
**Financial transaction card originated
messages — Interchange message
specifications —**

**Part 1:
Messages, data elements and code
values**

*Messages initiés par cartes de transaction financière — Spécifications
d'échange de messages —*

Partie 1: Messages, éléments de données et valeurs de code



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8583-1 was prepared by Technical Committee ISO/TC 68, *Banking, securities and other financial services*, Subcommittee SC 6, *Retail financial services*.

ISO 8583 consists of the following parts, under the general title *Financial transaction card originated messages — Interchange message specifications*:

- *Part 1: Messages, data elements and code values*
- *Part 2: Application and registration procedures for Institution Identification Codes (IIC)*
- *Part 3: Maintenance procedures for messages, data elements and code values*

Introduction

Services of the financial industry include the exchange of electronic messages relating to financial transactions. Agreements on application specifications are generally at a private level. This International Standard is designed as an interface specification enabling messages to be exchanged between systems adopting a variety of application specifications. The application specification may remain at the private level. Designers of such applications have complete design freedom within the overall constraint that messages shall be convertible to this interface format in order that international interchange may take place.

This International Standard uses a concept called a bit map, whereby each data element is assigned a position indicator in a control field or bit map. A one in the assigned position indicates the presence of a data element in a specific message. A zero in the assigned position indicates the absence of a data element in a specific message.

Data representation used in individual systems is subject to the commercial relationships between the parties contracting to each system. The message formats specified in this International Standard are designed to ensure that compatibility between systems conforming to this International Standard is always feasible.

In a number of cases, the names of data elements and message classes can become confusing when used in descriptive paragraphs. The word *authorization* is a typical example. It is an activity undertaken by a card issuer, it is the name of a message class where an acquirer requests a card issuer to undertake the activity and it is also a word used in many data element names.

To aid clarity, the following conventions are followed within this International Standard:

- data element names have the first letter capitalized;
- data element names are shown in *italics* except when used in tables or figures;
- message class names are shown capitalized when the context refers to their use in messages or transactions.

ISO 8583:1993 has been revised to be published in three parts. A number of changes have been made to accommodate the latest advances in payment technologies and the opportunity has also been taken to improve the layout and readability. A summary of the most significant changes between ISO 8583:2003 (all parts) and ISO 8583:1993 is provided in Annex F.

Financial transaction card originated messages — Interchange message specifications —

Part 1: Messages, data elements and code values

1 Scope

This part of ISO 8583 specifies a common interface by which financial transaction card-originated messages can be interchanged between acquirers and card issuers.

It specifies message structure, format and content, data elements and values for data elements. The method by which settlement takes place is not within the scope of this part of ISO 8583.

NOTE With the proliferation of technology available to financial institutions to offer services to customers, a range of tokens (financial transaction cards, digital certificates etc.) now exist for identifying account relationships. In order to maintain clarity, this part of ISO 8583 will continue to refer only to financial transaction cards as the token. However, readers should be aware that the actual token issued by a financial institution may be different.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

ISO 4217, *Codes for the representation of currencies and funds*

ISO 4909, *Bank cards — Magnetic stripe data content for track 3*

ISO 7372, *Trade data interchange — Trade data elements directory*

ISO 7811-2, *Identification cards — Recording technique — Part 2: Magnetic stripe — Low coercivity*

ISO 7812-1, *Identification cards — Identification of issuers — Part 1: Numbering system*

ISO 7813, *Identification cards — Financial transaction cards*

ISO 7816-6, *Identification cards — Integrated circuit(s) cards with contacts — Part 6: Interindustry data elements*

ISO 8583-2, *Financial transaction card originated messages — Interchange message specifications — Part 2: Application and registration procedures for Institution Identification Codes (IIC)*

ISO 8583-3:—¹⁾, *Financial transaction card originated messages — Interchange message specifications — Part 3: Maintenance procedures for messages, data elements and code values*

ISO 8601, *Data elements and interchange formats — Information interchange — Representation of dates and times*

ISO 8825 (all parts), *Information technology — ASN.1 encoding rules*

ISO 9564-1, *Banking — Personal Identification Number (PIN) management and security — Part 1: Basic principles and requirements for online PIN handling in ATM and POS systems*

ISO 9807, *Banking and related financial services — Requirements for message authentication (retail)*

ISO 13492, *Banking — Key management related data element (retail)*

ISO 18245:—²⁾, *Retail financial services — Merchant category codes*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

acquirer

financial institution (or its agent) which acquires from the card acceptor the data relating to the transaction and initiates that data into an interchange system

NOTE The acquirer remains unchanged throughout a transaction.

3.2

address verification

process of comparing data from the point of service (POS) with that held by the card issuer to verify the cardholder's billing address

3.3

advice

message where the sender notifies the receiver of an activity that has been taken, requiring no approval but requiring a response

3.4

aggregation

total amount of a number of transactions where details of the individual transactions that make up the total are not provided or recoverable

3.5

attended transaction

transaction where the acquirer has indicated that the card, cardholder and card acceptor representative are all present at the time of the transaction

3.6

authentication

action of proving that someone or something is genuine

1) To be published. (Revision of ISO 8583-3:1998)

2) To be published.