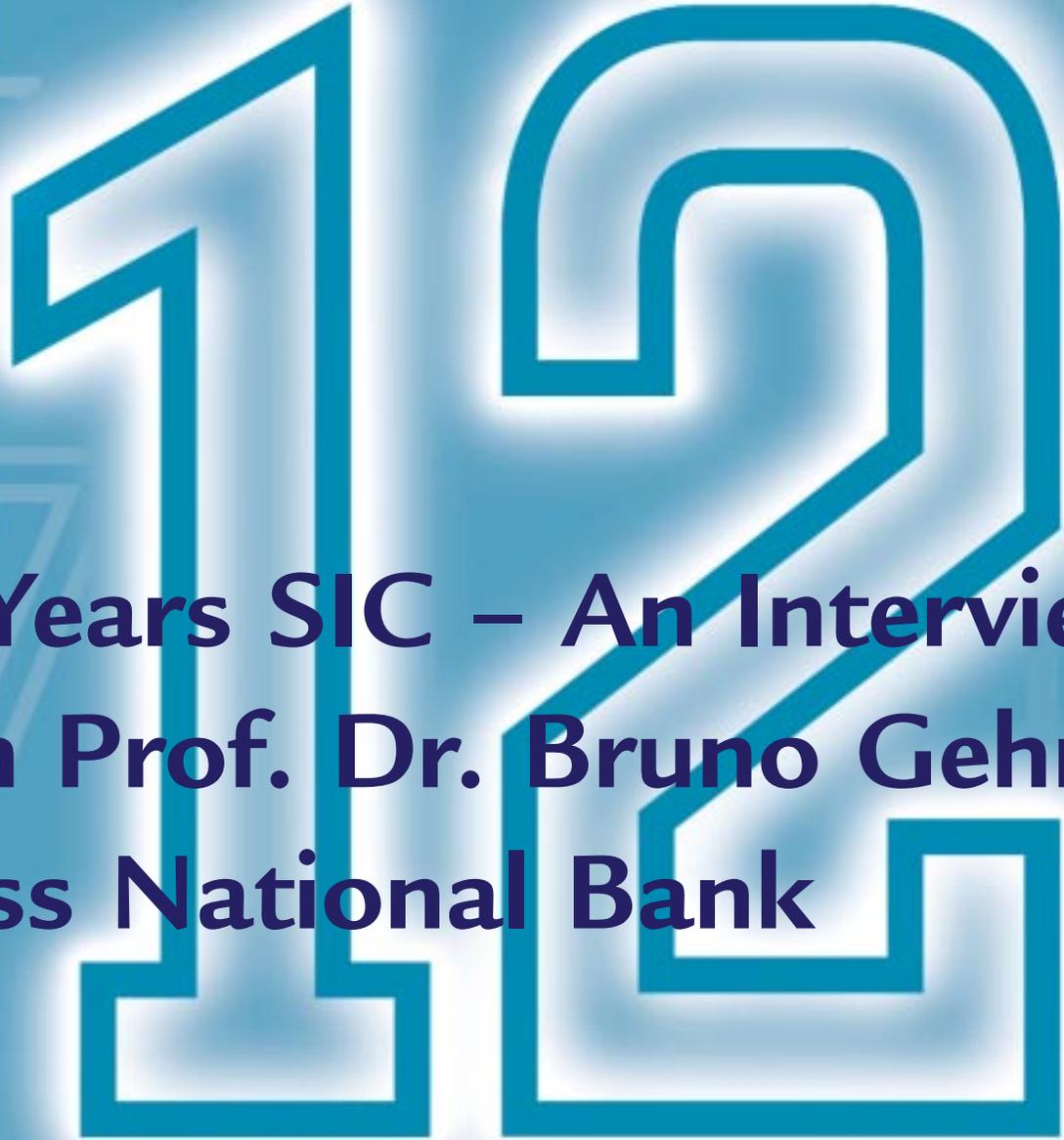


ISSUE 12: FEBRUARY 2002

ClearIT

The Publication about the Swiss Payment Traffic Systems



15 Years SIC – An Interview with Prof. Dr. Bruno Gehrig, Swiss National Bank

- SIC³ – A Project Update
- European Payment Traffic –
A Monetary Policy Undergoing Change

EDITORIAL

2002 is a year of two important anniversaries for the Swiss financial market and Swiss Interbank Clearing:

25 Years DTA/LSV and 15 Years SIC.

In the four issues for 2002, ClearIT will focus on retrospectives pertaining to these two milestones. The time perspective enhances the anniversaries and transports past experiences into the future. It is therefore a great honor to have Prof. Dr. Hans Geiger address our esteemed readers by opening this first issue of the New Year:

Dear Reader,

When SIC was started up on June 10, 1987 – almost fifteen years ago – it was not an evolutionary step, but instead a quantum leap. The replacement of the old bank clearing system by the new Swiss Interbank Clearing was a direct transition from a craft to a high-tech system. The only common denominator of the two systems consisted of the misnomer ‚clearing‘ they both carried in their name. But in truth the old system wasn’t yet a clearing institution, and SIC wasn’t clearing anymore – instead, it was the first true Real Time Gross Settlement system. Viewed from a historic perspective, the introduction of SIC marked the very beginning of the Swiss Value Chain, the technologically outstanding element today in the Swiss financial market infrastructure.

Predictably, the technological innovation at the heart of the money circulation was fraught with uncertainties. Experts feared a sharp increase in demand for central bank money, and differences arose between the Swiss National Bank and commercial banks about the need for overdraft credits to compensate for increased liquidity requirements. The fact that SIC brought on an unexpected surplus instead of the feared liquidity shortage is only one of the many indicators of the far-reaching implications of this technological achievement. The interview with Prof. Dr. Bruno Gehrig about the «SIC Success Story» and the retrospect of a first acknowledgment of SIC after ten months of successful operations is the first in an informal series of articles focusing on SIC over the years.

I hope you’ll enjoy reading your new issue of ClearIT.



*Prof. Dr. Hans Geiger,
Professor at the Institute for Swiss Banking
at the University of Zurich»*

CONTENT

- 3– 15 Years SIC – An Interview with Prof. Dr. Bruno Gehrig, Swiss National Bank
- 5– Looking Back: SIC the First Ten Months
- 7– European Payment Traffic – A Monetary Policy Undergoing Change
- 9– CLS – Foreign Exchange Processing with a Potential for Savings
- 11– SIC³ – A Project Update
- 14– RTGS^{plus}: A Successful Start
- 15– IPI – Innovative Banking in Graubunden

Bruno Gehrig: «SIC can really be termed a success story»

This summer, the SIC system will have been operational for fifteen years. ClearIT had a chance to speak with Prof. Dr. Bruno Gehrig, Vice-Chairman of the Governing Board of the Swiss National Bank (SNB), about the role the SNB plays with SIC along with some other related topics.

ClearIT: The SIC system (Swiss Interbank Clearing) is turning fifteen. What was and is the role of the SNB?

Gehrig: SIC can really be termed a success story. It was remarkable how the various participants including – to no small extent – the SNB cooperatively shouldered the tasks at hand and brought about the transformation from the old bank clearing (Also see page 5, Willi Hurni, ed.) to



Prof. Dr. Bruno Gehrig, SNB

today's SIC. Generally, a central bank can take on two different roles in high value payment systems: For one, a central bank has to be the monitoring authority for such a system. Additionally, they can choose to actually provide the system – something that is not mandatory.

Right from the beginning, the SNB focused on procuring an efficient and secure system, assigning Mr. Christian Vital to actively support the development process.

ClearIT: The SNB's role in the national payment traffic clearly demonstrates less involvement than for instance that of the Bundesbank in German payment systems. Contrary to the German Bundesbank, the SNB has chosen an outsourcing solution, similar to the British model. What are the reasons behind this decision? Has the outsourcing model proven successful in Switzerland?

As mentioned, the SNB subscribes to the philosophy to take very seriously the monitoring task which, incidentally, is prescribed by Swiss law, making sure that the high value payment systems are secure and efficient. The SNB clearly prefers a market solution for the system development and currently sees little reason to become a provider. Here in Switzerland we are fortunate that the cooperation between all participants has always been exceptionally positive. As long as the private sector takes their SIC-operating task seriously and completes it with such excel-

lence, the SNB has no motivation to change anything. Our model is clearly catching on internationally, as well. Currently this is particularly recognizable in Eastern European countries.

ClearIT: The newly revised national bank law to be discussed in parliament later this year now proposes specifically that the SNB monitor the operations of payment systems. How will this impact the payment system operating institutions?

SIC will remain virtually unchanged. The new law only formalizes what has been in effect to date. It does, however, give the SNB a legal basis to impose minimal requirements on new operators of electronic payment systems as well as to enforce sanctions. With these norms, international recommendations, e.g. BIS, can be implemented in Switzerland.

ClearIT: Now that Postfinance has become a full participant, all significant financial institutions are directly linked with SIC. Yet there are still several systems in use, particularly in the area of bulk payment traffic. Is it desirable to try to merge these systems?

The law does not prescribe the number of operating systems. What is important to the SNB is that these systems have efficient interfaces and are standardized appropriately. The co-existence of these systems is something the SNB is comfortable with. Ultimately it is the participants' decision how many bulk payment systems are in use.

ClearIT: Do you foresee that larger insurance companies and other larger corporations might be given the option to access SIC directly in the not too distant future?

Basically, expanded access will have to be compatible with international standards. I don't see any reason why Switzerland should take on a pioneering role in this particular area, especially since I do not perceive any serious pressure nor any particular economic need. The banks have a significant number of attractive offers, providing these corporations with the necessary services.

It is important to the SNB that all SIC participants have their own liquidity management. If necessary, the SNB can provide short-term liquidity, something that is governed by law and limited to regulated participants. This insures that the SNB always «remains in charge». If commercial pressure for this type of access builds up, we will rethink our position.

Spotlight on Prof. Dr. Bruno Gehrig

After completing his studies in economics and subsequent teaching at the University of Bern, Bruno Gehrig changed over to the private sector in 1981.

After ten years, during which he was Chairman of the Board for BB Bank Cantrade AG among other things, he returned to teaching and research in 1992 and became Professor for Business Administration at the University St. Gallen and Director of the Institute for Banks and Finances.

With his appointment to the Governing Board of the SNB in 1996, he took over the management of the Department III, which is responsible for the monetary policy implementation, foreign exchange reserve assets, payment traffic and IT.



ClearIT: During the next year the Continuous Linked Settlement system is scheduled to start its operations (see also the article on page 9, ed.). What is your opinion about the changes taking effect in the risk-area together with the fact that in Switzerland only three banks are direct CLS participants?

CLS has always had the favorable support of the central banks. This is justified by the fact that settlement risks will be significantly reduced with the introduction of CLS. The SNB actively supports this initiative, too, and has appropriately enhanced its instruments by creating intraday repos, which, as of recently, can also be paid back progressively.

The number of participants reflects our financial system with emphasis on a few big banks and a vast number of smaller and medium-size institutions, even when taking into consideration that some foreign banks might still be added. That's something the SNB can and must live with. One of the significant resulting consequences is that the participating banks must be extremely professional and must be committed to an exceptionally high level of reliability.

Obviously, the big banks are aware of these requirements and will certainly comply with them. If problems were to arise, the SNB would act as a system stabilizer, finding a way to ensure this stability.

Currently, the central banks are determining whether they should become direct CLS system participants, or whether they should gain access via a third party.

ClearIT: The past German chancellor Helmut Kohl recently made the following prediction: «In five years, the euro will be the currency in London, and in ten years in Zurich.» What is your opinion on this topic?

This is a topic often discussed. We will have to see how the situation evolves. While it certainly is a possibility, it is not a foregone conclusion. Obviously, EU membership is a prerequisite – and if or when this might happen is still rather uncertain.

It is also very important to not consider the currency issue by itself. The introduction of the euro is connected with many other issues. We want to remain open to the developments as they unfold. The introduction of the currency has changed the competition parameters, and it will be

interesting to follow future developments. What's required now is a pragmatic stance, weighing all relevant facts before making any decisions.

ClearIT: If the number of euro payments processed in Switzerland increases, the SNB might lose some influence over the liquidity management. What might the SNB do to counteract that?

The monetary policy remains an effective macroeconomic instrument, as long as there are credits and investments in Swiss Francs. And as long as that is the case, the SNB is able to influence short-term interest rates.

Payment traffic by itself is less important for monetary policy. Additionally, the new law allows the opportunity to provide – by means of the minimum reserve regula-

tions – a minimum deposit of Swiss Francs.

ClearIT: During the award of the Fondation Jean Monnet «Médaille d'Or» to Valéry Giscard d'Estaing and Helmut Schmidt this past November, Federal Council President Moritz Leuenberger had this to say: «Money and currency can also be used to obtain political and social goals – an opinion I would voice in front of central banks, as well.» How would you assess this statement from the point of view of a central bank?

It is obvious that the idea to form an EMU acted somewhat as a catalyst for a political integration. What was controversial was the idea's suitability. However, the first three years have proven the skeptics wrong, even if this time span was relatively calm in economic terms.

So the test of time really hasn't been passed. It remains to be seen how the system will react when tensions and problems occur during economically difficult times – and how these problems will be resolved. I'm sure there will be various challenges at some point in the future. But I do hope that the system can withstand that kind of pressure – it is in our interest, as well.

*André Gsponer,
Enterprise Services AG,
andre.gsponer@eps-ag.ch
Christian Schwinghammer,
Swiss Interbank Clearing AG,
christian.schwinghammer@sic.ch*

Looking Back: SIC – The First Ten Months

Swiss Interbank Clearing System – as SIC used to be called – began its operations mid-1987. One year later, Felix Fischer and Willi Hurni published an article in a special edition of «Wirtschaft und Recht», a Swiss publication for the economic sector, about «First Experiences with the Swiss Interbank Clearing System – A Big Bank Perspective».

Today, Willi Hurni revisits those early days and comments on some passages of the original article.

«June 10th, 1987, marked the long-awaited SIC startup. During those first weeks, some twenty banks had signed up, some big banks among them. Transaction volumes were limited according to a specific schedule and increased successively over time.

One example is the SBG (Union Bank of Switzerland): Only transactions over CHF 1,000,000 were processed through the SIC system.»

What a time it was ... Switzerland had more than two big banks, and one of them was Union Bank of Switzerland.

And now for some interesting facts and figures from the early days of SIC:

«As of March 31, 1988, 125 of the intended 158 banks had already signed on with the SIC system, and the total number of transactions processed would reach 100,000 per day. According to the projected growth schedule for 1988, the

volume will yet increase significantly to approximately 250,000 transactions per day. Peak rates can reach up to 400,000 transactions and CHF 150 billion per day.»

During 2001, SIC routinely processed 650,000 payments per average day, valued at CHF 182 billion, and on peak days 2,000,000 payments for CHF 221 billion.

And the number of participating banks has exceeded 300 by a significant margin.

The Computers Are Online

«New services, growing transaction volumes and an ever more demanding clientele called for a payment traffic processing service employing electronic data processing.

The new Swiss Interbank Clearing System attempts to meet these demands. The SIC system is based on a centralized computer system with ONLINE access for all participating banks. Depending on the bank's existing computer system, the SIC system can be accessed using either the bank's in-house equipment or a special inquiry and input system SUD (SIC User Device).»

Today nary a computer scientist will even remember when IT was still called EDP – yet today a baker can be online and selling croissants over the Internet. But back then ,going online' was still considered leading edge.

With all the facts, figures and technology, let's not forget the key question: Is SIC proving itself on a day-to-day basis?

«The experiences thus far with the new clearing system are very promising. The payment processing speed has been significantly reduced, meeting our expectations.

A final assessment of the processing speed can only be done when the majority of the small-amount transactions are handled by the system. Even though over 90% of the transactions are processed by the SIC system, this actually only represents 25% of all transactions.»

Investments in the Millions

And now on to an important topic: Money

«By now the Union Bank of Switzerland has invested approximately CHF 5 Million upgrading their existing payment traffic system for compatibility with the new SIC

Editor's comment

To read the entire original article, go to our website:

ClearIT@sic.ch

system, with CHF 3.5 Million going to hardware and CHF 1.5 Million to software.

To build the central SIC system computer center, Telekurs has invested several times as much. »

When it comes to financing an IT project of this magnitude nowadays, a CFO can only dream of such numbers.

I'd like to end with the conclusion of the article from 1988:

«One thing is for certain: With the SIC system the Swiss banks now have a clearing system which meets or exceeds the increasing customer and bank demands of volume, speed and quality, a system that compares favorably to foreign organizations.»

As much as might have changed over the past fifteen years, the same things still hold true in 2002.

*Willi Hurni,
UBS AG,*

willi.hurni@ubs.com



Denise Gonzales and Willi Hurni during the first SIC system inquiries in June 1987

European Payment Traffic – A Monetary Policy Undergoing Change

Starting with January 1, 2002, the euro has now become a reality in bills and coins for 300 million European. Those who believe that money transfers were now becoming significantly less expensive will be thoroughly disappointed. Unfortunately, the introduction of the joint currency does not go hand in hand with the creation of a unified payment traffic union.

For almost ten years now European institutions such as the European Commission, the European Parliament, of the European Central Bank have been voicing criticism: The payment traffic within the individual member countries seemingly

works fine, but it is neither efficient nor reasonable for crossborder payments.

In 1997, this discontentment about crossborder transactions was voiced in the Directives 97/5. The defined goal was to make the inter-European commercial payment traffic faster, more transparent, and ultimately less expensive. This EU Directive has been written into all member countries national laws as of the 14th of August 1999.

While the Directive brought about a reduction in transmission time from an average of six to three business days, the fees have remained virtually unaffected.

Both in the fall of 1999 and again in May 2001, the European Commission ordered studies researching the tariff situation for crossborder transaction within the EU (excluding Greece). In the 2001 study, 352 random transactions for approximately 100 EUR between the countries were followed.

The results were sobering: The total transaction fees across the European average amounted to 17 EUR, in national comparisons as high as 31 EUR. Compared to 1999, the total fees actually rose an average of 1.5% in spite of the implemented EU Directives.

Price Regulation

In July 2001, the Commission reacted, suggesting a regulation concerning crossborder payments in euro. The draft regulation provides identical pricing for crossborder payments in euro within the EU as for domestic transactions.

This applies to payments of up to EUR 50,000 in combination with the International Bank Account Number (IBAN) and the Bank Identifier Code (BIC). This affects transfers and checks (starting January 1st, 2003) as well as cash withdrawals from ATMs and card payments (starting January 1st, 2002).

In spite of the numerous protests from the banking sector and the ECB, on November 26, 2001 the Council of Mini-



The EU Commission wants the European payment traffic to be less expensive

sters for the Internal Market, Consumer Protection and Tourism voted for the price regulation with minor changes. The modified version no longer applies to check payments and the schedule has been postponed by six months.

The regulation now applies to cash withdrawals at ATMs and card payments starting July 1st, 2002, and to transfers starting July 1st, 2003, for amounts of up to EUR 12,500 and starting January 1st, 2006, for amounts of up to EUR 50,000.

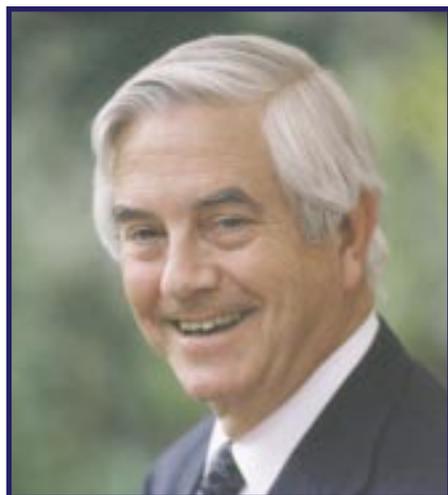
Banks Take the Initiative

In a market where foreign transfers only comprise approximately 2% of the entire payment traffic, not much has changed in the past years.

Only the events of the past few months have finally brought about noticeable motion to the issues at hand. The looming regulation by the EU Council of Ministers has inspired the banks. Represented by their European banking organization, they have launched several initiatives in short order.

The MIF-Initiative

In June 2001, the European Banking Asso-



EU Commissioner Fritz Bolkenstein, initiator of the EU price regulation

ciations first passed the convention for the introduction of a Multilateral Interbank Fee (MIF). Since this was a price agreement, it was presented to the EU Trade Commission for approval.

If the Trade Commission consents to the initiative – which isn't certain at this point – interbank fees in the EU can be standardized and reduced significantly with the help of the MIF amount.

This refers to euro payments with the 'OUR' fee option (all fees charged to ordering) of up to 12,500 EUR which are processed with SWIFT MT103+ with IBAN and BIC through a European clearing system. The MIF amount of 3 EUR is sent along with the payment amount. Hence there is no subsequent billing by the receiving bank.

Single Euro Payments Area

September 2001 brought the draft to achieve a standardized euro payment traffic union for the commercial payment traffic.

This «Blueprint for a Single Euro Payment Area» is a document developed under the auspices of the European Payment Group (EPG). The SEPA is to be realized in three phases.

Phase I (until 2002) focuses on automation of the processes, such as enforcing of STP-Standards and the introduction of the MIF convention.

Phase II (until 2005) envisions both the development of a European market convention and the necessary interbank infrastructure.

Finally, the goal of Phase III is the completion of the standardized euro payment traffic area with the potential, ten years from now, of operating a single European clearing system instead of several national ones.

«While the prescribed lowering of the fees does bring with it immediate advantages for the European citizens, it doesn't guarantee that the payment traffic is processed efficiently and reasonably.»

Now that it has become apparent that the EU price regulation will be introduced, the banks are displaying considerable interest to continue and even intensify their efforts for a Single euro Payments Area.

Eurocred Standard

In November 2001, even before passing the price regulation, the European Payment Group launched the Eurocred-Standard. The objective of this convention is efficient and cost-effective commercial euro payment traffic. The transaction duration is set at a maximum of three business days from order intake by the bank until crediting the beneficiary account.

The standard focuses on Straight Through Processing (STP). The payment order must contain IBAN and BIC. For payments with the OUR fee option the Eurocred-Standard should only apply if the MIF convention is accepted by the EU Trade Commission Competition Authority. Unlike the MIF convention, banks outside the EU, such as Switzerland, may join as well.

With the EU price regulation taking effect, some banks will no doubt question the necessity of the Eurocred-Standard. If the effort to overcome the negative connotation of the price regulation and instead to concentrate on shortening the transmission time and on the STP processing is successful, Eurocred can contribute to the efficiency improvements within the European payment traffic.

Distorting Effects

After an extensive warm-up period the European institutions have got the ball rolling. The improvements in the monetary policy will soon be clearly noticeably for all citizens of Europe. However, the economic point of view can't overlook the negative effects of price regulations.

Basically the regulation freezes the existing price differences between the EU countries, which is in line with the philosophy of a standardized European market. In addition there is a latent danger that the banks will lack motivation for service improvements if prices are set and don't cover costs.

An additional argument voiced is this: The success of IBAN and BIC becomes

endangered – if no money can be made with STP products in the foreign payment traffic, the banks won't be interested in fostering these standards. It's quite obvious: The EU price regulation now forces the banks to quickly change their price policy within the European payment traffic. This policy can't automatically cause enhanced efficiency in the foreign payment traffic. The banks have to cover a lot of distance before a true, standardized euro payment traffic area is developed.

Switzerland Benefits Indirectly

The change in inner-European monetary policy has an impact on Switzerland as well. If the interbank prices drop throughout Europe, the Swiss banks, too, will benefit. Since Switzerland is not currently

For further information take a look at www.fbe.be or at the web-site of the European Commission europa.eu.int/comm

subject to the MIF convention nor the EU price regulation, most banks will not be affected immediately by the lowering of the prices.

For the product development this means that outside fees for payments to Europe will be significantly lower in the future, and much more predictable. And now the customer will know what to expect up front.

*Ingeborg Schwan,
UBS AG,
ingeborg.schwan@ubs.com*

CLS – Foreign Exchange Processing with a Potential for Savings

Banks may participate in Continuous Linked Settlement System (CLS) in any number of ways. The type of CLS participation influences cash management. It is therefore well worthwhile to research the new conditions before deciding on a particular option.

CLS is a joint initiative of the world's 60 largest banks and brokerage firms. This project is dedicated to step by step processing of foreign exchange transactions

and thereby to the ultimate elimination of processing risks.

This procedure has been processing securities transactions in Switzerland for some time now by SIS SEGAINTERSETTLE AG. The introduction of CLS has far-reaching consequences on the back office processes, cash management as well as on the risk management of all participating financial institutions.

How does CLS work?

The CLS working model is based on two participant categories: The first category includes the direct participants, the so-called settlement members: They are shareholders and have a direct account connection with the CLS bank. The second category includes the 'indirect' participants, or so-called third parties, which have their foreign exchange transactions processed through a CLS settlement

member. Third parties have their accounts with a Settlement Member but not with CLS.

On the due date, both trade partners' foreign exchange transaction orders are sent to CLS via SWIFT where they are matched. On the value date, processing occurs step by step, the purchased currency and the sold currency are exchanged simultaneously between the trade partners on a gross settlement basis.

Cash- and futures-transactions as well as swaps can be executed in CLS. Recently, settlement members are now obligated to cover their debit balance at the CLS with timed payments at certain fixed times of a value date in order to guarantee liquidity provision during the CLS settlement process.

As soon as these payments are received by CLS, the individual foreign exchange transactions are processed step by step.

Covering of the debit balances occurs on a net settlement basis.

CLS is not a central counter party, does not operate a netting system and doesn't guarantee settlement. What the CLS mechanism does guarantee, however, is the security of the invested capital.

Cost Savings

With CLS, the process becomes a product. As soon as the processing no longer occurs in-house, cash management obtains a much greater significance. If a bank chooses a settlement member as a provider within the framework of foreign exchange processing with CLS, that bank is immediately faced with increased complexity in their cash management, because additional correspondent accounts must be handled.

In the May 2001 issue of ClearIT we published an article specifically reporting on the results of the Coop Bank who had

successfully streamlined their relationship with their correspondent banks.

A more detailed and thorough relationship with the CLS provider can indeed make sense and can make savings like the Coop Bank example possible. That's why concentrating the nostro relationships and ultimately the processing of the entire payment traffic via the CLS service provider makes inherent sense.

This is juxtaposed by the approach that only the absolutely necessary changes should be introduced for CLS. Usually the resulting additional complexity in the back office systems and processes is tolerated with that option. To avoid that, outsourcing is a viable alternative.

CLS third party services are currently offered in Switzerland by the two big banks, the Zurcher Kantonalbank and some foreign banks.

The banks are well advised to research this topic intensively, early, and from the perspective of the entire bank.

*Olaf Ransome,
Credit Suisse First Boston,
olaf.ransome@csfb.com*



Library photo: In a foreign exchange department, RDB/Lanz Christian

Editor's note:

The reference publication «CLS – A catalyst for Change in FX Processing and Cash Management» can be ordered directly from the author.

SIC³ – A Project Update

Launching SIC³ (see article in ClearIT Nr. 10) has successfully been initiated. As a first important step, the new multi-currency and mandate-capable platform was introduced at the end of last year.

With that, the basis for additional expansion steps as well as the cornerstone for entirely new possibilities of the now mandate-capable system were created. The subsequent project elements are already being developed. The Swiss financial market herewith will soon have its payment traffic system adapted to the latest standards and is exceptionally well equipped for the tasks ahead.

The cube graph below illustrates the complete SIC³ project scope.

Viewed as a whole, the project can be seen as a transformation framework for all required tasks.

There are four distinct project elements or phases, which can be processed largely autonomously and are therefore not (yet) tied to a specific deadline:

• **The RTGS-Platform**

The multi-currency and mandate-capable RTGS platform is already a reality and was successfully introduced in late fall of 2001.

• **The Formats**

International networking demands use of compatible standards such as the ones already implemented in swiss€gate by euroSIC or in remoteSIC. The project element SWIFT formats is designed to guarantee message type compatibility in our various processing systems, as well as bring about ideal conditions for the globalization trend.

• **The Payment Factory (PayFact)**

PayFact is being developed to optimize DTA and LSV in the handling of low amount payments as it refers to interfaces and processes in order to achieve more favorable transaction prices. Of course we are also exploring new functionalities.

• **The Network**

While Telos^{net} has proven itself as the X.25 network, it probably will be insufficient for future requirements. One of the elements of the fourth SIC³ project unit focuses specifically on its replacement with an efficient and reliable IP network. In the interest of our clients, this phase is approached with a joint project organization together with SIS SEGAINTERSETTLE AG.

Project Element 1: The Platform

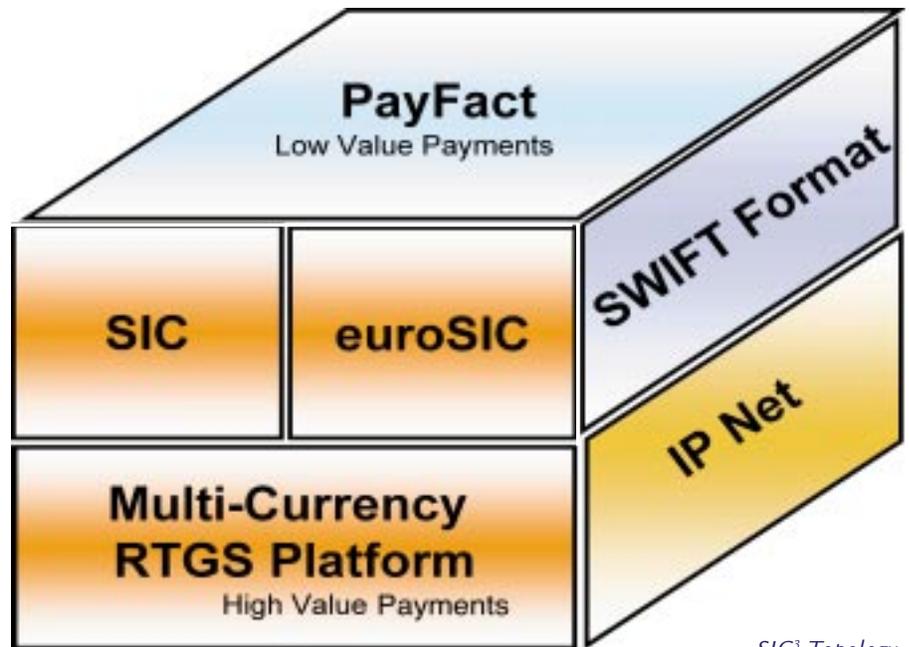
The multi-currency and mandate-capable platform (see page 12) has started to operate with the SIC³ Release 1.0

(Releases in October and November 2001). This was a non-event for the financial institutes and their software partners, since the only thing that changed for them was the euroSIC access number. For Swiss Interbank Clearing however, this successfully completed step is of tremendous significance.

Having to optimize the two clearing systems SIC and euroSIC became a foregone conclusion since the effort of maintaining and operating two practically identical software libraries would have been excessively high.

As a result more than 450 program modules had to be revised. They were tested and retested, which ultimately benefited the effortless migrations.

The investment paid off: In the future, over half a million CHF are saved in operating costs, and the software main-



SIC³-Topology

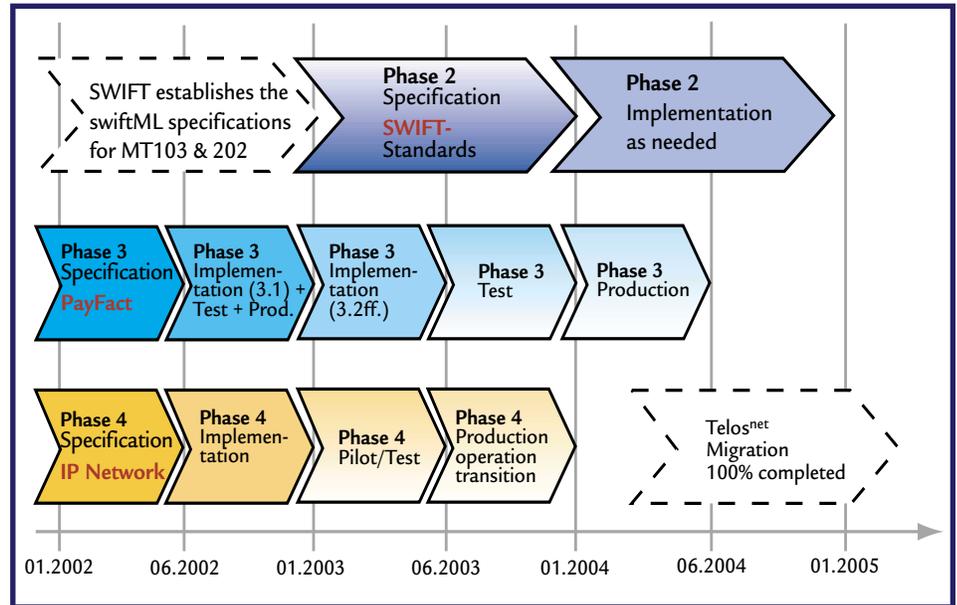
tenance expenses are reduced to approximately 60% of the previous costs.

**Project Element 2:
The (XML) Format Story**

Another SIC³ segment is the compatibility in the area of message formats, in the true sense the application of the SWIFT formats. The range of transaction types processed in our system is rather diversified: We differentiate between payment, tax, inquiry, system, and authorization messages.

There is, in fact, no existing message standard that would meet all our requirements. That's why in the SIC system there are message types with proprietary characteristics in use. For certain business cases this means costly conversions of the message contents to the SWIFT formats.

At the beginning of the project, there were many indicators that the SWIFT FIN formats would retain their significance over the next five to ten years. We informed you that the SWIFT FIN standard was



SIC³ Project Schedule

considered the targeted objective and we gave consideration to the use of FIN message types for RTGS and PayFact.

The situation has changed insofar as that at SWIFT both existing and new message types are developed on the swiftML basis.

As a result, the financial institutions and Swiss Interbank Clearing have opted for a pragmatic approach to action. The currently existing message types in SIC, euroSIC and DTA and LSV are adapted if it results in benefits to participants

Mandate-Capable SIC³ Brings New Possibilities

To the best of our knowledge, SIC³'s mandate capability is unique in this form. That results in new possibilities: The platform can provide existing and new clients with reasonably priced use of their own RTGS systems - a «clearing and settlement mandate» - for their own needs.

Various mandate service scenarios come to mind. The first «mandate» already exists today: the euroSIC system. Additional mandates would be structured identically and would be operated by Swiss Interbank Clearing. Each mandate RTGS would have a separate system manager (overseer).

The clearing day can be made to match individual requirements. The appropriate system manager - the SECB Swiss Euro Clearing Bank GmbH in Frankfurt for euroSIC - is responsible for the liquidity related management and monitoring of the system. E.g. a corresponding solution could be enlisted by a financial institution for transaction clearing within their own branch network. In that constellation, the head office would function as the system manager.

The mandate-capable infrastructure could also be used in a national or international association of banks. In any case it is guaranteed that the bank's operations center or the headquarters have the overview over the liquid assets and can actively monitor the «internal» clearing.

It is obvious that this infrastructure could also be used by a foreign central bank, to operate their own RTGS system in their national currency for example.

and/or the system operator. All new message types should be specified on the swiftML basis (e.g. credit advice).

If there is no message type for a specific purpose, the Swiss members on international committees and commissions should work towards generating that message type. Swiss Interbank Clearing verifies the use of SWIFT InterAct message types to enhance the existing inquiry options.

**Project Element 3:
New General Conditions for PayFact**

Swiss Interbank Clearing developed a detail concept with PayFact, based on the findings of workshops and focus groups to reduce the interface variety and to optimize DTA and LSV. Two committees – PAM (Product and Marketing Committee) and PAP (Project and IT-Process Steering Committee) – analyzed this detail concept on September 13th, 2001.

The results show that the general conditions compared with the guidelines have changed significantly and that a revision of the detail concept has become necessary. On the one hand, Postfinance will not bring the expected volume to the PayFact system. Instead, they will further extend their bulk payment traffic products and customized services, thereby strengthening their position as a service provider. On the other hand, the investment behaviors of the banks may have changed for the short term in terms of a shorter 'payback cycle'.

Swiss Interbank Clearing will redesign the PayFact project element in conjunction with the financial institutions. The goals pertaining to optimizing DTA and LSV will remain unchanged but the process will be analyzed considering the new general conditions.

Primarily, joint RTGS and bulk payment traffic systems will be tested for synergy potential (e.g. by combining joint processes). In addition, system demands will be examined for their feasibility, viability, acceptance and market demands.

One example for that is the automatic processing of charge backs and the debit processing for euro transactions. Swiss Interbank Clearing will introduce a concept by the end of the 2nd quarter 2002.

**Project Element 4:
Work on the IP Network**

Swiss Interbank Clearing and SIS SEGA-INTERSETTLE AG launched this project in August 2001. Subsequently, the entire project coordination was handed over to Telekurs Group. Any and all requirements and standards for the future IP network for SECOM, SIC and euroSIC were collected and forwarded as an invitation to bid to more than a dozen carriers.

Over the course of the evaluation due to the high demands on the network, only a few service providers remained at the end of the year. The determining factors are such demands as redundant dial-in nodes, extremely high availability, maximum security, range of services and carriers' price structuring for bandwidth and access equipment.

The consortium will thoroughly test and research the remaining service providers. The project plan intends Swiss Interbank Clearing establishing in-house readiness of the RTGS systems (SIC and euroSIC) for connection to an IP network during the second half of 2002.

At that time, interface specifications should be developed in order for the software providers to begin with the implementation. The pilot run is scheduled for the first quarter 2003. The tiered migration of all clients from SIC and euroSIC to



Swiss Interbank Clearing's development department



Synergies through collaboration: Telekurs and SIS SEGAINTERSETTLE AG

the new network is scheduled from mid-2003 until approximately 2005.

This migration process will be coordinated with SIS SEGAINTERSETTLE AG, the organization operating the SECOM application, in order to make use of the synergies between financial institutions and software partners.

*Dave Brupbacher,
Swiss Interbank Clearing AG,
dave.brupbacher@sic.ch*

NEWS & HIGHLIGHTS

RTGS^{plus} – A Successful Start

In November 2001, 58 international and German financial institutions, including SECB Swiss Euro Clearing Bank GmbH and UBS AG joined in the start of RTGS^{plus}. For the very first time, they processed their individual payment traffic as directly connected participants over the new liquidity saving Deutsche Bundesbank Real Time Gross Settlement system.

The euro clearing system EAF operations were discontinued with the start up of RTGS^{plus}.

Already 8,548 financial institutions worldwide have been registered as indirect participants through the 58 direct participants (financial institutions in the EMU).

The SWIFT BIC Directory and the RTGS^{plus} Directory list all direct participants with the label RTP, while all indirect participants bear the RT+ marker. This designates them as independent clearers within the EU.

There are already 30 new direct participants registered for the next two sign-up

dates in July 2002 and November 2002.

Additional information about RTGS^{plus} can be found on the Internet at: www.rtgplus.de

*Susanne Eis,
SECB Swiss Euro Clearing Bank GmbH,
susanne.eis@secb.de*

Editor's Note:

IRTGS^{plus} will be discussed in detail in a future edition

IPI: Innovative Banking in Graubunden

The very first international payment receipt IPI (International Payment Instruction) is being used in Switzerland in a small town where people go for their vacation. - The Graubundner Kantonalbank talks about their experiences.

On November 2nd, 2001 our customer Pastizaria Cantieni was the first Swiss company to receive the IPI receipts. The company maintains – as do many Graubunden businesses – extensive business relations with companies abroad. Accordingly, the timely processing of international payment traffic is of great importance.

Back in September 2000, a taskforce of the Graubundner Kantonalbank (GKB) started focusing on these needs – and introduced the IPI. With great success.

Careful Planning Prevents the Unanticipated

During the first phase all workflows and impacts on the bank-side IT systems were analyzed. The primary focus was on resolving the format of the new IBAN (International Bank Account Number) in

all in-house applications, in order to ensure that the IPI data could subsequently be processed automatically.

The good news: The necessary adaptations were relatively simple to implement, since the existing payment traffic processes didn't need to be adapted.

The entire effort invested in the IPI introduction at the Graubundner Kantonalbank amounted to approximately 45 man-days of work.

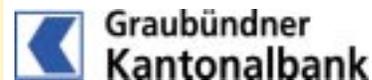
In-house Introduction: An Important Success Criterion

New products and services demand careful introductions.

IPI Information:

www.sic.ch or www.rba.service.ch,
click on «Services»

The project team attached great importance to the information compiled at the branch level and provided by the customer consultant. The new payment receipt was also extensively introduced in presentations and on the Intranet.



Founded in:	1870
Total Assets:	CHF 11.8 billion
Employees:	approx. 1200
Branches:	approx 90

Conversion with Advantages for the Customer and the Bank

The first serious conversations with Pastizaria Cantieni on how to improve the payment flow with the IPI receipt took place in May of 2001. Pastizaria Cantieni ships local specialties worldwide.

In addition, the international clientele of the specialty pastry shop and bakery should receive a payment receipt which was usable abroad. All this had to be simple and inexpensive.

All details had been cleared by summer and the new receipts were designed in cooperation with the homologization authority (RBA service) and ultimately printed by our regular printer.

The drafts were ready mid-October 2001 and the IPI was homologized October 31st, 2001.

Positive Experiences Confirm the Value of the IPI

Twenty bank customers ordered a total of 2,500 receipts in November, even though the IPI is not (yet) actively offered.

It is only mentioned to our customers when an intensified customer/bank relationship is being discussed.

Seeing that it is pursuing its own path to success proves the accuracy of our business strategy.

Claudio Trepp,
Graubundner Kantonalbank,
claudio.trepp@gkb.ch



Graubundner Kantonalbank in Chur



Swiss Plus Event in Milano, Italy. Panel



*Seminar Swiss Value Chain – Walter Leuenberger, Swiss Interbank Clearing,
Ronny Vogt, SIS SEGAIINTERSETTLE AG, Michael Jäggi, SWX Swiss Exchange,
Dr. Heinrich Henckel, SWX Swiss Exchange*

IMPRESSUM | Published by Swiss Interbank Clearing AG, Hardturmstrasse 201, CH-8021 Zürich, Switzerland |

| Additional Issues/Feedback clearit@sic.ch | Issue 12 – February 2002 | Printed in German and French |

| Editorial Team André Bamat, C.E.O., Swiss Interbank Clearing AG, Susanne Eis, SECB Swiss Euro Clearing Bank GmbH,
Ruth Furter, Postfinance, André Gsponer, Enterprise Services AG, Beat Härry, Credit Suisse First Boston,
Daniel Heller, Swiss National Bank, Bruno Kudermann, Editorial Manager, Swiss Interbank Clearing AG,
Ulrich Merz, UBS AG, Alex Miescher, RBA-Service, Christian Schwinghammer, Swiss Interbank Clearing AG, |

| Translation Haechler Translation Services | Layout Mirjam Steiner Advertising Agency | Printed by Telekurs Print Shop |

| Contact SIC SIC Operation Center +41 1 279-4200, Product Management +41 1279-4747,

euroSIC euroSIC Operation Center +41 1 170-4700, Product Management +41 1 279-4747,

SECB SECB Operation Center, +49 69 97 98 98 0, Customer Service SECB, +49 69 97 98 98 35 |

| Additional information about the Swiss payment traffic systems can be found on the Internet at
www.sic.ch or www.secb.de |