6 from '**DF0102EC02**DF0202FC02**DF0302FC02**FFFFFFFFFF…' to '**DF0102E002**DF0202F002**DF0302F002**0000000000…'	Editorial correction – incorrect values were used for the Accumulator Profile Controls and '00' is used for filler bytes instead of 'FF'
317	G-9	Table G-7	Modify Table G-7 to the following: **Data Element** — **Value** Accumulator Profile Control 1 — 'E001' Accumulator Profile Control 2 — 'F002' Accumulator Profile Control 3 — 'F002'	Editorial correction – the wrong data element was illustrated
189	G-4	Table G-1	Change "Cyclic Accumulator x Data" to "Cyclic Accumulators Data".	Typographical correction
190	G-7	G.4.2	Change the first sentence of G4.2 to: "Prior to personalisation, an area of card memory is allocated for each profile resource template and is filled with filler bytes of value '00'."	Editorial clarification. There is no "default value" for the template contents defined by CPA.

#	Page	CPA Reference	Change	Reason
191	G-7	Fig G-4	Replace the value shown for "Remaining memory space for additional resources" with the following: '00 … … 00'	Use of '00' for filler bytes instead of 'FF' is consistent with EMV AN#22
192			*Deleted from list – duplicate of item 312*	
193			*Deleted from list – duplicate of item 316*	
194	H-1	H1, 2nd paragraph	Change "GPO command data" to "GPO Input Data and the optional Profile Selection Diversifier".	Editorial clarification
195	H-2	Fig H-1	Change "GPO command data" to "GPO Input Data" and delete "PSD (Profile selection diversifier byte)".	Editorial clarification
321	H-2	Fig H-1	In the list of data above the arrow from the box with the modified label (see edit 195) "GPO Input Data", change "PSD" to "PSD (Profile Selection Diversifier)", redirect the Card Data arrow to point to this modified PSD text, and add "- ………….." as a new item in the list of data below the modified PSD text.	Editorial clarification
196	H-3	Figure H-2	Change "Profile control 'x' " to "Profile Control x"	Typographical correction
197	H-5	H2	In the middle of the page, the second bullet of a three bullet group, change 'a CIAC triplets:' to 'a CIAC triplet:'	Typographical correction
198	H-9	Figure H-4	Change "Profile control x" to "Profile Control x"	Typographical correction
199	H-10	Figure H-5	Change "Profile control x" to "Profile Control x"	Typographical correction
200	H-11	Figure H-6	Change "Profile control x" to "Profile Control x"	Typographical correction
201	H-13	Figure H-7	Change "Profile control X" to "Profile Control x"	Typographical correction
202	H-15	Figure H-8	Change "Profile control X" to "Profile Control x"	Typographical correction
203	H-17	Figure H-9	Change "Profile control X" to "Profile Control x"	Typographical correction
204	H-20	Figure H-10	Change "Profile control X" to "Profile Control x"	Typographical correction
205	H-21	H-10	Change "Authentication Token" to "Token Authentication"	Typographical correction
206	H-21	H-10.2	Change "Authentication Token" to "Token Authentication" in three places: the section heading, and twice in the section text	Typographical correction
207	H-21	H-10.2	Change "card-holder" to "cardholder".	Typographical correction
208	I-6	Figure I-1	Change "Cyclic Accumulator X Control" to "Cyclic Accumulator x Control"	Typographical correction
209	I-6	Figure I-1	Change "Cyclic Accumulator X Data" to "Cyclic Accumulator x Data"	Typographical correction
328	I-12	Table I-5	Replace the row for Cyclic Accumulator x Data with the following new rows: <table><tr><td>Cyclic Accumulator x</td><td>'00 00 00 08 54 00'</td><td>Accumulated value = 854.00 Euros</td></tr><tr><td>Cyclic Accumulator x Reference Date</td><td>'05 07 15'</td><td>Reference Date = 15 July 2005</td></tr></table>	Editorial correction – clarify that the elements are TLV-coded.

#	Page	CPA Reference	Change			Reason
210	I-14	Table I-6	Replace the row for Cyclic Accumulator x Data with the following new rows:			Editorial correction– a weekly cyclic accumulator does not use the Reference Date portion of Cyclic Accumulator x Data and clarify that the elements are TLV-coded.
			Cyclic Accumulator x	'00 00 00 28 69 50'	Accumulated value = 2869.50 Euros	
			Cyclic Accumulator x Reference Day	'07 E0'	Reference Day = 2016	
329	I-16	Table I-7	Replace the row for Cyclic Accumulator x Data with the following new rows:			Editorial correction– clarify that the elements are TLV-coded.
			Cyclic Accumulator x	'00 00 01 51 09 45'	Accumulated value = 15109.45 Euros	
			Cyclic Accumulator x Reference Date	'05 07 15'	Reference Date = 15 July 2005	
330	I-18	Table I-8	Replace the row for Cyclic Accumulator x Data with the following new rows:			Editorial correction– clarify that the elements are TLV-coded.
			Cyclic Accumulator x	'00 00 01 49 89 45'	Accumulated value = 14989.45 Euros	
			Cyclic Accumulator x Reference Date	'05 07 15'	Reference Date = 15 July 2005	
331	I-20	Table I-9	Replace the row for Cyclic Accumulator x Data with the following new rows:			Editorial correction – clarify that the elements are TLV-coded.
			Cyclic Accumulator x	'00 00 00 08 54 00'	Accumulated value = 854.00 Euros	
			Cyclic Accumulator x Reference Date	'05 07 15'	Reference Date = 15 July 2005	
211	J-1	Table J-1	Change "Accumulator x Controls" to "Accumulator Controls"			Typographical correction
212	J-1	Table J-1	Change "Counter x Controls" to "Counter Controls"			Typographical correction
213	J-2	Table J-1	Change "Cyclic Accumulator x Controls" to "Cyclic Accumulator Controls"			Typographical correction
214	J-2	Table J-1	Change "Cyclic Accumulator x Data" to "Cyclic Accumulators Data"			Typographical correction
215	K-4	Table K-1	Change "Counter x Data" to "Counters Data"			Typographical correction
216	K-4	Table K-1	Change "Counter x Controls" to "Counter Controls"			Typographical correction
217	K-4	Table K-1	Change "Cyclic Accumulator x Controls" to "Cyclic Accumulator Controls"			Typographical correction
218	K-4	Table K-1	Change "Cyclic Accumulator x Data" to "Cyclic Accumulators Data"			Typographical correction
219	K-4	Table K-1	Add the following note at the bottom of the page: Note: Tags in the range 'DF01' to 'DF3F' are used in CPA templates, with the data element associated with each tag dependent on the template within which the tag is used.			Editorial clarification
220	L-3	GPO Command Data	Change "GPO Command Data" to "GPO Input Data".			Editorial clarification
221	L-3	GPO Command Data Length	Change "GPO Command Data Length" to "GPO Input Data Length".			Editorial clarification
222	L-4	(new)	Add new entry "Log Data Tables" with page "L-63" below entry "Limits Entry x"			Editorial correction
223	L-4	(new)	Add new entry "Maximum Transaction Amount (MTA) Currency Code" with page "L-67" below entry "Master Key for SMI"			Editorial correction

#	Page	CPA Reference	Change	Reason
224	L-7	Accumulator Profile Control x	Below "Template:…", add "Template Length: N * 5"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
225	L-8	Table L-2	Indent text in last row "Currency Conversion Not Allowed"	Typographical correction
226	L-8	Accumulator x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
227	L-8	Accumulator x	Change "Format: n" to "Format: n 12"	Editorial correction
228	L-9	Accumulator x Balance	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
229	L-9	Accumulator x Balance	Change "Format: 12 n" to "Format: n 12"	Typographical correction
230	L-10	Accumulator x Control	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
231	L-10	Accumulator x Control	Below "Template:…", add "Template Length: N * 6"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
232	L-11	Accumulator x Data	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
233	L-11	Accumulator x Data	Below "Template:…", add "Template Length: (24 * n) + (36 * m)" with a footnote on "Template Length" that says: "The total number of Accumulators x in the template = n + m, where n is the number of Accumulators with one set of Limits, and m is the number of Accumulators with two sets of Limits."	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
234	L-11	Accumulator x Data	Change Length to "See Table L-71"	Editorial Clarification
235	L-11	Accumulator x Data	Change Format to: See Table L-71	Editorial clarification
236	L-11	Accumulator x Data	Add the following after the last paragraph in the dictionary entry for Accumulator x Data: | Tag	Length	Data	Format
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'DF0x'	6	Accumulator x (value)	n12
'DF1x'	12 or 24	Accumulator x Limits	n12 for each Limit | **Table L-71: Accumulator x Data**	Editorial Clarification
237	L-11	Accumulator x Limits	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
238	L-11	Accumulator x Limits	Change Length to "12 or 24 per Accumulator x"	Editorial clarification

#	Page	CPA Reference	Change	Reason
239	L-11	Table L-5	Change the caption to "Table L-5: Accumulator x Limits"	Typographical correction
240	L-12	Additional Check Table x	Below "Template:…", add "Template Length: sum of (3 + var.)"	Editorial clarification
241	L-14	AIP/AFL Entry x	Below "Template:…", add "Template Length: sum of (3 + var.)"	Editorial clarification
242	L-14	AIP/AFL Entry x	Change the length to "var. up to 63"	Editorial clarification, see #336
243	L-14	AIP/AFL Entry x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
336	L-14	Table L-7, AIP/AFL Entry x	Change the column heading "Bytes 4-64" to "Bytes 4-63"	AFL length is a multiple of 4 bytes. The longest AFL that fits within the previous size definition is only 60 bytes long.
244	L-16	Below Table L-8, note 4	Change the end of the sentence from "….resetting of velocity-checking indicators and counters" to "…resetting of velocity-checking counters"	Editorial correction – see the name of the bit in Table L-8.
245	L-18	Application Control, Byte 4	Indent the text "Disables Payment Systems…" in the second row after header	Typographical correction
246	L-28	CIACs Entry x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
247	L-28	CIACs Entry x	Below "Template:…", add "Template Length: N * 21"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
248	L-33	Table L-29	indent text in Meaning column for last 4 rows of the table	Typographical error
249	L-35	Table L-35	Change 'Number of Issuer Script Commands Containing Secure Messaging Processed' to 'Number of Successfully Processed Issuer Script Commands Containing Secure Messaging' in CVR byte 4, bits 8-5.	Editorial correction to match CCD update bulletin
335	L-36	Cardholder Name Extended	Change tag to '9F0B', change length to "27-45", and change format to "ans 27-45".	Editorial correction to match EMV - Cardholder Name Extended is not the same as Cardholder Name
250	L-37	Common Core Identifier (CCI) Definition	Change the last sentence to "Should be set to the value 'A5' for CCD-compliant profiles. Taken from the Issuer Options Profile Control associated with the Profile selected for the transaction."	The CCI is set by personalisation, not by the application. Also, clarify where the application finds the value.
251	L-38	Counter Profile Control x	Below "Template:…", add "Template Length: N * 4"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
252	L-39	Counter x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.

#	Page	CPA Reference	Change	Reason
253	L-40	Counter x Control	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
254	L-40	Counter x Control	Below "Template:…", add "Template Length: N * 4"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
255	L-41	Counter x Data	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
256	L-41	Counter x Data	Below "Template:…", add "Template Length: (9 * n) + (11 * m)" with a footnote on "Template Length" that says: "The total number of Counters x in the template = n + m, where n is the number of Counters with one set of Limits, and m is the number of Counters with two sets of Limits."	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
257	L-41	Counter x Data	Change Length to "See Table L-72"	Editorial Clarification
258	L-41	Counter x Data	Add the following after the last paragraph in the dictionary entry for Counter x Data: | Tag	Length	Data	Format
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'DF0x'	1	Counter x (value)	binary
'DF1x'	2 or 4	Counter x Limits	binary | **Table L-72: Counter x Data**	Editorial Clarification
259	L-41	Table L-39	Change the caption to "Table L-39: Counter x Limits"	Typographical correction
260	L-41	Counter x Limits	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
261	L-41	Counter x Limits	Change Length to "2 or 4 per Counter x".	Editorial clarification
262	L-42	Currency Conversion Table x	Below "Template:…", add "Template Length: sum of (5 + (n * 5)), where n = the number of currencies in Currency Conversion Table x."	Editorial clarification
263	L-42	Currency Conversion Table x	Change Length to "2 + (n * 5)"	Editorial clarification
264	L-44	Cyclic Accumulator Profile Control x	Below "Template:…", add "Template Length: N * 5"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
265	L-44	Table L-43	Indent text in last row "Currency Conversion Not Allowed"	Typographical correction
266	L-45	Cyclic Accumulator x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
267	L-45	Cyclic Accumulator x Control	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.

#	Page	CPA Reference	Change	Reason
268	L-45	Cyclic Accumulator x Control	Below "Template:…", add "Template Length: N * 6"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
269	L-47	Cyclic Accumulator x Data	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
270	L-47	Cyclic Accumulator x Data	Below "Template:…", add "Template Length: N * 20"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
271	L-47	Cyclic Accumulator x Data	Change Format to: See Table L-46	Editorial clarification
272	L-47	Cyclic Accumulator x Data	Change Length to "See Table L-46"	Editorial correction – include the length of the tags and lengths of sub-data elements within the template
273	L-47	Cyclic Accumulator x Data	Change Table L-46 to the following: | Tag	Length	Data	Format
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'DF0x'	6	Cyclic Accumulator x (value)	n12
'DF1x'	3	Cyclic Accumulator x Reference Date	n6
'DF2x'	2	Cyclic Accumulator x Reference Day	binary		Editorial correction and consistency with Accumulator x Data and Counter x Data
274	L-47	Cyclic Accumulator x Reference Date	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
275	L-48	Cyclic Accumulator x Reference Day	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
276	L-48	Cyclic Accumulator x Reference Day	Change the beginning of the definition from "The Reference Day is" to: "For a weekly cyclic accumulator, the Reference Day is"	Editorial clarification
277	L-53	GPO Command Data	Change "GPO Command Data" to "GPO Input Data".	Editorial clarification
278	L-53	GPO Command Data Length	Change "GPO Command Data Length" to "GPO Input Data Length" in two instances – the data element name, and the paragraph after the description. In description, change "GPO Command Data" to "GPO Input Data".	Editorial clarification

#	Page	CPA Reference	Change	Reason
279	L-53	GPO Parameters x	Add "(x = 1 to 15)" to title	Clarification.
280	L-53	GPO Parameters x	Below "Template:…", add "Template Length: N * 5"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
281	L-53	GPO Parameters x	Change "GPO Command Data Length" to "GPO Input Data Length", and in the associated description change "GPO Command Data" to "GPO Input Data".	Editorial clarification
282	L-60	Issuer Options Profile Control x	Change "(x = 1 to 14)" to "(x = 1 to 15)"	Correction, the value 'F' is also valid.
283	L-60	Issuer Options Profile Control x	Below "Template:…", add "Template Length: Min. N * 10"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
284	L-63	Limits Entry x	Change Length to 6. Below "Template:…", add "Template Length: N * 9"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length, and the length of each Limit Entry is only the length of a single limit
285	L-63	(new)	Add entry to the dictionary for Log Data Tables. Definition: "Template that may contains the First Generate AC Log Data Table, First Generate AC Unchanging Log Data Table, and Second Generate AC Log Data Table that are used to log transactions." Template: 'BF40', Tag: 'DF01', 'DF02', 'DF03', Length: var., Format: b	Editorial clarification – description of Log Data Tables template.
300	L-64	Table L-56, row for Byte 1 of Log Entry	Change the value for Byte 1 to the following: "bits 5-1: SFI containing the cyclic transaction log file bits 8-6: RFU"	Clarification that the SFI is coded on bits 5-1 of byte 1.
286	L-67	(new)	Add entry to the dictionary for Maximum Transaction Amount (MTA) Currency Code. Tag: —, Length: 2, Format: n3, Definition: Indicates the currency in which a Maximum Transaction Amount (MTA) is configured. Coded according to ISO 4217.	Clarification of format for a subfield of MTA Profile Control x
287	L-68	MTA Profile Control x	Below "Template:…", add "Template Length: N * 7"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
288	L-68	Table L-59	Indent text in last row "Currency Conversion Not Allowed"	Typographical correction
289	L-69	Offline Balance Currency Code	Add the following paragraph at the end of page: "The Offline Balance Currency Code (tag 'C9') is not personalised and is not updateable with a PUT DATA using tag 'C9'. The Offline Balance Currency Code is updated by updating the Accumulator 1 Currency Code using the PUT DATA on template tag 'BF32', tag 'DF01'. "	Editorial clarification
290	L-70	PDOL Related Data	Change "GPO Command Data" to "GPO Input Data".	Editorial clarification

#	Page	CPA Reference	Change	Reason
291	L-74	Profile Control x	Add the following to the end of the text in the footnote on the field VLP Profile Control: "If the VLP implementer-option is not implemented, these bits are RFU."	Editorial clarification
292	L-74	Profile Control x	Below "Template:…", add "Template Length: Min. N * 11"	Editorial clarification – include the length of the tags and lengths of sub-data elements within the template length
293	L-75	Profile ID	Change "Authentication Token" to "Token Authentication"	Typographical correction
294	L-77	Table L-64	Position in GPO Command Data row, Data Element Column: Change "Position in GPO Command Data" to "Position in GPO Input Data". Change Description to the following: "Indicates the starting position (in bytes) of the portion of data extracted from the GET PROCESSING OPTIONS (GPO) Input Data[1] and optional Profile Selection Diversifier that is compared to the Comparison Value(s) in this Profile Selection Entry. If the first byte of GPO Input Data is checked against the Comparison Value(s), then the value of Position in GPO Input Data is '01'." Add footnote 1 text, "If the Profile Selection Using Card Data implementer-option is supported by the application, then the Profile Selection Diversifier is concatenated before the GPO Input Data before the data is extracted for Profile Selection Entry processing. In this case, if Position in GPO Input Data has the value '01', then the Profile Selection Diversifier is the first byte of the extracted data. See section A3."	Editorial clarification
295	L-77	Table L-64	Comparison Block Length row, Description column: Change "GET PROCESSING OPTIONS command data" to "GPO Input Data"	Editorial clarification
296	L-77	Table L-64	Comparison Value row in Comparison Blocks, Description column: Change "GPO command data" to "GPO Input Data (and optional Profile Selection Diversifier)".	Editorial clarification

#	Page	CPA Reference	Change	Reason
297	L-78	Table L-64, Profile Selection Entry x	Clarify the coding of the Positive and Negative Actions by changing the description of Positive Action to: "Action to take when the check is positive (TRUE): • '00' = Not allowed • '01' to '7E' = value of selected Profile ID • '7F' = discontinue processing the GPO command and respond with SW1 SW2 = '6985' • '80'= not allowed • '81' to 'FF' = move down a specified number ('xx' minus '80') of Profile Selection Entries in the file (where 'xx' = value of Positive Action)" Also, change the description of Negative Action to: "Action to take when the check is negative (FALSE): • '00' = Not allowed • '01' to '7E' = value of selected Profile ID • '7F' = discontinue processing the GPO command and respond with SW1 SW2 = '6985' • '80' = not allowed • '81' to 'FF' = move down a specified number ('xx' minus '80') of Profile Selection Entries in the file (where 'xx' = value of Negative Action)"	Editorial clarification
298	L-79	Table L-65, row for Byte 1 of Profile Selection File Entry	Change the value for Byte 1 to the following: "bits 8-4: SFI containing Profile Selection File bits 3-1: RFU"	Clarification that the SFI is coded on bits 8-4 of byte 1.
299	L-83	Security Limits Status	Remove the sentence "Security Limits Status is the concatenation of the values in Table L-68." above Table L-68.	Editorial correction