

ISO 8583

ISO 8583 is international standard for financial transaction card.

ISO 8583 defines a message format and communication flow; then different systems can exchange transaction requests and responses.

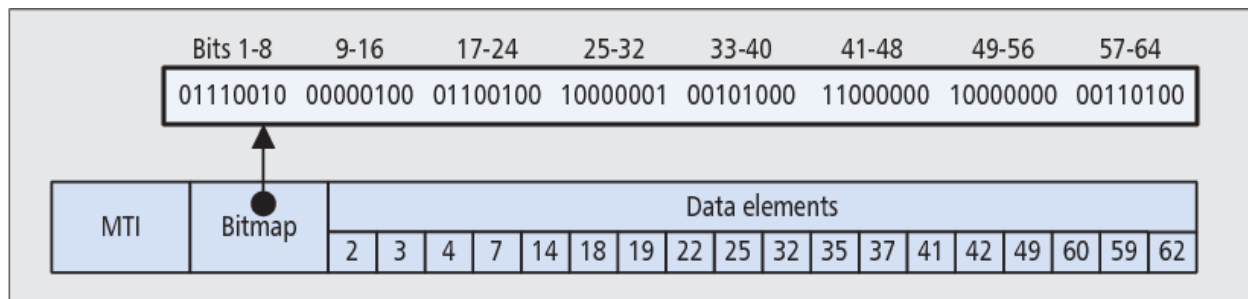
ISO 8583 define a common standard

ISO specification has 3 parts,

- Part 1: Message, data element and code value
- Part 2: Application and registration procedure
- Part 3: Maintenance procedure

Parts of ISO 8583 message

- Message type indicator (MTI)
- Bitmap
- Data element



Message type indicator – it has four digits numeric filed

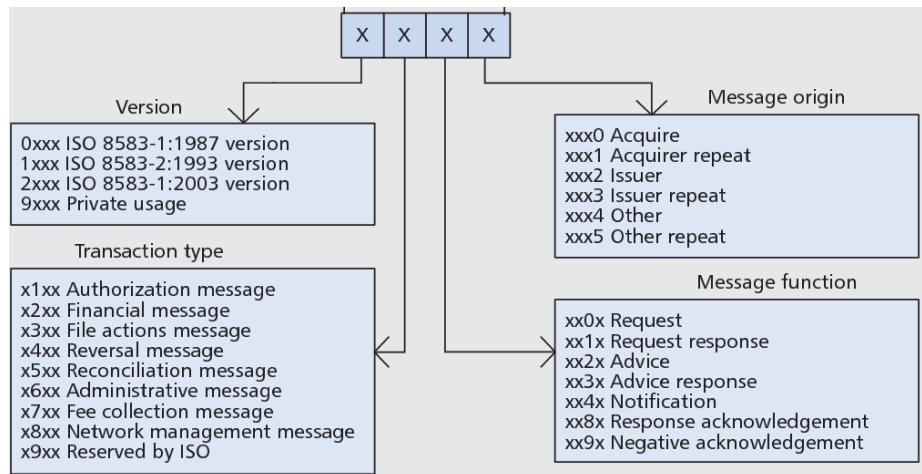
X X X X

1st digit - ISO 8583 version

2nd digit – message class

3rd digit – message function

4th digit – location of the message source



Bitmap is a field or subfield within a message. indicates whether other data elements or data element subfields are present elsewhere in the message.

Bitmap is representing as 8 bytes of binary data or as 16 hexadecimal characters in ASCII or EBCDIC.

A message contains at least one bitmap, it calls primary bitmap. Which indicates 1 -64 elements. If there is a secondary bitmap it indicates first bit in the primary bitmap. If present, the secondary bitmap indicate element 65-128. Similarly, a tertiary bitmap can present 129- 192.

Example:

Bitmap value - **22 10 00 11 02 C0 48 04,**

0010 0010 0001 0000 0000 0000 0001 0001 0000 0010 1100 0000 0100 1000 0000 0100

3, 7, 12, 28, 32, 39, 41, 42, 50, 53, 62 fields are present in the message.

Data elements are the individual fields that carrying the transaction information. There are up to 128 data elements specified in the original ISO 8583:1987 standard, and up to 192 data elements in later releases.