### পেমেন্ট সিস্টেমস্ ডিপার্টমেন্ট বাংলাদেশ ব্যাংক প্রধান কার্যালয় ঢাকা

পিএসডি সার্কুলার নং ঃ ০১/২০২১

তারিখঃ ২২ পৌষ ১৪২৭ ৬ জানুয়ারী ২০২১

ব্যবস্থাপনা পরিচালক/ প্রধান নির্বাহী কর্মকর্তা বাংলাদেশে কার্যরত সকল তফসিলী ব্যাংক/পেমেন্ট সার্ভিস প্রোভাইডর/পেমেন্ট সিস্টেমস্ অপারেটর/ মোবাইল ফিন্যান্সিয়াল সার্ভিস প্রদানকারী প্রতিষ্ঠান

প্রিয় মহোদয়.

## Guidelines for 'Bangla QR' Code Based Payments প্রণয়ন প্রসঙ্গে।

সম্প্রতি দেশে Quick response (QR) code ভিত্তিক পরিশোধ সেবার ব্যবহার পরিলক্ষিত হচ্ছে। QR code ভিত্তিক লেনদেন সহজ ও সাশ্রয়ী বিধায় এর বহুল ব্যবহার দেশের আর্থিক অন্তর্ভুক্তিমূলক কার্যক্রমকে আরো গতিশীল করবে। এ প্রেক্ষিতে, QR code ভিত্তিক লেনদেন Interoperable করার লক্ষ্যে বাংলাদেশ ব্যাংক 'National QR Code Standard for Retail Payments in Bangladesh' শিরোনামে 'Bangla QR' এর কাঠামো প্রস্তুত করেছে। এক্ষণে, দেশের অভ্যন্তরে পরিচালিত 'Bangla QR' এর ব্যবহারবিধি, লেনদেন নিষ্পত্তি, ফি ও চার্জ নির্ধারণ ইত্যাদি বিষয়ের বিস্তারিত ব্যাখ্যা সম্বলিত Guidelines for 'Bangla QR' Code Based Payments প্রণয়ন করা হয়েছে (এতদ্সংযুক্ত), যা সকল Bangla QR code ভিত্তিক লেনদেনের ক্ষেত্রে অনুসরণীয় হবে। এতদ্প্রেক্ষিতে, QR code ভিত্তিক লেনদেনের সাথে সম্পৃক্ত প্রতিষ্ঠানসমূহকে (Issuing/Acquiring) নিমুবর্ণিত নির্দেশনা প্রদান করা হলোঃ

- ১. বাংলাদেশে QR code ভিত্তিক লেনদেনের ক্ষেত্রে Issuing/Acquiring প্রতিষ্ঠান নির্বিশেষে সকলকে 'Bangla QR' গাইডলাইন অনুসরণ করতে হবে। তবে ইতোমধ্যে যেসকল প্রতিষ্ঠান Non EMVCO/ Proprietary standard অনুসরণ করে QR code ভিত্তিক পরিশোধ সেবা চালু করেছে তারা ৩১ ডিসেম্বর, ২০২১ এর মধ্যে বিদ্যমান Proprietary QR-কে 'Bangla QR' দ্বারা প্রতিস্থাপন করবে।
- ২. 'Bangla QR' ভিত্তিক আন্তঃপ্রাতিষ্ঠানিক লেনদেন দেশে কার্যরত সকল Network এর মাধ্যমে পরিচালনা/সম্পন্ন করা যাবে।
- ৩. Static 'Bangla OR' ভিত্তিক লেনদেনের জন্য একক ব্যক্তিক হিসাবে দৈনিক লেনদেনের সীমা সর্বোচ্চ ২০,০০০ টাকা।
- 8. 'Bangla QR' ভিত্তিক লেনদেনের ক্ষেত্রে বাংলাদেশ ব্যাংক কর্তৃক ধার্যকৃত ফি ও চার্জসমূহ প্রযোজ্য হবে।
- ৫. 'Bangla QR' প্রচার ও প্রসারের লক্ষ্যে ব্যাংক/পেমেন্ট সার্ভিস প্রোভাইডর/পেমেন্ট সিস্টেমস্ অপারেটর/মোবাইল ফিন্যান্সিয়াল সার্ভিস প্রোভাইডর প্রতিষ্ঠানগুলো প্রয়োজনীয় গ্রাহক/মার্চেন্ট সচেতনতা বৃদ্ধির উদ্যোগ গ্রহণ করবে।

উপর্যুক্ত নির্দেশাবলী অবিলম্বে কার্যকর হবে।

আপনাদের বিশ্বস্ত.

(মোঃ মেজবাউল হক) মহাব্যবস্থাপক

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# Guidelines for 'Bangla QR' Code Based Payments



Payment Systems Department Bangladesh Bank

January 2021

# **Revision History**

Date	Version	Amendment / Change Description
January 2021	1.0	Initial publication

Version 1 Page 2 of 11

# **TABLE OF CONTENTS**

1.0 Introduction	4
2.0 Purposes of the Guideline	4
3.0 Scope/Applicability	4
4.0 Participants in a QR Code based Transaction	5
5.0 Bangla QR Logo	5
6.0 Transaction Flow of a QR Payment	5
7.0 Merchant on boarding for QR Payments	7
8.0 Clearing and settlement	7
9.0 Security	7
10.0 Transaction Limits	8
11.0 Transaction Notifications	8
12.0 Fees and Charges	8
13.0 Dispute Management	8

#### 1.0 Introduction

Building a safe, secured and efficient payment and settlement system in the country requires continuous efforts from all related stakeholders i.e. Regulators, Banks, Mobile Financial Service (MFS) providers, Payment System Operator (PSO), Payment Service Providers (PSP), Payment Schemes etc. These organizations play a pivotal role in encouraging and adopting new technologies such as Quick Response (QR) code which is a low cost retail payment solution. QR code is a two dimensional bar code initially invented for the auto industry eventually became popular in processing payments worldwide as a contactless payment method. Acquisition of small merchants will now be possible using QR codes instead of currently practiced expensive acquisition process using Point of Sales (POS) devices. This low cost technology will enable all merchants including small and micro merchants to be a part of the digital payment ecosystem.

Some Banks, Payment Schemes, MFSs, PSPs and PSOs have already prepared their own standards and infrastructures for facilitating closed loop/Proprietary QR code based payments, this however would increase inefficiency in the overall payment systems. In this backdrop, Bangladesh Bank in consultation with the stakeholders has developed a National QR Code Standard for Retail Payment named 'Bangla QR' for open loop interoperable QR code based payments. Here, we have adopted EMV<sup>®</sup> Merchant-Presented QR Code Specification (EMV<sup>®</sup> QRCPS), where merchant will display its QR code and customer will scan the QR code using his/her financial institution's solution.

#### 2.0 Purposes of these Guidelines

- i. To promote the use of low cost QR code based payments throughout the country.
- ii. To provide regulatory framework about branding, merchant on-boarding, fees & charges and dispute Management etc. for the participants.

#### 3.0 Scope/Applicability

These guidelines are applicable for all members (Issuers, Acquirers, Transaction Processors, Third Party Payment Aggregators, Customers and Merchants) who will take part in Merchant Presented Mode of QR code based payments.

Version 1 Page 4 of 11

# 4.0 Participants in a QR Code based Transaction

The QR code based Payment System consists of the following members:

- a. Acquirer the Banks/MFSs/PSPs/PSOs that enrolls merchants, assigning merchant ID, maintaining merchant record/account and settling funds for merchants. Acquirer also facilitates QR code payments by providing application solution for merchants as well as for customers.
- b. *Issuer* Institutions that facilitates QR payments from its customer's account (i.e. current savings account, debit/credit/prepaid card, MFS account, e-wallet account etc.). Issuer usually on boards the customers (individuals and merchant) and provides QR code base transaction processing solution.
- c. Transaction processor A payment infrastructure provider which processes all off-us transactions by routing them to the appropriate participant and provides net settlement position to its participants and arrange to send the same to the settlement bank for posting.
- d. *Third Party Payment Aggregator* An entity that provides support to the merchants to facilitate electronic payments, these support include onboarding merchants directly, or on behalf of the acquirer. In case of direct onboarding, the entity needs to obtain license from the Bangladesh Bank as PSO (WLAMA).
- e. *Customer* An entity who maintains account (current/savings account, debit/credit/prepaid card, MFS account, e-wallet account etc.) with the issuer.
- f. *Merchant* An entity engaged in the business of selling of goods and services enrolled with an acquirer for receiving electronic payments.

# 5.0 Bangla QR Logo

To ensure the uniformity of National QR Code Standard, Bangladesh Bank has developed a logo termed as 'Bangla QR'. This logo represents the interoperable QR Code based retail payments and should be displayed in each merchant point to facilitate 'Bangla QR' payments. The logo of 'Bangla QR' must be developed according to the format given in Annexure-1. The acquirer shall also comply with the template as per Annxure-2. The 'Bangla QR' template should be clearly visible and readable to the customers. Apart from paper or sticker, 'Bangla QR' may be displayed in virtual form on any device screen.

# 6.0 Transaction Flow of a QR Payment

To encourage seamless Bangla QR payments, the applications provided by the issuer should be uniform. Bangladesh Bank suggests to customize the steps for QR code based payments as follows:

Version 1 Page 5 of 11

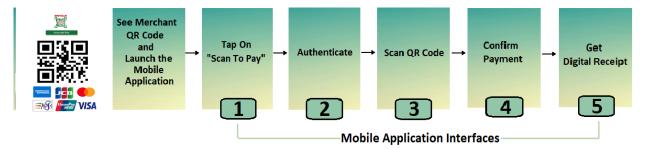


Figure: Steps of QR code based payments

The following image depicts a generic mobile application user interfaces and process flow:

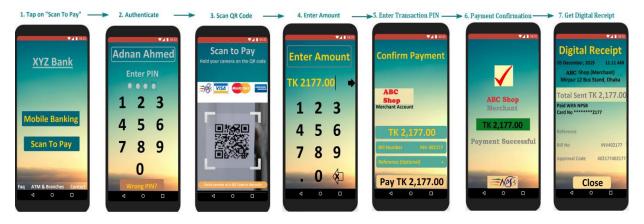


Figure: QR code based user interfaces (Static)

In this instance, the merchant will display a generic QR code which contains merchant's payment information without amount. Customer will scan the QR code and enter the payable amount in his/her mobile application and process the payment.



Figure: QR code based user interfaces (Dynamic)

In this instance, the merchant will generate specific QR code which contains merchant information including amount for each payment. Customer will scan the QR code and pay without entering the amount in his/her mobile application.

Version 1 Page 6 of 11

## 7.0 Merchant on boarding for QR Payments

QR code based payments opened the opportunity for the acquirers as well as for the merchants by enabling them to accept digital payments cheaply and easily. Bangla QR code will increase customers' financial service accessibility and interoperability in payment ecosystem. For the rapid expansion of QR code based payments, acquirers should prepare their strategy considering the following issues:

- i. Acquisition of merchants for Bangla QR payments will be decided by existing risk analysis and mitigation method (for example acquirer can segregate the merchants based on their sales volume, business nature, services offered etc).
- ii. Acquirers shall adopt the merchant acquisition policy in compliance with the regulations provided by Bangladesh Bank and BFIU.

#### 8.0 Clearing and settlement

All successful Bangla QR transactions must be authorized by the issuer and transaction completion information will be notified to related customer and merchant instantly. Transactions which are processed through Bangladesh Bank's network will be settled on the next business day. Participants will receive all the Clearing and Settlement reports including detail information at the end of each clearing cycle as usual.

## 9.0 Security

- i. The Bangla QR code is prepared according to the EMVCo standard. So, the acquirers and issuers shall adopt related security features instructed by EMVCo.
- ii. Acquirers and issuers shall follow card and other relevant controls mentioned in guidelines on 'ICT Security for Banks and Non-Bank Financial Institutions' issued by Bangladesh Bank.
- iii. Acquirers and issuers shall comply with relevant circulars issued by Bangladesh Bank regarding Card Present and Card Not Present (CNP) transactions from time to time.
- iv. Acquirers shall provide merchant awareness to ensure presentation of legitimate QR code.
- v. Issuers shall aware their customers to verify merchant's name and details while paying through Bangla QR.
- vi. For security purposes, issuers shall adopt transaction limits in line with clause 11 of these guidelines for QR code based transactions.

Version 1 Page 7 of 11

#### **10.0 Transaction Limits**

Merchants will be able to accept funds by using Bangla QR from various payment instruments including bank account, debit card, credit card, pre-paid card, MFS account and e-wallet account. Therefore, the number and amount for daily transaction for each category of account will be determined by the issuers as per their existing policy. However, Bangladesh Bank shall determine any transaction limit deemed necessary and will provide notification to the participants regarding such limits from time to time.

#### 11.0 Transaction Notifications

- i. Issuers shall notify customers the transaction status in real-time via SMS/email.
- ii. Acquirers shall notify the merchants the transaction status in real-time via SMS/email.

## 12.0 Fees and Charges

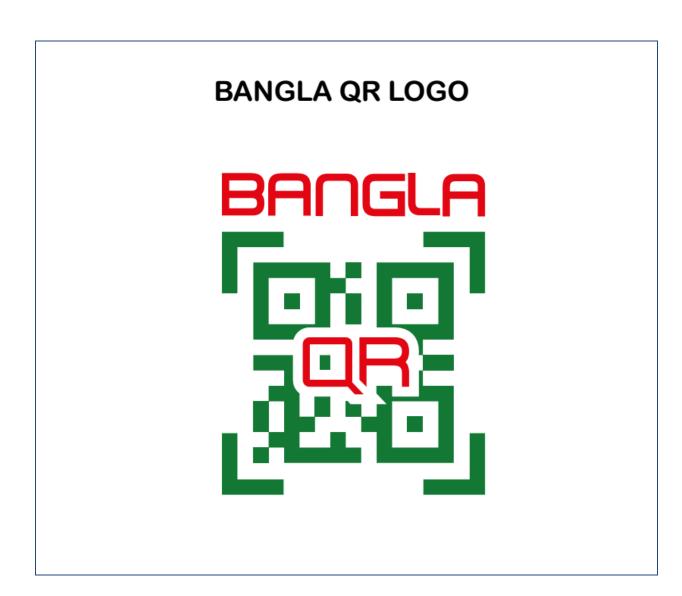
- i. Acquirers are strictly advised to make sure that the cost of Merchant Discount Rate (MDR) shall not be passed on to the customer.
- ii. Fees and charges for transactions processed through Bangladesh Bank's network will be as per Bangladesh Bank directives while the fees for other processors will be based on their policy. However, processors are encouraged to reshuffle their fee structure in line with the fees of Bangladesh Bank's network as much as possible.

#### 13.0 Dispute Management

In case of on-us transactions, there should be a clearly defined and disclosed Dispute Management Procedure for merchant and customer by respective service provider. While for not on-us transaction, acquirers and issuers should follow transaction processor's dispute management guideline. The transaction processor(s) are encouraged to adopt shorter dispute management timeframe for Bangla QR payments.

Version 1 Page 8 of 11

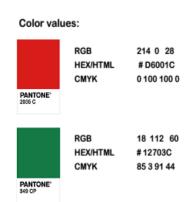
# **Annexure-1: Bangla QR Logo Details**



Version 1 Page 9 of 11

# **BANGLA QR LOGO**

# Colors

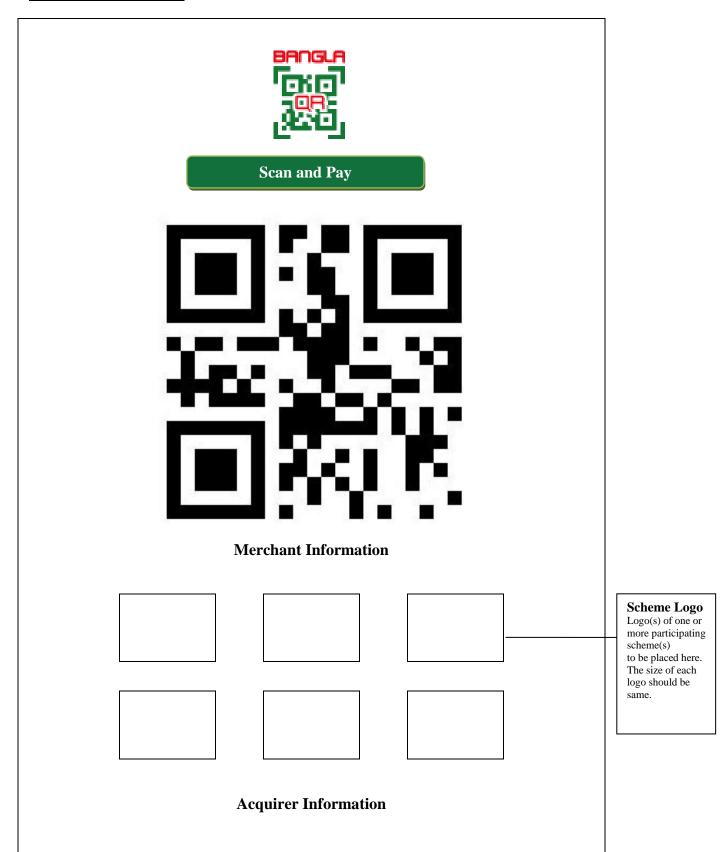




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Version 1 Page 10 of 11

# **Annexure-2: Template**



Version 1 Page 11 of 11