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Security for corporate customers with EBICS
EBICS helps provide payments market solutions that offer highly secure communication channels between customer and bank.
Marie Curie, who later went on to win a Nobel Prize, wrote in a letter to her brother in 1894: “On ne fait jamais attention à ce qui a été fait; on ne voit que ce qui reste à faire.” This quote is as applicable today as it was back then.

The cornerstone for the nationwide Post payment system was being laid at that time in Switzerland, which was subsequently launched in 1906. It was intended to provide further harmonization in payment traffic, after several hundred different coins with a payment function were in circulation up until 1850.

History is repeating itself today; payment traffic in Switzerland is on the verge of another major, exciting change. Innovation simplifies the processes, new business models change the value chain and regulatory requirements must be implemented. Swiss payment traffic must be updated.

Do you know this? An update on your home computer or your mobile phone often evokes ambivalent feelings: on the one hand, you are interested in the improvements and simplifications, while on the other hand, you hope that the switchover does not require too much effort. No one can escape progress. Whether you perceive the effort associated with change as a pool of possibilities or as a burden, your perspective is crucial.

Stakeholders involved in payment transactions will experience this ambivalence when it comes to the ongoing harmonization. However, it is obvious that a consistent digitalized payment process will facilitate the handling of payment flows and reduces the sources of error associated with interfaces. In brief: the new possibilities will make life easier.

Nevertheless, a certain amount of effort is initially required with the migration: while a software update is centrally dictated by a software company, Swiss payment traffic involves around 600,000 autonomous companies and several million individuals, all of which must be coordinated – without sovereign authority or sanctions pressure, in correspondence with our concept of a free market economy.

Efforts being made by the banks are focused on two levels of action: one involves converting the bank’s own payments infrastructure. That this is not merely a simple “download” with “install” and then shortly afterwards “open”, is understandable. The other action level involves motivating billers and bill payers to make adaptations to their accounting software through various channels. Those banks that actively approach their customers and accompany them in this process are exemplary.

The success of the individual banks will be measured by how well they support and inform their customers and have promoted comprehension of the benefits of the migration. Many players are already strongly committed to doing so. With regard to the replacement of the payment slips by the QR-bill and other modern payment forms, this dynamic is to be maintained and further increased. Because what was true one hundred years ago, still applies today, as formulated by Marie Curie: One never notices what has been done; one can only see what remains to be done.

David Wiesner
Member of the Executive Board of RBA Holding Ltd and Entris Banking Ltd, Member of the Board of Directors of SIX Interbank Clearing Ltd
FROM “TECHNICAL SWITCH” TO THE NEW eBill

Credit Suisse is one of two pilot banks that will use the shared SIX Payment platform starting in February 2018 with the new eBill – the successor to today’s e-billing. Alain Schmid, Head Payment Services, explains the motivations.

Why has Credit Suisse decided to take part as a pilot bank?
The future belongs to eBill. It is due to this issue that several cooperation agreements were made between Credit Suisse, SIX and other financial institutions in recent months. So it was just logical for us to become a pilot bank. We can only approach the upcoming steps together and mutually profit from one another. As the saying goes: “Those who act alone add, but those who act together multiply”. Gone are the times in which each market player developed his own solutions.

“Gone are the times in which each market player developed his own solutions.”
«If we are close to our customers, then we have done a good job.»

Alain Schmid
What specific advantages do you anticipate upon the launch of this project?
With our commitment we have the opportunity to actively contribute to the design and implementation of the new product. We can share our wealth of experience with our partners.

Migration of central LSV processing to the SIX Paynet Platform took place on 21 September 2017. What are the consequences of this migration?
The migration day of 21 September 2017 has not had any tangible consequences. It was – so to say – merely a “technical switch” involving LSV as a product and its functionality, which did not change anything for Credit Suisse or our customers. This will not be the case for the migration planned for February 2018. That is when the migration and changeover from the old e-billing to the new SIX Paynet Platform and to eBill will take place. It will become an attractive, innovative service with a redesigned, intuitive user interface and upgraded functions, such as standing release or eBill installment payments.

The number of direct debit transactions in Switzerland comprises but a single-digit percentage share in comparison to the entire payment volume. Is there truly a demand for the service?
For our corporate customers the direct debit scheme is an essential component in overall cash management, particularly for those that initiate their monthly invoices electronically. Therefore, it is important that an efficient and far-sighted solution is offered. The service must be simple; the processes must be reliable, comprehensible and especially tailored to meet the customer’s requirements.

The banking center aims to get customers excited about eBill, because it offers them added value.”

The new platform handles customary standards such as DTA and SIC, and also supports the new ISO 20022 standard. Why will so many standards continue to be maintained?
The different market players – banks, software providers, corporate customers – are at different stages with implementation of the standards. The need for adaptation consequently varies. Different standards and specifications will be offered during a transition period to provide all participants sufficient time.

Aren’t you concerned that the QR-bill will overshadow eBill?
This will create a market opportunity. When the market changes, you are forced to review your own solution and to adapt it to any new user requirements if necessary. If we are close to our customers, then we have done a good job.

Interview:
Gabriel Juri & Karin Pache
SIX Interbank Clearing

The dynamic is challenging. A few years ago the sentiment was that ISO 20022 would virtually become the new standard par excellence, not just throughout Europe, but worldwide. It was thought that connectivity and enrichment services would no longer be needed. Quite the opposite has indeed occurred: there is a common roof, a common logic, but each country uses the whole somewhat differently. That is why we assume that the standard will be continuously further developed. The banks must keep a finger on the pulse.
e-bill IS BECOMING eBill

Following successful migration of the central processing of direct debits to the SIX Paynet Platform, the next important step will be taken in February 2018 with the eBill service. In addition to the new look and feel, new functions will be offered, such as standing approval and installment payments. Credit Suisse is one of two pilot banks and will be the first customer to migrate to the new SIX Paynet Ltd central platform. Migration of remaining Credit Suisse eBill customers will then take place in May 2018, and all banks will have switched over to the new service by the end of 2018.

The essentials about multi-banking:
It is necessary that customers who currently use the e-bill service at multiple banks (multi-banking) choose a single eBill banking relationship. The changeover phase from e-bill to eBill, which will last until the end of December 2018 and will be conducted by SIX Paynet Ltd, affects all banks within the Swiss financial center. Multiple eBill banking relationships will be possible again starting in 2019.
Welcome to the future
eBill – the Swiss bill

Evolution
Digitalization of billing – step by step
Swiss payment traffic proves itself as highly functional, according to organizations and companies with large payment volumes. Although this is encouraging, there is a problem. Those who are satisfied place little value on change. The harmonization of Swiss payments based on ISO 20022 is a change – and suffers precisely from this dilemma.

Current public opinion about Swiss payment traffic is good. Of 1,553 people in charge of payment traffic among companies and public organizations surveyed, 70 percent rate the functioning of domestic payments as very good.

Organizations that do business depend on the functioning of payments. It is therefore not surprising that up to two-thirds are moderately to strongly impacted by the harmonization, depending on the level of automation. A majority of users associate the migration with advantages. Positive beneficial expectations are most pronounced sector “Fiduciary, auditing, collection and insurance companies”, in industry and commerce, as well as among administrative organizations. The standardization is most strongly associated with a minimization of errors. Hence, the harmonization fulfills a central prerequisite for the reforming of functioning systems – what is expected is an improvement, not a deterioration.
This goodwill, however, is not reflected in a high degree of willingness to migrate. More than 60 percent of the organizations that are moderately to strongly impacted will not have migrated to ISO 20022 by 30 June 2018. The fiduciary, auditing, collection and insurance companies as well as the non-profit organizations (NPOs) represent the exception to this, with nearly half already indicating a high degree of readiness.

Since 2016, at least the number of migrated projects that have been started has visibly increased. The project concentration is greatest among administrative organizations. Last year, the proportion among them was considerably lower. Organizations that have not currently started a project do not consider migration necessary at the current time. Experience shows that this is an indication of a lack of problem pressure.

High level of knowledge, but more information desired
The harmonization has been systematically accompanied with communications for around a year, which has proven to be quite effective: the level of knowledge about the harmonization project has increased slightly and includes around three-fourths of users. This figure was 67 percent last year. In terms of content, the new QR-bill is often mentioned. This lends the project a powerful visual symbol.

A high level of perception, however, does not automatically mean that those affected are well-informed about the migration in terms of content. A majority feel that they are sufficiently informed in just a few sectors, such as the administration or companies with more than 20 full-time equivalents (FTEs).

Users generally wish to primarily receive more information from their own financial institution, followed by their own IT suppliers.

Important are the communication of deadlines and the benefits of the harmonization
The harmonization of Swiss payment traffic entails a change to a process that is perceived to be satisfactory. The central prerequisite for the success of the reform is that it be anticipated with goodwill. What is currently lacking is a prioritization of the migration tasks among those impacted.

While the information efforts of the past years have borne fruit, there are still those who are affected by the harmonization who have heard nothing about it.

What is now needed is open communication without alarmism, in which the approaching final deadlines are brought to the forefront, which emphasizes the migration advantages and which motivates those impacted, but who are not yet sensitized towards it, to take action.

Communication is ideally conducted through the financial institutions. This communication channel works.

Urs Bieri
Co-head of the opinion and market research institute gfs.bern
FACTS & FIGURES

**MIGRATION PROJECT STARTED**

“Regarding the necessary implementation steps in your organization: Has your organization already started a project for the software migration of your processes to ISO 20022?”

in % of users, (2017: that use an e-banking portal, EPO or DTA)

![Bar chart showing migration project started](chart)

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**AWARENESS**

“How well informed do you feel about the (2017: harmonization of the) Swiss payment traffic infrastructure project?”

in % of users

![Bar chart showing awareness](chart)

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**INFORMATION THROUGH THE FINANCIAL INSTITUTION**

“Now think about the financial institution through which you primarily process your payment traffic. Have you already been informed by your/this financial institution about the upcoming harmonization and standardization of Swiss payments?”

in % of users that work with one or more financial institutions

![Bar chart showing information through the financial institution](chart)

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© gfs.bern, PaymentStandards.CH, June/July 2017 (n 2016 = 530, n 2017 = 1471)

© gfs.bern, PaymentStandards.CH, June/July 2017 (n 2016 = 509, n 2017 = 1553)

© gfs.bern, PaymentStandards.CH, June/July 2017 (n 2016 = 509, n 2017 = 1498)
The toy brick standard

ISO 20022 – Finally a standard for the entire world! All software will function with every bank on this planet, because each of the thousands of financial institutions offers exactly the same customer interface for electronic payment instructions. And every financial institution can exchange data from any clearing system in any country without any additional effort and expense. Is that really the case? An analogy with toy brick houses sheds the right light on ISO 20022.

Many countries are converting payment traffic to ISO 20022 or plan to do so. The 2016 “ISO 20022 adoption initiatives report” lists more than 30 different initiatives in payments alone – including SEPA and the Swiss Payment Standards. These are fantastic perspectives, or so one might think. The consequences being that all payment procedures will be compatible and completely exchangeable. This means that an international change of banks would also be extremely simple to carry out. All this thanks to the ISO 20022 standard, which has already been introduced in the interbank sector in Switzerland.

Is ISO 20022 really a standard?
Is it a globally uniform standard that will make all these bold visions and hopes come true? After all, it is a standard developed by the International Organization for Standardization (ISO), which is a body that was founded in 1947, comprises 162 member states and enjoys significant authority.

Nevertheless, the answer is no. Primarily because ISO 20022 involves more than just a single standard; it is more like a giant toolbox with which standards can be created. The following analogy should help clarify matters: toy brick sets function similarly to the ISO 20022 standard. Each toy brick is created according to the same standards and fits hundreds of counterparts, even if the other piece has another shape, color or function, and even if it comes from an older kit, sales of which ended over thirty years ago. Now, if two people were given the task of independently building a house with toy bricks, it is guaranteed that two completely different houses would arise, despite the kit standard. They would surely be two different sizes, differ in the number of rooms, have different colors and pretty much differ in every aspect of what makes a house. Nevertheless, the kit standard would make it easy to place these two houses on identically sized foundations and to connect them stably to one another. Not least because the individual toy bricks – regardless of how they are used – have a standardized height and width. However, if two toy houses were not built using this kit standard, but one house was a sand castle and the other was made of cardboard, then the two could not really be stably and permanently connected to one another – or only with a significantly great effort – because they would be lacking common, standardized components.

ISO 20022, the comprehensive toolbox
Six different fields (payments, securities, trade services, cards, FX) were standardized through ISO 20022. Each field contains several dozen to hundreds of messages. Each one of these messages can often contain several hundred different, complex structured elements, such as is the case with the “simple” pain.001 payment instruction, where nearly a
thousand elements are available for creating a unique standard message.

In the EU, the SEPA Standard was constructed with messages and elements from the ISO 20022 toolbox. The Swiss financial center developed the Swiss Payment Standards from the same toolbox. Both take into account the respective national, historical and cultural differences of the countries that have arisen. While, for example, SEPA only standardizes euro payments with an emphasis on the direct debit scheme, the Swiss Payment Standards comprehensively harmonize Swiss payment traffic, including, in particular, payment slips and foreign payments. That is why a SEPA payment instruction is structured differently to a Swiss payment instruction, although both use standard elements from the same pain.001 ISO 20022 message. Yet, as with different toy brick houses, ISO 20022-based country-specific standards can be connected together with relative ease, because they often use the same components in a similar way and are the same, at least in terms of technology and data model. This reduces the expense for internationally active companies and software providers, although the respective local differences must also always be understood and taken into account.

If the vision of the global introduction of the ISO 20022 standard consists of building “houses” which take into account the national differences and requirements, yet which can be stably and permanently connected with one another if needed, then the answer to the question of whether ISO 20022 is a standard is: Yes!

Peter Ruoss
UBS Switzerland AG
Cyber security throughout the international banking community

“Combating fraud is a challenge for the entire financial industry. The threat landscape adapts and evolves daily, and both SWIFT and its customers have to remain vigilant and proactive over the long term.”

Gottfried Leibbrandt, CEO SWIFT
The growing threat of cyberattacks has never been more pressing. Recent incidents of payment fraud in financial institutions’ local environments demonstrate the necessity for industry-wide collaboration to fight against these threats.

In response to the rapid escalation in cyber threats, SWIFT has put in place a Customer Security Programme (CSP) in order to support customers in reinforcing the security of their SWIFT-related infrastructure. While SWIFT customers are individually responsible for the security of their own environments, SWIFT views the security of the industry as a whole as a shared responsibility. As an industry cooperative, SWIFT is committed to playing an important role in reinforcing and helping to safeguard the security of the wider ecosystem.

Key issues
The CSP addresses three key aspects:
1. The security and protection of customers’ local environments with the introduction of mandatory security controls that all customers have to adhere to
2. Prevention and detection of fraud in commercial relationships
3. Sharing and preparing together to stay ahead of cyber-attacks

Impact on the Swiss financial industry and SWIFT customers
The SWIFT Customer Security Controls Framework describes a set of mandatory and advisory security controls for all SWIFT customers. The requirements (consisting of 27 security controls, of which 16 are mandatory and 11 advisory) prescribe a level of security that will be expected of all parties connecting to the SWIFT network, as well as an indication of how to achieve that level of security.

All controls are articulated around three overarching objectives: “Secure your Environment”, “Know and Limit Access”, and “Detect and Respond”. The controls have been developed based on SWIFT’s analysis of cyber threat intelligence and in conjunction with industry experts and user feedback.

“We welcome and endorse SWIFT’s initiative to create a security ‘baseline’ for the whole industry which will help to reinforce and drive up cyber security standards.”

Yves Obrist
Head of Operational, Cyber and IT Risks, FINMA
SWIFT CSP SECURITY CONTROLS FRAMEWORK

Secure Your Environment
1. Restrict Internet access
2. Segregate critical systems from general IT environment
3. Reduce attack surface and vulnerabilities
4. Physically secure the environment

Know and Limit Access
5. Prevent compromise of credentials
6. Manage identities and segregate privileges

Detect and Respond
7. Detect anomalous activity to system or transaction records
8. Plan for incident response and information sharing

By December 2017 all SWIFT users must indicate their level of compliance to the set of mandatory and optional advisory security controls, by submitting a self-attestation. The level of compliance can be shared with counterparties through the SWIFT KYC Registry Security Attestation Application. This process is designed to enhance confidence in the security of counterparties’ local SWIFT environments. In addition, the option of self-attesting compliance with the advisory security controls will further raise the bar and promote best-practice in cyber risk management across the SWIFT community. By December 2018, all users must have self-attested their full compliance with mandatory security controls.

We expect the Swiss community to work towards full compliance with the security controls and we look forward to them attesting their compliance as foreseen in the attestation process.”

Dr. Andy Sturm
Director, Financial Stability, Head Oversight, SNB, Overseer of SWIFT

How is SWIFT helping?
In May, SWIFT organized a series of Customer Security Information Sessions to provide all customers the possibility to hear and learn first-hand about the CSP. On top of that, SWIFT is providing the community with direction on how and where to access further updates including self-service tools such as the mySWIFT knowledge base, SWIFTSmart for training as well as the CSP pages on swift.com. Should an institution seek to get help from cyber experts, there is also a directory of Cyber Security Service Providers on swift.com to help institutions to identify potential project partners.

The SWIFT Information Sharing and Analysis Centre (ISAC) global portal helps the SWIFT community protect itself and its customers by sharing detailed technical intelligence to allow the community to protect itself, to take mitigating action, and to defend against further attacks.

All users have access to the ISAC portal and it is strongly recommend that SWIFT customers use the SWIFT ISAC portal to stay informed of the latest updates.

Cristina Rigo
Head of SWIFT Switzerland GmbH

MORE INFORMATION?
For further information on SWIFT’s CSP, please visit www.swift.com/csp
Or contact SWIFT’s representative office in Switzerland by sending an e-mail to cristina.rigo@swift.com
Digitalization, automation, new technologies and processes constantly lead to complex challenges among the payments participants. It is a matter of finding simple, and at the same time, secure ways and means, particularly when it comes to the relationship between the customer and the bank. EBICS helps provide market solutions that offer communication channels with the highest security.

It has been nearly a year since MELANI, the Swiss federal government’s Reporting and Analysis Centre for Information Assurance, went public with its warning: “Offline payment software in the sights of hackers – Swiss companies affected”. Cybercrime is a constantly growing threat for banks and their customers. Processes are networked and interlocked through digitalization and automation. This increases the

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**Highest security for corporate customers with EBICS**

Swisscom has put together a modular service solution together with its software partners, Crealogix (EBICS server, VEU portal), and Windata (VEU app). The modules shall enable banks to provide a high security standard in their corporate customer business and, at the same time, cover the customer’s need for simpler and transparent handling.

<table>
<thead>
<tr>
<th>MODULE</th>
<th>TARGET GROUP</th>
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<tbody>
<tr>
<td>Basis is the “EBICS/Intersystem” shared platform, which is currently used productively among six banks. The solution comprises a complete service from a single source.</td>
<td>Banks that are not yet using a solution or which would like to profit from a shared service.</td>
</tr>
<tr>
<td>VEU module for release of payment instructions submitted through EBICS. One extension option is the provision of functionality for interbank payment instructions.</td>
<td>Extension module for banks that obtain the EBICS service from Swisscom.</td>
</tr>
<tr>
<td>VEU app (German/French/English). White label release app (bank logo/colors). Banks provide the app license to their customers.</td>
<td>All banks in Switzerland.</td>
</tr>
<tr>
<td>VEU portal (as of Q1 2018). White label release portal (bank logo/colors). Banks provide the portal log-in to their customers.</td>
<td>All banks in Switzerland.</td>
</tr>
<tr>
<td>HSM box and mobile ID. Secure access components to secure access through the VEU portal.</td>
<td>All banks in Switzerland that use the VEU portal.</td>
</tr>
<tr>
<td>Offline banking solutions from the cloud (as of Q1 2018). Producers of offline banking solutions have the option of offering their products to their customers as managed cloud solutions.</td>
<td>Producers of offline banking solutions.</td>
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</tbody>
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“Crucial for the proper implementation of the VEU concept is that the release of payment instructions submitted via ‘offline software products’ is made by the customer through another, second channel/device.”

Solutions for people
In this tense environment it is not enough to design technically sophisticated security solutions. Since there are people involved with each corporate customer, new solutions must also be easy to handle.

Secure end to end, through clearly defined responsibilities
EBICS (Electronic Banking Internet Communication Standard) is becoming the European standard. It goes beyond the bank-specific Swiss “Intersystem” procedure. Its advantage is that a customer can reach all financial institutions that support EBICS with a single means of identification or channel. The customer also has the option of using the procedure with a distributed electronic signature (VEU), which significantly boosts security and places responsibility for the execution of a payment instruction where it belongs – with the ordering party. The Swiss financial center is therefore, starting this year, recommending the use of VEU in the “Swiss Market Practice Guidelines EBICS”.

Crucial for the proper implementation of the VEU concept is that the release of payment instructions submitted via “offline software products” is made by the customer through another, second channel/device. The multi-banking capability of EBICS nevertheless makes it possible to design the release process for the customer so that it is convenient, without having to be logged-in to various e-banking systems. All payments submitted through EBICS, for which various banks are awaiting approval, can take place through a corresponding central VEU portal or a VEU app.

A close connection and reuse of existing banking portals are also possible through a programming interface (API). The principle bank would then have to consistently provide the multi-banking capability to its customers.

Thomas Drescher & Claus Halbherr
Swisscom Enterprise Customers – Banking
The multibank concept with the EBICS VEU

Creation of secure orders to different banks through offline banking software

Multibank release via mobile app or VEU portal
**DEEP DIVES:**

More about the EBICS interface in the March 2017 edition

More about the first gfs.bern survey in the December 2016 edition

More about the history of the SIC system in the June 2012 double edition

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**30 YEARS SIC**

- **1987**
  Commencement of productive operation with 8 banks connected

- **1988**
  All Swiss clearing participants connected to SIC

- **1990**
  Increase of database capacity to 1 million payments a day

- **1994**
  Introduction of priority categories (depending on the urgency of the payments)

- **1995**
  SECOM interface (fully automated processing of securities transactions)

- **1998**
  Introduction of repos; settlement of DTA and LSV transactions

- **1998**
  Participation is extended to foreign banks

- **1999**
  ATM, card-operated filling stations and EC-direct transactions are settled

- **2000**
  Introduction of cheque clearing; settlement of Swiss post money market transactions

- **2001**
  Postfinance settles customer payments; banks can access SIC via SWIFT

- **2002**
  Connection to the CLS global clearing and settlements system for foreign exchange transactions

- **2005**
  Repos replace Lombard loans to banks

- **2010**
  Participation is extended to insurances and funds

- **2015**
  Operational launch of the ISO 20022-compatible Swiss RTGS platform SIC4

- **2016**
  Postfinance decides to settle all interbank payments via SIC

- **2017**
  All participating institutions in SIC have switched over to ISO 20022