



The Swiss professional journal for payments Edition 63/64 | September 2015

**Interview** The long road to the ideal payments world

oSIC reloaded

A controversial standard

## Interview

# The long road to the ideal payments world

Swiss payment traffic is due to be harmonized and standardized by 2020, which is still a fair way off from becoming a reality. On the one hand, technical hurdles must be overcome, while on the other, the readiness to decide to move ahead together quickly is not equally widespread. This can be the case both with companies of a respectable size and the smallest of firms. Business consultant Stefan Lenz guides us through the obstacle course.

#### Business & Partners e-bill is part of the future

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In 2013, the Swiss banks decided to push the e-bill and to combine it with direct debits in a single system. SIX was assigned with the design and implementation of the new solution. That was the birth of the LEON project.

## Business & Partners

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Making good progress in the LEON Working Group

The working group is involved in the design of the new e-bill/direct debit solution. Representing the Cantonal Banks, Roberto Paredes describes what has happened so far and what is planned for the future.

## Products & Services e-bill's new appearance

The Swiss banks, PostFinance and SIX have been marketing electronic billing for e-banking customers under the "e-bill" brand since 2006. Following the overall appearance of e-bill at the beginning of 2015, the new online-based marketing campaign began at the end of February 2015.

# Highlights And it runs and runs and runs!

The new era in interbank payment traffic was ushered in on 16 April 2015. At precisely 7:30 pm, the traffic light turned green. Since then, the new euroSIC has confirmed to run on the innovative SIC<sup>4</sup> platform.

# Products & Services

SIC<sup>4</sup> with Swiss francs: The countdown is running

The "New SIC Architecture" project is not quite complete, despite the successful launching of the new euroSIC system, especially for the Swiss National Bank. The Swiss RTGS system SIC for Swiss francs is still pending.

# Standardization

# The new payment slip is taking shape

The dimensions and design template of the inpayment slip with data code ( $\Omega R$  code) was published in June. Just how the Swiss financial center will meet the new regulatory requirements is now tangible and visible.

# Standardization

# ISO 4217: A controversial standard

Currency codes are indispensable in business transactions throughout the world; for example, all stock exchange and payment systems from Mumbai to Antwerp to Zurich are set up for them. ISO 4217 standard defines how the CHFs of this world are issued. This standard has been revised under the leadership of Switzerland.

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Front page: With a twist of the wrist, the new euroSIC system has been launched.



#### Dear reader,

It is complete! In the twinkling of an eye, the old euroSIC became the new euroSIC. While the Swiss payment system for euro payments was constantly adapted to meet our needs, the migration on 16 April 2015, at precisely 7:30 pm, was a quantum leap. Sixteen years after euroSIC was placed in operation.

A representative of the Bundesbank stated in a CLEARIT interview in 2005: "I still consider euroSIC an innovative and successful concept for connecting Swiss financial institutions to the euro circulation." Our interbank payment system has long been innovative and successful, even in the opinion of those beyond the borders of Switzerland, last but not least due to the high quality of the service performance for the participating banks.

With the new euroSIC we are well equipped well beyond 16 years, at least in technical terms. This is also attributable to the flexible ISO 20022 message standard that is being gradually used in the financial industry. It will therefore be easier, faster and cheaper for us to react to new market circumstances and to efficiently support our banks at the interfaces to their customers: for payment transactions in euro today, in francs tomorrow. And tomorrow is rapidly approaching. The new SIC system will also be placed in operation in the twinkling of an eye on 14 April 2016. And I dare to assume that the migration will also function smoothly after the day-end processing.

An equally smooth integration of direct debiting within the e-billing process is in progress. I am optimistic that we will complete this major project, under the aegis of LEON, in the next two years.

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Michael Montoya, UBS AG Chairman of the Board of Directors of SIX Interbank Clearing Ltd

# The long road to the ideal payments world

Swiss payment traffic is due to be harmonized and standardized by 2020, which is still a fair way off from becoming a reality. On the one hand, technical hurdles must be overcome, while on the other, the readiness to decide to move ahead together quickly is not equally widespread. This can be the case both with companies of a respectable size and the smallest of firms. Business consultant Stefan Lenz guides us through the obstacle course.

# CLEARIT: Mr. Lenz, as a business consultant you concentrate on projects in the healthcare sector and – according to your website – on special projects in other interesting industries. Such as?

**Stefan Lenz:** Primarily the energy market. Developing new business models, exploring new models of cooperation and "discovering" the customer are among the priorities of the energy service providers. So to speak, "away from the electricity meter and towards needs, products and customers".



Stefan Lenz, management consulter at Parexa AG, has extensive experience in marketing and sales as well as operations of banking services.

#### And what role do payment transactions play there?

An essential one, because liquidity is always important. Energy service providers also want to earn money and charge for their services efficiently and transparently.

# Hasn't this been the case until now?

In principle, yes. Only there is a lack of integration of product usage and payment processing data among the various energy service providers. Large customers can already freely purchase their electricity in the partially liberalized electricity market. This means that product usage and billing must be designed to be much more flexible. Payment traffic must be redefined in this area.

# "It is fundamentally a matter of ensuring liquidity, for which payment transactions are ultimately indispensable."

Besides banks and software providers, now companies are confronted with an extraordinary, major challenge: the migration to new payment schemes and standards. What is the main emphasis of your consultancy work? Payment traffic tends to be invisible in our projects. It is,

so to speak, an important minor issue – partially automated, particularly at the interface between companies' financial and billing departments and the banks. However, as soon as it comes to developing additional automation potential, the process context must be analyzed in great depth. Then topics such as digitalization and archiving crop up. I would assert that the process perspective is essentially more interesting than the technical message level of a "pain.001". While payment traffic, like the circulatory system in a human body, is invisible, it is an equally vital function in any company. It is fundamentally a matter of ensuring liquidity, for which payment transactions are ultimately indispensable.

# In your opinion, how should this indispensable payment traffic be handled in the best of all possible worlds? For example, in a hospital?

What is needed is simplicity, reliability (e.g. status message in the new ISO 20022 message standard) and transparency (e.g. the new electronic account statements). If these three factors can be achieved, payment traffic will also become less expensive, especially when it comes to very complex investigations and returns.



Let's conduct a reality check: After all that you know about the harmonization efforts in Switzerland – how close will we be to perfect payment transactions processing by mid-2020, when all stakeholders will have made the switch? Will it deliver the simplicity, reliability and transparency you're calling for?

There will still be a couple of steps to take. In particular, we are currently still talking about harmonization and not standardization. Those are two entirely different pairs of shoes. If we want to harmonize, then we are heading in the right direction. But that's not enough. For example, we are talking about payment slips that only permit millimeter deviations in production before they become invalid; we are talking about interfaces in the EBICS standard that are still implemented very heterogeneously, although the whole thing has arisen from standardization efforts. And finally, we are still talking about certain histories such as character tables and character sets. I'd put it like this: Umlauts (ä, ö and ü) will still be a challenge in 2020.

# Exactly what problems do millimeter deviations and umlauts present? Take the example of payment transactions in the healthcare industry.

The healthcare sector also involves the ability to process large volumes of invoices highly efficiently with XML data structures. In other words, the complete invoicing between service providers (hospitals, laboratories and physicians) and the health insurance companies takes place electronically today. Several years ago, a billing standard was introduced that enables XML-based invoicing and can also generate (new) payment slips if needed. On the other hand, the fundamentals for payment processing are also integrated in the invoicing, such as account numbers, creditor data or even the payment purpose involved in a payment. And this information must also be redesigned. This means that the required information for the new pain.001 message structure is to be integrated in the XML message used in the healthcare sector. This integration must consider all the rules with regard to umlauts and other special characters. A new standard is needed for this, the XML standard 4.5.

## Excuse me? Which standard?

In the healthcare sector we are currently speaking about the so-called XML standard 4.4, which is maintained by the "Data Exchange Forum". Here the data exchange procedures between service providers (hospitals, physicians) and guarantors (health insurance providers, cantons) are defined. That is a pure Swiss standard.

## And how do things look in the energy market?

Progress in terms of automation in this sector has not quite come so far. The energy market struggles with certain fundamentals: How do I even gain access to certain product usage data? How exactly am I to capture this data in reality, such as which customer purchased how much electricity of what type and over what time period? How can I then appropriately bill this electricity transparently and efficiently? Since there are still around 700 energy providers (the majority of them city and municipal plants) active in Switzerland, there is still some need for automation here.

# "That is, of course, unless each bank cooks its own soup..."

# Where do you see the greatest challenges in the coming years? How do you assess the progress made so far towards the harmonization of payment traffic?

We are so much further along today than we were a few years ago, because now we can speak about payment traffic as a basis on which further joint implementations are possible. I think of the new pain.002 status message, which provides considerably more process reliability. That is, of course, unless each bank cooks its own soup in the sense of "we offer added value". Here it is important to let go of a misunderstood differentiation and really raise the flag of standardization. In this regard I am addressing the AOS, some of which offer questionable "added value" as well as the details in the individual messages, for example, how and when should a "reason code" be sent back with extensive text or not? The ultimate customers and software providers appreciate it when the ISO standard is adhered to as much as possible and that also makes the whole thing easy to implement.

# Payment traffic is increasingly assuming a commodity character. How accurate is the impression that the vast majority of users are indifferent about issues such as whether proprietary or standardized formats are used? – as long as there is a plug and an electrical cord through which payments can be processed. Do your customers have firm ideas about what is good for them or bad?

Our customers certainly do have a clear concept of this; particularly in the healthcare sector in which payment messages are often delivered with service information. This information is especially important in the healthcare sector because the services provided must correlate to the insured benefits. This type of information transmission is standardized and structured through XML messages. In the energy industry this is happening similarly. There too, not only the payment information is delivered, but also the service information that states who purchased how much and which electricity where and when. Hence, the payment traffic standard is becoming a part of the digital value creation chain in both industries. It should be possible to process even greater numbers of bills electronically in the future, as foreseen by the LEON project and the further development of the e-bill. It is also conceivable that the offer, the order and the order confirmation can take place fully electronically within the value creation chain and that later down the line in the process messages such as account statements will make available further business administration information for internal settlements entirely electronically. This means that

payment traffic will be embedded in the digital value creation chain. Since it is simply a link in the chain, it must be as highly standardized as possible.

# What influence does the ISO 20022 standard have on the up- and downstream processes in this digital world?

It facilitates efficient cash management. If information about the liquidity is effectively available, along with current account balances, then a cash manager in a large company can decide within seconds where to shift which cash positions, where he can optimize liquidity and thereby dynamically adapt to the interest rate and risk situation. Payment traffic with its up- and downstream systems thereby facilitates liquidity optimizations.

# "I can better manage liquidity with ISO 20022."

#### Is this added value also quantifiable?

It is not really quantifiable because the effective costs are not really known. These also differ for each financial institution. However, I think that with ISO 20022 we are basically achieving greater process reliability and efficiency with the order confirmation and the corresponding account statement messages, which then enable optimizations in combination with other business administration processes. For example, if I manage to provide liquidity in the right place in a corporate group, which is at the place where, for example, the truck with the ordered goods is departing. With ISO 20022 I can count on payments being processed within the required period of time at the right place. Without ISO 20022 I cannot count on the money being in the right place at the right time. Consequently, this means that I can better manage liquidity with ISO 20022.

# How much do your contacts know about the ISO 20022 standard and its impact on their business?

Many customers have a vague idea about it, so to speak, "I know there is something like that there." But they don't really specifically know what in which areas and what impact it will have on them. Much less, which systems it impacts. That is precisely our task as business consultants: to explain clearly to the specialist and management staff what needs doing. We always begin with an analysis phase which entails making ISO 20022 operationally comprehensible from the ground up with the process chain. Only when the context is clear and, for example, we have a complete picture of debtor management, can the game with ISO 20022 really begin.

# Let's assume that customers are not lining up outside your door – how do you intend to "sell" pains and camts?

They aren't for sale. What the market is currently buying are the new ERP and payment transaction solutions. This is because you always want to be closer to customers with an ERP solution, to process the customer information in a structured manner and also because you want to have more efficient processes in the ERP field. Hence, messages such as "pain" or "camt" are not important, rather more the "translation" in the customer's process language.

# "The Swiss banks should offer coordinated solutions."

# What support can companies generally expect, and you specifically, as a consultant, from the banks?

From the banks I hope and expect fewer differentiations and more standardization, and I expect more support so that customers are not left standing out in the rain in this harmonization process. The Swiss banks should (both in terms of content and time) offer coordinated solutions. We often experience that customers says that they won't do anything until all banks have progressed equally far.



Thus they expect the same degree of readiness at the same time from the banks; e.g. such as the offering of a minimal set of ISO 20022. I can already send pain.001 to some banks today, but not to every bank. For customers, under some circumstances, this means that that their system operates in an inefficient manner and multiple new procedures must be placed in operation and that they generally must work with multiple banks.

# If you compare the financial institutions: How does their level of commitment differ?

There are major differences in my opinion. You notice quite clearly that PostFinance, for example, for which payment traffic is a core business, is making great efforts here. They support their customers very closely and large customers receive a special consultation. It is not unheard of for the PostFinance representative to conduct customer analyses with us on site. At the other end of the spectrum are banks such as small cantonal or regional banks. They appear to be asleep like Snow White; there is not even any sign on their websites that ISO 20022 exists. That sets off alarms for me.

# "No software partner is producing a release just because of ISO 20022."

# Where do software vendors stand in terms of implementation? Is there also a heterogeneous approach to the topic among them?

Very heterogeneous. No software partner is producing a release just because of ISO 20022. These modifications are always delivered with a package. The question here is, what do customers expect? According to our experience, the software companies do not build anything for stock. They say: tomorrow's software is yesterday's software. Hence, if they submitted a DTA yesterday, then tomorrow they will simply deliver a "pain.001". Some personal persuasion is needed before software partners realize that the pain.002 offers significant advantages. So that an electronic account statement can be integrated, if no SWIFT interface was previously offered with MT940, the software partner must right away put it in turbo. In the end, it is up to the customers who demand this service. Software partners are difficult to motivate, because payment traffic is unattractive for them as they apparently cannot charge any money for it.

# What factors does the harmonization of debtor, creditor and cash management processes depend upon?

Upon an absolute straight through processing of data and information via all interfaces, financial institutions and national borders. This means that the entire game begins there where, for example, information for the provision of liquidity in the cash management field can also be used in debtor management. The goal being that I can pay my bills so that they are recognized 1:1 by the others and that no inquiries are necessary. That I implement methods such as the open item accounting so that I can only close booking records when the payment actually arrives and the ERP solution automatically balances the currency exchange rate differences. This means straight through processing from the liquidity via creditor and debtor management through to the payment. I guess that's the only way to success.

We are well on the way towards this goal, but there are still problems here and there with the implementation, be it because one software partner, for example, "forgets" what an end-to-end ID is or because the other cannot really warm up to the new inpayment slip since the schemes are not that easy. After all, it requires reading and understanding documentation that is nearly 1,000 pages long. Needed from the Swiss financial center are simple instructions or reference examples showing how certain development steps can be easily carried out. The Swiss Usage Guide is an excellent example of this. It helps those for whom this field is too technical to get on board.

# Swiss Usage Guide

The "Swiss Usage Guide" explains through field rules and examples how the ISO 20022 messages (customer-bank and bank-customer) must be constructed in accordance with the Swiss recommendations for the most common use cases (payment types), thereby providing an end-to-end analysis of the entire process.

In 2016 the new e-bill which is combined with the direct debit scheme will be introduced in Switzerland. How much interest is there for this offer among companies in the healthcare sector?

This is an interesting service, particularly in view of the combination of services. On the one hand, because with the e-bill the necessary transparency can be attained with electronic billing and, on the other, the service offers the convenience of automatic debiting. This means a combination of transparency and convenience. I believe that this is a key factor for the future.

## Why aren't dentists participating in e-billing?

The e-bill today is far too complicated and tedious when

it comes to the registration procedure. We also have the following unfortunate "triangular relationship". The dentist has little technical affinity for the whole topic, customers don't demand it and software partners don't implement the interface – there is not much that can be done. Should the e-bill ever be included in standard software, if I, as a dentist, am able to activate it with a simple click, without first having to sign a bunch of contracts – and then with every bank – then the registration procedure would be quite easy. We need an e-billing contract that I can, for example, enter into with SIX centrally and thereby automatically become a participant in the entire system.

Administrative processes are simply not a priority for small companies, and dentists are among them. Such matters are viewed as a necessary evil to fulfill regulatory requirements and are thus put on the perpetual back burner. The dentist does not earn any money with it and he really does not have to offer that convenience to customers. You have to go to the dentist in any case – but surely not because you are eager for e-billing.

#### Interview:

Gabriel Juri, SIX Interbank Clearing

gabriel.juri@six-group.com

André Gsponer, ConUm AG

andre.gsponer@conum.ch

# Info event

The "Communications Migration PT CH" working group is hosting for the third time an info event for business software vendors about the planning and status of the implementation of ISO 20022 in Switzerland. The event will take place on 17 September 2015 in Zurich in German language. Further information can be found at www.migration-zv.ch.

# e-bill is part of the future

In October 2013, the Swiss banks decided to push the e-bill and to combine it with direct debits in a single system. SIX was assigned with the design and implementation of the new solution together with the Swiss banks. That was the birth of the LEON project.

Seeking to promote the e-bill over paper bills is the overarching aim of LEON (in German: Lastschrift und E-Rechnung Online Neu, New Direct Debit and E-Bill Online). The proportion of paper bills should be significantly reduced in the coming years and processed entirely electronically from the biller to the customer, including payment. The aim is also to functionally improve the e-bill in order to make it more attractive to customers.

To upgrade interfaces and reduce complexity, the e-bill and direct debit procedure are now being combined in a new joint system. This means that the direct debit processes are being matched to that used for the e-bill. The Swiss banks and SIX are also breaking new ground when it comes to implementation of the new solution.

For customers they are launching a central web portal for e-bills and direct debits including an app. The e-billing functionalities will then no longer be shown directly in e-banking, but through the web portal or the app.

## Benefits for banks, billers and customers

Banks will benefit from synergies and save costs through the combination of e-billing and the direct debit procedure in one system with a single interface. New e-billing functions need only be implemented once – and no longer by the bank, but at SIX. This means that functions can be introduced among customers considerably faster than was previously possible, specifically within a year.

Billers also profit from the new solution. In the future they will only need to operate a single interface for the two payment instruments. They will now receive their customers' registration data for e-billing and direct debiting electronically directly from the new system. The e-bill's range of functions is also being expanded. For example, customers can now register for e-billing directly at the biller.

Customers primarily profit from joint access to their e-bills and direct debits. Improved functionalities and a central web portal with app will now be available for e-billing.

# Current project status and schedule

The detailed concept was elaborated by SIX together with the banks in the LEON Working Group. Opinions about the key points of the detailed concept were gathered from more than 4,000 e-banking users as well as the 15 largest billers. Prototypes were created for the new web portal and the app. After the decision to execute the project was officially made in June 2015, development of the new solution commenced at SIX in July. The banks will migrate to the new web portal for e-billing in 2017 and to the new direct debit procedure in 2018.

## Ulrike Eckardt, SIX Paynet

ulrike.eckardt@six-group.com

# Great potential for e-billing

500,000 companies and public administrations send around 500 million bills annually to around four million private households. The lion's share of these bills is currently sent on paper. These paper bills, however, generate a great deal of work and high costs among companies ranging up to CHF 5 per bill.

Paper bills are also inconvenient and time-consuming for customers who make their payments electronically via e-banking. The e-bill is very helpful here. It is transmitted electronically by the biller to the customer in the e-banking system and then checked and paid by the customer with the click of a mouse.



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# Making good progress in the LEON Working Group

The payment traffic infrastructure in Switzerland is currently being further developed for the future. Central to this project are the improvement of the e-bill and the combination of the e-billing and direct debiting procedure in a new joint system. The author of this article, as the member representing the Cantonal Banks in the LEON Working Group, is involved in the design of the new solution.



www.e-bill.ch is popular: It was visited by more than 34,000 people in August 2015.

Large projects within the financial center infrastructure require enormous coordination among all the stakeholders, as does the implementation of the improved e-bill and the new direct debit procedure, with which the LEON Working Group is occupied. In recent months it has developed a combined scheme for e-bills and direct debits together with representatives from all banks and PostFinance. This task was very interesting for all participants, who now all agree that the new scheme will be well received in the market. One special challenge entailed finding a combination of the two procedures that offers many advantages for all participants; that is, the financial institutions, billers and end-customers. This work is now completed and everyone is looking forward to the launch in 2016.

## Advantages for billers...

In the future, there will be a common data format among banks and PostFinance for e-bills and direct debits. This is a very positive development for billers, which simplifies many things. New billers will now be able to participate in e-billing and direct debiting much more easily. Also advantageous is that sign-ups for the direct debit scheme will be delivered to the biller electronically in the future and thereby adapted to match the e-billing process. In the future, billers will be able to sign up customers for e-billing themselves, making registrations possible outside the e-banking system, which will certainly have a positive impact on the development of the e-bill.

# ... as well as for customers

The banks' customers will also greatly benefit from the new e-billing functions. The sign-up process for e-billing will be much easier. Furthermore, customers will experience greater transparency about their e-bills and will thus be able to decide about the releasing of their e-bills more quickly. Customer requirements were also taken into account when it came to the further development of notifications; e.g. upon receipt of a new e-bill. With the planned simplifications and improvements it is strongly anticipated more customers will sign up for e-billing.

#### New portal

Within the scope of the LEON project, e-billing functionalities will no longer be displayed in the e-banking system, but on a central web portal at SIX. This simplifies the situation for financial institutions. In the future, banks have an essential advantage: They benefit immediately from adaptations, improvements and any innovations made to the portal. At the same time, the scope and even the existing complexity of an e-banking release will be reduced. Through the combination of e-billing and direct debiting in one system the financial institutions are also anticipating savings in regard to interfaces.

# Upcoming detailed planning

The banks will begin the implementation work for the new web portal solution in 2016. The banks must begin the budgeting and planning of the project for their institution in a timely manner so that they will be ready for a smooth migration to the new portal in 2017.

# Roberto Paredes, Thurgauer Kantonalbank

roberto.paredes@tkb.ch



Advertising video on YouTube

# e-bill's new appearance

The Swiss banks, PostFinance and SIX have been marketing electronic billing for e-banking customers under the "e-bill" brand since 2006. Furthermore, together they have promoted the name recognition and use of e-bill with annual marketing campaigns. Following the overall appearance of e-bill at the beginning of 2015, the new online-based marketing campaign began at the end of February 2015.

The new appearance and marketing campaigns were planned and executed by the Marketing Working Group on behalf of the Swiss banks, PostFinance and SIX.

#### New, more contemporary Internet appearance

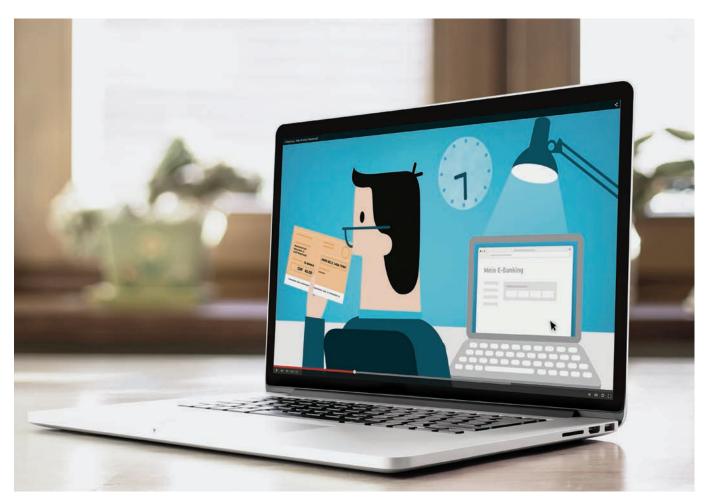
The central communication platform is the website e-bill.ch. There, individuals can learn about the benefits and functionalities that e-bill offers as well as which banks and companies offer it. The website was completely overhauled, both technically and in terms of content, and relaunched at the beginning of this year. It is distinguished by a fresh design, attractive contents and a high level of user-friendliness. An essential role is played by the new video, which, in a minute and a half, explains how the "Weber Family" benefits from e-bill. In this year's prize contest, we introduce another question about e-billing on the website e-bill.ch.

# New advertising message, diverse advertising tools

The new advertising message focuses on the benefits of e-bill: convenient, fast and paperless. Each of these benefits is formulated as a question for which the answer is always the same: "e-bill". In this way, the logo is integrated in the communication inside a speech bubble. The advertising means were adapted to the new appearance of e-bill and the new advertising message. In addition to the logo and text modules, banks and billers have flyers, web banners, print banners and two films in German, French, Italian and English at their disposal.

# Greater clarification through new marketing campaign

The aim of the new marketing campaign is to increase e-bill's profile, to provide clarification and thereby to



Promotional video on YouTube

boost sign-ups for e-bill among e-banking customers. The most important elements of the new marketing campaign include an advertising video on YouTube, banner advertising and the question & answer contest.

At the end of each month, when most e-banking customers pay their bills, e-bill will be advertised on YouTube, on over 400 websites including 20minuten, Tages Anzeiger, Tribune de Genève and on Google.

The marketing campaign has already proven to be successful in the first three months: The countdown video on YouTube was viewed more than 692,000 times and the banner advertising has generated 48,000 additional clicks on e-bill.ch. More than 20,000 people have participated in the contest since the beginning of the year.

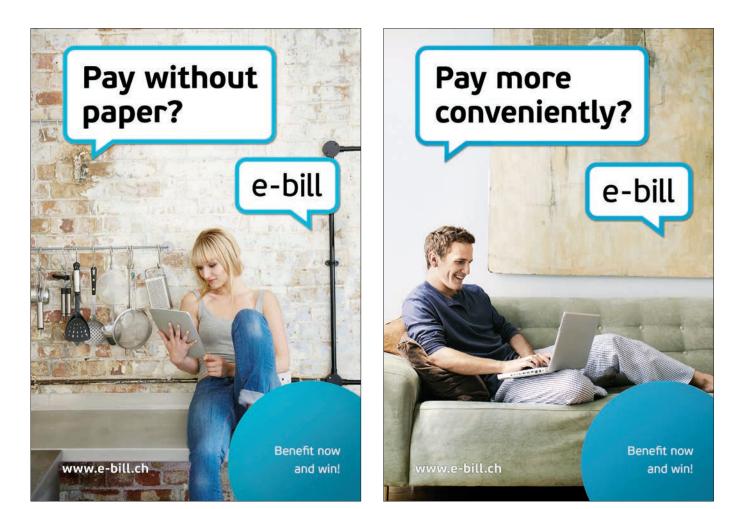
# Ulrike Eckardt, SIX Paynet

ulrike.eckardt@six-group.com

# e-bill: as secure as e-banking

e-bill is an integral component of the e-banking services offered by the Swiss banks and PostFinance. Hence, the very strict and comprehensive security precautions also apply for e-bill.

Data security and data protection are a very high priority in the e-billing process. Therefore, only the latest authentication, authorization and encryption processes are used for the transmission and storage of e-billing data. Furthermore, this also applies to all partners involved in the e-billing system, which are also contractually obligated to treat all data confidentially and to appropriately protect their systems. The Swiss banks, SIX Paynet, PostFinance and all partners use the billing data exclusively for the provision of the e-billing service.



The new advertising means for promoting e-bill, which can be downloaded from the download center at e-rechnung.ch/werbemittel.

# And it runs and runs and runs!

The new era in interbank payment traffic was ushered in on 16 April 2015. At precisely 7:30 pm, the traffic light turned green. Since then, the new euro-SIC has confirmed to run on the innovative SIC<sup>4</sup> platform.

Of course, it does not just run by itself; a few people are necessary to make sure that it does. And while they were concentrated and focused in the run-up to the premiere, there was no sign of nervousness. Though perhaps a bit of crackling tension.



# **Command center**

"OK! Let's do it!", was the motto that evening in the Operations Center command center, where 20 employees from the overall project manager to the IT developer and the database specialists gathered – including the SECB system manager connected by phone from Frankfurt. And then one thing followed another.

- 7:29 pm: Last online acceptance of messages from the old system;
- 7:30 pm: shutdown of the old and startup of the new euroSIC; starting
- 7:35 pm: activation of the high-volume participants UBS, PostFinance, Credit Suisse, ZKB und St. Galler Kantonalbank;
- starting 8:00 pm: submission and delivery of transactions for these participants;
- 8:45 pm: activation of all euroSIC participants.

The first clearing day proceeded smoothly from the perspective of all participants.

# It works! And no one notices...

At least, the introduction has gone unnoticed by anyone who pays in euro with his or her card in a Swiss shop, who

collects a direct debit in euro or who purchases euro denominated securities on the Swiss stock exchange. And last but not least, cross-border workers who received their salaries in euro a few days later haven't noticed anything from the most significant milestone in Swiss payment traffic since 1999. And that's a good thing, because payment traffic extends – like no other financial instrument – through every nook and cranny and process not only at every bank, at every company, but through every private household. Infrastructure upgrades should occur "unnoticed" so that there is no disruption to the economic cycle.

# euroSIC cubed

The refurbishment of the 16-year-old euroSIC system is the first move by the Swiss financial institutions "in an intensive phase in which we are paving the way for an even more improved payments future," according to Armin Brun, Vice Chairman of the PostFinance Executive Board and a member of the Board of Directors of SIX Interbank Clearing. Since the evening of 16 April, 190 participant banks and external systems (e.g. SECOM and Eurex) can smoothly exchange their euro transactions on the new platform. The second milestone will follow next year with the operational startup of the new SIC system. Development of the SIC platform has been ongoing for nearly four years at SIX Interbank Clearing. Up to 80 team members at SIX were and are involved in the project tasks. Countless "hurdles" were overcome along the way to the "go" decision made by the Board of Directors on 25 March 2015.

# **Precise landing**

The green light from the SIX Interbank Clearing Board of Directors was the end result of a long chain of decisions. These included the rather boring project status reports marked in green. The result of these was that the budgeted total costs of CHF 42 million in installments over the years was always maintained. Two so-called management letters from the external auditor, PwC, and three internal test reports based on around 10,000 conducted test cases were sent to the financial center committees. Since the end of 2014 these led to a positive evaluation of the system manager, the internal audit by SIX and ultimately to the conclusion by PwC: "Overall, up to 5 February 2015, there were no circumstances known to us that would speak against a positive go-live decision for the euroSIC sub-project."

# Laurels

According to PwC, the test design, methodology, procedure and tools chosen by the project meet the latest international standards or even exceed their requirements. In comparison to the other development projects, our project would demonstrate a "very professional approach" and offer a large degree of security and quality. The internal audit awarded top marks in terms of the ratio between risk exposure and test result. Nevertheless, to rest on our laurels is not an option. The challenges remain great, because the operational startup of the far more important SIC system is still to come. As supervisor and system manager, the Swiss National Bank has already indicated that they will

Addendum

In response to feedback about the "Migration ISO 20022" article in the last issue of CLEARIT, please note that incoming messages sent to the bank through the SIC<sup>4</sup> platform can only be delivered in the old message standard on the following day. This means that even if there are problems with ISO 20022, the affected bank cannot fall back to the old standard throughout the entire switchover day.

# be keeping an even closer eye on us so that payments in Swiss francs, too, would go largely unnoticed by banks, companies and consumers.

# Gabriel Juri, SIX Interbank Clearing

gabriel.juri@six-group.com

# New online investigation in euroSIC

The use of ISO 20022 messages is possible in euroSIC since 1 July 2015. This means that potentially not all content from ISO 20022 can be transmitted in a SIC or FIN message (truncation). To support the system participants with truncation, effective immediately, an online research via the web portal is possible in euroSIC. Participants can thereby query individual euroSIC messages, including all original data, which means that investigations may be carried out online retroactively up to three months. The registration procedure will be announced in a circular as soon as possible. Furthermore, it remains possible to issue manual investigation orders to the Operations Center.



"We process your payments" and, now, also through the new euroSIC system. Some of the staff of SIX Interbank Clearing – representing the whole project team.

# SIC<sup>4</sup> with Swiss francs: The countdown is running

The "New SIC Architecture" project is not quite complete, despite the successful launching of the new euroSIC system, especially for the Swiss National Bank. The Swiss RTGS system SIC for Swiss francs is still pending.

"Good evening everyone – the operational startup of euroSIC on the SIC<sup>4</sup> platform was successfully carried out and is completed," read the brief and concise text of the e-mail notice from SIX Interbank Clearing, which was received by the Swiss National Bank (SNB) shortly after 9:00 pm on 16 April 2015. This signaled to the stakeholders that the productive start of the upgraded euro clearing infrastructure was successful.

# 14 April 2016

The brief message quoted above is the result of years of development. The SNB closely accompanied the CHF 42 million platform renewal project right from the beginning. The project is not yet completed for the SNB as the SIC system manager, rather, it is just entering the crucial phase. The completion of the euroSIC project triggered the count-down to the platform switch of SIC on 14 April 2016.

The SNB is confident that this introduction will also take place smoothly and successfully. To ensure a successful start, the countdown period will be used intensively to thoroughly check the system, including in the external test environment – which will remain permanently available for all participants. In the process, the SNB will assume responsibility for the legally required task of facilitating and securing the cashless payment systems and as the contracting authority of the SIC system.

# Absolutely crucial

As is generally known, the SBN makes its sight deposit accounts available for payments processing in SIC and thereby ensures that settlement takes place in central bank money. But that is not the SNB's only role; it also takes on the operative steering of the system. With special functions, for example, the clearing stop times can be deferred or transactions can be entered for banks with technical problems. For the Swiss financial center it is absolutely crucial that financial market participants are able to meet their obligations and those of their customers and that the cash-side processing of securities transactions are conducted in the Swiss Value Chain. In addition, a major share of retail payments is also handled through SIC and the SNB also processes its transactions through this system.

Extensive tests and reviews will be conducted in the coming months to also ensure the good functioning of this vital system on the new platform. The SIC<sup>4</sup> test environment for SIC has been available since 1 July 2015; system participants are called upon to deliver a broad set of various test messages. The central system acceptance tests will take place early this fall, which shall be partially focused on integration of the participants, in part on the performance and robustness, and then on exceptional situations. The guided bank test – in which selected banks will run through the central functions of the SIC system in an authentic scenario – will be conducted in October.

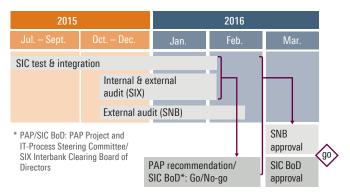
# Additional security

Beyond the system acceptance tests mentioned, the text and acceptance process will also be evaluated by internal and external auditors in fall this year. The results of the tests and of the auditors should be available at the end of January 2016. To achieve additional security for the risk assessment regarding the production launch, the SNB will also carry out an additional external review through an external auditing firm, the focus of which will be on system robustness on the one hand, and the specific SNB functions on the other.

If a positive summary can be drawn from the above-named tests and external audit reports, then the go-ahead will be given to introduce the new SIC into production. Hopefully, SIC participants would take no notice of the migration again this time in April 2016 except for receiving a concise e-mail in their inbox confirming the positive start. As of the November SIC release in 2016, the SIC participants will also be able to profit from the new functionalities such as liquidity reservations and management of the wait file.

# Andreas Wehrli, Swiss National Bank

andreas.wehrli@snb.ch



Time plan to operational startup of the new SIC on 14 April 2016

# The new payment slip is taking shape

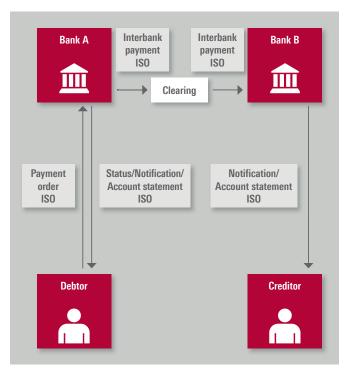
The dimensions and design template of the inpayment slip with data code (QR code) was published in June. Just how the Swiss financial center will meet the new regulatory requirements is now tangible and visible.

FINMA's revised Anti-Money Laundering Ordinance (AMLO), which will come into force on 1 January 2016, stipulates that for payment orders not only information about the beneficiary, but also the debtor must be entered and transmitted (= larger data record). Behind this lie the increased requirements of the international Financial Action Task Force (FATF), which has taken on the fight against money laundering and terrorist funding since 1989, and of which Switzerland is a founder member.

## **Transitional period**

In its consultation report on the AMLO in June 2015, FINMA acknowledges that the delivery of the large data record for orange payment slips and those for interbank payments will not be possible by the launch date of the new SIC system and the new inpayment slip in 2018.

The Swiss financial center is fully implementing the new requirements with the inpayment slip with data code so that it is possible for the parties participating in the payment processing to meet their due diligence obligations. This requirement stands in contrast to the blue (now orange) payment slip with reference number (ISR) that was introduced in the 1970s. The approach taken back then, to



transport as much information from the debtor to the creditor with as little data as possible, in order to enable creditors to manage their accounts automatically (e.g. customer number, invoice number, amount), was correct and very efficient for a long time. The underlying message standards (DTA, EPO) in ISR payment processing and the ISR credit are now being replaced by the ISO 20022 message standard. The redesign of the payment slips – with repercussions for all parties involved in payment transactions – is a consequence of the new regulatory requirements. With an eye towards reducing the processing workload, the decision was made to design a new inpayment slip, which factored in the regulatory requirements while also providing added benefits to all participants.

## A virtue out of necessity

In addition to the reduction of the slip diversity and the harmonization of the various proprietary message standards currently used, the working group assigned by the Swiss financial center considered combining the new payment slip with a data code right from the beginning. They were aware that the Austrian banks were already in the process of designing such a data code. For synergistic considerations, the Swiss definition was based on the Austrian one, but had to be extended to meet the specifics of the Swiss market. The use of a data code is also spreading throughout payment traffic worldwide; alongside Austria, in Slovakia, Finland, Great Britain and Brazil, without claiming to be exhaustive.

The QR code is being used as the data code type for the new payment slip. It offers the following advantages:

- A globally known industry standard (ISO/IEC 18004/2006);
- Data is protected by an error correction level. Depending on the level, n% of damaged data can be automatically reconstructed. Level L (low = 7%) is being used on the inpayment slips;
- The error tolerance is higher compared to the current OCR-B text (e.g. recognition of deviating positioning and damaged slips);
- The QR code is "en vogue". Applications are rapidly increasing in Switzerland. Many companies are already using it for their own purposes;
- Nearly 70% of the Swiss population owns a smartphone. The figure is even nine out of ten people among young adults (source: Comparis);
- QR code readers are available for all smartphones (the majority free of charge), sometimes even preinstalled;
- Many conventional slip scanners can already read QR code in addition to the encoding line;

- The printing of QR codes can be undertaken by commercial label, ink jet or laser printers, in additional to professional printers;
- In the QR code, billers can be provided with a dedicated section for their own use (e.g. for dispatch control).

Before all payment participants can profit from the advantages, the new ISO 20022 message standard that is relevant for the submission and processing of the payment slip must be introduced at the financial institutions and their



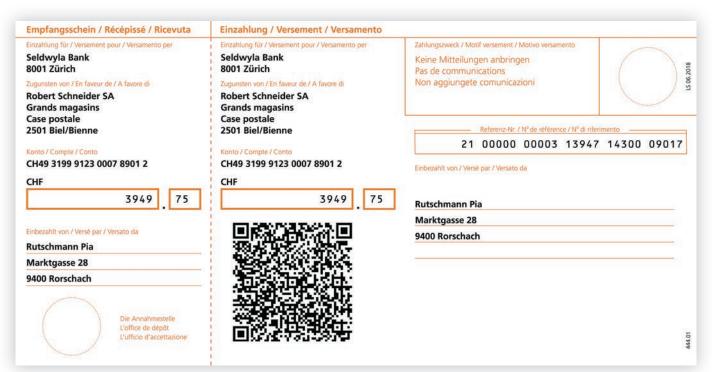
# Info event

The "Communications Migration PT CH" working group is hosting for the third time an info event for business software vendors about the planning and status of the implementation of ISO 20022 in Switzerland. Topics will include ISR payment processing and the new inpayment slip with data code. The event will take place on 17 September 2015 in Zurich in German language. Further information can be found at www.migration-zv.ch.

customers. This migration must be completed before the inpayment slip with data code can first be used. According to the current state of planning, this will be possible in mid-2018. The dimensions and design template for the new inpayment slip can be downloaded at www.migration-pt.ch.

Patrick Belk, Boxcon AG, Head of the Working Group Payment Slips

patrick.belk@boxcon.ch



# ISO 4217: A controversial standard

Currency codes are indispensable in business transactions throughout the world; for example, all stock exchange and payment systems from Mumbai to Antwerp to Zurich are set up for them. ISO 4217 standard defines how the CHFs of this world are issued and upon which basis which criteria is defined. This standard has been reissued under the leadership of Switzerland.

As is well known, the only thing that is constant is change. This also directly applies to the processes and standards in the financial infrastructure in general and for payments in particular. It took three years to complete the so-called "Standard Review" as it is known in ISO jargon. While that may sound like a lot of time, for the vast majority of the nearly 20,000 ISO standards, such an editing process, which is initiated every five years, takes even longer. The currency code standard is managed under the aegis of "ISO/TC 68/SC 7 – Core Banking". At first glance, the review is not earth-shaking and appears rather technical. In reality, significantly more lies beneath the surface.

# The small ABC of ISO

Abbreviations beg to be decoded: TC stands for Technical Committee and SC for Subcommittee. There are more than 200 TCs, which are in charge of all sorts of standards – ranging from screw threads (TC 1) to ferroalloys (TC 132) to animal feed machines (TC 293). Among TC 68's (financial services) best known projects is the ISO 20022 standard. Besides SC 7 there are two additional subcommittees that are primarily in charge of standards for securities and information security. In addition to the currency code standard, SC 7 is also in charge of the BIC (ISO 9362) and the IBAN standard (ISO 13616).

# Efficiency has priority

The actual review process started on 8 May 2012 at the ISO/TC 68/SC 7 annual conference in Chicago with the assignment to deploy a working group (number 12) for this purpose. After nine of the 24 participating nations named their representatives and the Swiss ISO membership was named as convenor as proposed, the first workshop was held in Zurich in November 2012. The Swiss interest is explained by the fact that the Currency Office – the globally central contact point for administrative matters concerning the standard – is located in Zurich and constantly aims to work as efficiently as possible, which was only possible to a limited degree with the "old" standard. One of the main issues was to overcome the flood of applications of new

currencies from private organizations, which was explicitly permitted in the previous versions of the standard. Applications for the issuing of currency codes, such as for DINER coins, which are minted in Andorra and are of numismatic interest, had no chance anyway. So what's the point in the administration of such an application? In agreement with the World Bank, the Currency Office has informally rejected all similar requests; only applications from central banks or other government authorities were processed. This "new" practice had to be confirmed in the revised standard.

## Material for the next revision

Intensive consultations took place ahead of the working group's second workshop held in Paris in June 2013. Among them, the scope of applicability for the working group formulated by SC 7 was disputed. Specifically, within the course of the work it turned out that the central problem – there are relatively few free currency codes available for new currencies – could not be solved with a quick stroke of the pen. Several countries, including Switzerland, were of the opinion that all strategic options were technically too complex for this standard review. Others felt that this was within the working group's project scope. Ultimately, a so-called Ad Hoc Group was set up at the ISO/ TC 68/SC 7 2013 Annual Conference in Guangzhou for this purpose.

In the meantime, the new version of the standard, after a number of further votes, was finalized to the point that nothing more stood in the way of publication by the International Organization for Standardization on 5 August 2015. The solution involving expansion of the available currency codes that was elaborated by the ad hoc group will thus be factored into the next revision of the standard. Until

# SIX in charge of the Currency Office

The duties of the Currency Office (officially: Secretariat of the Maintenance Agency for ISO 4217) are specified in the standard. SIX has been in charge of the worldwide issuing and administration of standardized currency codes for the past six years. Central banks from all over the world report to Zurich if they introduce a new currency or if they want to change or delete an existing one. SIX issues the codes according to a process stipulated in the standard involving the respective central bank and the World Bank. SIX subsequently ensures that all organizations that it may concern (currently over 1,500 subscribers) around the world are informed about the change. then, the working group shall remain dormant, according to the unanimous decision by ISO/TC 68/SC 7 at this year's conference in Toronto.

# Kept dormant until...

Another, not uncontroversial topic cropped up on the final round of approval for the revised standard: Cryptocurrencies (for more about this see the last issue of CLEARIT: "About Karma, Kisses and Kraken"). This sort of currencies should also be considered, according to some working group members. In his roles as convenor of the working group, the author of these lines stuck to the original project assignment and scope in order to avoid a significant delay of the work due to this complex subject matter. One of the core issues: How to handle the paradox in which applications for currency codes may only be made by central banks or other governmental authorities, while private operators of such cryptocurrencies may also be involved in the business?

These and other challenges will awaken the working group from its dormancy sooner or later. At the latest when the "Study Group on Digital Currencies", newly founded by ISO/TC 68/SC 7, completes its work. Until then, the latest edition of the revised ISO 4217 standard can be purchased online for CHF 38 since August 2015 from SNV, the Swiss ISO member.

# Gabriel Juri, SIX Interbank Clearing

gabriel.juri@six-group.com



| UD/JPY   | BID    | Ask  |      |
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|  | 82.04  |  | Sprc |
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## Council

Thomas Hadorn, PostFinance, Erich Schild, UBS Switzerland AG, Susanne Eis, SECB, Christian Schwinghammer, SIX Interbank Clearing Ltd, Andreas Galle, SIX Interbank Clearing Ltd, André Gsponer (Head), ConUm AG, Gabriel Juri, SIX Interbank Clearing Ltd, Daniela Meyer-Brauss, Credit Suisse AG, Jean-Jacques Maillard, BCV, Stefan Michel, SNB, Johann Wucherer, Liechtensteinischer Bankenverband

#### **Editorial Team**

André Gsponer, ConUm AG, Andreas Galle, Gabriel Juri (Head) und Christian Schwinghammer, SIX Interbank Clearing Ltd

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## Contact

SIX Interbank Clearing Ltd T +41 58 399 4747

Additional information about the Swiss payment traffic systems can be found on the Internet at www.six-interbank-clearing.com