

NIGERIA INTER-BANK SETTLEMENT SYSTEM PLC

NIBSS ELECTRONIC FUND TRANSFER (NEFT)

CORPORATE USER GUIDE (Version 3.0)

TABLE OF CONTENTS

1.	Background	2
1.1	Product Description	2
1.2	Value Proposition	5
1.3	Benefits of using or accepting NEFT as a payment method.....	5
2.	Operational Modalities	6
2.1	Collection	6
2.2	Presentment	8
2.4	Clearing House Processes	11
2.5	Inward Clearing	12
2.6	Settlement.....	12
2.7	Clearing Period.....	12
2.8	Resource requirements.....	13
2.9	Documentation/Proof-of-Payment.....	13
3.	NEW PRODUCT POTENTIAL	13
4.	Critical Risk Factors.....	13
4.1	Operations Risks.....	14
4.2	Financial Risks	14
5.	Conclusion	14
	APPENDIX I. EXAMPLE NEFT CREDIT TRANSFER FORM	15
	APPENDIX II. CAPTURE FILE EXAMPLE	16

1. Background

Cash remains the prevalent means of consumer payments in Nigeria today. It is most desirable to reduce the volume of cash-based transactions.

Widely accepted electronic payment systems would reduce the volume of cash outside the formal banking sector, increase the velocity of money, and thereby engender sustainable economic growth. The developed economies are characterized by popular electronic payment systems.

One effective approach to reducing high dependence on cash is to make available to consumers and merchants a variety of payment systems such that the two players would be able to select a preferred choice depending on the nature of transaction and circumstances of the purchase. The NIBSS Electronic Funds Transfer (NEFT) service is one of such payment systems.

The *NEFT* was introduced into the financial system in Nigeria in March 2004. This payment method is available in three modes namely,

- (a) NEFT Credit Transfer (Single Items)
- (b) Bulk Clearing – Automated Direct Credits
- (c) Bulk Clearing – Automated Direct Debits

This document presents a brief description of this new mode of payment and its operational logistics.

1.1 Product Description

1.1.1 NEFT Credit Transfer (Single Items)

In a cheque payment system, the payer gives the payment order (as confirmed on the cheque) to the payee. The payee must present the cheque to either the payer's bank for cash or to his own bank for deposit which will subsequently be paid through the clearing process. With NEFT payment, the payer hands the payment order directly to his own bank, which then makes payment to the beneficiary's bank through the clearing process.

The payer could hand over a copy of the payment order to the beneficiary as evidence of fund transfer. Also, the payee's bank account will be credited as soon as payment has been received through the clearing system.

The problem of returned cheques is avoided by the NEFT method of fund transfer. A NEFT payment is an irrevocable fund transfer instruction because the payer's bank simply will not accept the order if there are insufficient funds to cover the payment instruction.

Example of payments that can be effected with NEFT Credit Transfer service:

- a) Individual (person-to-person) fund transfers

- b) Merchant payments i.e. payments for goods and services
- c) Payment of tuitions
- d) Individuals paying utility bodies (water, electricity, telephone bills, Multichoice, FSTV, etc.)
- e) Revenue collections by government agencies e.g. Customs, FIRS, etc.
- f) Distributor payments
- g) Government taxes
- h) Subscription payments (magazines, clubs, associations, etc.)
- i) Charity donations
- j) Payment to religious bodies (churches, mosques)

The NEFT is quite similar to the GIRO payment method which has become popular in Europe and other parts of the world.

This new transfer system is similar to the NIBSS Fastfunds which is a third-party credit transfer system. However the NEFT serves the credit transfer needs of the low-end of the consumer market i.e. low-value, high-volume credit transfers, whilst Fastfunds is better suited for the high-end of the market i.e. high-value, low volume transfers.

1.1.2 BULK Clearing

The BULK Clearing service enables **corporate bodies** to present multiple Direct Credit or Direct Debit instruments, through clearing banks, to the Automated Clearing session.

Prior to the introduction of NEFT banks used to employ Bank Drafts to handle third-party inter-bank money transfers, salaries, Direct Debits/Standing Orders by insurance and utility companies. These transactions are manually processed; this manual processing cannot be efficient in treating high volume transactions. Bulk (NEFT) Clearing is best suited for processing of payments of this nature.

Example of payments that can be processed with Bulk Clearing (Automated Direct Credits) system:

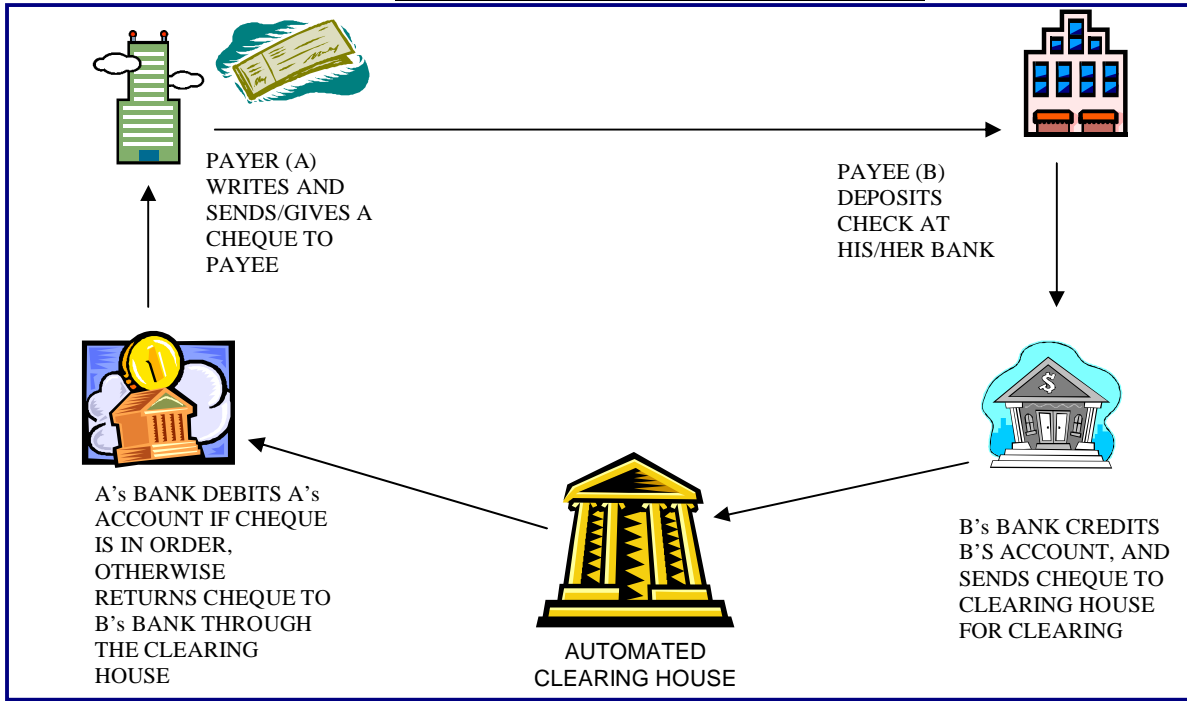
- a) Payment of staff salaries
- b) Payment of pensions
- c) Payment of sundry benefits to several individuals e.g. shareholders dividends
- d) Payment of Inter-Bank Standing Orders, by banks
- e) Contractor payments

Example of payments that can be processed with Bulk Clearing (Automated Direct Debits) system:

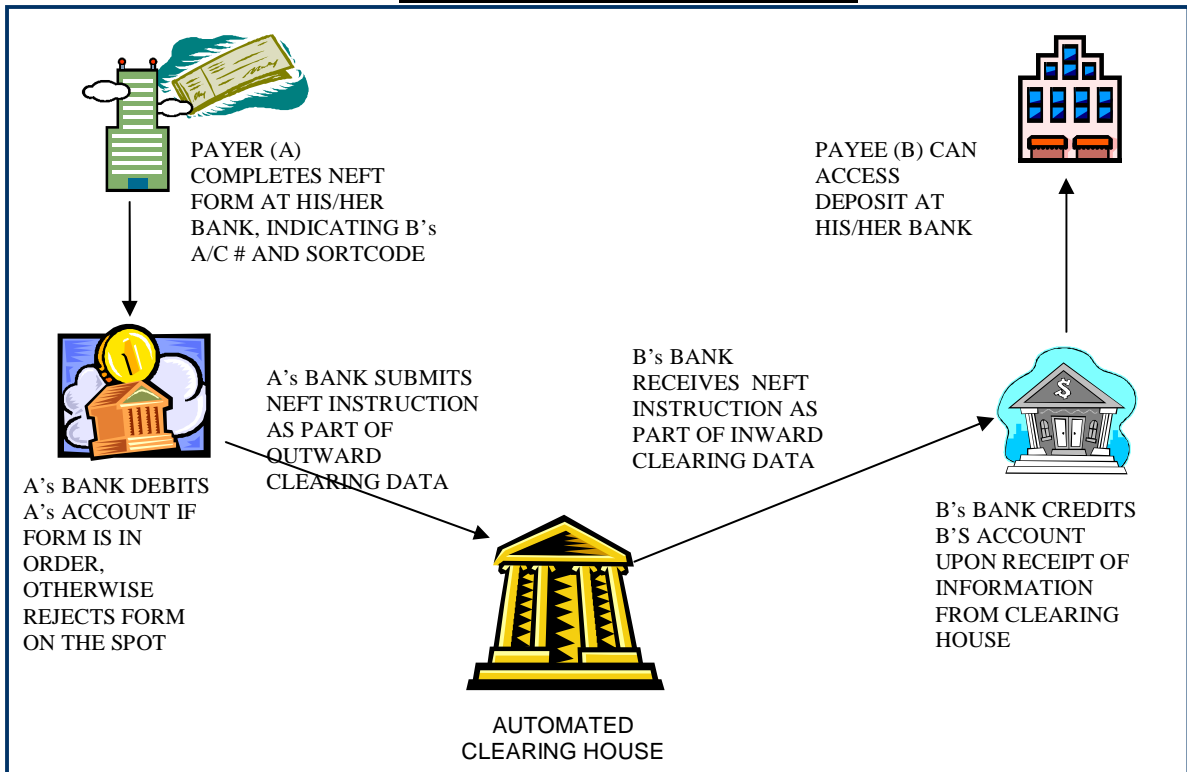
- a) Insurance premiums payments by Direct Debit
- b) Utility Bill collections (water, electricity, telephone bills, etc.)
- c) Subscription collections (clubs, associations, etc.)

The NEFT Bulk Clearing service takes full advantage of Item Processing technologies to enable fast processing, presentment, and clearing of high volume of instruments through the Nigeria Automated Clearing System, daily.

HOW A CHEQUE CLEARS



HOW A NEFT CLEARS



1.2 Value Proposition

The NEFT payment system provides the following benefits.

- Additional consumer payment option
- 24-Hour credit transfer system, with a nationwide coverage for transfer instructions cleared through the Lagos Clearing House
- Clearing delays eliminated, in case of credit transfers
- A payment instrument more attractive to merchants than cheques as the NEFT instrument is an irrevocable transfer instruction.
- A convenient means of settling regular periodic payments as Direct Credits (payer-initiated) or Direct Debits (payee-initiated)
- Can be used to pay government taxes, school fees, donations, salaries, as it is practiced in developed countries.
- Ideal for processing Salary and Pension payments, which are of inter-bank nature.
- Provides necessary information to the beneficiary e.g. Payer's name, payment narration; this helps the reconciliation process for the beneficiary
- An ideal platform for operating banking products of inter-bank nature e.g. inter-bank standing orders.

1.3 Benefits of using or accepting NEFT as a payment method

- Bank transfers are more secure for both the customer and the banks. There are no cheques that may be misplaced, lost or stolen. In addition, since the payment goes directly from the customer to the bank, there is no possibility of fraudulent alteration of the payment amount.
- The sender's account is debited immediately in case of credit transfers. This makes account reconciliation much simpler for the customer. The customer does not have to worry about un-presented cheques being debited unexpectedly months later, on presentation by the payee.
- As NEFT credit transfers are credited directly, the payment process is much quicker than with cheques, which must first be presented to the paying bank in clearing. This can result in improved cash flow.
- Any payment credited to the beneficiary's account is a cleared item. There is no possibility of the payment being reversed for insufficient funds, drawers confirmation, irregular signature or any other reasons associated with cheques.

1.3.1 Some Specific Benefits For Banks

- a) Decongests Banking Halls

- b) Enhances customer service delivery
- c) Reduces cash handling costs
- d) Reduces total cost of payments processing
- e) Additional revenue for banks
- f) Product development opportunities for banks
- g) Enables banks to provide total solutions to corporate customers (One Stop Service)
- h) Enhances banking operations e.g. Standing orders, etc.

1.3.2 Specific Benefits for the Banking Public

- a) Convenience
- b) Reduces reconciliation efforts
- c) Can provide substantial savings in accounting time and money
- d) No cheque handling, printing and storage costs
- e) Reduces exposure to cheque fraud
- f) No loss or stolen cheques
- g) Better cash flow management
- h) Faster clearing period

2. Operational Modalities

2.1 Collection

It is the responsibility of clearing banks to collect NEFT instructions from their customers for onward presentment at the Automated Clearing sessions. The Automated Clearing House requires the following data items to be provided for every NEFT instruction.

- Sender's Name
- Receiver's Name
- Receiver's Bank
- Receiver's Bank branch
- Receiver's account number
- Receiver's account sortcode
- Transfer Amount
- Payment Reference
- Payment Narrations

Details of clearing item collection for the NEFT Credit Transfer, and Bulk Clearing system follow:

2.1.1 NEFT CREDIT TRANSFER (SINGLE ITEMS)

- i. Customer walks in to a bank's branch and completes a pre-printed, pre-numbered NEFT Credit Form in duplicate (see example form in the Appendix).
- ii. The Branch Customer Service personnel would accept the completed

form and check it for validity i.e. checks for correctness, sufficient fund in account, and compliance with account mandate.

The validity of SortCode has to be confirmed too. To aid this process, NIBSS Plc provides all clearing banks with a database of all bank sort codes. This database shall be updated periodically by NIBSS, and updated versions shall be made available to the banks from time to time. Therefore banks are required to always notify NIBSS about new branches and branch closures, to enable NIBSS update the Sortcodes Database accordingly.

- iii. Invalid forms shall be rejected on the spot.
- iv. Customer Service personnel would enter details of NEFT form on the terminal.
- v. The transfer amount shall be debited to the customer account immediately and, endorsed copy of the form shall be given to the customer.

2.1.2 BULK CLEARING (Automated Direct Credits)

- i. Customer's representative delivers electronic NEFT file with an accompanying Summary Sheet to the Customer Service personnel at Bank branch or Bank Clearing Centre, in accordance to pre-arranged delivery procedures. Media shall be delivered under a security seal.
- ii. The Customer Service(CS) personnel would accept the items and check them for validity i.e. checks for tampering, correctness, sufficient fund in source account, and compliance with account mandate. The CS personnel would also perform an electronic security check on the file and ensure that the contents of the file and Summary Sheet tally.
- iii. Invalid transfer applications shall be rejected on the spot.
- iv. The transfer amount shall be debited to customer account immediately and, endorsed copy of the Summary Sheet shall be given to the customer's representative.

2.1.3 BULK CLEARING (Automated Direct Debits)

- i. Customer's representative delivers electronic NEFT file with an accompanying Summary Sheet to the Customer Service personnel at Bank branch or Bank Clearing Centre, in accordance to pre-arranged delivery procedures. Media shall be delivered under a security seal.
- ii. The Customer Service personnel would accept the file and Schedule and check it for validity i.e. checks for tampering, correctness, and compliance with account mandate. He would also perform an electronic security check on the file and ensure that the contents of the file and Summary Sheet tally.
- iii. Invalid transfer applications shall be rejected on the spot.
- iv. The endorsed copy of the Summary Sheet shall be given to the customer's representative.

2.2 Presentment

The clearing center of the bank shall extract NEFT Data from bank's transaction database at end of day, for presentation at the Automated Clearing session.

Also, the Bulk Transfer media would be collated at the bank's Clearing Centre, where the files would be vetted, converted as necessary, and then presented at the next Automated Clearing Session.

NEFT Items meant for presentation at the Automated Clearing session must be provided in Capture Files (CF) format in accordance to standard procedures of the Nigeria Automated Clearing System (NACS).

One Capture file contains a group of items of the same nature (same collection type), and same business date, from same bank, to be presented to one bank. This group of items is called a **bundle**. A Capture File can contain a maximum of 9,999 items. If the source Bundle has more than this maximum, multiple capture files should be created.

2.2.1. THE CAPTURE FILE NAME

The Capture file name shall use the following naming convention:

CF_<PresentingBankRoutingNumber>_<BundleCreationDate>_<BundleCreationTime>_<CaptureSessionID>_<BundleID>.csv

Where:

PresentingBankRoutingNumber = nnnnnnnnn
BundleCreationDate = yyyyymmdd
BundleCreationTime = hhmm
CaptureSessionID = nn (maximum size is 2)
BundleID = nnnnnnnnnn (maximum size is 10)

Notes:

- 1) The values for the fields in the file name (except for the BundleCreationTime) shall be from the data fields in the Summary Bundle Record inside the Capture file (data field definitions are described in Section 2.2.3 below).
- 2) The size of the CaptureSessionID and BundleID could be any size as long as it does not exceed the maximum size. The field doesn't need to be zero filled to be the maximum size.
- 3) *CaptureSessionID* refers to Cycle Number.

2.2.2 CAPTURE FILE STRUCTURE

The Capture file structure is defined as follows:

Bundle Summary Record*Item Record (for item 1)**Item Record (for item 2)*

.

.

Item Record (for item n)

Each record in the file will contain only ASCII data and will be terminated by a carriage return and line feed.

The first line of the Capture file is always the **Bundle Summary Record**. The **Item Records** of the bundle follow the Bundle Summary Record.

The Bundle Summary Record consists of data fields related to the bundle, separated by commas. The Bundle Summary Record format is as follows:

RecordType, Bundle collection type, Final destination routing number, Presenting bank routing number, Presentment date, Capture session ID, Bundle creation date, Bundle ID, Items within bundle count, Bundle total amount

Where *Record type, Bundle collection type* etc. are the data fields of the Bundle Summary Record. All data fields of the Bundle Summary Record are defined in Section 2.2.3 below.

The Item Record consists of data fields related to one item, separated by commas. The Item Record format is as follows:

Record type, Presenting bank item sequence number, Receiving bank sort code, Account number, Transaction code, Serial number, Item amount, Bank of First Deposit (BFD) sort code, MICR repair flags, Special handling indicator, Payer Name, Payee Name, Transaction narration.

Where *Record type, Presenting bank item sequence number* etc. are the data fields of the Item Record. All data fields of the Item Record are defined in Section 4 below.

An example of the Capture file is shown in Appendix II below.

2.2.3 BUNDLE SUMMARY RECORD

<i>Data Field Name</i>	<i>Description/Format/Value</i>	<i>Type</i>	<i>Size</i>	<i>Usage</i>
Record type	Bundle Summary Value: 'B'	A	2	R

<i>Data Field Name</i>	<i>Description/Format/Value</i>	<i>Type</i>	<i>Size</i>	<i>Usage</i>
Bundle collection Type	A code that identifies the type of bundle Value: 30=NEFT Credit (Single Items) 31=NEFT Credit (Bulk Items) 71=NEFT Debit (Bulk Items)	N	2	R
Final destination bank routing number	The routing number of the bank to which the bundle is being sent to.	N	9	R
Presenting bank routing number	The routing number of presenting bank.	N	9	R
Presentment date	The date that designates the intended presentment date of the bundle in format: YYYYMMDD	N	8	R
Capture Session ID	A code assigned by the institution that creates the bundle, denotes the clearing session number to which bundle is to be submitted. Default Value: 1	N	2	R
Bundle creation date	The date that the bundle is created in format: YYYYMMDD	N	8	R
Bundle ID	A number that uniquely identifies the bundle, assigned by the institution that creates the bundle.	N	10	R
Items within bundle count	A number indicating the total number of Item Records in the bundle	N	4	R
Bundle total amount	A number indicating the total value of the items in the bundle.	N	15	R

2.2.4. ITEM RECORD

<i>Data Field Name</i>	<i>Description/Format/Value</i>	<i>Type</i>	<i>Size</i>	<i>Usage</i>
Record type	Item Record Value: 'I'	A	2	R
Presenting bank item sequence number	A number assigned by the institution that creates the item record.	N	15	R
Account Sortcode	The account sortcode	N	9	R
Account number	The account number at the receiving bank	A N	15	R
Transaction code	The transaction code Default Value: 20	N	2	O
Serial number	The item serial number	N	15	O
Item amount	The value of the item	N	13	R

<i>Data Field Name</i>	<i>Description/Format/Value</i>	<i>Type</i>	<i>Size</i>	<i>Usage</i>
Bank of First Deposit (BFD) routing number.	N/A Default value: 000000000	N	9	O
MICR repair flags	N/A Default value: 000000	N	6	O
Special handling indicator	Default value: 0	N	3	O
Sender's Name	The name of Sender of NEFT instruction	A N	20	O
Receiver's Name	The name of Receiver of NEFT instruction	A N	20	O
Transaction Detail	The details of the transaction	A N	25	O

Below are the relevant Capture File (CF) specification codes which are required to facilitate the processing of the NEFT instrument.

CASH COLLECTION TYPE		BUNDLE COLLECTION TYPE	
CODE	DESCRIPTION	CODE	DESCRIPTION
51	Presentment Credit	30	NEFT Credit Transfer (Single Items)
		31	Bulk Clearing Item(Direct Credits)
50	Presentment Debit	71	Bulk Clearing Item(Direct Debits)
53	Returned Item (Credit)	53	Returned NEFT Credit transfer (Single Item)
		54	Returned Direct Credit Bulk Clearing Item
52	Returned Item (Debit)	81	Returned Direct Debit Bulk Clearing Item

2.4 Clearing House Processes

Automated Clearing Session

The NEFT payment instruments shall be presentable at any of the two daily sessions of the Automated Clearing system, along with other instruments.

Physical Instrument Exchange Session

There shall be no activity in respect of the NEFT instrument, at the physical instrument exchange session, as NEFT is operated as a paperless fund transfer service.

2.5 Inward Clearing

All inward NEFT items would reflect appropriately in the Clearing reports and Bank Posting File (file of inward items), after every clearing session. This would enable the banks to post entries into the receiver's accounts as required.

It is obligatory upon the beneficiary bank to provide all vital information, as contained in the Bank Posting File, in the Bank Account Statement of the respective beneficiaries e.g.

- Sender's name
- Payment narration
- Payment Reference number

These pieces of information will be very helpful for the receiver at the point of account reconciliation.

In case of (single item and bulk) credit transfers, the receiving bank shall be required to make funds available to the beneficiary the business day the instrument was received in the clearing house.

INVALID TRANSACTIONS

Every inward NEFT item which is found to be invalid (e.g. case of invalid account) shall be clarified with the presenting bank to the benefit of the beneficiary; *if such case could not be resolved within 24 hours, then the receiving bank shall remit such funds to the collecting bank as a RETURN NEFT ITEM (in a Return Request File), and the collecting bank shall advise the sender accordingly.*

2.6 Settlement

The ECPIX application provides a separate net settlement figure for this new instrument, per bank. In this way, the banks would be properly informed of the actual net settlement in respect of NEFT transfers for every clearing session.

2.7 Clearing Period

INSTRUMENT TYPE	CLEARING PERIOD (VALUE TO CUSTOMER)	SETTLEMENT
NEFT Credit transfer(Single Item)	Same (clearing) day	Day item was presented in clearing
Bulk Clearing (Direct Credits)	Same (clearing) day	Day item was presented in clearing
Bulk Clearing (Direct Debits)	3 days, as it is with local cheques	Next Day

2.8 Resource requirements

All clearing banks shall provide :

- pre-printed, pre-numbered NEFT Transfer forms. See recommended form design in Appendix I.
- Delivery Procedure for electronic media (containing bulk clearing instruments) to Bank Clearing Centres by corporate bodies.
- A means of extracting NEFT Transactions from Bank Transaction Database, and conversion to ECPIX format for onward transmission to the Automated Clearing House.
- A means of converting bulk clearing items to the ECPIX Capture file format, for onward transmission to the Automated Clearing House.

NIBSS will provide support services if required by any bank.

2.9 Documentation/Proof-of-Payment

NEFT CREDIT TRANSFER (Single item)

The payer may forward a copy of the bank-endorsed NEFT form to the beneficiary (if required) as proof of payment. The beneficiary bank is required to include the “Bank of Deposit” information in bank statements, as a reconciliation guide for the beneficiary.

3. NEW PRODUCT POTENTIAL

NEFT provides product opportunities for banks. Discerning banks could develop nation-wide fund transfer products, branded as desired, for the benefit of their customers. Also banks with an Automatic Teller Machine(ATM) network could provide the NEFT system as an additional self-service facility.

Finland had up to 2000 giro-only ATMs in operation as at year 2001 (www.bof.fi).

4. Critical Risk Factors

The NEFT transfer system benefits from all the immense security apparatus of the Virtual Private Network of the Automated Clearing infrastructure, in the areas of secure outward items preparation, secure data transmission and processing, and secure inward items processing.

4.1 Operations Risks

The NEFT system is subject to inherent risks of electronic funds transfer systems. We are delivering the NEFT on the platform of the NACS to make it enjoy the protection of the immense security mechanism of the NACS, as a way of mitigating these risks.

However, the collecting and beneficiary banks are required to review internal processes of handling outward and inward items, as appropriate, to mitigate every identifiable operational risks in line with each bank's fund transfer policy guidelines.

4.2 Financial Risks

The present clearing collateral regime sufficiently covers settlement risks of the NEFT instrument.

There are no identifiable customer-related financial risks with the credit transfer system, as every collecting bank shall process only transfer instructions backed by sufficient funds in customer accounts in accordance with accounts operations mandate.

5. Conclusion

This document provides a lucid description of the NEFT product, with emphasis on the value propositions to all stakeholders in the financial system, and its operational modalities.

The NIBSS Electronic Funds Transfer scheme has great potentials to:

- reduce the high dependence of the banking public on cash as a means of payment;
- it will boost the fee-income base of all banks and enhance customer service delivery, thereby enabling banks to retain their customers, and win new customers;
- serve as a veritable tool for the elevation of the Nigeria payment system, with its attendant macroeconomic benefits.

NIBSS PLC
March, 2006.

APPENDIX I. EXAMPLE NEFT CREDIT TRANSFER FORM

ABC BANK OF NIGERIA PLC Broad Street Branch		Ref.: 9999999999999999 Date: _____
DIRECT CREDIT		
TO:		
BENEFICIARY'S NAME:-----	BANK NAME:-----	
ACCOUNT: <input style="width: 100%;" type="text"/>	BRANCH NAME: -----	
	BRANCH SORT CODE: <input style="width: 100%;" type="text"/>	
BY THE ORDER OF:		
ACCOUNT NAME: -----		
ACCOUNT: <input style="width: 100%;" type="text"/>		
BEING PAYMENT FOR: -----		
THE SUM OF: _____		
		₦ <input style="width: 100%;" type="text"/>
		_____ Authorised Signature

NOTE:

- Field lengths :
 - Account number – 15 characters
 - Reference Number – 15 characters
 - Account Name – 20 characters
 - Beneficiary's Name – 20 characters
 - Payment narration – 25 characters

- All presenting banks are required to print the NEFT Transfer Forms in duplicates, with 16-digit *Reference Number* pre-numbered (0000000000000000 to 9999999999999999).

- Presenting bank wants to be able to identify NEFT originating branch, while treating inward NEFT Returns. To meet this requirement, every presenting bank is required to indicate the sort-code of NEFT originating branch in the *BOFD(Branch of First Deposit)* field of item records in the Capture File, for every fresh NEFT presentments. In this way, whenever there is a NEFT Return inward, the *BOFD* value would tell the originating branch of the instrument.

APPENDIX II. CAPTURE FILE EXAMPLE

B,30,347812343,678912345,20010220,1,20010220,23,5,150000
I,12,347812343,1234567234,56,,10000,678912345,000000,0,Abc,Def, dummy data
I,13,347812343,3459823454,56,,20000,678912345,000000,0,Abc,Def, dummy data
I,14,347812343,6784556123,56,,30000,678912345,000000,0,Abc,Def, dummy data
I,15,347812343,4895433321,56,,40000,678912345,000000,0,Axy,Dxy,dummy data
I,16,347812343,5478943343,56,,50000,678912345,000000,0,XYZ,Abc,dummy data