

JR

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PEOPLE'S REPUBLIC OF CHINA**

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**Technical specifications on bankcard interoperability - Part 1:
Transaction processing
(English Translation)**

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Foreword

JR/T 0055 "Technical specifications on bankcard interoperability" consists of the following 5 parts.

- Part 1. Transaction processing;
- Part 2. Message interface;
- Part 3. File data format;
- Part 4. Data secure transmission control;
- Part 5. Communication interface.

This part is part 1 of JR/T 0055.

This part was proposed by the People's Bank of China.

This part shall be under the jurisdiction of the National Financial Standardization Technical Committee.

The responsible drafting organizations of this part. People's Bank of China
Science and Technology Division, China UnionPay Co., Ltd.

The participating drafting organizations of this part. Industrial and Commercial

Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, Huaxia Bank, China Financial Electronics Co., Ltd., Bank Card Testing Center.

1 Scope

This part of the standard specifies the bankcard interbank transaction processing and handling principles.

This part of the standard applies to all exchange centers, acquirer, issuer and other institutions for bankcard interbank transaction.

2 Terms and definitions

The following terms and definitions apply to this part.

2.1

Bank card

Payment tools issued by the commercial banks and other financial institutions to the community, with all or part of functions of consumer credit, transfer settlement, access to cash, and so on.

2.2

Switching center

The institution completing bank card interbank transaction information transfer and clearing data collection, sorting and issuing functions.

2.3

Acquirer

A financial institution (or its agent) that obtains transaction-related data from the card acceptor and introduces the data to a switching center.

2.4

Card acceptor

The party who accepts the card and provides the receiving party with the transaction data,

It refers to the party of fund transfer-out in the transfer transaction.

2.12

Transfer-in

It refers to the party of fund transfer-in in the transfer transaction.

3 General processing flow of transaction

Based on the transaction processing, the transaction can be divided into online type, manual type and offline type. This part defines the general processing of these three types of transactions.

3.1 General processing flow of online transaction

Depending on whether the success of the transaction relies on the approval of the transaction acceptor, the online transaction can be divided into the request type and the advice type.

3.1.1.1 Basic requirements for request transaction

The request transaction is sent from the requester of the transaction (such as the acquirer) to the receiver (such as the issuer), informing the other party of the transaction being in progress, and asking the other party to send a response after the transaction is completed. After receiving the transaction request, the receiver shall directly respond with the transaction approval or rejection. If the receiver of the transaction is not the final receiving institution of the transaction, the receiver is responsible for forwarding the transaction to the next receiving institution.

It is not allowed for the request transaction to be automatic repeated sent.

The general process of request transactions is divided into two categories. transferred through the switching center, directly processed and finished by the switching center.

3.1.1.2 Request transaction through exchange center transfer

Note: Either the sender or the receiver is the switching center.

Figure 4 -- General processing flow of advice transaction directly

processed and finished by switching center

3.1.2.4 Storage and forward mechanism of advice transaction message

The following two situations may exist in online transaction process.

- The sender cannot send the message to the receiver.
- The sender cannot receive the response from the receiver after sending the message.

When one of the above two conditions occurs, the sender may place the message in the store-and-forward queue, repeat the sending at regular intervals for a certain number of times before the sender system starts cutoff. If the response is still not received, the sending is stopped. If there is an uneven account between the sender and the receiver, it is solved through error disposal. This disposal method is called store-and-forward mechanism.

The store-and-forward mechanism is only used when sending some advice message.

3.2 General processing flow of offline transactions

This standard does not yet define a specific offline transaction, so its general processing flow is temporarily undefined.

3.3 General processing flow of manual transactions

The processing flow of manual transactions depends on the specific implementation of the system. All parties involved in the transaction can agree on the manual transaction processing flow. However, it shall not exceed or violate the relevant provisions of this standard on the manual transaction.

4 Transaction specific processing flow and

processing requirements

In accordance with the function of the transaction, transactions can be divided into financial transactions, error transactions and management transactions.

This part details the specific processing flow and processing requirements of