

Card Generation Interface Specification

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For the latest technical documentation, see the [Developer Portal](#).

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1 About this Document

This document describes the format for the GPS Card Generation XML Interface.
The interface allows card manufacturers to accept card generation files from GPS.

What's Changed?

If you want to find out what's changed since the previous release, see the [Document History](#) section.

1.1 How to use this Guide

If you want to find out about the file naming convention and different file format options available, see [About the Card Generation File](#).

To view an example file, see [Example File](#).

To view details of the fields in the XML files, see [XML Fields](#).

1.2 Related Documents

Refer to the table below for other documents which should be used in conjunction with this guide.

| Document | Description |
|------------------------------------|--|
| Web Services Guide | Describes how to use the GPS web services API to make agency banking requests. |
| EHI Guide | Provides details of the GPS External Host Interface (EHI). |
| Smart Client Guide | Describes Smart Client, which is an administration application that can be used to view and manage cards and transactions in your program. |

2 About the Card Generation File

2.1 File Naming Conventions

The file naming convention is flexible but by default, card interface files have the following naming convention:

On-Premise Customers (P0)

XXXX_PPPP_rrrr_bbbb.xml

GPS Cloud (P1 and P2)

XXXX_PPPP_rrrr_bbbb_Pn.xml

Where:

- **XXXX** – is the Institution name as held by Global Processing Services
- **PPPP** – is the first PRODUCT_REF (product reference) in the file
- **Rrrr** – is the number of records in the file
- **Bbbb** – is the unique GPS batch number
- **Pn** – is the production environment (2 digits), such as P1 and P2. (Not applicable to customers in our UK data centre production environment)

Example

CLI_PRODUCT1_124_1571_P1.xml

Note: The production environment variable is relevant to customers in one of our AWS Cloud-based production environments (P1 and P2) and does not apply to existing customers in our UK data centre production environment (P0). For details of which production environment applies to your programme, please check with your GPS implementation manager or account manager.

2.2 File Formats

The Card Generation XML file is available in the following formats:

- **1 – Cut-Down Format.** By default, you are provided with this format, which is similar to the file sent to the card bureau but with sensitive information removed. This file does not contain the following fields:
 - <TRACK1>
 - <TRACK2>
 - <CVV2>
 - the CHIP element which includes the fields: <CHIP> <CHIP_TRACK_1> <CHIP_TRACK_2> <CHIP_TRACK_1_MSD_CL> <CHIP_TRACK_2_MSD_CL> and <PINBLOCK>
- **2 – Full Format.** This format is provided on request and only to fully PCI-compliant clients. This file is the same as the one sent to the card bureau and includes the sensitive information above.
- **3 – Cut Down Format with masked PAN.** This format is provided on request and is the same as the Cut-Down Format but includes the masked PAN in the <PAN> element.

3 XML Fields

This section provides details of the fields included in the XML file.

| XMLTAG | Type | Length | Description | Nulls Allowed |
|-----------------------|------------|--------|---|---------------|
| <CARDGEN> | | | Header tag | N/A |
| <CARDSUM> | | | Summary file opening tag | N/A |
| <DATA_FORMAT_VERSION> | Varchar | 5 | File version | No |
| <FILEDATE> | dd-mm-yyyy | 10 | File date | No |
| <FILETIME> | hh-mm-ss | 10 | File time | No |
| <NO_OF_CARRIERS> | Integer | | Number of carriers | No |
| <NO_OF_CARDS> | Integer | | Number of cards | No |
| <NO_OF_PRODUCTS> | Integer | | Number of different products in the file (Mag stripe/chip etc) | No |
| <TXREF> | varchar | 30 | Transmission_Reference This is an incrementing reference number and may not be consecutive. | No |
| <ORDER_REF> | varchar | 30 | Customer order reference number | Yes |
| <PRODUCT> | | | Defines a product set | N/A |
| <PRODUCT_REF> | varchar | 50 | Identifies the product. Note: This is the physical card Design reference as used by the card printer. | No |
| <RECORD> | | | Defines a record within a Product | N/A |
| <REQUEST_TYPE> | varchar | 15 | Indicates whether the card is a “New” or “Replacement” card request For PIN Mailers, can be one of: PIN_MAILER NEW_WITH_PINM REPL_WITH_PINM | No |
| <UID> | Varchar | 20 | Unique identifier to identify the record. You can use this in error tracking. | No |
| <CARRIER> | | | Defines the Carrier section | N/A |
| <TITLE> | Varchar | 10 | Cardholder title | Yes |
| <FNAME> | Varchar | 20 | Cardholder first name | Yes |
| <SNAME> | Varchar | 30 | Cardholder surname | Yes |
| <ADD1> | Varchar | 50 | Cardholder address line 1 | Yes |
| <ADD2> | Varchar | 50 | Cardholder address line 2 | Yes |
| <ADD3> | Varchar | 50 | Cardholder address line 3 | Yes |
| <ADD4> | Varchar | 50 | Cardholder address line 4 | Yes |
| <CITY> | Varchar | 50 | Cardholder address city | Yes |
| <POSTCODE> | Varchar | 10 | Cardholder address postcode | Yes |
| <MOBILE> | Varchar | 50 | Mobile phone number linked to the card | Yes |
| <COUNTRY> | Varchar | 3 | Cardholder address country. Numeric 3-digit ISO 3166-1 Country code (e.g. 052 for Barbados). (Always 3 digits, use leading zeros if needed.) | Yes |
| <BULK_ADD1> | Varchar | 50 | Alternative delivery address line 1. If present, should be used in preference to | Yes |

| XMLTAG | Type | Length | Description | Nulls Allowed |
|--------------------|---------|--------|--|---------------|
| | | | carrier address. | |
| <BULK_ADD2> | Varchar | 50 | Alternative delivery address line | Yes |
| <BULK_ADD3> | Varchar | 50 | Alternative delivery address line 3 | Yes |
| <BULK_CITY> | Varchar | 50 | Alternative delivery address city | Yes |
| <BULK_COUNTY> | Varchar | 20 | Alternative delivery address count | Yes |
| <BULK_POSTCODE> | Varchar | 10 | Alternative delivery address postcode | Yes |
| <BULK_COUNTRY> | Varchar | 3 | Alternative address country. Numeric 3-digit ISO 3166-1 Country code (e.g. 052 for Barbados). (Always 3 digits, use leading zeros if needed.) | Yes |
| <CARRIER_TYPE> | Varchar | 30 | Defines carrier product. Note: This is the Carrier Product Design reference as used by the card printer. | No |
| <CARRIER_LOGO_ID > | Varchar | 20 | Defines an optional carrier logo. | Yes |
| <DELV_METHOD> | Char | 1 | The delivery method for the card: 0 = Standard mail (default) 1 = Registered mail 2 = Direct delivery (Courier) | No |
| <DELV_CODE> | Varchar | 12 | The delivery code for the card: If specified, all cards with the same delivery code are to be sent together to the specified BULK delivery address. Carriers with the same DELV_CODE will be grouped together in the file. | Yes |
| <FULFIL1> | Varchar | 50 | RFU (Reserved for Future Use) | Yes |
| <FULFIL2> | Varchar | 50 | RFU | Yes |
| <LANG> | Char | 2 | Defines the language of the carrier product, if it is not already defined by the <CARRIER_TYPE> elements. Uses ISO 639-1 language code. Examples: English is "en", French is "fr" | Yes |
| <CARD> | | | Card definition opening tag. | N/A |
| <TYPE> | varchar | 20 | Defines the product: "Mag" "Chip&PIN" "Chip&PIN&Contactless" | No |
| <CURRENCY> | Char | 4 | 4-digit ISO currency code. For example: "0826"= GBP | No |
| <TRACK1> | Varchar | 76 | Track 1 data for magnetic stripe, excluding the Start Sentinel, End Sentinel and LRC characters. Note: The ISO standard allows for maximum of 76 (excluding the Start Sentinel, End Sentinel and LRC characters). Track Layout MASTERCARD: B + PAN + ^ + Name + ^ + Expiry date in "yyMM" format + Service Code + 00000 + CVV1 + 0000000 VISA: B + PAN + ^ + Name + ^ + Expiry in "yyMM" format + Service Code + 00 + CVV1 + 000000 | No |
| <TRACK2> | Varchar | 37 | Track 2 data for the magnetic stripe, excluding Start Sentinel, End Sentinel and LRC characters. MASTERCARD: PAN + = + Expiry date in "yyMM" format + Service Code + 000000 + Validity in months + CVV1 + PAN Sequence No VISA: PAN + = + Expiry Date in "yyMM" format + Service Code + CVV1 + 00000 | No |
| <TRACK3> | Varchar | 104 | Track 3 data for the magnetic stripe, excluding Start Sentinel, End Sentinel and | Yes |

| XMLTAG | Type | Length | Description | Nulls Allowed |
|-----------------|-------------|--------|--|---------------|
| | | | LRC characters. ISO standard allows for a maximum of 104 characters (excluding Start Sentinel, End Sentinel and LRC). By default, GPS will put the Card 9-digit token in this element. | |
| <EMBOSS_PAN> | Integer | 19 | Embossed card Primary Account Number (PAN) | No |
| <EMBOSS_NAME> | varchar | 27 | Embossed card name. Actual maximum length will depend on the card design. | Yes |
| <EMBOSS_START> | Varchar | 10 | Embossed card start date (MM/YY) | No |
| <EMBOSS_EXPIRY> | Varchar | 10 | Embossed card expiry date (MM/YY) | No |
| <EMBOSS_CVC2> | varchar | 10 | Embossed card Verification Code 2 (CVC2) | No |
| <EMBOSS_LINE4> | Varchar | 27 | Embossed card line 4. Actual maximum length will depend on the card design. | Yes |
| <THERMAL_LINE1> | Varchar | 70 | Example, Company name | Yes |
| <THERMAL_LINE2> | Varchar | 120 | RFU | Yes |
| <IMAGE_ID> | Varchar | 20 | Identifies the image file that will be printed on the face of the card. | Yes |
| <LOGO_FRONT_ID> | Varchar | 30 | Identifies the logo file that will be printed on the face of the card. | Yes |
| <LOGO_BACK_ID> | Varchar | 30 | Identifies the image file that will be printed on the back of the card, if supported. | Yes |
| <QRCODE> | Varchar | 100 | Identifies the QR code that will be printed on the card, if supported. You can add separate values to each card using GPS Web Services. | Yes |
| <PINBLOCK> | Hexadecimal | 16 | Optional. Will only be present if the card is Mag stripe and the card requester requires online PIN. Used for PIN mailers. Format is the same as <PINBLOCK> in the <CHIP> section; see below. | Yes |
| <CHIP> | | | Defines the chip details. This element may not be present, depending on Card Type. | N/A |
| <TYPE> | varchar | 10 | Possible values: Maestro Mastercard VisaCard Euro Cirrus EuroCard Cirrus Maestro PLUS Card | Yes |
| <PAN> | Integer | 16-19 | Primary Account Number ISO 8583 bit 2 | Yes |
| <PAN_SEQ> | Integer | 2 | PAN Sequence number. ISO 8583 bit 23. Value from 00 to 99. | Yes |
| <NAME> | Varchar | 26 | Must match name embedded in Track 1 | Yes |
| <START_DATE> | Integer | 6 | YYMMDD | Yes |
| <EXPIRY_DATE> | Integer | 6 | YYMMDD | Yes |
| <SERVICE_CODE> | Integer | 3 | Three decimal digits as defined in ISO 7813. First digit: Use and Technology: 1 = International 2 = International, Chip | Yes |

| XMLTAG | Type | Length | Description | Nulls Allowed |
|-----------------------|-------------|--------|---|---------------|
| | | | 5 = National Use Only 6 = National Use Only, Chip 7 = Private Label 9 = Test Card Second digit: Authorisation requirements: 0 = Normal 2 = Online Authorisation Required 4 = Online Authorisation required unless special agreement Third digit: Service and PIN requirements: 0 = PIN Required 1 = No restrictions 2 = Purchases only 3 = ATM Only, PIN required 4 = Cash only 5 = Purchases only, PIN required 6 = Use PIN if possible 7 = Purchases only, use PIN if possible | |
| <CHIP_TRACK_1> | varchar | 76 | This is the entire chip track 1 for EMV transactions. It permits the derivation of EMV tag hex 9F1F (track 1 discretionary data as defined in ISO 7813) which is part of this. MASTERCARD: B + PAN + ^ + Name + ^ + Expiry date in "yyMM" format + Service Code + 00000 + iCVV + 0000000 VISA: B + PAN + ^ + Name + ^ + Expiry Date in "yyMM" format + Service Code + 00 + iCVV + 000000 | Yes |
| <CHIP_TRACK_2> | varchar | 38 | This is the EMV Track 2 equivalent data, for EMV tag hex 57. It is for EMV-based (including qVSDC) transactions (both contact and contactless) MASTERCARD: PAN + D + Expiry in "yyMM" format + Service Code + 000000 + Validity in months + iCVV + PAN Sequence No (If the length of CHIP_TRACK_2 is odd then will add "F" at the end) VISA: PAN + D + Expiry Date in "yyMM" format + Service Code + iCVV + 00000 (If the length of CHIP_TRACK_2 is odd then will add "F" at the end) | Yes |
| <CHIP_TRACK_1_MSD_CL> | Varchar | 76 | Optional. This element will only be present if the product type supports Contactless Magnetic Stripe Transactions. It is the base Track 1 for Contactless Magnetic Stripe (which is not EMV) transactions. MASTERCARD: For Mastercard, this is for tag hex 56 (PayPass Magstripe Track 1 Data.) (See Mastercard "PayPass MagStripe Technical Specifications v3.2 Oct 2006".) VISA: For Visa, if there is a separate data item on the ICC for the Track 1 exclusively for Magnetic Stripe Data (not EMV or qVSDC) then use this for it. Format is same as <CHIP_TRACK_1> except Name is replaced with space and forward slash i.e. " / ", and discretionary data may be different. | Yes |
| <CHIP_TRACK_2_MSD_CL> | Varchar | 37 | Optional. This element will only be present if the product type supports Contactless Magnetic Stripe transactions. It is the base Track 2 for contactless Magnetic Stripe (which is not EMV) transactions. MASTERCARD: For Mastercard, this is for tag hex 9F6B (PayPass Magstripe Track 2 Data.) (See Mastercard "PayPass MagStripe Technical Specifications v3.2 Oct 2006".) VISA: For Visa, if there is a separate data item on the ICC for the Track 2 exclusively for Magnetic Stripe Data (not EMV or qVSDC) then use this for it. Format is same as <CHIP_TRACK_2> but discretionary data may be different. | Yes |
| <PINBLOCK> | Hexadecimal | 16 | Holds the encrypted PIN to be placed on the chip card. Format is ISO 9564-1 Format 0 (same as ANSI X9.8 Format 0), triple DES encrypted with the double-length Zone PIN Key, expressed as 16 hex digits (with 2 hex digits representing 1 binary byte.) This is formed as: Plaintext PIN field = '0'+ PIN length (4-C) + PIN + 'F's padding to 16 hex digits. Account number field = '0000' + rightmost 12 digits of the PAN excluding the check digit. | Yes |

| XMLTAG | Type | Length | Description | Nulls Allowed |
|--------|------|--------|--|---------------|
| | | | Then XOR the 'Plaintext PIN field' and 'Account number field'. This is 16 hex digits representing 8 binary bytes. Then Triple-DES encrypt the resultant 8 binary bytes with the double length Zone PIN Key. Example: PAN = 5299887766554439 PIN = 223344 Zone PIN Key = 3B6870987613107CFB1F4C6EC17F3483 Plaintext PIN field = 06223344FFFFFFFF Account Number Field = 0000988776655443 Result of XOR = 0622ABC3899AABBC Encrypting this with the Zone PIN key gives result: 7553DAA289620533 So PINBLOCK is 7553DAA289620533 | |

3.1 XML Markup

Please note that certain characters are reserved for XML markup. When an XML parser encounters a reserved character, it assumes it has encountered an element, entity or markup statement. The following examples of reserved characters, and what you should replace this with if you need to include that character as data in the XML file:

| Reserved character | What you should use |
|--------------------|---------------------|
| < | < |
| > | > |
| & | & |
| ' | ' |
| " | " |

4 Example File

Below is an example of a typical XML file:

```
<?xml version="1.0" encoding="utf-8"?>
<CARDGEN>
  <CARDSUM>
    <DATA_FORMAT_VERSION>10</DATA_FORMAT_VERSION>
    <FILEDATE>26/03/2013</FILEDATE>
    <FILETIME>09-15-55</FILETIME>
    <NO_OF_CARRIERS>2</NO_OF_CARRIERS>
    <NO_OF_CARDS>2</NO_OF_CARDS>
    <NO_OF_PRODUCTS>1</NO_OF_PRODUCTS>
    <TXREF>1001</TXREF>
    <ORDER_REF>ABC-123</ORDER_REF>
  </CARDSUM>
  <PRODUCT>
    <PRODUCT_REF>DESIGN1</PRODUCT_REF>
    <RECORD>
      <REQUEST_TYPE>New</REQUEST_TYPE>
      <UID>52738099</UID>
      <CARRIER>
        <TITLE>Mr.</TITLE>
        <FNAME>Fred</FNAME>
        <SNAME>Jones</SNAME>
        <ADD1>Sample Company</ADD1>
        <ADD2>1 Sample Street </ADD2>
        <ADD3>Sample Borough </ADD3>
        <ADD4>Sample Address Line 4</ADD4>
        <CITY>Sample City</CITY>
        <POSTCODE>E1W2BS</POSTCODE>
        <COUNTRY>UK</COUNTRY>
        <BULK_ADD1></BULK_ADD1>
        <BULK_ADD2></BULK_ADD2>
        <BULK_ADD3></BULK_ADD3>
        <BULK_CITY></BULK_CITY>
        <BULK_COUNTY></BULK_COUNTY>
        <BULK_POSTCODE></BULK_POSTCODE>
        <BULK_COUNTRY></BULK_COUNTRY>
        <CARRIER_TYPE>CAR_1</CARRIER_TYPE>
        <CARRIER_LOGO_ID></CARRIER_LOGO_ID>
        <DELV_METHOD>0</DELV_METHOD>
        <DELV_CODE></DELV_CODE>
        <FULFIL1></FULFIL1>
        <FULFIL2></FULFIL2>
        <LANG>en</LANG>
      </CARRIER>
    </RECORD>
  </PRODUCT>
  <CARD>
    <TYPE>Mag</TYPE>
    <CURRENCY>0826</CURRENCY>
    <TRACK1>B1234567812345678^GIFTCARD/CORPORATE^1811122000009830000000</TRACK1>
    <TRACK2>1234567812345678=16102210000006064400</TRACK2>
    <TRACK3>953171211</TRACK3>
    <EMBOSS_PAN>1234 5678 1234 5678</EMBOSS_PAN>
    <EMBOSS_NAME>MR A B SAMPLE</EMBOSS_NAME>
    <EMBOSS_START>11/11</EMBOSS_START>
    <EMBOSS_EXPIRY>10/16</EMBOSS_EXPIRY>
    <EMBOSS_CVC2>1234 135</EMBOSS_CVC2>
    <EMBOSS_LINE4>A123 REG</EMBOSS_LINE4>
    <THERMAL_LINE1>Possible Company Name here</THERMAL_LINE1>
    <THERMAL_LINE2></THERMAL_LINE2>
    <IMAGE_ID></IMAGE_ID>
    <LOGO_FRONT_ID></LOGO_FRONT_ID>
    <LOGO_BACK_ID></LOGO_BACK_ID>
    <QRCODE>https://www.flex-e-card.com/balance/2909680989632389</QRCODE>
    <PINBLOCK>3A56DFF541C12197</PINBLOCK>
  </CARD>
</RECORD>
<RECORD>
  <REQUEST_TYPE>New</REQUEST_TYPE>
  <UID>52738098</UID>
  <CARRIER>
    <TITLE>Mr.</TITLE>
    <FNAME>AN</FNAME>
    <SNAME>Other</SNAME>
    <ADD1>Tall Pines</ADD1>
    <ADD2>1 Sample Road </ADD2>
    <ADD3>Sample Borough </ADD3>
    <ADD4></ADD4>
    <CITY>Sample City</CITY>
    <POSTCODE>E1W2BS</POSTCODE>
    <COUNTRY>UK</COUNTRY>
    <BULK_ADD1>General Manager</BULK_ADD1>
    <BULK_ADD2>The Big Company</BULK_ADD2>
    <BULK_ADD3>123 The High Street</BULK_ADD3>
    <BULK_CITY>Maintown</BULK_CITY>
    <BULK_COUNTY></BULK_COUNTY>
    <BULK_POSTCODE>MA1 1MA</BULK_POSTCODE>
    <BULK_COUNTRY>UK</BULK_COUNTRY>
    <CARRIER_TYPE>CAR_2</CARRIER_TYPE>
    <CARRIER_LOGO_ID>Logo1</CARRIER_LOGO_ID>
  </CARRIER>
</RECORD>
```

```
<DELV_METHOD>2</DELV_METHOD>
<DELV_CODE>B029</DELV_CODE>
<FULFIL1></FULFIL1>
<FULFIL2></FULFIL2>
<LANG>en</LANG>
</CARRIER>
<CARD>
  <TYPE>Chip&PIN</TYPE>
  <CURRENCY>0826</CURRENCY>
  <TRACK1>B1234567890123456^GIFTCARD/CORPORATE^1811122000009830000000</TRACK1>
  <TRACK2>1234567890123456=16102210000006064400</TRACK2>
  <TRACK3>123456789</TRACK3>
  <EMBOSS_PAN>1234 5678 9012 3456</EMBOSS_PAN>
  <EMBOSS_NAME>MR AN OTHER</EMBOSS_NAME>
  <EMBOSS_START>11/11</EMBOSS_START>
  <EMBOSS_EXPIRY>10/16</EMBOSS_EXPIRY>
  <EMBOSS_CVC2>1234 157</EMBOSS_CVC2>
  <EMBOSS_LINE4></EMBOSS_LINE4>
  <THERMAL_LINE1></THERMAL_LINE1>
  <THERMAL_LINE2></THERMAL_LINE2>
  <IMAGE_ID>img00124</IMAGE_ID>
  <LOGO_FRONT_ID>logo_HSBC</LOGO_FRONT_ID>
  <LOGO_BACK_ID></LOGO_BACK_ID>
  <QRCODE>https://www.flex-e-card.com/balance/2909680989632389</QRCODE>
  <CHIP>
    <TYPE>MASTERCARD</TYPE>
    <PAN>1234567890123456</PAN>
    <PAN_SEQ>01</PAN_SEQ>
    <NAME>OTHER/MR AN</NAME>
    <START_DATE>111101</START_DATE>
    <EXPIRY_DATE>161031</EXPIRY_DATE>
    <SERVICE_CODE>221</SERVICE_CODE>
    <CHIP_TRACK_1>B1234567812345678^OTHER/MR AN ^1610221000004600000000</CHIP_TRACK_1>
    <CHIP_TRACK_2>1234567812345678D16102210000006046000F</CHIP_TRACK_2>
    <PINBLOCK>3A56DFF541C12197</PINBLOCK>
    <CHIP_TRACK_1_MSD_CL>B1234567812345678^ /^1610221000004600000000</CHIP_TRACK_1_MSD_CL>
    <CHIP_TRACK_2_MSD_CL>1234567812345678D161022100000001</CHIP_TRACK_2_MSD_CL>
  </CHIP>
</CARD>
</RECORD>
</PRODUCT>
</CARDGEN>
```

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Technical Publications

If you want to contact our technical publications team directly, for queries or feedback related to this guide, you can email us at: docs@globalprocessing.com.

Document History

| Version | Date | Description | Revised by |
|---------|--------------------------|--|------------|
| 12.5 | 12/10/2022 | Added details of the file naming conventions for both cloud and on-premise GPS solutions. See File Naming Conventions . | WS |
| | 28/09/2022 | Clarified customer file and data format options; updates to TYPE and CARRIER_TYPE elements. | AL |
| 12.4 | 12/08/2022 | New guide layout and HTML version now available | PC |
| 12.3 | 11/08/2022 | The values in the QRCode field can now be updated using Web Services. Field size updated from 50 to 100 characters. | WS |
| 12.2 | 20/08/2021 07/09/2021 | PRODUCT_REF field maximum length updated to 50 characters. GPS office address update | WS |
| 12.1 | 24/05/2021 | Review and update to language. | WS |
| 12.0 | 13/05/2021 | New Guide template and layout. Added section on XML reserved markup characters. | WS |
| 11.01 | 17/12/2020 | Clarification of usage of BULK_ADD fields and DELV_CODE (bulk address and delivery code) No change to file layout. | IF |
| 11.00 | 10-March-2020 | Added MOBILE to CARRIER section. Only appears for version 11.00 and higher. | IF |
| 10.02 | 10/03/2020 | Updated description of TRACK2 and CHIP_TRACK_2 for VISA. Added 00000 to each. | IF |
| 10.01 | 16/01/2020 | Clarified descriptions of all CHIP Track data fields, to aid understanding of the usage of them: CHIP_TRACK_1 , CHIP_TRACK_2 , CHIP_TRACK_1_MSD_CL , CHIP_TRACK_2_MSD_CL Corrected the description of the PINBLOCK field, and an example is supplied. Clarified COUNTRY and BULK_COUNTRY code values. Clarified SERVICE_CODE values. Added description for PAN and PAN_SEQ values. Table headings now repeated on each page and prevent rows from breaking across pages if possible. | MD |
| 10.0 | 26/03/2019 | Added BULK_COUNTRY to the CARRIER section | IF |
| 9.03 | 21/03/2016 | Corrected max length of TRACK1 and updated description Corrected max length of TRACK2 and updated description Corrected max length of TRACK3 and updated description Corrected max length of CHIP_TRACK_1 Corrected max Length of CHIP_TRACK_2 Corrected max length of CHIP NAME Corrected max length of CHIP_TRACK_1_MSD_CL Corrected max length of CHIP_TRACK_2_MSD_CL Updated list of possible CARD TYPES. Updated list of possible CHIP TYPES No change to file layout. | MD |
| 9.02 | 4/03/2016 | Clarified file naming convention further. No change to file layout. | IF |
| 9.01 | 18/01/2016 | Added documentation about PIN block format, no change to file layout. | IF |
| 9 | 15/12/2015 | Corrected File Naming convention Added new optional tag CHIP_TRACK_1_MSD_CL | |
| 8.02 | 30/04/2015 | Changed length and description of BULK_COUNTRY Increased length of REQUEST_TYPE and added new options for PIN Mailers | |
| 8.01 | 19/01/2015 | Corrections to spec: Track1 increased to 79 | |
| 8 | 9/10/2014 | Added PINBLOCK as an optional element in the CARD structure | |
| 7 | | Moved REQUEST_TYPE from <PRODUCT> container to <RECORD> | |

| Version | Date | Description | Revised by |
|---------|------------|--|------------|
| | | CHIP_TRACK_1 will be present for Mastercard AND VISA Detailed contents of Track data Moved LANG to its correct position Added new optional tag CHIP_TRACK_2_MSD_CL | |
| 6 | 03/09/2013 | Added LANG to CARRIER element Added CARRIER_LOGO_ID to CARRIER element Added QRCODE to CARD element Changed all CARRIER elements to allow NULLs Increased maximum length of Track 1 to show maximum length GPS will currently output . N.B. ISO specifications allow for maximum of 79 in Track 1 Added CHIP_TRACK_1 (only for VISA cards) Changed COUNTRY from Varchar(20) to char(3) Numeric ISO Country code Added CVV1 to sample Track 1 layout | IF |
| 5.01 | 26/03/2013 | Added ORDER_REF to CARDSUM element | IF |
| 5 | 08/02/2013 | Added new fields to support Bulk Delivery Address | IF |
| 4.01 | 10/09/2012 | Replaced <ADD5> with <CITY> in the <CARRIER> element. Clarified Country ISO code. Added XML closing tags for clarity. | IF |
| 4.0 | 28/02/2012 | Added new fields to support Bulk Delivery, Simplex Line 4, Currency, Thermal Lines 1 & 2, Front & Logo images. Defined maximum field sizes that were not already defined. | IF |