

GUIDELINES FOR IMPLEMENTATION OF FUND TRANSFER VIA QR CODE

NAPAS QR FASTFUND 247

(For Banks that implemented IBFT)

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I. Document overview

1.1. Document purpose

This document is provided for Member Organizations (MOs) of NAPAS to guide the implementation of fund transfer via QR code (NAPAS QR FAST FUND 247).

1.2. Objects using the document

- Member organizations participate in the Financial switching services and electronic clearing services for interbank fund transfer transactions (IBFT)
- Member organizations participate in the Financial switching services and electronic clearing services for real-time direct credit transactions (DC NRT)

1.3. Terms and abbreviation

No.	Abbreviation	Meaning
1	IBFT	Financial switching and electronic clearing services for inter-bank transfer transactions
2	ISS	Issuers
3	BEN	Beneficiary bank
4	MO	Member organization
5	NAPAS QR FAST FUND 247	Brand name of the fund transfer transaction via QR code

II. General information

2.1. General introduction of fund transfer via QR code

- MO implements a new transaction type that is fund transfer via QR code (NAPAS QR FAST FUND 247) into the below service:
 - + IBFT service.
- The information about this type of transaction is as follows
 - + QR code generation channel: website, mobile application of the BEN or other entry provided to beneficiary customers.
 - + Fund transfer Channel: Application of ISS.
 - + QR code information:
 - QR code type: dynamic QR and static QR
 - QR code format: Comply with NAPAS technical standards in section IV

2.2. The role of MO

MO participates in the role of the ISS and/or the BEN in the NAPAS QR FAST FUND 247 with the following rights/responsibilities:

- In case MO participates as an ISS:

- + Provide and manage QR code reader applications for customers according to the standards specified in the Technical specification issued by NAPAS.
- + Perform identification, authorization and approval the NAPAS QR FAST FUND 247.
- + Instruct and communicate to customers about the function of scanning QR Code of beneficiary customers to perform fund transfer.
- + Provide accurate information in the online message to distinguish NAPAS QR FAST FUND 247 in accordance with NAPAS's technical specification for reporting, statistical and fee calculation purposes.
- In case MO participates in the role of a BEN
 - + Create, update and manage QR codes for customers in accordance with technical specification issued by NAPAS.
 - + Instruct and communicate to customers about the function of QR code generation so that customers can provide QR code to other sending customers to perform inter-bank fund transfer transactions.
 - + Accept and process interbank fund transfers using QR codes.

III. Technical, operational and legal implementation guidelines

Implementation guidelines on transaction flow, technical and operation changes and legal implementation are described in the Appendix 1.

IV. Guidelines for BEN to generate QR codes

The QR code format divides into the following cases:

- Static QR fund transfer to account
- Static QR fund transfer to card
- Dynamic QR fund transfer to card
- Dynamic QR fund transfer to account

Detailed instructions are given in Appendix 2 of the Document.

V. Regulations on the Viet QR brand identity

MO shall follow the instructions in the Instruction document for applying the VietQR logo to payment and fund transfer transactions via QR codes attached to this document.

APPENDIX 1: INSTRUCTIONS FOR IMPLEMENTATION OF NAPAS QR FAST FUND 247 IN IBFT SERVICE

1. Transaction flow

Follow the flow of a normal interbank fund transfer.

In the NAPAS QR FAST FUND 247 in IBFT service (aka **QR IBFT**), the customer uses the ISS's application to scan the QR code of beneficiary customer (QR code is created on the BEN's application or the application of another provider) instead of entering the card number/account number information.

- For dynamic QR: QR information includes card/account number, beneficiary bank, transaction amount and transfer content.
- For static QR: QR information includes card/account number, beneficiary bank.

The information read from the QR code must be fixed, the customer cannot edit this information (except for the information of amount and transaction content read from the dynamic QR code which can be edited).

In addition, the QR format allows distinguishing the QR for transferring money to card or account so that the ISS can display the corresponding interface to the customer and send the corresponding transaction message to NAPAS.

(Please refer to information about QR format in section IV).

The steps of querying beneficiary information and sending fund transfer request are processed as a normal IBFT flow.

2. Legal implementation

NAPAS updated the IBFT service content in the Product Document attached to the Regulations for member organizations participating in the NAPAS system to deploy QR IBFT and send this update to participating banks.

NAPAS will periodically update the Regulations for member organizations participating in the NAPAS system (including other updates besides QR IBFT) and send the new version to all MOs according to NAPAS' periodic update plan.

3. Technical Deployment

3.1. For ISS

ISS shall comply with the Technical Specification (Tech spec) 1.0 issued by NAPAS in 2017. To support a new transaction channel for QR transactions deployed on the IBFT system, ISS shall ensure fill in the accurate value of the field DE#60 in online message.

According to the regulations of the field DE#60, the IBFT service have 02 characters to specify the originating channel, the values are specified as follows:

- 00: Unknown

- 01: ATM
- 02: Counter
- 03: POS
- 04: Internet Banking
- 05: Mobile Application
- 06: SMS Banking
- 07: Another channel

To deploy the QR IBFT, NAPAS updates the channel values in DE#60 as follows:

- 00: Unknown
- 01: ATM
- 02: Counter
- 03: POS
- 04: Internet Banking
- 05: Mobile Application
- 06: SMS Banking
- 07: Another channel
- ...
- **99: money transfer via QR channel**

Furthermore, to ensure the future expansion on payment channels, the system supports the processing of all values from 00 to 99.

3.2. For BEN

Beneficiary bank do not need to make any technical changes when receiving the QR IBFT transaction because currently the systems are supporting the filling and processing of all values from 00 to 99 of DE#60, the BEN does not need to differentiate the transaction channel from ISS.

4. Operational implementation

4.1. General description

- Updates on the Settlement file for MO (.dat file): QR IBFT transactions are included in the file of switching transactions (together with IBFT, ATM, POS).
- Updates on the Summary report (pdf): Separate the QR IBFT transactions from the normal IBFT transactions.
- Updates on discrepancy file sent from MO to NAPAS: QR IBFT transactions are grouped together with the IBFT, ATM, POS transactions.

- The process/regulations on settlement, reconciliation and dispute of QR IBFT transactions is similar to those of normal IBFT transactions.

4.2. Detailed description

- Integrate IBFT and IBT transaction into IBFT on internal reports of Napas BCTH03, BCTK, BCGS and SWI sent to MO.
- Group by IBFT, in the IBFT group there are QR IBFT and other IBFT on the reports BCTH03, BCTK, BCGS.
- Group by IBFT, in the IBFT group there are QR IBFT and other IBFT in each status (success, refund after reconciliation, refund after dispute, additional settlement)
- Add aggregate data on the reports: QT_MO, Citad, THQT, THP_MO, BCP_MO, Phi02 HTDC, Phi04 HTDC

5. Fee policy

Apply fee policy of IBFT service.


APPENDIX 2: QR CODE FORMAT GUIDELINES

1. Static QR to account

00020101021138570010A00000072701270006970403011200110123456780208QRIBFTT
A53037045802VN6304**F4E5**

Name	ID	Length	Value
Payload Format Indicator <i>Data version</i>	00	02	01
Point of Initiation Method <i>Initialization method</i>	01	02	11
Consumer Account Information <i>Beneficiary identification information</i>	38	57	0010A000000727 0127000697040301130011012345678 0208QRIBFTTA
Transaction Currency <i>Currency code</i>	53	03	704
Country Code <i>Country code</i>	58	02	VN
CRC (Cyclic Redundancy Check)	63	04	F4E5

Steps to create QR


Implementation step	Input data	Expected results
Create CRC http://www.lammertbies.nl/comm/info/crc-calculation.html	00020101021138570010A00000 07270127000697040301120011 0123456780208QRIBFTTA530 37045802VN6304	F4E5
Generate QR Code https://www.the-qrcode-generator.com/	00020101021138570010A00000 07270127000697040301120011 0123456780208QRIBFTTA530 37045802VN6304 F4E5	

2. Static QR to the card.

00020101021138600010A00000072701300006970403011697040311012345670208QRIBFTT
C53037045802VN63044F52

Name	ID	Length	Value
Payload Format Indicator <i>Data version</i>	00	02	01
Point of Initiation Method <i>Initialization method</i>	01	02	11
Consumer Account Information <i>Beneficiary identification information</i>	38	60	0010A000000727 0130000697040301169704031101234567 0208QRIBFTTC
Transaction Currency <i>Currency code</i>	53	03	704
Country Code <i>Country code</i>	58	02	VN
CRC (Cyclic Redundancy Check)	63	04	4F52

Steps to create QR


Implementation step	Input data	Expected results
Create CRC http://www.lammertbies.nl/comm/info/crc-calculation.html	00020101021138600010A00000 07270130000697040301169704 0311012345670208QRIBFTTC 53037045802VN6304	4F52
Generate QR Code https://www.the-qrcode-generator.com/	00020101021138600010A00000 07270130000697040301169704 0311012345670208QRIBFTTC 53037045802VN 63044F52	

3. Dynamic QR to the account

00020101021238570010A00000072701270006970403011300110123456780208QRIBFTTA53
0370454061800005802VN62340107NPS68690819**2E2E**

Name	ID	Length	Value
Payload Format Indicator <i>Data version</i>	00	02	01
Point of Initiation Method <i>Initialization method</i>	01	02	12
Consumer Account Information <i>Beneficiary identification information</i>	38	57	0010A000000727 0127000697040301130011012345678 0208QRIBFTTA
Transaction Currency <i>Currency code</i>	53	03	704
Transaction Amount <i>Amount GD</i>	54	06	180000
Country Code <i>Country code</i>	58	02	VN
Additional Data Field Template <i>Additional information</i>	62	34	0107NPS6869 0819thanh toan don hang
CRC (Cyclic Redundancy Check)	63	04	2E2E

Steps to create QR

Implementation step	Input data	Expected results
Create CRC http://www.lammertbies.nl/comm/info/crc-calculation.html	00020101021238570010A0000007 2701270006970403011300110123 456780208QRIBFTTA530370454 061800005802VN62340107NPS6 8690819thanh toan don hang6304	2E2E
Generate QR Code https://www.the-qrcode-generator.com/	00020101021238570010A0000007 2701270006970403011300110123 456780208QRIBFTTA530370454 061800005802VN62340107NPS6 8690819thanh toan don hang6304 2E2E	

4. Dynamic QR to the card.

00020101021138600010A00000072701300006970403011697040311012345670208QRIBFTTC53037045802VN6304A203

Name	ID	Length	Value
Payload Format Indicator <i>Data version</i>	00	02	01
Point of Initiation Method <i>Initialization method</i>	01	02	12
Consumer Account Information <i>Beneficiary identification information</i>	38	60	0010A000000727 0130000697040301169704031101234567 0208QRIBFTTC
Transaction Currency <i>Currency code</i>	53	03	704
Transaction Amount <i>Amount GD</i>	54	06	180000
Country Code <i>Country code</i>	58	02	VN
Additional Data Field Template <i>Additional information</i>	62	34	0107NPS6869 0819thanh toan don hang
CRC (Cyclic Redundancy Check)	63	04	A203

Steps to create QR

Implementation step	Input data	Expected results
Create CRC http://www.lammertbies.nl/comm/info/crc-calculation.html	00020101021238600010A00000 072701300006970403011697040 311012345670208QRIBFTTC53 0370454061800005802VN62340 107NPS68690819thanh toan don hang6304	A203
Generate QR Code https://www.the-qrcode-generator.com/	00020101021238600010A00000 072701300006970403011697040 311012345670208QRIBFTTC53 0370454061800005802VN62340 107NPS68690819thanh toan don hang6304A203	