Billing of the Future

eBill and QR-bill
Swiss Banking Services Forum, 22 May 2019

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Agenda

• How do SIX and the Swiss financial center design the ecosystem Billing?
• Current developments in the areas of QR-bill and eBill
• 2019-2021 roadmap & conclusions
The Ecosystem Billing in Switzerland

- 8.5 million people
- 3.7 million households
- 0.6 million companies
- 500+ software providers
- 250+ financial institutions
- 1000 million invoices annually

Sources: CH statistics: BFS 2017/2018; Software providers: Inside-IT Top 500 list; Financial institutions: SNB 2017; Bills: SIX survey / Swiss financial center
The Ecosystem Billing Includes Multilayered User Groups; the Foundations For Digitalization Aare In Place

<table>
<thead>
<tr>
<th>Initial position CH market</th>
<th>Usage behavior</th>
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</thead>
<tbody>
<tr>
<td>93% Internet coverage in households*</td>
<td>51 million direct debits**</td>
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<tr>
<td>90% People (16-74 years of age) who use the Internet at least weekly*</td>
<td>20 million eBill invoices**</td>
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<td>142 million payments at post office counters</td>
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<td>95+ million bank instructions (via the postal service)</td>
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<td>635+ million other electronic payments</td>
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</table>

The digital transformation in payment traffic is an extended process

For the foreseeable future, invoice issuers will serve payers both digitally and traditionally. Many invoice issuers have not yet completed digitalization.

Sources: * BFS 2017 / 2018; ** Figures 2018, without PostFinance volume
The Swiss Financial Center and SIX Create Solution Environments to Comprehensively Meet the Needs of the Market

<table>
<thead>
<tr>
<th>Target group</th>
<th>Focus</th>
<th>KPI</th>
<th>Lifecycle</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>Payment slip</td>
<td>Traditional payers</td>
<td>Classic invoice</td>
<td>1 billion</td>
<td>• Both traditional and digital participants will be provided with</td>
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<tr>
<td></td>
<td></td>
<td>Paper slip</td>
<td>slips annually</td>
<td>solutions.</td>
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<td></td>
<td></td>
<td>Counter payment</td>
<td></td>
<td>• Both classic and debit-based payment processing will be supported.</td>
</tr>
<tr>
<td>QR-bill</td>
<td>Traditional payers*</td>
<td>Classic invoice</td>
<td>N/A</td>
<td>• Different levels of product maturity are reflected in the redesign</td>
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<tr>
<td></td>
<td></td>
<td>Paper slip</td>
<td></td>
<td>of the invoicing landscape.</td>
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<tr>
<td></td>
<td></td>
<td>Counter payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eBill</td>
<td>Digital payers</td>
<td>Classic invoice and direct</td>
<td>&gt;1 million</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>debit</td>
<td>users</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>End-to-end digital</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>E-banking integration</td>
<td></td>
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</tr>
<tr>
<td>Direct debits</td>
<td>Traditional payers</td>
<td>Direct debit</td>
<td>&gt;50 million</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recurring bills</td>
<td>trx annually</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Account bound</td>
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</table>

* Supports digital payers with simplified entry in e-banking and m-banking
eBill and QR-bill Are the Invoicing Solutions of the Future – Digitalization Will Be Optimally Supported

Business-to-consumer invoices shall be processed digitally end-to-end by 2028 and then shifted to eBill. The Swiss financial center and SIX are driving this process, taking market needs into account in the process.

Note: Schematic representation, time scale and volume are indicative.
Important Milestones Were Achieved In 2018/2019 For eBill and QR-bill Together With the Swiss Financial Center

<table>
<thead>
<tr>
<th>Autumn 2018</th>
<th>November 2018</th>
<th>December 2018</th>
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</thead>
<tbody>
<tr>
<td>QR-bill consultation procedure</td>
<td>Publication of the Implementation Guidelines</td>
<td>Financial institutions informed about the QR-IID</td>
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</table>

Of those directly impacted were involved in the consultation procedure.

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<tbody>
<tr>
<td>LEON project completed (90+ banks migrated)</td>
<td>Consultation for network partner model</td>
<td>Further development 2019/2020 adopted</td>
</tr>
</tbody>
</table>


220+ of those directly impacted were involved in the consultation procedure.

90+ Financial institutions migrated to eBill in 2018/2019.
The QR-bill Replaces the Existing Payment Slips and Supports Digitalization

Overview of the QR-bill

Format

An invoice is a "QR-bill" if it...

- a bill with a payment part and a receipt integrated in the form, or
- a bill with an enclosed payment part and a receipt.

Structured billing information

The data content for the “billing information” field defined by the Swiss trade association of the ICT software industry enables the automation of business software, invoice controls and allocations.

Alternative procedures supported

The QR-bill supports the embedding of information for alternative procedures and thus promotes innovation and digitalization in the Swiss financial center.

Background information

- This “Swiss QR Code” enables the triggering of payments at financial institutions across all order channels.
- The “Swiss QR Code” enables the triggering of payments at post office counters.
- The payment part of the QR-bill with receipt contains the information needed to execute a payment in the form of a QR code along with readable information.

Developments
There Are Three Different Versions of the QR-bill, All of Which Must Be Supported By Financial Institutions

Today

Two dominant types of slips

Orange payment slip with ISR reference

Red payment slip

June 2020

Three versions for the QR-bill

QR-bill with QR-IBAN + QR-reference

QR-bill with IBAN + SCOR (ISO-11649)

QR-bill with IBAN without reference

Developments

405 remain to prepare for introduction of the QR-bill on 30 June 2020

243 QR-IIDs were issued to the financial institutions
## The QR-bill Offers Diverse Benefits Compared With the Use of Payment Slip and Takes the Digitalization Trend Into Account

### Advantages for invoice issuers

- Print out of invoices inhouse on white paper
- Continued use of ISR reference numbers
- SCOR reference numbers are usable (e.g. for payments with the SEPA zone).
- Amount field and/or payer can be left blank
- Combination of reference number and messages possible
- **Support of alternative procedures**

### Advantages for invoice recipients

- Billing information received for simple bookkeeping reconciliation
- QR code scanning replaces manual entering of payment data
- Comparison of accurate data through text details in the payment part
- Free choice of the payment channel: e-banking, m-banking or counter
## eBill Is the Strategic Initiative For the Digitalization of Invoicing – Constant Further Development of the Solution

### Focus on investments

1. **Extension of reach**
2. **Complete coverage of use cases**
3. **Easy user journey**

### Development 2019/2020

<table>
<thead>
<tr>
<th>Development</th>
<th>Reach</th>
<th>User C.</th>
<th>User J.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lookup</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network partner model</td>
<td>●</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>eBill Sharing</td>
<td>○</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>eBill for Business</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>eBill with direct debiting</td>
<td>●</td>
<td>●</td>
<td>●</td>
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</tbody>
</table>

### Development approach

Further development is ongoing together with the Swiss financial center in an annually recurring process:

- Development of rough concept
- Sounding out within the community
- Detailing & validation
- Formalization of the implementation
- Implementation with pilot banks

* Detailed design for billers depends on the network partner.
Two Essential Innovations Will Accelerate the Adaptation of eBill Starting November 2019

Lookup functionality

Initial position
Till now, payers had to sign up at each invoice issuer through the e-banking system, which essentially hindered the adaptation.

New functionality
1. Payers need activate the function only once through the e-banking / eBill portal
2. Billers find their customers and send invoices as eBills in the e-banking system

Advantages
Invoice issuers can send eBills to their customers right from the first invoice.*

Introduction of the network partner

Initial position
Till now, eBill were operation by two providers. The new network partner model enables new providers to be part of the operation of eBill.

Model

Till now
- E-banking
- RS
- E-banking

As of November 2019
- E-banking
- RS
- Network partner
- E-banking

Advantages
Wider range of services for billers, software partners can act as network partners

* Various use cases are made possible: Integration the checkout process in e-commerce, POS integration or reconciliation in the existing customer master data and conversion to eBill.
Starting In 2020, eBill Will Become More Flexible and New Segments Will Be Included With Specific WExtensions

**eBill Sharing**

**Initial position**
eBill invoices cannot be paid through another path without detours. There is a market demand here for various constellations (e.g. in families)

**New functionality**
1. Payer A authorizes payer B to view their eBill invoices via e-banking / eBill portal
2. The authorized payer B can view the eBill invoices and release them for payment (from their own account)

**Advantages**
Invoices can be paid and managed by other participants (e.g. partner).

**eBill for Business**

**Initial position**
eBill is primarily targeted towards private customers. Business customers that pay invoices via e-banking have until now not been explicitly depicted.

**New functionality**
Employees A and B are authorized by the company and have access to the e-banking system. The pay eBill invoices for the company through the company's e-banking account.

**Advantages**
Financial institutions can offer eBill to business customers and depict access authorizations.
The Digital Alternative to the Direct Debit Procedure Will Be Ready For Invoice Issuers in 2021

Initial position

- There have historically been two direct debit procedures in Switzerland
- LSV+ contains analog processes
- eBill does not have a solution for collection-based use cases, which are important for certain invoice issuers.

A decision was made in the community to upgrade eBill to include a collection mechanism

Objectives

1. LSV ➔ eBill

   Encourage the shifting of volume from direct debit (LSV+/CH-DD) – and thereby digitalization

2. Process end-to-end digitally and process without downstream objection

Solution sketch

- Electronic collection authorizations initiated by the invoice issuer or payer, administrable by the payer electronically in the e-banking/eBill portal

   Upstream dissent instead of downstream objection: Dissent possible during a 28 day preliminary period – then the debit is executed.

   During the preliminary period, the pending payment can be view in the balance preview (e-banking) and can only be rejected (if needed) in the eBill portal.
eBill and QR-bill Complement One Another; Continuity Is Ensured and Enables New Invoicing Approaches

- eBill and QR-bill function in interaction...
- ...and enable service innovations for network partners

1. Invoice issuer delivers invoices to the network partner
2. The network partner conducts triage and prepares eBill invoices
3. The payer receives and pays them through their preferred channels

QR-bill

eBill specification for alternative procedures

Traditional payer

Digital payer

Developments
Billing Roadmap 2019-2021

**QR-bill**
- Publication of test concept / Test script
- **30.06.2020** Launch of QR-bill

**eBill**
- Go-live PostFinance (payer)
- Go-Live NWP model and lookup function
- Introduction of eBill Sharing and eBill for Business
- Introduction of direct collection

Note: The roadmap makes no claim in terms of completeness. Subject to change without notice.
Conclusions

1. Be prepared for the QR-bill

Starting **30 June 2020**, each financial institution must be able to process the three QR-bill versions. Invoice recipients must have completed the technical migration on time in order to be able to pay QR-bills. Private customers must be informed about the handling of QR-bills by their bank.

2. Promote digitalization

Actively inform your customers about the possibility to send invoices electronically per eBill to the recipients e-banking account.

Show your business customers the possibilities of offering digital invoicing.

3. Co-design eBill

As a strategic channel of the Swiss financial center, eBill is further developed in collaboration with pilot banks and/or network partners.

We also welcome your institution to our group of pilot banks to be involved in future developments pertaining to the development of eBill.
Further Information About eBill and the QR-bill

**eBill**

- eBill.ch
  - Communications support
  - Specification of alter. procedures
  - Instructions
  - www.ebill.ch

- eBill Membersection
  - Technical specifications
  - Handbooks for banks

**QR-bill**

- PaymentStandards.ch
  - Materials for the banking community (flyer, film, datasheet, customer presentation for bank advisors)
  - Implementation Guidelines
Contact

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