Swiss QR-bill

Technical information about the QR-IID and QR-IBAN

Version 1.1, with effect from 29 February 2020

General note

Comments and questions about this document can be directed to the respective financial institution or to SIX at the following address: billing-payments.pm@six-group.com.

For ease of legibility, this document uses the masculine form to refer to both genders.

Change control

All changes made to this document are listed in the document history with version details, change date and a brief description of the changes made.

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Support and resources

SIX makes various help resources and other support materials available without liability. Find out more at www.PaymentStandards.CH.

Document history

Version	Date	Change description
1.0	15.11.2018	First edition
1.1	29.02.2020	Corrections and clarifications, in particular: - Functions of IBAN tool (only validation; no self-generation of QR-IBAN, as this is within the authority of the bank) - Update of Illustration 3 «Generic payment process based on a QR-bill»

Table of contents

1   Introduction

The payment part of the QR-bill replaces the existing inpayment slips, including inpayment slips with reference numbers (known as ISR). The various versions of the ISR procedure have always guaranteed that Switzerland's payment traffic system is a highly efficient one.

In order for the payment part of the QR-bill to work equally successfully, payments in future will be handled using a structured reference similar to the ISR procedure, based on a special IBAN, the QR-IBAN.

This document contains all the technical information that banks and software providers will need to enable them to introduce and use the QR-IBAN based on the QR-IID, a special kind of bank IID.

The document is therefore addressed to all Swiss and Liechtenstein banks which want to be able to offer their customers QR-bills using QR references, and to all software providers.

1.1   Change ownership

The document «Swiss QR-bill – technical information about the QR-IID and QR-IBAN» can only be changed by

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and incorporates the recommendations for Swiss financial institutions.

The latest version of this document is available from the Download Center at www.PaymentStandards.CH.

1.2   Reference documents

Ref.	Document/Scheme	Title	Source
[1]	IG QR-bill	Technical and professional specifications of the payment part with Swiss QR Code and Receipt	SIX
[2]	IG on Customer-Bank Messages for Reporting	Swiss Implementation Guidelines for Cash Management	SIX
[3]	IG customer-bank messages	Swiss Implementation Guidelines for customer-bank messages	SIX
[4]	Processing rules	Processing rules for QR-bills	SIX

Table 1:   Reference documents

Organisation	Link
ISO	www.iso20022.org
SIX	www.iso-payments.ch www.sepa.ch www.six-group.com/interbank-clearing
Harmonization of Swiss payments	www.PaymentStandards.CH

Table 2:   Links to the relevant Internet pages

1.3   Definition of terms

1.3.1   IID

The IID (institution identification) is used in Switzerland and Liechtenstein to identify financial institutions as participants in the Swiss RTGS systems. Every institution is assigned at least one IID.

1.3.2   QR-IID

The QR-IID is derived from the institution identification (IID). QR-IIDs consist exclusively of numbers from 30000 to 31999. IBANs (QR-IBANs) based on these QR-IIDs are used only for the new procedure with a QR reference in the QR-bill.

1.3.3   IBAN

The IBAN is the internationally standardized representation of a bank account number in accordance with the ISO 13616 standard.

1.3.4   QR-IBAN

For payments with a structured QR reference, the QR-IBAN must be used to indicate the account to be credited. The formal structure of the QR-IBAN corresponds to the rules stipulated in ISO 13616 standard for IBAN. The payment scheme with reference is recognized through a special financial institution identification (QR-IID). The values 30000 – 31999 are exclusively reserved for the QR-IID. Each legally independent financial institution participating in the scheme is assigned one QR-IID. The QR-IBAN contains the QR-IID of the account-keeping financial institution for identification of the scheme.

2   Information about the QR-IID

2.1   Basic principles

- In order for a financial institution to receive a QR-IID, it must be a participant in the Swiss RTGS systems SIC and/or euroSIC.
- Financial institutions taking part in the scheme will be assigned no more than one QR-IID for each SIC or euroSIC settlement account.
- Financial institutions are not entitled to request a specific QR-IID.

2.2   Administering and assigning the QR-IID

SIX Interbank Clearing is responsible for administering and assigning IIDs. It issues all IIDs – incl. QR-IIDs –, keeps a record of the links between the IIDs and SIC or euroSIC settlement accounts, makes amendments and deletions, archives inactive IIDs and maintains an open-access database of all IIDs in the Bank Master data.

2.3   Informing participants of their QR-IID

SIX Interbank Clearing will inform each financial institution in writing when their QR-IID has been assigned.

If an institution does not want a QR-IID/QR-IID, they must send a written request for it to be deleted.

2.4   How the QR-IID is shown in the Bank Master

On its website SIX Interbank Clearing maintains an open-access database (Bank Master) containing the master data of the financial institutions that are connected to the Swiss payment systems SIC and euroSIC. Among other things, the Bank Master contains the identity of the owner of every IID, including their postal address, participation in systems and services and concatenations to other IIDs.

On the date when the QR-bill is launched, all the QR-IIDs that have been assigned by that date will be entered in the Bank Master, published and activated for use in SIC/euroSIC. **The QR-IID cannot be used in production until that date.**

From the QR-bill launch date, QR-IIDs will be published in the Bank Master in the same format as «normal» IIDs. They will also be marked with the new code 4 in the «SIC» or «euroSIC» column to show their participation in the SIC or euroSIC system:

- Code 4 in the «SIC» column = participation in SIC as QR-IID for payments with QR reference in SIC
- Code 4 in the «euroSIC» column = participation in euroSIC as QR-IID for payments with QR reference in euroSIC

More details about changes to the Bank Master will be published in the Release Notes for the SIC Platform Release 4.6 during the first quarter of 2019.

2.5   Ordering a QR-IID

Institutions which do not have a QR-IID can order one using the master data form on the SIX Interbank Clearing Extranet. The QR-IID will be activated when the updated Bank Master is published, and will then be ready for use for addressing payments in SIC and euroSIC.

2.6   Concatenating a QR-IID in SIC

Any concatenation of a QR-IID in SIC occurs in the same way as concatenation of a «normal» IID but must follow another QR-IID.

2.7   Deleting a QR-IID

A financial institution's QR-IID remains active for as long as the institution is connected to a Swiss payment system. When that is no longer the case, the QR-IID will be deactivated and deleted.

SIX Interbank Clearing archives deleted QR-IIDs for 10 years in its master data. During that time the QR-IID cannot be assigned to another institution.

A financial institution can use a master data form to ask for its QR-IID to be deleted. The institution must first ensure that none of its customers still has an active QR-IBAN.

The QR-IID will be deleted with effect from when the next updated Bank Master is published. If any payments based on payment parts with QR-IBAN and this deleted QR-IID that are still in circulation are ordered in SIC or euroSIC, they will be rejected.

2.8   QR-IIDs in the SIC/euroSIC test system

A test bank master with QR-IIDs can be downloaded under www.PaymentStandards.CH . It may only be used for test purposes.

From summer 2019, the full version of the SIC Platform Release 4.5 (due on 15 November 2019) will be available in the SIC/euroSIC test system. From that date, the QR-IIDs will also be activated in the SIC/euroSIC test system.

2.9   Publication of QR-IIDs

The official QR-IIDs will be published in the Bank Master at the end of May 2020, but may only be used productively when the QR-bill is launched on June 30, 2020.

3   Using the QR-IBAN

3.1   Basic principles

Using a QR-IID makes it easy to distinguish a QR-IBAN from an IBAN.

On that basis, validation and processing rules can then be laid out. For example, when a QR-IBAN is used, a QR reference must always be sent with the payment, whereas in a QR-bill where an IBAN is used, no QR reference may be sent.

	Payment includes		Remark
	QR reference	Messages	
QR-IBAN	Mandatory	Optional	Must contain a QR reference. Now messages ca also be sent.
IBAN	Prohibited	Optional	Can now contain an ISO reference, but must not contain a QR reference.

Illustration 1:   Relationship between the kind of account number, the reference and message options

Important: A QR-IBAN can only be used for incoming payments. Payments debiting a QR-IBAN are not anticipated. That is why there must always be an IBAN in addition to a QR-IBAN (for incoming payments with no reference and for outgoing payments).

3.2   Constructing and working out a QR-IBAN

There is no difference between the format of an IBAN and a QR-IBAN. Both comply with ISO 13616 rules:

Structure of Swiss or Liechtenstein (QR)-IBAN (21 characters)																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Country code CH/LI		Check digits		IID or QR-IID					Internal account numbers of the financial institutions											

Illustration 2:   Formal structure of a Swiss or Liechtenstein IBAN or QR-IBAN

All financial institutions in Switzerland and Liechtenstein have defined the structure of their IBANs within the regulations. The IID is an essential component of the IBAN. When creating the QR-IBAN, it is recommended that the same procedure is followed, using the QR-IID. This means there can be a 1:1 relationship between the IBAN and the QR-IBAN.

In principle, the financial institutions are free to make up their own QR-IBAN, provided they comply with ISO 13616 rules and that the QR-IID is used.

A QR-IBAN does not necessarily have to be based on the IBAN.

Each individual institution defines in its customer information whether an account (account with IBAN) is associated with one or more QR-IBANs.

3.3 Which billers should receive a QR-IBAN?

All billers who wish to use the QR reference in future will now need at least one QR-IBAN as well as their IBAN.

It is up to the banks to give their customers a QR-IBAN as well as an IBAN.

3.3.1 Can a biller use only a QR-IBAN?

No. In addition to the QR-IBAN, billers also need a credit account (IBAN format). The credit account can also be used for crediting incoming payments without a reference.

Furthermore, payments can only be made to the account of an IBAN, i.e. it is not permitted to use a QR-IBAN to identify the debit account.

3.4 How financial institutions use the QR-IBAN

The sections below explain what financial institutions need to take into account when using the QR-IBAN in their payment traffic processes.
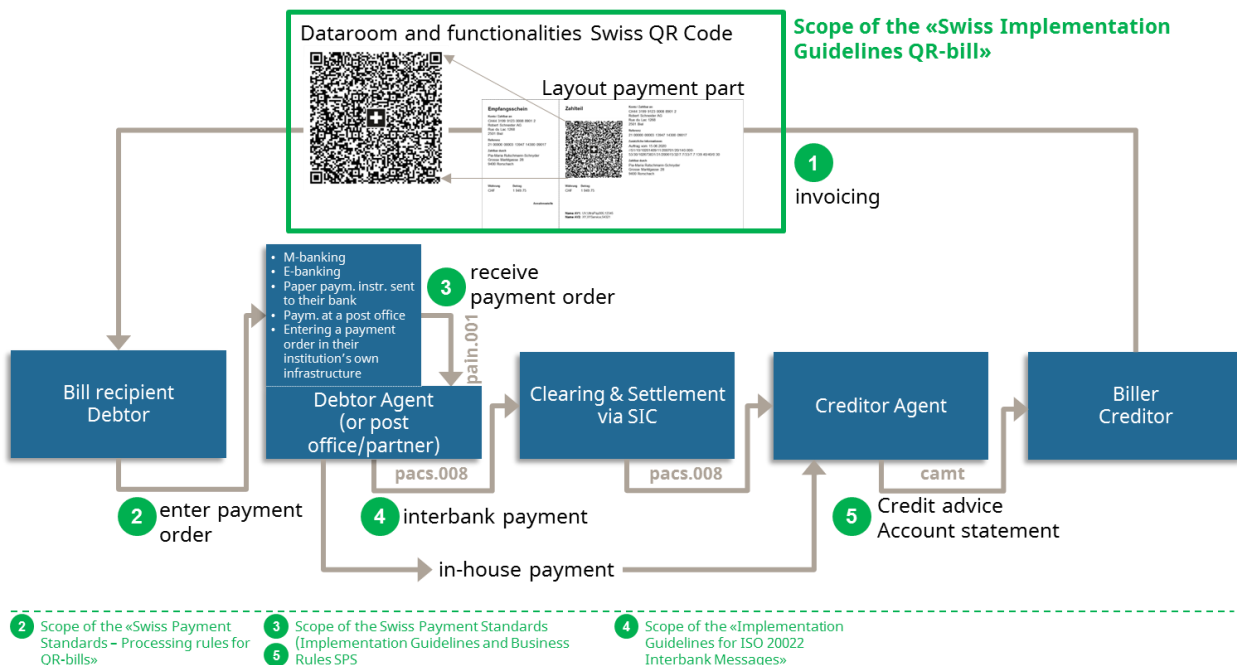

Illustration 3:   Generic payment process based on a QR-bill

3.4.1 Debtor agent

As described in section 3.1 «Basic principles», it is important to ensure that, where a payment is made to credit a QR-IBAN, a QR reference is sent, or, where a payment is to credit an IBAN, no QR reference is sent.

The payment part of a QR-bill can be used to place payment orders electronically and verifiably. If payments are sent to the bank electronically, the debtor can record the payment by scanning the QR code or else enter it manually.

The debtor agent must ensure that the basic principles described above are complied with for all methods of entering a payment:

Manual entry in e-/m-banking:

- Entering the QR reference is mandatory where a QR-IBAN is used
- Where an IBAN is used, <u>no</u> special field for entering a QR reference must appear.

Where the debtor pays by scanning the QR code, it must be ensured that the basic principles are still complied with even if the payment instruction is subsequently changed manually.

When a pain.001 is received, the regulations under Swiss Payments Standards must be checked and/or validated.

3.4.2 Creditor agent

The creditor agent must ensure that incoming payments in favour of both QR-IBANs and IBANs are directed to the correct destination account.

When processing incoming payments, the specifications in the latest version of the «Swiss Implementation Guidelines for customer-bank messages (Reports)» must be complied with. This describes how to handle incoming payments based on QR-bills in connection with account statements (see under www.PaymentStandards.CH).

The creditor agent must also ensure when it receives an inter-bank payment via SIC or euroSIC that incoming payments addressed to its own QR-IID can be correctly processed (in the same way as when they are addressed to a «normal» IID).

4 Online searching for a QR-IBAN

An online tool is provided on the SIX Interbank Clearing website to test QR-IBANs. The QR-IBANs communicated by the banks to their customers can be validated there.

Since the allocation of QR-IBAN is reserved exclusively for banks, no function is offered for generating QR-IBANs from conventional IBANs or proprietary account numbers.

5 Using the QR-IBAN abroad

In principle, the QR code payment part is designed for payments in Switzerland and Liechtenstein, not for foreign payment transactions.

For payments from abroad, the BIC must be sent in addition to the IBAN (QR-IBAN).

A financial institution can be identified from the IID, and so also can the BIC. Providers of BIC directories, such as SWIFT, use the Bank Master published by SIX Interbank Clearing. In future this will also include QR-IIDs, so that the corresponding BICs can be identified based on those. When QR-IIDs are first activated for use in production in summer 2020, a corresponding BIC entry will be added to the Bank Master, using data from the IID of the institution's head office.

Annex: Index of tables and figures