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# Validation of a Swiss QR Code

A guide to the SIX QR-bill Validation Portal

Version 1.0, effective as of 21 April 2021



#### **General Notes**

Comments and questions about this document can be directed to SIX at the following address: <a href="mailto:support.billing-payments@six-group.com">support.billing-payments@six-group.com</a>.

For better readability, the publication does not include references to male or female individuals. All terms used to denote persons refer to all genders.

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#### Versioning

The main versions increment the versioning counter before the decimal (Version 1.0, Version 2.0). Incrementing the main version and sub-version numbers directly reflects modifications in the SIX Validation Portal.

#### **Reference Documents**

The following documents contain technical and layout-related specifications for the QR-bill:

Document/schema	Title	Source
Implementation Guidelines for the QR-bill	Specification of the data scheme and layout rules for the QR-bill	SIX
Style Guide	Layout rules and recommendations for the QR-bill	SIX
Processing Rules	Processing Rules for QR-bill (Business Rules)	SIX

Table 1: Reference documents

Organization	Link
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 reference documents on the Internet

Failure to comply with the specifications for the QR-bill may result in:

- debtors and their financial institutions being unable to enter payments.
- debtors and their financial institutions being unable to execute payments.
- credits to the invoice issuer and their financial institution being booked incorrectly or not at all.
- laws being violated (e.g. data protection).

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## 1 Introduction

This document is intended for financial institutions, software partners and invoice issuers who use the SIX Validation Portal to verify QR-bills.

### 1.1 Purpose

This document contains the process description and step-by-step instructions for the SIX Validation Portal. Any special features for validating a QR-bill are described and explained in detail.

### 1.2 Link and registration

All of the instruction steps and information contained in this document refer to the SIX Validation Portal for SIX QR-bills, which can be found at:

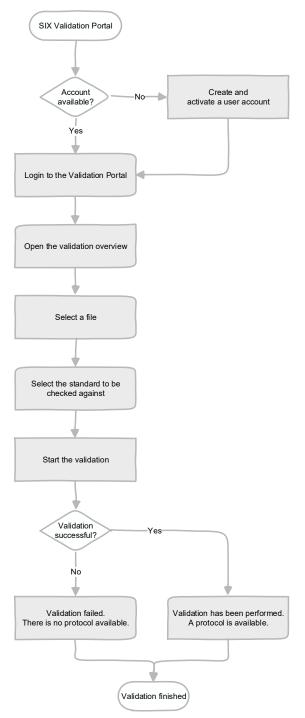
Swiss QR-bill Validation.Portal

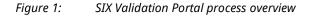
Registration is required in order to use the SIX Validation Portal. Users can log in to the SIX Validation Portal as soon as their accounts are activated.

We kindly ask you to read our user instructions before starting validations. The instructions contain information and tips including permitted formats, prescribed encoding and other topics.

## 2 SIX Validation Portal process overview

The process overview serves to visualize the registration and login as well as validation in the SIX Validation Portal.







## 3 Validation principles

## 3.1 Validation process

To validate files, switch to the validation overview via the "Validation" tab.

	Swiss QR-bill Validation.Portal
HOME USAGE HINTS VALIDATION SPS DOCUMENTATION FAC Validation On this page you can validate your QR text data o and view the results.	a YOUR REQUEST DOWNLOADS
Select one or more QR text payload or image files:	Select a reference standard:
Choose Files 12 files	Q Recently used     QR;;CH
	All Reference Standards
	3 Upload Messages

*Figure 2:* Overview of how to upload files

- Select and open one or more files via "Choose Files" (1).
- On the right side, select the standard (2) for checking the file(s) against.
- Click "Upload Messages" (3) to complete the process.

Currently, only one standard is available for selection for the QR-bill. However, our Validation Portal offers the possibility to provide several standards from which you can individually choose the standard that suits you for each file you upload.



Validation principles

Once the files are uploaded, there are several options to validate or manage them.

- To validate a single file, select "Validate Now" (4) on the right side of that file.
- To validate all uploaded files, select all of the entries (5) using the checkbox on the upper left side. If only particular files are to be validated, they can be selected using the corresponding checkboxes. Then click on the "Validate Selected Messages" option (6) and start the validation by clicking on "Execute" (7).
- Each uploaded file also has additional options (8). As well as allowing you to view and download the file, you can delete it or change the standard against which the file is to be validated.

Select one or more QR text payload or image files:	Select a reference star	ndard:	
Choose Files	G Recently (     @ QR;;Cl     All Referer     @ QR;;Cl	H nce Standards	*
5 Please Select an Action 6 Execute 7	<u>,</u>		Upload Messages
Please Select an Action Validate Selected Messages Change standard for selected messages	Uploaded	Size Reference Standard QR,;;CH	Status & Action Result Validate Now
View 🕹 Download 💼 Delete 🔟 Standard     Beispiel_11.jpg	one second ago	7.06 KB QR;;CH	Validate Now
Standard Beispiel_10.png Standard Beispiel_10.png	one second ago	68.88 KB QR;;CH	Validate Now
<ul> <li>Tiew</li></ul>	one second ago	8.22 KB QR;;CH	Validate Now
🐵 View 👌 Download 👼 Delete 🔟 Standard	one second ago	8.76 KB	

*Figure 3:* Overview of uploaded files

### 3.2 Possible validation results

Please note that due to the various software applications and hardware scanners used, the processing and/or validation results may vary on several points.

#### 3.2.1 Validation without errors

A green test result with the status "Validation complete" means that the file could be successfully validated and does not contain any errors.

Beispiel_11.jpg		Contraction A D	Validation complete View results as: HTML, Text
🐨 View 📥 Download  前 De [1]] Standard	lete 27 minutes ago 68.88 KI		Download: Text

*Figure 4: Validation without errors* 

#### 3.2.2 Validation with errors

A red test result with the status "Validation complete" means that the file could be validated, but that it does contain errors. An indication of how many errors or notes are involved is directly visible in the overview.

Beispiel_3.png		QR;;CH	Validation complete View results as: HTML, Text	1 Error, 1 Note(s)
🐵 View 👌 Download 🗂 Delete 🔟 Standard	one second ago	8.76 KB	Download: Text	

*Figure 5: Validation with errors* 

#### 3.2.3 Validation failed

If a file cannot be validated, the status "Validation failed" is displayed. Since the validation could not be successfully completed, no protocol is available.

Beispiel_10.png			QR;;CH	Validation failed
💿 View 👌 Downloa 🔟 Standard	d <u> </u> Delete	one month ago	8.22 KB	

Figure 6: Validation failed

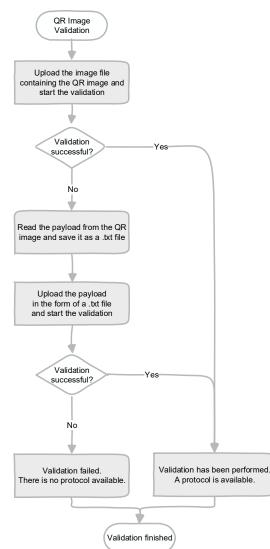


## 4 QR image

The QR image is the actual QR code that is present on the QR-bill. It is not possible to upload QR-bill in its entirety. If you have a complete QR-bill in a digital form, select and cut out the QR image and save it in one of the permitted image formats. Generally speaking, any screenshot or snipping tool is suitable for this purpose.

The validation of the image file works the same as described in chapter 3.1. If the validation of the QR Code image fails it is suggested to validate it as a text. To do so, the content of the QR Code needs to be transferred to .txt-file and re-validated.

#### 4.1.1 QR image validation process overview



The process overview is used to visualize the validation of a QR image.



Overview of the QR image validation process

## 5 FAQ and contact

Frequently asked questions are documented under "FAQ" and will be expanded and updated as needs require.

If you have any further questions, concerns or suggestions, our team is at your disposal via the contact form under "Your Request".

	Swiss QR-bill Validation.Portal
HOME USAGE HINTS VALIDATION SPS DO	DCUMENTATION FAQ YOUR REQUEST DOWNLOADS
Your Request Do you have a message or a que	uestion for us? We will try to respond to your concern as quickly as possible.
Please Choose	v
Your message	
Send	
Copyrig DE   E	ght 2021 by SIX Disclaimer. Privacy Statement. N

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