

RESOLUTION 792

BAR CODED BOARDING PASS (BCBP) — VERSION 3

△ PSC(30)792 Expiry: Indefinite
Type: B

RESOLVED that:

Members may issue, either for online or interline carriage, a Boarding Pass with version 2 of the Bar Code standard as described herein. All of the following specifications define the required characteristics of the elements and format of the Bar Code on the Boarding Pass or electronic (mobile) device.

Section 1 — General

INTRODUCTION

This resolution defines a machine-readable bar code for boarding passes or electronic (mobile) devices. This data format supports single segment, multi-segment and inter-line data encoding. The 2-dimensional Bar Code format has the capacity to convey this data allowing a wider range of devices to display or produce boarding passes with encoded data.

1.1 USE OF BAR CODED BOARDING PASS

This resolution addresses the Bar Code format for use on single-segment and multi-segment Boarding Passes. This does not preclude the ability for a Member to adopt their own Bar Code for online use, or for use as bilaterally agreed upon between a Member and an interline partner.

△ The Bar Code format also permits an airline to include its own proprietary data, and a digital signature alongside the required Bar Code information.

△ A Bar Coded Boarding Pass may not be issued for more than one passenger.

1.1.1 USE OF PAPER BAR CODED BOARDING PASS

The Bar Code presented here is designed for use on all forms of Boarding Pass stock, including ATB (Automated Ticket and Boarding Pass), General Purpose (i.e. kiosk) and self-printed (i.e. web check-in). The Bar Code shall be printed on the same side of the page as the passenger and flight information. The Bar Code does not require any specific placement or orientation on the Boarding Pass. However it is recommended that the Bar Code be printed adjacent and parallel to an edge of the document in order to facilitate the use of reading devices.

1.1.2 USE OF ELECTRONIC (MOBILE) DEVICE BOARDING PASS

△ The Bar Codes presented here are designed for use on an electronic (mobile) boarding pass. These Bar Codes should be able to be displayed by all modern electronic (mobile) devices and to have the screen display optimised. Airport Bar Code Readers should be able to read the printed Bar Codes as well as the electronic (mobile) presented symbologies. The digital signature only applies to electronic (mobile) boarding passes.

1.2 ACCEPTANCE

In accordance with their interline travel agreements, Members shall accept and honour Boarding Passes or documentation with Bar Codes issued under this resolution.

Section 2 — Technical Specifications Scope

This data structure is designed exclusively for use on Bar Coded airline boarding documents, passes and Electronic Ticket Itinerary Receipts. The resolution defines the encoding of Bar Code data, and its visual representation and placement on a document or electronic (mobile) device.

The use of this Bar Code does not impose additional requirements or restrictions on what else is displayed on the boarding document or pass.

2.1 TECHNICAL REQUIREMENTS

2.1.1 Printed Boarding Pass

The Bar Code presented here is a 2-dimensional Bar Code in PDF417 standard containing a structured data message (SDM). This message as defined in ISO/IEC 15438 contains fixed-length fields and variable-length data that can be used by airlines at their discretion.

The PDF417 Bar Code format permits flexibility in the size, readability, robustness and capacity of printed Bar Codes. It is widely supported by current Bar Code scanners and printers, and is already in use within the airline industry.

2.1.2 Electronic (Mobile) Boarding Pass

The Bar Codes presented here are 2-dimensional bar codes in Aztec, Datamatrix and QR code formats containing a structured data message (SDM). Airlines are free to choose one of the three presented Bar Code formats.

The Datamatrix message as defined in ISO/IEC 16022 contains fixed-length fields and variable-length data that can be used by airlines at their discretion.

The QR message as defined in ISO/IEC 18004 contains fixed-length fields and variable-length data that can be used by airlines at their discretion.

The Aztec message as defined in ISO/IEC 24778 contains fixed-length fields and variable-length data that can be used by airlines at their discretion.

Aztec, Datamatrix and QR permit flexibility in the size, readability, robustness and capacity of Bar Codes.

2.2 STRUCTURE REQUIREMENTS

This Bar Code format allows for 1 fixed-length and 2 variable-length sets of data. The fixed-length data refers to all elements that are required and must be included within every Bar Code. The first set of variable-length data is conditional (use if available) and the second set of variable length data is optional which allows airlines to include their own information alongside the required elements.

The 2nd variable-length data (optional) can include non-printable (binary) data. A Bar Code scanning system designed for this Bar Code format must scan and accept with valid data, including non-printable data in the variable length segment, even if it does not use of all of the data. The maximum size of the bar code shall not exceed 600 characters.

2.3 BAR CODE STRUCTURE SPECIFICATIONS

See Resolution 792, Attachment 'A'.

- **Note:** the S format was removed from these specifications in 2007. Therefore carriers should stop using the S format no later than 1 June 2009.

2.4 EXAMPLES

- △ Five examples reflecting the positioning of the data in the bar code and the string of characters to be encoded can be found in Resolution 792, Attachment 'B'.

2.5 BAR CODE SPECIFICATION

2.5.1 PDF 417 barcode

As it is envisaged that Bar Codes will be produced in different environments (e.g. home printer, kiosk, etc.) and read with different devices (laser, optical, etc.), the following guidelines have been developed.

Printing resolution of an ink jet personal printer: minimum 300 dpi (maximum not applicable).

Printing resolution of a direct thermal GPP (General Purpose Printer): minimum 200 dpi (maximum not applicable).

Recommended Setting for PDF 417

X Dim = 10 mils or 0.03CM (one inch is approximately 3CM)

X to Y ratio = 3

Note: X Dim is the width of a narrow bar. The Y dimension is the height of each row within the PDF417 symbol.

| | | |
|------------------------------|--------|---------|
| Error Correction Level | 3 | 4 |
| Number of characters encoded | 41–160 | 161–320 |

2.6 REFERENCES: BAR CODE SPECIFICATIONS

See Resolution 792, Attachment 'C'.

2.7 USAGE ON ELECTRONIC TICKET PASSENGER ITINERARY RECEIPT

When a Bar Code is printed or displayed on an electronic passenger itinerary receipt, it shall be in accordance with the provisions of this resolution. Conditional element 16 shall be present with indicator 'I' to identify that the Bar Code is printed on an itinerary receipt and not the boarding pass document.

2.8 DATA EXCHANGE OF 2D BAR CODE DATA ELEMENTS

2.8.1 IATA PADIS XML message standards shall be used for the Data Exchange of the 2D bar code data elements.

- **2.8.2** For data message exchange of 2D bar code data elements between a system or process needing to read and validate the data in the 2D barcode and an airline's DCS system, an IATA PADIS XML Message Exchange Standard has been developed to support this exchange.

- **2.8.3** This PADIS XML standard is developed and maintained by PADIS XMLWG under the PADIS BOARD umbrella as defined in IATA Resolution 783.

- **2.8.4** The XML Standard messages (schema) and supporting documentation is stored under the IATA PADIS private site and can be accessed by following URL: [http://extranet2.iata.org/sites/padis_xml_typex_releases / default.aspx](http://extranet2.iata.org/sites/padis_xml_typex_releases/default.aspx).

Resolution 792 Attachment 'A'

BCBP M FORMAT VERSION 3

| New item number | Element Description | Field Size | Unique / repeated | Data type | Formatting | Ref no(s) |
|-----------------|--|------------|-------------------|-----------|--|-----------|
| 1 | Format Code | 1 | U | f | | a |
| 5 | Number of Legs Encoded | 1 | U | N | | b |
| 11 | Passenger Name | 20 | U | f | Left justified and trailing blanks | 14 |
| 253 | Electronic Ticket Indicator | 1 | U | f | | 65 |
| 7 | Operating carrier PNR Code | 7 | R | f | Left justified and trailing blanks | c |
| 26 | From City Airport Code | 3 | R | a | | 56 |
| 38 | To City Airport Code | 3 | R | a | | 56 |
| 42 | Operating carrier Designator | 3 | R | f | Left justified and trailing blanks | |
| 43 | Flight Number | 5 | R | NNNN[a] | Leading zeros on numerics and alpha or blank on last digit | |
| 46 | Date of Flight (Julian Date) | 3 | R | N | Leading zeros | 4 |
| 71 | Compartment Code | 1 | R | a | | 17 |
| 104 | Seat Number | 4 | R | NNNa | Leading zeros on numerics | |
| 107 | Check-In Sequence Number | 5 | R | NNNN[f] | Leading zeros on numerics and alpha or blank on last digit | |
| 113 | Passenger Status | 1 | R | f | | 16 |
| 6 | Field size of variable size field (Conditional + Airline item 4) | 2 | R | f | Right justified and leading zeros | d |
| 8 | Beginning of version number | 1 | U | f | > sign | |
| 9 | Version number | 1 | U | f | Number sign | f |
| 10 | Field size of following structured message - unique | 2 | U | f | Right justified and leading zeros | g |
| 15 | Passenger Description | 1 | U | f | | 49 |
| 12 | Source of check-in | 1 | U | f | | h |
| 14 | Source of Boarding Pass Issuance | 1 | U | f | | i |
| 22 | Date of Issue of Boarding Pass (Julian Date) | 4 | U | N | First digit for the year then 3 digits with leading zeros | 4 |
| 16 | Document Type | 1 | U | f | | j |
| 21 | Airline Designator of boarding pass issuer | 3 | U | f | Left justified and trailing blanks | o |
| 23 | Baggage Tag Licence Plate Number (s) | 13 | U | f | As per BSM specifications | p |
| 17 | Field size of following structured message - repeated | 2 | R | N | Right justified and leading zeros | k |
| 142 | Airline Numeric Code | 3 | R | N | Right justified and leading zeros | |
| 143 | Document Form/Serial Number | 10 | R | f | Right justified and leading zeros | |
| 18 | Selectee indicator | 1 | R | f | | l |
| 108 | International Documentation Verification | 1 | R | f | | 22 |
| 19 | Marketing carrier designator | 3 | R | f | Left justified and trailing blanks | m |
| 20 | Frequent Flyer Airline Designator | 3 | R | f | Left justified and trailing blanks | n |
| 236 | Frequent Flyer Number | 16 | R | f | Depends on the carriers and alliances | 42 |
| 89 | ID/AD Indicator | 1 | R | f | | 53 |
| 118 | Free Baggage Allowance | 3 | R | f | | 59 |
| 4 | For individual airline use | Var | R | | | e |
| 25 | Beginning of Security Data | 1 | U | | ^ sign | |
| 28 | Type of Security Data | 1 | U | f | | |
| 29 | Length of Security Data | 2 | U | f | Right justified and leading zeros | q |
| 30 | Security Data | Var | U | f | | r |

f Alpha-Numerical (full set ASCII including symbols)

N Numerical (0-9)

a Alphabetical (A-Z)

[] optional

* Mandatory when issued on an ET Itinerary Receipt

** Optional when issued on an ET Itinerary Receipt

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Attachment 'B'

EXAMPLE — M1 USING MANDATORY ELEMENTS ONLY

| New item number | Element Description | Field Size | Unique / repeated | Value | | | | | | | | | | | | | | | | | | | | Notes |
|-----------------|---|------------|-------------------|-------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|------------------------------------|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 1 | Format Code | 1 | U | M | | | | | | | | | | | | | | | | | | | | |
| 5 | Number of Legs Encoded | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 11 | Passenger Name | 20 | U | D | E | S | M | A | R | A | I | S | / | L | U | C | | | | | | | | |
| 253 | Electronic Ticket Indicator | 1 | U | E | | | | | | | | | | | | | | | | | | | | |
| 7 | Operating carrier PNR Code | 7 | R | A | B | C | 1 | 2 | 3 | | | | | | | | | | | | | | | |
| 26 | From City Airport Code | 3 | R | Y | U | L | | | | | | | | | | | | | | | | | | |
| 38 | To City Airport Code | 3 | R | F | R | A | | | | | | | | | | | | | | | | | | |
| 42 | Operating carrier Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 43 | Flight Number | 5 | R | 0 | 8 | 3 | 4 | | | | | | | | | | | | | | | | | |
| 46 | Date of Flight (Julian Date) | 3 | R | 2 | 2 | 6 | | | | | | | | | | | | | | | | | | August 14th |
| 71 | Compartment Code | 1 | R | F | | | | | | | | | | | | | | | | | | | | |
| 104 | Seat Number | 4 | R | 0 | 0 | 1 | A | | | | | | | | | | | | | | | | | |
| 107 | Check-In Sequence Number | 5 | R | 0 | 0 | 2 | 5 | | | | | | | | | | | | | | | | | |
| 113 | Passenger Status | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 6 | Field size of following variable size field | 2 | R | 0 | 0 | | | | | | | | | | | | | | | | | | | 0 in Decimal = 00 in Hexidecimal |
| 8 | Beginning of version number | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 9 | Version number | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 10 | Field size of following structured message - unique | 2 | U | | | | | | | | | | | | | | | | | | | | | 11 in Decimal = B in Hexadecimal |
| 15 | Passenger Description | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 12 | Source of check-in | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 14 | Source of Boarding Pass Issuance | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 22 | Date of Issue of Boarding Pass (Julian Date) | 4 | U | | | | | | | | | | | | | | | | | | | | | 6 = 2006, 225 = August 13th |
| 16 | Document Type | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 21 | Airline Designator of boarding pass issuer | 3 | U | | | | | | | | | | | | | | | | | | | | | |
| 23 | Baggage Tag Licence Plate Number (s) | 13 | U | | | | | | | | | | | | | | | | | | | | | |
| 17 | Field size of following structured message - repeated | 2 | R | | | | | | | | | | | | | | | | | | | | | 41 in Decimal = 29 in Hexadecimal |
| 142 | Airline Numeric Code | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 143 | Document Form/Serial Number | 10 | R | | | | | | | | | | | | | | | | | | | | | |
| 18 | Selectee indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 108 | International Documentation Verification | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 19 | Marketing carrier designator | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 20 | Frequent Flyer Airline Designator | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 236 | Frequent Flyer Number | 16 | R | | | | | | | | | | | | | | | | | | | | | |
| 89 | ID/AD Indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 118 | Free Baggage Allowance | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 4 | For individual airline use | Var | R | | | | | | | | | | | | | | | | | | | | | airline specific |
| 25 | Beginning of Security Data | 1 | U | A | | | | | | | | | | | | | | | | | | | | |
| 28 | Type of Security Data | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 29 | Length of Security Data | 2 | U | 6 | 4 | | | | | | | | | | | | | | | | | | | 100 in Decimal = 64 in Hexadecimal |
| 30 | Security Data | 100 | U | G | I | W | V | C | 5 | E | H | 7 | J | N | T | 6 | 8 | 4 | F | V | N | J | 9 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |
| | | | | Q | 3 | D | F | 5 | T | G | B | N | 8 | 7 | 0 | 9 | H | K | T | 5 | D | 3 | D | |
| | | | | W | 3 | G | B | H | F | C | V | H | M | Y | 7 | J | 5 | T | 6 | H | F | R | 4 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |

△ EXAMPLE 2 — 1 SEGMENT, ALL CONDITIONAL AND OPTIONAL DATA FIELDS POPULATED

| New item number | Element Description | Field Size | Unique / repeated | Value | | | | | | | | | | | | | | | | | | | | Notes |
|-----------------|---|------------|-------------------|-------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|------------------------------------|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 1 | Format Code | 1 | U | M | | | | | | | | | | | | | | | | | | | | |
| 5 | Number of Legs Encoded | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 11 | Passenger Name | 20 | U | D | E | S | M | A | R | A | I | S | / | L | U | C | | | | | | | | |
| 253 | Electronic Ticket Indicator | 1 | U | E | | | | | | | | | | | | | | | | | | | | |
| 7 | Operating carrier PNR Code | 7 | R | A | B | C | 1 | 2 | 3 | | | | | | | | | | | | | | | |
| 26 | From City Airport Code | 3 | R | Y | U | L | | | | | | | | | | | | | | | | | | |
| 38 | To City Airport Code | 3 | R | F | R | A | | | | | | | | | | | | | | | | | | |
| 42 | Operating carrier Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 43 | Flight Number | 5 | R | 0 | 8 | 3 | 4 | | | | | | | | | | | | | | | | | |
| 46 | Date of Flight (Julian Date) | 3 | R | 2 | 2 | 6 | | | | | | | | | | | | | | | | | | August 14th |
| 71 | Compartment Code | 1 | R | F | | | | | | | | | | | | | | | | | | | | |
| 104 | Seat Number | 4 | R | 0 | 0 | 1 | A | | | | | | | | | | | | | | | | | |
| 107 | Check-In Sequence Number | 5 | R | 0 | 0 | 2 | 5 | | | | | | | | | | | | | | | | | |
| 113 | Passenger Status | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 6 | Field size of following variable size field | 2 | R | 4 | C | | | | | | | | | | | | | | | | | | | 76 in Decimal = 4C in Hexadecimal |
| 8 | Beginning of version number | 1 | U | > | | | | | | | | | | | | | | | | | | | | |
| 9 | Version number | 1 | U | 3 | | | | | | | | | | | | | | | | | | | | |
| 10 | Field size of following structured message - unique | 2 | U | 1 | 8 | | | | | | | | | | | | | | | | | | | 24 in Decimal = 18 in Hexadecimal |
| 15 | Passenger Description | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 12 | Source of check-in | 1 | U | W | | | | | | | | | | | | | | | | | | | | |
| 14 | Source of Boarding Pass Issuance | 1 | U | W | | | | | | | | | | | | | | | | | | | | |
| 22 | Date of Issue of Boarding Pass (Julian Date) | 4 | U | 6 | 2 | 2 | 5 | | | | | | | | | | | | | | | | | 6 = 2006, 225 = August 13th |
| 16 | Document Type | 1 | U | B | | | | | | | | | | | | | | | | | | | | |
| 21 | Airline Designator of boarding pass issuer | 3 | U | A | C | | | | | | | | | | | | | | | | | | | |
| 23 | Baggage Tag Licence Plate Number (s) | 13 | U | 0 | 0 | 8 | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 0 | 3 | | | | | | | | 41 in Decimal = 29 in Hexadecimal |
| 17 | Field size of following structured message - repeated | 2 | R | 2 | 9 | | | | | | | | | | | | | | | | | | | |
| 142 | Airline Numeric Code | 3 | R | 0 | 1 | 4 | | | | | | | | | | | | | | | | | | |
| 143 | Document Form/Serial Number | 10 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | | | | | | | | Not applicable to that flight |
| 18 | Selectee indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 108 | International Documentation Verification | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 19 | Marketing carrier designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 20 | Frequent Flyer Airline Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 236 | Frequent Flyer Number | 16 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | | | | | | | | |
| 89 | ID/AD Indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 118 | Free Baggage Allowance | 3 | R | 2 | P | C | | | | | | | | | | | | | | | | | | |
| 4 | For individual airline use | Var | R | L | X | 5 | 8 | Z | | | | | | | | | | | | | | | | airline specific |
| 25 | Beginning of Security Data | 1 | U | ^ | | | | | | | | | | | | | | | | | | | | |
| 28 | Type of Security Data | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 29 | Length of Security Data | 2 | U | 6 | 4 | | | | | | | | | | | | | | | | | | | 100 in Decimal = 64 in Hexadecimal |
| 30 | Security Data | 100 | U | G | I | W | V | C | 5 | E | H | 7 | J | N | T | 6 | 8 | 4 | F | V | N | J | 9 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |
| | | | | Q | 3 | D | F | 5 | T | G | B | N | 8 | 7 | 0 | 9 | H | K | T | 5 | D | 3 | D | |
| | | | | W | 3 | G | B | H | F | C | V | H | M | Y | 7 | J | 5 | T | 6 | H | F | R | 4 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |

EXAMPLE 3 — 1 SEGMENT, PARTIALLY POPULATED

| New item number | Element Description | Field Size | Unique / repeated | Value | | | | | | | | | | | | | | | | | | | | Notes |
|-----------------|---|------------|-------------------|-------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|------------------------------------|----|-----------------------------|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 1 | Format Code | 1 | U | M | | | | | | | | | | | | | | | | | | | | |
| 5 | Number of Legs Encoded | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 11 | Passenger Name | 20 | U | G | R | A | N | D | M | A | I | R | E | / | M | E | L | A | N | I | E | | | |
| 253 | Electronic Ticket Indicator | 1 | U | E | | | | | | | | | | | | | | | | | | | | |
| 7 | Operating carrier PNR Code | 7 | R | A | B | C | 1 | 2 | 3 | | | | | | | | | | | | | | | |
| 26 | From City Airport Code | 3 | R | G | V | A | | | | | | | | | | | | | | | | | | |
| 38 | To City Airport Code | 3 | R | C | D | G | | | | | | | | | | | | | | | | | | |
| 42 | Operating carrier Designator | 3 | R | A | F | | | | | | | | | | | | | | | | | | | |
| 43 | Flight Number | 5 | R | 0 | 1 | 2 | 3 | | | | | | | | | | | | | | | | | |
| 46 | Date of Flight (Julian Date) | 3 | R | 2 | 2 | 8 | | | | | | | | | | | | | | | | August 16th | | |
| 71 | Compartment Code | 1 | R | C | | | | | | | | | | | | | | | | | | | | |
| 104 | Seat Number | 4 | R | 0 | 0 | 2 | F | | | | | | | | | | | | | | | | | |
| 107 | Check-In Sequence Number | 5 | R | 0 | 0 | 2 | 5 | | | | | | | | | | | | | | | | | |
| 113 | Passenger Status | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 6 | Field size of following variable size field | 2 | R | 1 | 3 | | | | | | | | | | | | | | | | | 19 in Decimal = 13 in Hexadecimal | | |
| 8 | Beginning of version number | 1 | U | > | | | | | | | | | | | | | | | | | | | | |
| 9 | Version number | 1 | U | 3 | | | | | | | | | | | | | | | | | | | | |
| 10 | Field size of following structured message - unique | 2 | U | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 15 | Passenger Description | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 12 | Source of check-in | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 14 | Source of Boarding Pass Issuance | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 22 | Date of Issue of Boarding Pass (Julian Date) | 4 | U | | | | | | | | | | | | | | | | | | | | | |
| 16 | Document Type | 1 | U | | | | | | | | | | | | | | | | | | | | | |
| 21 | Airline Designator of boarding pass issuer | 3 | U | | | | | | | | | | | | | | | | | | | | | |
| 23 | Baggage Tag Licence Plate Number (s) | 13 | U | | | | | | | | | | | | | | | | | | | | | |
| 17 | Field size of following structured message - repeated | 2 | R | 0 | D | | | | | | | | | | | | | | | | | 13 in Decimal = 0D in Hexadecimal | | |
| 142 | Airline Numeric Code | 3 | R | 0 | 5 | 7 | | | | | | | | | | | | | | | | | | |
| 143 | Document Form/Serial Number | 10 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | | | | | | | | |
| 18 | Selectee indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 108 | International Documentation Verification | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 19 | Marketing carrier designator | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 20 | Frequent Flyer Airline Designator | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 236 | Frequent Flyer Number | 16 | R | | | | | | | | | | | | | | | | | | | | | |
| 89 | ID/AD Indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 118 | Free Baggage Allowance | 3 | R | | | | | | | | | | | | | | | | | | | | | |
| 4 | For individual airline use | Var | R | | | | | | | | | | | | | | | | | | | | | |
| 25 | Beginning of Security Data | 1 | U | ^ | | | | | | | | | | | | | | | | | | | | |
| 28 | Type of Security Data | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 29 | Length of Security Data | 2 | U | 6 | 4 | | | | | | | | | | | | | | | | | 100 in Decimal = 64 in Hexadecimal | | |
| 30 | Security Data | 100 | U | G | I | W | V | C | 5 | E | H | 7 | J | N | T | 6 | 8 | 4 | F | V | N | J | 9 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | continued from previous row |
| | | | | Q | 3 | D | F | 5 | T | G | B | N | 8 | 7 | 0 | 9 | H | K | T | 5 | D | 3 | D | continued from previous row |
| | | | | W | 3 | G | B | H | F | C | V | H | M | Y | 7 | J | 5 | T | 6 | H | F | R | 4 | continued from previous row |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | continued from previous row |

EXAMPLE 4 — 2 SEGMENTS, ALL CONDITIONAL AND OPTIONAL DATA FIELDS POPULATED

| New item number | Element Description | Field Size / repeated | Unique / repeated | Value | | | | | | | | | | | | | | | | | | | | Notes |
|-----------------|---|-----------------------|-------------------|-------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|-----------------------------------|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 1 | Format Code | 1 | U | M | | | | | | | | | | | | | | | | | | | | |
| 5 | Number of Legs Encoded | 1 | U | 2 | | | | | | | | | | | | | | | | | | | | |
| 11 | Passenger Name | 20 | U | D | E | S | M | A | R | A | I | S | / | L | U | C | | | | | | | | |
| 253 | Electronic Ticket Indicator | 1 | U | E | | | | | | | | | | | | | | | | | | | | |
| 7 | Operating carrier PNR Code | 7 | R | A | B | C | 1 | 2 | 3 | | | | | | | | | | | | | | | |
| 26 | From City Airport Code | 3 | R | Y | U | L | | | | | | | | | | | | | | | | | | |
| 38 | To City Airport Code | 3 | R | F | R | A | | | | | | | | | | | | | | | | | | |
| 42 | Operating carrier Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 43 | Flight Number | 5 | R | 0 | 8 | 3 | 4 | | | | | | | | | | | | | | | | | |
| 46 | Date of Flight (Julian Date) | 3 | R | 2 | 2 | 6 | | | | | | | | | | | | | | | | | | 226 = August 14th |
| 71 | Compartment Code | 1 | R | F | | | | | | | | | | | | | | | | | | | | |
| 104 | Seat Number | 4 | R | 0 | 0 | 1 | A | | | | | | | | | | | | | | | | | |
| 107 | Check-in Sequence Number | 5 | R | 0 | 0 | 2 | 5 | | | | | | | | | | | | | | | | | |
| 113 | Passenger Status | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 6 | Field size of following variable size field | 2 | R | 4 | C | | | | | | | | | | | | | | | | | | | 76 in Decimal = 4C in Hexadecimal |
| 8 | Beginning of version number | 1 | U | > | | | | | | | | | | | | | | | | | | | | |
| 9 | Version number | 1 | U | 3 | | | | | | | | | | | | | | | | | | | | |
| 10 | Field size of following structured message - unique | 2 | U | 1 | 8 | | | | | | | | | | | | | | | | | | | |
| 15 | Passenger Description | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 12 | Source of check-in | 1 | U | W | | | | | | | | | | | | | | | | | | | | |
| 14 | Source of Boarding Pass Issuance | 1 | U | W | | | | | | | | | | | | | | | | | | | | |
| 22 | Date of Issue of Boarding Pass (Julian Date) | 4 | U | 6 | 2 | 5 | | | | | | | | | | | | | | | | | | 24 in Decimal = 18 in Hexadecimal |
| 16 | Document Type | 1 | U | B | | | | | | | | | | | | | | | | | | | | |
| 21 | Airline Designator of boarding pass issuer | 3 | U | A | C | | | | | | | | | | | | | | | | | | | |
| 23 | Baggage Tag Licence Plate Number (s) | 13 | U | 0 | 0 | 8 | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 3 | | | | | | | | | |
| 17 | Field size of following structured message - repeated | 2 | R | 2 | 9 | | | | | | | | | | | | | | | | | | | 41 in Decimal = 29 in Hexadecimal |
| 142 | Airline Numeric Code | 3 | R | 0 | 1 | 4 | | | | | | | | | | | | | | | | | | |
| 143 | Document Form/Serial Number | 10 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | | | | | | | | |
| 18 | Selectee indicator | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 108 | International Documentation Verification | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 19 | Marketing carrier designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 20 | Frequent Flyer Airline Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 286 | Frequent Flyer Number | 18 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | | | | | | | | |
| 89 | ID/AD Indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 4 | Free Baggage Allowance | 3 | R | 2 | 0 | K | | | | | | | | | | | | | | | | | | |
| 7 | For individual airline use | Var | R | L | X | 5 | 8 | Z | | | | | | | | | | | | | | | | |
| 26 | Operating carrier PNR Code | 7 | R | D | E | F | 4 | 5 | 6 | | | | | | | | | | | | | | | |
| 38 | From City Airport Code | 3 | R | F | R | A | | | | | | | | | | | | | | | | | | |
| 38 | To City Airport Code | 3 | R | G | V | A | | | | | | | | | | | | | | | | | | |
| 42 | Operating carrier Designator | 3 | R | L | H | | | | | | | | | | | | | | | | | | | |
| 43 | Flight Number | 5 | R | 3 | 6 | 6 | 4 | | | | | | | | | | | | | | | | | |
| 46 | Date of Flight (Julian Date) | 3 | R | 2 | 2 | 7 | | | | | | | | | | | | | | | | | | |
| 71 | Compartment Code | 1 | R | C | | | | | | | | | | | | | | | | | | | | |
| 104 | Seat Number | 4 | R | 0 | 1 | 2 | C | | | | | | | | | | | | | | | | | 227 = August 15th |
| 107 | Check-in Sequence Number | 5 | R | 0 | 0 | 2 | | | | | | | | | | | | | | | | | | |
| 113 | Passenger Status | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 6 | Field size of following variable size field | 2 | R | 2 | D | | | | | | | | | | | | | | | | | | | 45 in Decimal = 2D in Hexadecimal |
| 17 | Field size of following structured message - repeated | 2 | R | 2 | 9 | | | | | | | | | | | | | | | | | | | 41 in Decimal = 29 in Hexadecimal |
| 142 | Airline Numeric Code | 3 | R | 0 | 1 | 4 | | | | | | | | | | | | | | | | | | |
| 143 | Document Form/Serial Number | 10 | R | 0 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | | | | | | | | | |
| 18 | Selectee indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 108 | International Documentation Verification | 1 | R | 1 | | | | | | | | | | | | | | | | | | | | |
| 19 | Marketing carrier designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 20 | Frequent Flyer Airline Designator | 3 | R | A | C | | | | | | | | | | | | | | | | | | | |
| 286 | Frequent Flyer Number | 16 | R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | | | | | | | | |
| 89 | ID/AD Indicator | 1 | R | | | | | | | | | | | | | | | | | | | | | |
| 118 | Free Baggage Allowance | 3 | R | 2 | P | C | | | | | | | | | | | | | | | | | | |
| 4 | For individual airline use | Var | R | W | Q | | | | | | | | | | | | | | | | | | | |
| 25 | Beginning of Security Data | 1 | U | A | | | | | | | | | | | | | | | | | | | | |
| 28 | Type of Security Data | 1 | U | 1 | | | | | | | | | | | | | | | | | | | | |
| 29 | Length of Security Data | 2 | U | 6 | 4 | | | | | | | | | | | | | | | | | | | |
| | Security Data | 100 | U | G | I | W | V | C | 5 | E | H | 7 | J | N | T | 6 | 8 | 4 | F | V | N | J | 9 | |
| 30 | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |
| | | | | Q | 3 | D | F | 5 | T | G | B | N | 8 | 7 | 0 | 9 | H | K | T | 5 | D | 3 | | |
| | | | | W | 3 | G | B | H | F | C | V | H | M | Y | 7 | J | 5 | T | 6 | H | F | R | 4 | |
| | | | | 1 | W | 2 | Q | A | 4 | D | V | N | 5 | J | 8 | K | 4 | F | 0 | L | 0 | G | E | |

764

RESOLUTION 792 Attachment 'C'

REFERENCES

| No | Description | Notes | Set of values |
|----|--|--|---|
| 4 | Date of Flight - Date of Issue | Calendar date. In date of issue, precede by single digit for year. Surname of passenger followed by an oblique and the given name, when available. When there is not enough space for the given name, encode at least one alpha character or initial. If surname exceeds 18 characters, truncate at 18th character followed by an oblique and one alpha initial. | "001": Jan 1st, "8001": Jan 1st 2006, "365": Dec 31st, "6365": 31st Dec 2006 |
| 14 | Passenger Name | | 0 ticket issuance/passenger not checked in, 1 ticket issuance/passenger checked in, 2 baggage checked - passenger not checked in, 3 baggage checked/passenger checked in, 4 Passenger passed security check, 5 Passenger passed gate exit (coupon used), 6 Transit, 7 Standby, Seat Number not printed on Boarding pass at time of check-in (Seat number to be printed at time of seat assignment), 8 Boarding data revalidation done, (Gate, Boarding Time and Seat on Revalidation Field already used), 9 Original boarding line used at time of ticket issuance, A Up- or down-grading required at close out, e.g. when passenger waitlisted in C class and OK in Y class, B-Z Reserved for future industry use. |
| 16 | Passenger Status | | e.g. F (First Class), J (Business Class Premium), Y (Economy/Coach) |
| 17 | Compartment Code | Optional at time of ticket issuance - See Resolution 728 for list of codes | 0 travel document verification not required, 1 travel document verification required, 2 travel document verification performed |
| 22 | International Documentation Verification | | |
| 42 | Frequent Flyer Number | 2 character or 3 letter airline designator followed by up to the 13 numerics or alpha-numerics, or 16 numerics if the FFN is 16 digits | |
| 49 | Passenger Description | Industry discount ticket (see Recommended Practice 1788): | 0 adult, 1 Male, 2 Female, 3 child, 4 infant, 5 no passenger (cabin baggage), 6 adult travelling with infant, 7 unaccompanied minor, 8-9 Future industry use, A-Z Future industry use |
| 53 | ID/AD Indicator | Elements 26 and 38 are Airport/City codes concerning the segment covered by the document in hand | "0": IDN1 positive space, "1": IDN2 Space available, 2 IDB1 Positive space, 3 IDB2 Space available, 4 AD, 5 DG, 6 DM, 7 GE, 8 IG, 9 RG, A UD, B ID — Industry discount not followed any classification, C IDFS1, D IDFS2, E IDR1, F IDR2, G-Z for future industry use |
| 56 | From City Airport Code - To City Airport Code | | "K": kilos, "L": pounds, "PC": pieces |
| 59 | Free Baggage Allowance | See Resolution 722 - example: "20K" | "E": Boarding pass issued against an Electronic Ticket |
| 65 | Electronic Ticket Indicator | | S for Single, M for Multiple |
| a | Format Code | | 1, 2, 3 or 4 |
| b | Number of Legs Encoded | Minimum 1 segment, Maximum 4 segments to limit the size of the bar code | |
| c | PNR Code | operating carrier, independent of code-share or lease or other issues | |
| d | Field size of variable size field (Conditional + Airline item 4) | Size of data used within the subsequent conditional and airline individual fields (item 8 to 118, plus item 4), in ASCII-printed hexadecimal. If not used, enter "00" | |
| e | For individual airline use | Optional, whose data length must be given in the previous filed value | "00" to "FF" |
| f | Version number | Version of the structured message of the M format | |
| g | Field size of following structured message - unique | Size of data used within the subsequent fields (item 15 to 23), in ASCII-printed hexadecimal. If not used, enter 00 | |
| h | Source of check-in | Where the check-in was initiated | "W": Web, "K": Airport Kiosk, "R": Remote or Off Site Kiosk, "M": Mobile Device, "O": Airport Agent, "T": Town Agent, "V": Third Party Vendor |
| i | Source of Boarding Pass Issuance | Where the Boarding Pass was issued | W - Web Printed / K - Airport Kiosk Printed / X - Transfer Kiosk Printed / R - Remote or Off Site Kiosk Printed / M - Mobile Device Printed / O - Airport Agent Printed / T - Town Agent Printed / V - Third Party Vendor Printed / Blank - Unable to support |
| j | Document Type | Boarding Pass or Itinerary Receipt | "B": Boarding Pass, "I": Itinerary Receipt |
| k | Field size of following structured message - repeated | Size of data used within the subsequent fields (item 142 to 118), in ASCII-printed hexadecimal. If not used, enter 00 | |
| l | Selectee indicator | | "1": selectee, "0": not selectee |
| m | Marketing carrier Designator | Airline code of the marketing carrier | |
| n | Frequent Flyer Airline | Airline code of the airline's FFP | |
| o | Airline Designator of boarding pass issuer | Identifies the origin of the data encoded in the airline individual use field | |
| p | Baggage tag licence plate number | As per BSM specifications, RP 1745 | |
| q | Length of Security Data | Size of data used within the subsequent security field (item 30), in ASCII-printed hexadecimal. If field not used, leave blank. | |
| r | Security Data | Digital signature generated according to the rules of the country where the Boarding Pass is used. All the data prior to the signature field (including items 1 to 4, excluding items 25 to 29) should be signed. | "00" to "FF" |



Search no further!



We are the official sources of standards, rules, regulations and procedures

Airline Coding Directory – ACD

This reference contains all airline designators, three-digit airline numeric codes and location identifiers. It also includes ISO currency, country codes, minimum connecting time, coordinators and airlines applying reconfirmation procedures and Numeric Location Type Code.

Multilateral Interline Traffic Agreements Manual – MITA

This reference contains the passenger and cargo Interline Agreements that spell out which airlines have agreements and the basic rules airlines follow when collecting money and issuing documents for carriage on each others services.

Reservations Interline Message Procedures – AIRIMP

This reference contains universally agreed upon communications standards for the handling of Passenger Reservations Interline Messages. These standards are used in millions of transactions between Travel Agency and Airline systems and by Airline to Airline systems.

For more information, visit www.iata.org