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ClearIT

Information about the Swiss Payment Traffic Systems

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Switzerland is part of the euro payments area

The Swiss IBAN Tool

LSV⁺ from a beneficiary's perspective

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DEAR READER

Once again, this issue of ClearIT focuses on the formation of the single euro payment area (SEPA) and integrating the Swiss financial market in it.

The European Payments Council (EPC) has been doing good work: It submitted the system descriptions and the regulations (Rulebooks for the Credit Transfer System as well as for the Direct Debit System) on time. Simultaneously, the implementation process for the SEPA project was developed. Here in Switzerland, our Swiss Payments Council (SPC) has specifically addressed the issues at hand and passed a number of resolutions, starting as far back as 2004/2006. And now we are beginning to see the successful results. The implementation of the IBAN/BIC resolution is already showing positive results in the area of cross-border payment traffic to Europe. Evaluations have shown that, during the first quarter of 2006, significantly more than 70% of these payments contained a correct IBAN.

At the European level, our representatives to the EPC and the working groups were able to celebrate a major success with the passing of the resolution referring to Switzerland's participation in the SEPA systems. With this, there is a real chance that we will be able to offer our clients «local» euro conditions, resulting in entirely new opportunities for our financial market.

Switzerland's integration brings rights and responsibilities analogous to those of the banks within the euro zone. Here, all of us must accept the level playing field; picking out just the "raisins" won't be possible. Implementing and adapting our processes will require much work over the next few years. SEPA will be launched in all of Europe during the years 2008 to 2010, and we need to develop our ideal schedule for the integration and all its measures. The details will be worked out by the Payments Committee Switzerland (PaCoS) with support from Swiss Interbank Clearing. The SPC will hold the necessary discussions and initiate the adoption of formal policies within the deciding bodies of the financial market (the boards of Swiss Interbank Clearing and the Swiss Bankers Association).

The financial effects are currently unclear. Efficiency gains achieved through comprehensive Straight Through Processing (STP) could potentially be offset by lower fee gains. The costs of implementation aren't known yet, either. But one thing can be said for certain: Our clients will benefit, and our ability to compete will improve.

A handwritten signature in black ink, appearing to be 'Joerg Auer'. The signature is stylized and written in a cursive-like font.

Joerg Auer, UBS AG, Chair, Swiss Payments Council (SPC)

SWITZERLAND IS PART OF THE EURO PAYMENTS AREA

ClearIT: Switzerland has been an active member of the European Payments Council (EPC) since 2002. How has the collaboration been working out so far?

Michael Montoya: Switzerland has proactively participated in European working groups since the beginning and has always provided the competent resources required. Our commitment has always been very much appreciated by the European partners. The Swiss financial institutions were already represented in the EPC predecessor organizations, such as the Heathrow Group. In 2002, the banks gave themselves a new, more widely supported, yet tighter organizational structure in the form of the EPC, and Switzerland has been a member of this committee from the beginning. The catalyst for the formation of the EPC was the European Commission and its increasing level of regulatory activity within the realm of payment traffic. In the beginning, those payments affected by the EU Regulation 2560/2001 were the primary focus. Switzerland was clearly not concerned with that. Nonetheless, the country was invited to collaborate, due to its central geographic location in Europe and its strong economic involvement with the EU. The EPC efforts toward creating a European payments area soon showed that in order to attain the desired objective, SEPA tools and SEPA infrastructures should cover all payment traffic transactions in euro,

not just the regulated ones. Now the question arose, how – in what form – Switzerland could be integrated into the euro payment zone without losing the clear differentiation between regulated and non-regulated transactions.

Germain Hennet: Switzerland is and always has been a part of the European network via the Swiss Bankers Association (SBA). The SBA is a founding member of the European Banking Federation (FBE). Consequently, there exists a long tradition to have Switzerland at the table for European topics. Furthermore, Switzerland enjoys a stellar reputation in Europe, due to its excellent and secure payment traffic solutions such as SIC and euroSIC. Switzerland's input is therefore greatly appreciated.

Beyond that, the EPC consolidates the opinion of the three major European banking associations: the FBE, the European Association of Co-operative Banks and the European Savings Banks Group.

What changes as a result of Switzerland's SEPA participation?

Michael Montoya: By participating in the European payment area, Switzerland is committed to acknowledge and adhere to the regulations developed by the EPC for the euro payment traffic. The EPC Rulebooks being prepared define what will be implemented starting in 2008. They

also include the non-regulated payments, which, as mentioned above, affect Switzerland the same as all the other SEPA participants.

Germain Hennet: On the one hand, all financial institutions (approx. 1600 Swiss bank branches) processing payments via euroSIC now benefit from a payment traffic area spanning 28 EU countries and approximately 36,000 banking locations. On the other hand, starting on January 1, 2007, the Swiss financial institutions, too, must enable payments according to the SEPA definitions if they want to be sure that the payments won't be rejected.

Which obstacles had to be removed before Switzerland could participate in SEPA?

Germain Hennet: Since Switzerland was participating in the relevant discussions from the beginning, there were no obstacles whatsoever. Rather, it was important to refute the rumor that while Switzerland wanted to have a say, it was only interested in benefiting without participating.

Michael Montoya: The entire process was short and smooth, and took place in a very cooperative atmosphere. It also quickly became evident that equal treatment of the Swiss franc could not be a component of the resolution (see box). As long as the regulation within the EU only applies to euro payments, and



Michael Montoya (left) is responsible for payment traffic at UBS. He is the Swiss representative of the European Payments Council (EPC). Germain Hennet is a member of the management of the Swiss Bankers Association and is responsible for the area of Retail Banking. He is a member of the FBE Payments Systems Committee as well as a member of the Swiss Payments Council (SPC).

Representatives of the European Payments Council (EPC) and Swiss financial center have come to an agreement: Switzerland is accepted into the SEPA, the single European payments area. Therefore, the Swiss financial institutions have the same rights and responsibilities as all other SEPA banks when it comes to cross-border payment traffic. Excluded from that are regulated payments, as postulated in the EU Regulation 2560/2001, since this regulation does not apply to Switzerland. Michael Montoya and Germain Hennet provide background information.

RESOLUTION TEXT

Extract of the EPC resolution passed unanimously on 8 March 2006:

It is hereby resolved that banks in Switzerland have the right to participate in the SEPA Credit Transfer Scheme and the SEPA Direct Debit Scheme provided that the following guiding principles are followed by them:

- Switzerland is part of the SEPA on the basis that the level playing field principle is respected.
- All Swiss adhering Scheme Participants shall comply with the Rulebooks on the same basis as all others.
- Switzerland needs to ensure that the provisions of applicable EU/EEA legislation affecting payments services enabled by the SEPA Schemes are effectively represented in Swiss law or in equally binding practice for Swiss Scheme Participants.

For the sake of clarity it should be noted that the Rulebooks will cover payments subject to and not subject to regulation 2560/2001. Switzerland only has payments (in and out) not subject to 2560/2001.

not, for instance, to payments in the national currencies of Great Britain or Denmark, it obviously can't govern the Swiss franc, either. The main obstacle is how to implement the requirements of the EPC Rulebooks at the Swiss financial institutions. However, this can be secured with the joint venture Swiss Interbank Clearing and the swisseuro-

GATE service via the euroSIC system. At the same time, this also facilitates the accessibility of all Swiss financial institutions.

Participating in SEPA also brings responsibilities. What are the consequences for the Swiss financial center?

Germain Hennet: It is important to mention that participation predominantly brings benefits and advantages. The SECB Swiss Euro Clearing Bank GmbH, as the euroSIC system manager, can smoothly process payments with 28 countries directly. The EU is the «roof» over the SEPA. By participating in the SEPA, the Swiss financial center will now be treated identically by all European banks. As mentioned, though, starting on January 1, 2007, payments can be refused or rejected by EU banks if they lack the IBAN/BIC. The consumers will be informed by the banks about this new situation.

Michael Montoya: I'm coming back to the previously mentioned binding character of the implementation of the EPC Rulebook. Switzerland as a financial center must ensure that all customers are accessible and that all financial institutions participating in SEPA payment processes adhere to the corresponding regulations. This, even though the Swiss financial center is not governed by EU law. It is here that the Swiss payment systems will play a crucial role. We will be able to secure implementation of the directives in Switzerland through regulations in those systems.

On March 8, 2006, the previously mentioned EPC Rulebooks for Credit Transfer and Direct Debit were passed. What were the significant differences between them and the solutions that already existed in Switzerland?

Michael Montoya: Basically, Switzerland can meet the requirements derived from the EPC Rulebooks without any problems. There are some isolated questions that haven't been completely resolved, such as the foregoing of the presentation of a debit authorization at the debtor's bank, or the posting of a payment receipt on the basis of the IBAN alone. Depending on the answers to these questions, Switzerland may need to modify its practices.

Germain Hennet: There are a few details still to be worked out. What is of real significance for the Swiss financial center is another point entirely, though: Regarding these issues, we cannot limit ourselves to our relationship with the EU. That would be insufficient. The solutions pertaining to the EU are strongly influenced by the protection of the consumers there. For us, payment traffic with the entire world is important – especially payments in U.S. dollars. The SEPA notwithstanding, we shouldn't lose sight of that. The Swiss financial center plays an important role globally, as well.

At the next meeting of the EPC Plenary on June 2, 2006, in addition to electing the new chair, the structure of the working groups will be looked at. What will be the most

important issues that these working groups will have to discuss?

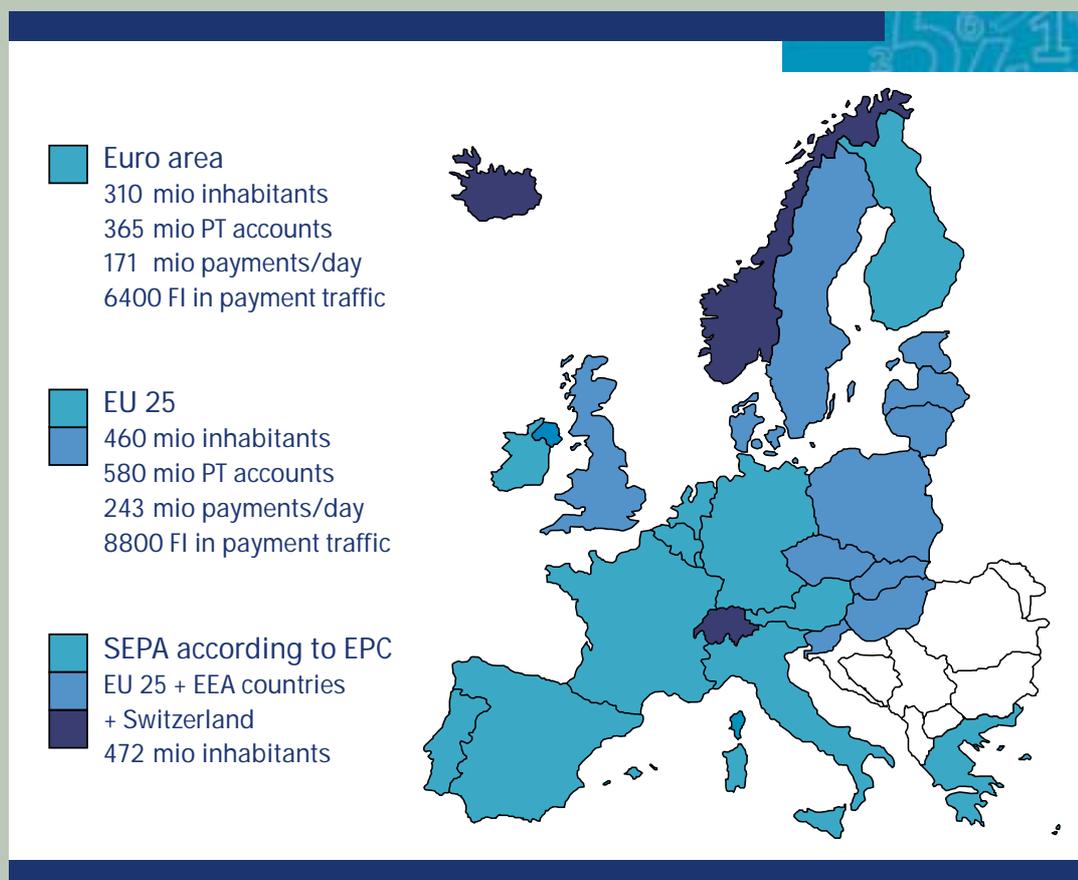
Michael Montoya: Currently, there are ongoing, intensive discussions about the further development and future structures of the EPC. One central issue is the role of the scheme managements, the monitoring and administration of the SEPA payment process, and the implementa-

tion of the Rulebooks starting in 2008. Here, anything is possible, from an organizational structure within the EPC all the way to founding a separate company for the scheme management. To be sure, more can be said about that after the next EPC Plenary in June 2006. Interview:

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SPATIAL EXTENT OF THE SINGLE EURO PAYMENTS AREA (SEPA)



Source: Deutsche Bundesbank

PAYMENT TRAFFIC COMMITTEES PREPARE FOR SEPA

During its conference in mid March in Bad Horn, Germany, the Swiss Payments Council (SPC) was able to celebrate a significant milestone in the cooperation between the Swiss financial center and the single euro payments area (SEPA): The recognition of Switzerland as a SEPA member. IBAN and SWIFT were among some of the other topics discussed.

At the beginning of March, the European Payments Council (EPC) passed the SEPA Credit Transfer Scheme Rulebook and the SEPA Direct Debit Scheme Rulebook for use within SEPA. The governing area of these processes was defined to include Switzerland, in addition to the 25 EU nations and the three EEA countries of Iceland, Liechtenstein, and Norway. This brings with it both rights and responsibilities for the Swiss financial center. By the next SPC meeting this coming November, the required measures to be taken in connection with the implementation of the SEPA regulations by the beginning of 2008 must be defined. On behalf of the SPC, the Payments Committee Switzerland (PaCoS) will specifically address various questions regarding the handling of cross-border euro payments from and to Switzerland, the SEPA compatibility of euroSIC, and the systemic availability of Swiss financial institutions from the SEPA.

IBAN for national payments

The general IBAN introduction in the national area was another topic dealt with in Bad Horn. The IBAN, which supports Straight Through Processing (STP), is to be used as the norm for the mid-term.

Starting this October, Swiss financial institutions and their clients are to be provided with a conversion aid for the migration to IBAN for payments within Switzerland (see also the article on page 11). As accompanying measures to the area-wide IBAN introduction, the option to refuse payments that lack an IBAN or other mandatory STP criteria, as well as a differentiated fee structure for SIC and euroSIC, are also being discussed.

SWIFT in Switzerland

Under the leadership of Swiss Interbank Clearing, specialists from all

major Swiss financial institutions have started preparations for a study to show if – and if yes, how – SWIFT services could increasingly be used within Swiss financial market infrastructures. SWIFT representatives informed the SPC members about their services in the areas of standardization, payment traffic platforms, and networks.

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SEPA CARDS FRAMEWORK

The European Payments Council (EPC) has defined various initiatives for the preparation of SEPA-compliant payment products for end users within the scope of the single euro payments area introduction. In addition to products for credit transfer and direct debit, one main focus is the use of card products.

The EPC has defined the basic conditions for card use within the SEPA Cards Framework (SCF). It governs the use of debit and credit cards for cashless Point of Sale (POS) payments and for euro cash withdrawals at ATMs.

On the one hand, the goal of these regulations is to make it simpler for bank customers to use debit and credit cards throughout the entire euro zone and cross-border, while also making it as inexpensive as possible for the banks and matching it to the individual countries' banking conditions. On the other hand, the simpler market entry and the uniform framework conditions are intended to intensify competition at all levels among issuers, acquirers, and processors.

According to the SCF, the customers should have access to the first SEPA-normed card products as of January 1, 2008. By the year 2010, the current national products should be replaced entirely by the new SEPA-compliant card products.

The introduction of the SCF predominantly affects the existing proprietary debit systems within individual

SEPA countries. Less pronounced is the impact on the credit card systems, since currently those are almost exclusively based on international brands.

The essential rules

On a fairly general level, the SCF regulates – among others – the following areas:

- The card schemes are to provide market access to all interested parties under the same conditions. Additionally, the card schemes are to guarantee separation between license and brand management and the actual transaction processing.
- To prevent card abuse, the use of chip technology on the basis of the EMV standard for cards as well as terminals is mandatory. The schemes are to actively support the change from magnetic strip to chip technology through a liability shift.
- The use of a card PIN is required as the sole method to be used for user authorization. This replaces the still widely accepted signature as the bearer authentication.

- Multilateral interchange agreements are established for service compensation between the issuer and the acquirer.

Intentions of the international card schemes

The two major international credit cards schemes – MasterCard and VISA – are putting their efforts into developing and preparing SCF-compliant debit systems.

MasterCard adapts the SCF regulations within the already existing Maestro system and will introduce a SEPA-compliant Maestro license with the corresponding system regulations. VISA has developed V PAY, a new SEPA-compliant debit system that also meets the SCF requirements.

How do national card systems become SCF capable?

The following three options are available to adapt the current national debit systems to become SCF compliant card systems:

Replacing the national systems with either the international V PAY or Maestro system.

Developing and guaranteeing SCF conformity of the national system as well as securing the SEPA-wide application via alliances with other SCF compliant systems.

Guaranteeing SEPA use by co-branding with an international system, if the current national system meets the SCF regulations.

The significance of the SCF for Switzerland

Although the SCF requirements only apply to transactions in euros for the time being and Switzerland therefore is only marginally affected, in future, the Swiss finance market can hardly ignore the requirements, regula-

tions, and development of the SCF. Within the framework of the SEPA roadmap, it is crucial for Switzerland to guarantee the compatibility of the national payment systems with the SCF regulations.

The Swiss banks have created the best possible conditions to meet the SCF regulations without major investments by changing to Maestro as the national debit system, as well as with the already completed migration to EMV. The PostFinance has yet to determine the SCF effect on the Postcard system.

What lies ahead with SCF

From today's vantage point, the developments in the SCF area are far

from complete. In view of the already-voiced criticism on the SCF in the area of Governance and Interchange, the EPC will need to continue developing the regulatory body and further define the still rather basic requirements.

On behalf of the Payments Committee Switzerland (PaCoS), a yet-to-be-formed working group called «Cards» will intensively delve into SCF, its further developments, and the resulting affects on Switzerland. This committee will be made up of representatives from all major Swiss stakeholders – issuers, acquirers and processors.

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The Swiss banks have created the best possible conditions to meet the SCF regulations by changing to Maestro as the national debit system, as well as with the already completed migration to EMV.

THE SWISS IBAN TOOL

The electronic tool to calculate the IBAN of Swiss financial institutions is being developed, with testing by the financial institutions beginning in May 2006. The free download version of this conversion software is scheduled to be available on the Swiss Interbank Clearing website by September 2006. This meets the final requirement for the migration of approximately 30 million proprietary bank accounts to the IBAN standard used worldwide.

Triggered by the mandatory use of IBAN as of January 1, 2006, in cross-border traffic – that is, within the single euro payments area (SEPA) – the IBAN is becoming increasingly popular in Switzerland, too. Ever since spring 2006, the banks have been handing out red payment deposits slips imprinted with an IBAN instead of the bank-proprietary account number.

Approximately 30 million of these bank account numbers are stored today by clients, as well as in the banks' master data files, ready to be converted to the standardized IBAN format using a specially designed software program.

About 590 financial institutions, representing more than 99% of the Swiss payment traffic, have submitted their algorithms to configure correct IBANs to Swiss Interbank Clearing, which is coordinating the project. These algorithms – some of them very complex – are currently being programmed into the new IBAN tool. Comprehensive testing with actual payment data should be completed in cooperation with the financial institutions by the end of June 2006.

Early in May 2006, the financial institutions and software providers

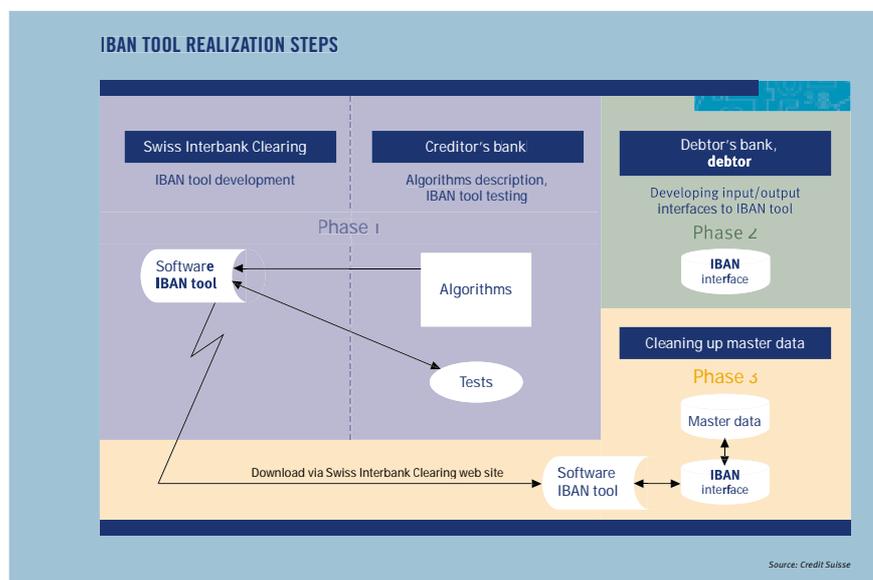
were given the specifications and record descriptions that will allow them to adapt the input/output interfaces of their payment traffic applications.

The IBAN tool was developed as a Java application; starting in the fall of 2006, it can be downloaded for free by banks and their customers from www.iban.ch. This software should be able to configure approximately 90% of the bank account numbers stored in the various data banks. Among the beneficiary data, for instance, are accounts payable of around 40,000 DTA/EZAG (data carrier exchange) customers, more than 100,000 clients with e-banking offline tools, and automatic payment

orders at 800 banks. Add to that the debtor data of approximately 2,500 LSV (direct debit) customers. In those cases where an IBAN configuration cannot be calculated, a clear error message is generated in the appropriate output record.

The primary goal in developing this IBAN tool is to update larger data banks in a one-time mass migration. Certain software providers and bank applications will enable to generate an IBAN directly while collecting the payment and to save it, if necessary.

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LSV⁺ MIGRATION FROM THE PERSPECTIVE OF A BENEFICIARY

Beneficiaries have been switching from LSV (direct debit) to the new LSV⁺ since November 11, 2005. This migration offers bank customers improvements ranging from delivery directly to their regular bank to a remarkable reduction in return notices. Emil Meier Metalldruckerei AG, a metal-working company and a client of Credit Suisse, has successfully implemented the necessary software upgrades and adaptations. Now their LSV⁺ collections are producing positive results.

The Emil Meier Metalldruckerei AG is located in Adliswil, near Zurich, and has a staff of 15 employees. They use several metal-working processes and manufacturing methods with products being made to order from plans provided by the customers. Their product line ranges from large shielding for the high voltage industry, to building elements for architects, to decorative items like vases for private individuals.

Using LSV

As a side business, the company also maintains a gas station where customers can pay by the month. They pay only for the gas; the administrative costs are not passed on to the consumer. Since goods are obtained before payment is received, the company is in essence granting a credit until billing. In this context, quick payment receipt with low fees is desirable. In order to achieve this goal, the customer is offered LSV as a payment option, since it eliminates additional fees

such as the ones charged when paying at a postal counter. Approximately half of the gas customers have opted for the LSV payment method, resulting in approximately 180 accounts debited via LSV in a monthly cycle. LSV has been used for many years. Originally, the processing was handled with the use of lists; subsequently, collection orders were delivered to Swiss Interbank Clearing on disks.

Software and process

The low numbers of LSV notwithstanding, there are specific requirements for the processing. Data needed for the actual invoicing include the amount of gas sold, the type, and the price at the time of the sale. This information is transferred to the gas station program on disk or via another electronic storage medium. Since the accounting for the gas pumps is also processed this way, a standard solution is unsuitable. Therefore, a separate program has been

developed that reads the data, produces the monthly invoices, and processes the payments in the form of LSV or deposit slips. In order to avoid unnecessarily impacting the company bookkeeping with the gas station operation, this accounting runs separately and only generates a balance amount entry that is posted to the company accounting system.

Migration to LSV⁺

Emil Meier Metalldruckerei AG needed to make some adaptations in their processing to successfully migrate to LSV⁺. The following changes will result directly from LSV⁺:

- New messaging protocols
- Varying delivery channels
- Mandatory IBAN for creditors.

The conditions LSV⁺ requires of its environment resulted in some indirect consequences:

- A change to electronic data delivery (replacing disks)

- Support of the Swiss «ESR» with its reference numbers

The customer wanted to change from delivery on disks in LSV directly to LSV+ without the intermediary step of installing an electronic interface in the legacy LSV. A certain amount of pressure developed after the announcement that delivery of data disks would no longer be accepted after December 2005, since the specifications for LSV+ hadn't been publicized yet. Now, the deadline has been extended until October 31, 2006 – the actual shut-off date for the legacy LSV.

Thanks to very detailed technical specifications and solid support by Credit Suisse, the migration went off without any major hitches from the perspective of Emil Meier Metall-drückerei AG. One individual completed the software adaptations over

the period of four weeks. It turned out to be very helpful to have access to the specialist from the bank, since in different specifications there were some instances of varying terminology. All three – the Post-Finance ESR guidelines, the Swiss Interbank Clearing instructions, and the bank specifications – affect the same messages, so it was important for the bank to provide competent answers to detailed questions about the migration. The transfer also showed that a test environment to monitor the entire process would be useful.

Conclusion

All in all, Emil Meier Metall-drückerei AG perceives the migration project as positive. In achieving a successful result, the following prerequisites were significant: The solid software

INFO

Migration from LSV to LSV+ no later than October 31, 2006

Delivery on data carriers to Swiss Interbank Clearing for LSV until October 31, 2006

base, the know-how within the company, and the technical documentation and support by the bank.

Since the software changes for this mandatory migration clearly would result in a customer advantage, the upgrades and adaptations were executed readily and willingly. Ultimately, Emil Meier Metall-drückerei AG will benefit from a more transparent process and simpler operations with LSV+.

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Samples from the Emil Meier Metall-drückerei AG product line

THE INTERNET: WHAT CAN BE DONE AGAINST INCREASINGLY CLEVER ATTACKS?

Potential dangers such as identity theft rise with Internet use. Techniques to damage financial institutions and their clients are continually refined and targeted ever more systematically and specifically. Customers feel insecure. How do banks best prepare to fend off such threats?

Last year, phishing (electronic data theft) was on everybody's mind. With the use of phony emails or websites, criminals obtained specific access data such as passwords and PINS from unsuspecting Internet users. First the good news: Phishing attacks and spam are on the decline, thanks to efficient defense mechanisms. Now the bad news: The attackers have further refined their methods by combining the same processes and aiming them directly at specific user groups. Increasingly, attacks no longer come from the Internet, but instead via instant messaging, voice over IP, handhelds, and cell phones.

The basic character of these attacks has changed, too: What once used to be considered a game or hacking has by now definitely taken on a criminal trait.

Spyware

The current threats are the result of spyware. Spyware is a software program that is installed on users' computers without their knowledge for key logging and to collect user information. The information obtained by the software is then forwarded to third parties. In 2004, the damage to private individuals based on identity theft in the U.S.A. amounted to more

than 6 billion US dollars. Approximately 3% of all American households were affected.

Social engineering

Social engineering was perfected to take advantage of weak spots in company processes and to gull users by taking advantage of their habits. One way to do this is by sending emails targeted at particular user groups. Recipients feel safe to open these emails and/or attachments because the subject line or content refers to specific topics and/or interest groups. These attacks are referred to as «spear phishing» and they represent a first step toward the «Man in the Middle Attack» (MITM) (see box), a type of attack requiring new defense methods altogether.

Within the past few weeks, another efficient type of attack has been on the rise: In this new scenario, clients are requested to call their banks at a number provided within the email. Of course it isn't the bank answering the call at the other end, but rather the phishers' telephone system, identifying itself as the automatic, voice-activated bank «operator». The caller is then instructed to provide additional personal information, account number, and PIN in order to «continue processing». The process

is extremely professional, sounds astonishingly similar to the real bank systems and is, accordingly, very successful.

Bot networks

Another system used is a bot network. Bots are small programs that are installed on many computers via a worm attack, and they combine all infected machines into a single P2P network. The bots can be operated from a central computer system and execute all types of operations. They can be used to launch DDoS attacks (Distributed Denial of Service) on Internet servers. In February of 2006, the Internet sites of NASA and the Department of Defense were both victims of such an attack. This type of attack is often linked with extortion or blackmail attempts. Usually, victimized companies keep these extortion demands secret for fear that it will tarnish their image.

Customer behavior

According to research in the U.S.A., user behavior in reference to email use by banks has changed. Most bank customers no longer open emails from banks at all, but delete them immediately. However, while this greatly reduces the potential of an attack, email is increasingly

losing its significance as a means of communication. This is unfortunate, because this particular advertising channel is considered to be very efficient by the banks.

A client has little opportunity to obtain knowledge and understanding about various attack methods and to stay informed, and often feels overwhelmed by the technology. Reliable computers with solid software bundled with user-friendly security software that can be updated automatically are the basic requirements for being able to work securely.

Bank communication

Banks are responsible for providing their customers with updated information about the current hazards; that is, to make them aware of potential threats to them and to third parties. Additionally, the banks make sure that legal requirements and regulations are adhered to. The liability question in case of a loss hasn't been answered conclusively to date. Over the past months, the opinion has been voiced that Internet users should be reminded to take responsibility for their own financial affairs.

Significant financial and personnel investments by the banks are required in order to adapt electronic services to fend off or prevent the current threats. It takes specialists who continually monitor the developments by the attackers and deliver appropriate software patches within a very short time. These patches must be obtained from reliable sources, inserted into the corresponding

applications, and tested. The threats can only be contained using secure services, equipment, and applications.

Conclusion

Internet services cannot guarantee 100% security. Neither is there perfect protection from fraud in the real world: Fake currency bills or theft of payment orders from mailboxes are examples of fraudulent activities that have been around since long before the era of the Internet. In electronic communication, as anywhere, the overall goal is to provide appropriate and sensible security. Certainly, the banks are making a solid contribution to this by continually upgrading their systems to meet current threats and by informing their customers of looming hazards.

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SIC/euroSIC

SIC and euroSIC are not considered Internet services. The few Internet-based components are neither necessary nor critical for operation. SIC and euroSIC have their own communications network, in which the data is signed and encrypted with powerful certificates. In short, there is no danger to SIC or euroSIC from the Internet.

MAN IN THE MIDDLE ATTACK (MITW)

In a «Man in the Middle Attack», the attacker is situated between two computers communicating with each other. From there, it can receive, alter, feed, and/or delete data. This can only be prevented by means of secure, reciprocal authentication, such as electronic certificates (PKI). The messages transferred should be signed and encrypted.

«BOTMASTER» GETS NEARLY FIVE YEARS IN PRISON

A 20-year-old who prosecutors say hijacked computers to damage computer networks and send waves of spam across the Internet was sentenced on Monday to nearly five years in prison. Jeanson James Ancheta, a well-known member of the «Botmaster Underground» who pleaded guilty in January to federal charges of conspiracy, fraud and damaging U.S. government computers, was given the longest sentence for spreading computer viruses, federal prosecutors said. He was sentenced to 57 months in prison and three years of supervised release by U.S. District Judge Gary Klausner, who also ordered him to pay \$15,000 in restitution to the U.S. Naval Air Warfare Center in China Lake, California, and forfeit to the government some \$60,000 in illicit gains. «Your worst enemy is your own intellectual arrogance that somehow the world cannot touch you on this», Klausner said in sentencing Ancheta. Ancheta was accused in the original 17-count indictment of hijacking some 500,000 computers using «bots» or programs that surreptitiously install themselves on computers so they can be controlled by a hacker. A bot net is a network of such robot, or «zombie» computers, which can harness their collective power to do considerable damage or send out huge amounts of junk e-mail. Prosecutors say the case was unique because Ancheta was accused of profiting from his attacks by selling access to his «bot nets» to other hackers and planting adware, software that causes advertisements to pop up, into infected computers. In entering the guilty pleas, Ancheta admitted using computer servers he controlled to transmit malicious code over the Web to scan for and exploit vulnerable computers, which he then controlled as «zombie» machines. (Source: Reuters, 8 May 2006)



Lots of work for the Payments Committee Switzerland (PaCoS) to do. Standing from left: Andreas Galle, Swiss Interbank Clearing Ltd., Markus Ruggiero, Zürcher Kantonalbank (represents the Cantonal Banks), Patrick Bürki, PostFinance, Ernst Weber, Swiss Association Raiffeisen Banks, Christian Schwinghammer, Swiss Interbank Clearing Ltd., Germain Hennet, Swiss Bankers Association, Alfred Meyenberg, PostFinance, Nik Notka, RBA-Zentralbank, Robert Fluri, Swiss National Bank. Sitting from left: Marco Kropf, Migrosbank (represents the individual institutions), Angelo Bulato (Chair), Credit Suisse, Boris Brunner, UBS AG, Dennis Flad, Credit Suisse.

MASTHEAD

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