

ගෙවීම් සහ පියවීම් දෙපාර්තමේන්තුව

கொடுப்பனவுகள், தீர்ப்பனவுகள் திணைக்களம்

**Payments and Settlements Department** 

11 March 2019

Payment and Settlement Systems Circular No. 02 of 2019

To :

All CEO's of Licensed Banks, Licensed Finance Companies and Licensed Operators of Mobile Phone Based e-Money Systems

Subject:

Establishment of a National Quick Response Code Standard for

**Local Payments** 

This Circular is issued in terms of Section 44 of the Payment and Settlement Systems Act No.28 of 2005 (Act) read with Section 4 of the Act to establish a National Quick Response Code Standard for Local Payments. The Central Bank of Sri Lanka (CBSL) hereby issues a National QR code standard, titled LANKAQR Specifications (Annexure 1).

This Circular shall replace the Payment and Settlement Systems Circular No. 06 of 2018 – Establishment of a National Quick Response Code Standard for Local Currency Payments and shall come into effect on 11 March 2019 and all Financial Institutions (Licensed Banks and Licensed Finance Companies), and Licensed Operators of Mobile Phone Based e-Money Systems who offer QR Code based payment solutions shall conform to the same within two (02) months of this Circular.

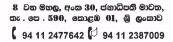
#### 1. Definitions

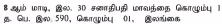
For all intents and purposes the following have been defined as parties to a LANKAQR code initiated transaction:

- 1.1 Issuer Financial Institutions which facilitate QR code based payments from current accounts, savings accounts, credit card accounts, and Operators of Mobile Phone Based e-Money Systems.
- 1.2 Merchant Acquirer The Financial Institution or Mobile Phone Based e-Money Operator\* responsible for enrolling merchants, assigning merchant IDs, maintaining merchant records/accounts, and settling merchants. The Merchant Acquirer also facilitates generation of merchant presented LANKAQR code.

Cont.

<sup>\*</sup> Financial Institutions or Mobile Phone Based e-Money Operators not connected to the Common Electronic Fund Transfer Switch (CEFTS) will be required to complete the settlement of their LANKAQR transactions through a Licensed Financial Institution connected to CEFTS operated by LankaClear (Pvt) Ltd (LCPL).





psd@cbsl.lk



- 1.3 Network Facilitator When the Issuer and acquirer (Merchant Acquirer and Transaction Acquirer) are different, the Network Facilitator would be responsible for routing transactions between the respective Financial Institutions involved in the transaction. Processing and clearing of all payments acquired using LANKAQR code, which are effected through current accounts, savings accounts and Mobile Phone Based e-Money accounts will be routed through the LankaClear (Pvt) Ltd (LCPL) network. It must be noted that LANKAQR based payments effected through international payment networks will be processed and cleared through existing mechanisms.
- 1.4 Mobile Application Provider This is the party which provides the mobile based payment solution to facilitate transactions using LANKAQR code. This can be a third-party application provider of a Financial Institution or an acquiring institution.
- 1.5 Transaction Acquirer The Transaction Acquirer is the Financial Institution which provides acquiring facilities for the mobile application provider or Mobile Phone Based e-Money Operator to process LANKAQR transactions. This party would facilitate the financial transactions via respective payment network.

## 2. Fees and Charges

- 2.1 No charge shall be levied on the customer for LANKAQR code initiated transactions.
- 2.2 Charges may be levied on merchants in the form of a Merchant Discount Rate (MDR).
- 2.3 Merchant Acquirers are strictly advised to make sure that the merchants do not recover full/part cost of MDR from the end customer.
- 2.4 Merchant Acquirers shall ensure that the lowest possible MDR rates prevail in order to encourage faster and widespread adoption of the LANKAQR code in the country.
- 2.5 Initially, CBSL may allow market forces to determine the MDR thus creating a healthy competition among Merchant Acquirers, and if required, CBSL may intervene in order to regularise and stabilise the MDR.
- 2.6 Table 1 below is an example of the distribution of a 1% MDR between all stakeholders Merchant Acquirers, Transaction Acquirers, Issuers and LCPL. Though the MDR may vary, the allocation for each stakeholder identified below shall not be changed, with the exception of the Merchant Acquirer. The Issuer Fee and Transaction Acquirer Fee shall be distributed by LCPL, in accordance with the allocations provided in Table 1 of this Circular. The LCPL Fee payment by the Merchant Acquirer will be added to the existing LankaPay CEFTS monthly invoice.

2.7 In the instance of a reversal of a transaction, the network fee (LCPL Fee which is non-refundable) shall be borne by the Merchant Acquirer.

Table 1\*\*: Example of distribution of a 1% MDR between all stakeholders

Transaction Amount (x) in LKR	LCPL Fee in LKR	Issuer Fee	Transaction Acquirer Fee	Merchant Acquirer Fee	
10<=x<=100	0.01	0.25%			
100 <x<=1000< td=""><td>0.10</td><td>0.35% (To be shared with</td><td rowspan="2">Up to 0.40% (Determined by market forces) - LCPL Fee</td></x<=1000<>	0.10		0.35% (To be shared with	Up to 0.40% (Determined by market forces) - LCPL Fee	
1000 <x<=5000< td=""><td>1.00</td><td rowspan="2">Mobile Application Provider)</td></x<=5000<>	1.00		Mobile Application Provider)		
5000 <x< td=""><td>3.00</td><td></td><td colspan="2"></td></x<>	3.00				

<sup>\*\*</sup> Percentages given in the table are calculated from the total transaction amount (x).

#### 3. Transaction Limits

- 3.1 The minimum transaction limit per LANKAQR code transactions shall be LKR 10.00.
- 3.2 The maximum transaction limit per LANKAQR code transactions shall be decided by the Merchant Acquirer, based on individual risk tolerance.

## 4. Transaction Notifications

- 4.1 Issuers shall notify the customers of the transaction status in real-time, via SMS.
- 4.2 Merchant Acquirers shall notify the merchants of the transaction status in real-time, via a suitable method, agreed with the merchant.

### 5. Network Facilitator

LCPL has been appointed as the main facilitating entity for the LANKAQR code based payment process and shall issue the relevant Operating Guidelines and Branding Guidelines as approved by the Director, Payments and Settlements Department, CBSL. All participants engaging in LANKAQR code initiated transactions shall adhere to the above Guidelines issued by LCPL.

D Kumaratun<del>gé</del>

**Director, Payments and Settlements** 

# **LANKAQR Specification**

Based on the EMV® QR Code Specification for Payment Systems (EMV QRCPS) - Merchant-Presented Mode - Version 1.0 - July 2017.

**Merchant-Presented Mode** 

Version 1.0 - October 2018

## **TABLE OF CONTENTS**

INTRO	DUCTION	2
PURPO	SE	2
REFER	ENCES	3
1. DA	TA OBJECT UNDER THE ROOT OF LANKAQR CODE	4
1.1.	TRANSACTION CURRENCY	4
1.2.	MERCHANT ACCOUNT INFORMATION (ROOT)	4
1.3.	MERCHANT ACCOUNT INFORMATION (TEMPLATE)	5
1.4.	ADDITIONAL DATA FIELD TEMPLATES	5
1.5.	DATA OBJECTS – UNRESERVED TEMPLATES	6
2 SP	FCIFICATION - NETWORK FACILITATORS	6

#### **INTRODUCTION**

Quick Response (QR) code based payment solutions, initiated using mobile devices, provide an alternative channel for initiating and accepting payments, specifically between a customer and a merchant. The usage of QR codes for payments eliminates the requirement for customers to carry cash or payment cards and for merchants to invest in high cost Point-Of-Sale devices to process transactions. The payment industry will benefit immensely from having a QR code standard implemented in the payment ecosystem of the country. Accordingly, the Central Bank of Sri Lanka is hereby issuing a QR code standard, titled LANKAQR Specification, to promote customer convenience, security and ensure interoperability of different payment mechanisms and instruments. By adopting a standardised QR code to initiate payments, financial institutions will be able to provide access to low-cost and secure digital payments to customers and merchants.

### **PURPOSE**

This document provides:

the customisations required to be adopted in EMV® QR Code Specification for Payment System (Merchant-Presented Mode - Version 1.0 - July 2017) to facilitate LANKAQR code. This specification shall be used by all Financial Institutions and operators of mobile phone based e-money systems, when issuing LANKAQR codes to their Merchants and/or any other third party who wishes to enter into LANKAQR code based payment mode.

[This section is left blank intentionally]

## REFERENCES

MET BARDINGED
EMV® QR Code Specification for Payment Systems (EMV QRCPS) - Merchant-Presented Mode - Version
1.0 - July 2017. https://www.emvco.com/
[This section is left blank intentionally]
[This section is left blank intentionary]

## 1. DATA OBJECT UNDER THE ROOT OF LANKAQR CODE

Please note that the data objects unless otherwise specified under this document, shall be as per the EMV® QR Code Specification for Payment Systems (EMV QRCPS) - Merchant-Presented Mode – Version 1.0 - July 2017 (EMV ® QR Code Specifications).

Following data objects under the root of the LANKAQR code will be customised as mentioned under the particular templates:

- Transaction Currency
- Merchant Account Information
- Additional Data Field
- Unreserved Templates

## 1.1. TRANSACTION CURRENCY (ID - "53")

The Transaction Currency shall conform to ISO 4217 and shall contain the value "144" for LKR.

## 1.2. MERCHANT ACCOUNT INFORMATION (ROOT) (ID - "02" to "51")

With reference to *Table 4.1: Allocation of Merchant Account Information (IDs "02" to "51")* under EMV ® QR Code Specifications, the following IDs shall be present accordingly.

Table 1.1 - Allocation of Merchant Account Information for LANKAQR Code Specification

ID	Meaning		
"26"-"27"	Reserved for LankaPay		
"28"-"29"	Reserved for WeChat Pay		
"30"-"31"	Reserved for Alipay		

## 1.3. MERCHANT ACCOUNT INFORMATION (TEMPLATE)

With reference to Table 4.2: Data Object ID Allocation in Merchant Account Information Template (IDs "26" to "51") under EMV ® QR Code Specifications, the following IDs shall be present accordingly.

**Table 1.2** – Data Object ID Allocation in Merchant Account Information Template for LANKAQR Code Specification

ID	Meaning	Format	Length	Presence	Comment
"80"	Reserved for LankaPay	S	*	0	*
"81"	Reserved for WeChat Pay	S	*	O	*
"82"	Reserved for Alipay	S	*	О	*

O – Optional

## 1.4. ADDITIONAL DATA FIELD TEMPLATES (ID - "62")

With reference to *Table 3.7 – Data Objects for Additional Data Field Template (ID "62")* under EMV ® QR Code Specifications, the following IDs shall be present accordingly.

Table 1.3 – Data Objects for Additional Data Field Template for LANKAQR Code Specification

Name	ID	Format	Length	Presence
Reserved for LankaPay	"60"	S	*	O
Reserved for LankaPay	"61"	S	*	0

O – Optional

S - String

<sup>\*</sup>Refer respective Network Facilitator documents

<sup>\*</sup>Refer respective Network Facilitator documents

## 1.5. DATA OBJECTS – UNRESERVED TEMPLATES (ID – "80"-"99")

With reference to Table 4.5 – Data Object ID Allocation in Unreserved Templates (IDs "80" to "99") under EMV ® QR Code Specifications, the following IDs shall be present accordingly.

Table 1.4 - Data Object ID Allocation in Unreserved Templates for LANKAQR Code Specification

ID	Meaning
80	Reserved for LankaPay
81	Reserved for LankaPay

## 2. SPECIFICATION – NETWORK FACILITATORS

Please refer respective specification details issued by relevant Network Facilitators for further information.