

Annual Report 2007



since 1996

Eleven years of successful cooperation in EFT/POS Foundation of the ep2 Technical Cooperation Association

Members, Ladies and Gentlemen

Today we can look back not only on a rewarding year, but on eleven years of successful activity and the establishment of a prominent association. Technical Cooperation ep2 (TeCo ep2) is a prime example of how eleven years of concentrated



cooperation can result in quite considerable benefits for all involved. This is demonstrated by the definition of the ep2 EFT/POS system and in the development of TeCo ep2 as an established association. The activities of TeCo ep2 had a considerable impact on EFT/POS technology in Switzerland and it is not an exaggeration to say that the association has thereby created a very high quality and advanced standard.

TeCo ep2's great involvement in the development and implementation of the new ep2 system generation has definitely been worthwhile - almost 70,000 ep2 terminals are already operational in retail. Fourteen homologated terminals from eight different vendors are already available to retailers and nine further products are still in the certification process. Because of the broad selection available, the market is now more open and prices per unit have fallen. The ep2 specification was continuously improved through four releases while the components 'fuel station terminal', 'vending machines' and 'e-commerce' were added to it. It provides for single terminals and branch solutions as well as integrated solutions. Most points of sale have already switched to ep2 terminals. The ep2 specification is exceptionally well positioned for compatibility with SEPA (Single Euro Payments Area). It has a very advanced concept that is highly regarded and well-accepted within the European region.

The longstanding efficient collaboration finally acquired a satisfactory legal form with the foundation of the TeCo ep2 Association on 12 April 2007. The previous activities are continued identically by TeCo ep2 and the rights to the ep2 specification were transferred to the Association. Membership is open to acquirers, retail representatives and, more recently, also to terminal vendors; the ep2 specification can be licensed to acquirers and terminal vendors. To ensure a stable basis for the Association, the foundation proposal and the ep2 standard were checked and approved by the Swiss Competition Commission beforehand.

As a strong team of technical specialists, TeCo ep2 gained tremendous know-how over 11 years. This is clearly demonstrated by the success of the ep2 system. We are pleased to recount the history of TeCo ep2 once again and to define our goals for the future. For its future work, the Association will still require an open culture of discussion, solidarity and a high degree of technical competence among its members. We would like to take this opportunity to express our heartfelt thanks to all members who have been involved in the Steering Committee (Executive Board) or in the ep2 workgroup for their exceptional services and efficient collaboration. Further thanks are due to the 'ep2 project team @ Zühlke' for their excellent work. Our thanks also go to our

business unit for the professional work pertaining to the foundation of the Association. With the joint efforts of our members we are confident that we can continue to optimize and successfully implement the ep2 cashless payment system. With ep2 we have set the correct course, also as far as Europe is concerned.

The President:



H.-R. Thönen



TeCo ep2 Inaugural Meeting of 12 April 2007

Annual Report for Financial Year 2007

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TeCo ep2 Association – Technical cooperation in the EFT/POS field (ep2): 1996-2007

In February 1996, PostFinance, Telekurs and the Electronic Payment System Association (Verband Elektronischer Zahlungsverkehr VEZ) laid the **foundation** in a memorandum of understanding for cooperation in developing the ep2 system generation. This project defined the future EFT/POS infrastructure for Switzerland. Its goal was to **standardize card payments**, including all procedures, functions and interfaces on the basis of international standards. In the past eleven years, the ep2 partners have developed a comprehensive **ep2 specification**, which has progressed to the fourth version and has been continuously improved and implemented successfully. Two-thirds of all terminals in Switzerland are already ep2 terminals.

With the **establishment** of the **Technical Cooperation ep2 Association** (TeCo ep2) on 12 April 2007, this long-standing, efficient cooperation assumed an appropriate legal form. "The Association aims to **establish the ep2 standard and the corresponding EFT/POS infrastructure throughout Switzerland** and to continue the technological development of the system as a whole" (see Articles of Association). The organization now comprises six acquirers and the VEZ and, over the past few years, has generated considerable benefits for all involved, thanks to its professional team of technical specialists. In addition, TeCo ep2 has become an increasingly important platform for information and discussion in the field of EFT/POS technology.

With ep2, a **far-reaching degree of standardization of the EFT/POS system in Switzerland** (2nd system generation) has been achieved, taking all international standards (EMV) into account. This is a very progressive concept, that is SEPA-compatible and broadly recognized: "The future belongs to ep2 – with a view to Europe too".

www.eftpos2000.ch

The screenshot displays the website for the Technical Cooperation ep2 (TeCo ep2) Association. The main navigation menu includes: Login: AGR, Login: PGR, Overview, FAQ / Infos about ep2, Certification Auth., Registration Auth., Agendas, Testing, Change Requests, and Contact us.

ep2 Members - Organisation

ep2 Steering Committee (STC)		ep2 Arbeitsgruppe (AGR)	
Chairman STC ep2		Chairman AGR ep2	
Hans-Rudolf Thönen, Postfinance		Adrian Loosli, Postfinance	
H. Herzig	Adiano SA	B. Hottling	Adiano SA
E. Indum	DE POST Postfinance	R. Fahr	Adiano SA
D. Crestani	Diners Club International	G. Feltysson	DE POST Postfinance
U. von Falck			
H. Hiltner			
H.M. Meyer			
Ch. Borer			
P.A. See			
A. Hiltner			

ep2 Certification Authority

Public Certification Information

Prices & Informations

ep2 Test System Registration Form

ep2 Hardware Certification Registration Form

ep2 Software

ep2 Terminal

RSA Public Key

Minimal Hash

ep2 Acquirer

Info: Serial

Freeze Zahl

ep2 Release

ep2 Vendor

ep2 Vendor

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ARS-S

C.A.R.

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Technical Cooperation ep2 (TeCo ep2) Association

We are glad to inform about the foundation of Technical Cooperation ep2 Association on April 12, 2007. With this foundation, the efficient and eleven year long cooperation between the Swiss acquirers and Verband Elektronischer Zahlungsverkehr (VEZ) gets an adequate legal form.

The founder members are:

- Adiano SA
- Diners Club International
- JCB International Co. Ltd.
- PostFinance - Swiss Post
- Swisscard - AECIS AG
- Telekurs Mailpay
- Verband Elektronischer Zahlungsverkehr VEZ

More information about the TeCo ep2 Association are available at the TeCo office:

Technical Cooperation ep2
Mrs RA ic: ur K. Utzinger
Frohburgstrasse 98
8006 Zurich
Tel: +41 (44) 363 14 00
Fax: +41 (44) 363 15 25
E-Mail: ep2@tu-law.ch

In order to push and to develop the chip based EMV payment method in the Swiss market, the above mentioned companies combined their forces and developed the eftpos 2000 (ep2) standard for card present and distance payment. With this ep2 standard the actual eftpos infrastructure of credit and debit terminals, as well for vending machines in Switzerland is defined. The result is an open system based on international standards and recommendations. The ep2 standard is productive since May 31, 2003 and today over 60% of the Swiss terminal population has been migrated to the ep2 standard.

Development of the EFT/POS technology and system

Background

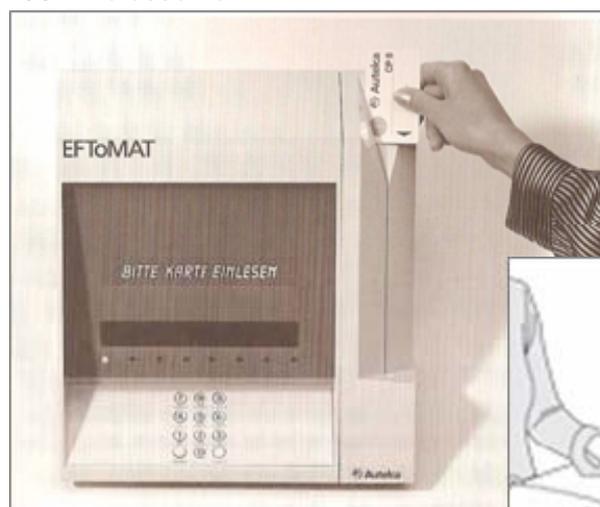
Around 20 years elapsed between the previous bulky closed system and the small open ep2 device of today. The current device is one-tenth the size of the former one, but many times faster in transaction processing and supports many different card types (credit, debit, magnetic and chip cards). This shows how fast things have changed in electronic payments.

It took more than ten years from the first **individual EFT/POS systems** to a **standard one**. Each card used to have its own technical specifications and for a long time EFT/POS devices did not support all cards. The requirement for an open system was crucial and defined as follows:

- Freedom of choice between multiple cards and card technologies at the device; only one device per POS, open terminal market;
- Devices supporting multiple hosts; direct connection to each individual card supplier;
- Communication over the public network.

Over the years, the technical issues gained increasingly in complexity and the demand for an EFT/POS system accessible by all parties and with a standard technical basis became increasingly urgent. Next, the ECR-interface (VEZ-interface), the reconciliation and the terminal certification process were standardized. The first open device for all the common debit and credit cards was already available in 1992. In 1993, a specification committee was founded. Three years later, **technical cooperation on EFT/POS 2000** (ep2) began with a memorandum of understanding (see ep2 project). The founding members at the time were PostFinance, Telekurs and the Electronic Payment System Association (VEZ). The fact that a number of direct competitors (six acquirers, at present) worked **together** on an EFT/POS system in the ep2 project must be unique. Cooperation with external partners was regarded as an opportunity even in the early days. The conviction at the time that only joint developments would result in success with proven customer benefits has subsequently been confirmed.

1987 'Kolossomat'



2007



ep2 project

For eleven years the card acquirers (today: Aduno, Diners Club, JCB, PostFinance, Swisscard and Telekurs Multipay) and the VEZ have been working on developing and implementing the new ep2 system generation. As a powerful team of specialists they chalked up considerable successes in recent years. The involvement of the retail trade ensured that customer requirements would also be taken into account in the card processing at the POS. **Extensive standardization of the Swiss EFT/POS system** (2nd system generation) was achieved with ep2, while taking all the international standards (EMV) into consideration.

The results of this work show today: Almost 70,000 ep2 terminals are already installed at points of sale, making up approx. 70% of the entire terminal population in Switzerland. A large proportion of the retail trade has therefore already switched to ep2 or, after successful pilot projects, has plans for nationwide distribution of the ep2 system generation. Fourteen homologated terminals of versions 2.0.1, 3.0.0, 3.1.0 and 4.0.0 by eight different vendors are available to retailers, and eight further products are still at certification stage (see list of terminals, page 18). Because of the broad selection available, the market is now more open and prices per unit have fallen. The **ep2 specification** was continuously improved over four releases while the components 'fuel station terminal', 'vending machines' and 'e-commerce' were added to it. The last version (V.4.0.0) was published at the end of October 2006. It provides for single terminals and branch solutions as well as integrated solutions.

This efficient collaboration acquired a satisfactory legal form with the **foundation of the Technical Cooperation ep2 Association** (TeCo ep2) on 12 April 2007. The rights to the ep2 specification were transferred to TeCo ep2 and membership of the association was redefined. Membership is open to acquirers, retail representatives and also terminal vendors. Acquirers and terminal vendors can become licensees of the ep2 specification. To ensure a stable basis for the Association, the foundation proposal and the ep2 standard were checked and approved by the Swiss Competition Commission in advance. We believe that the new form of organization will simplify collaboration in many areas and permit further improvements to be made.

ep2 objectives attained: In the new ep2 system functionality was improved, security increased and some offline functionality was implemented. The advantages of the offline functionality show in the processing of very small amounts, in savings on communication costs and in a certain degree of independence from availability of the acquirer host and the communication network. All processes and interfaces were largely standardized in order to simplify the overall system and permit a modular structure in the standard. International standards were adhered to, the dual message process (separate authorization and submission of transactions) was implemented, and allowances were made to permit transactions to be processed in different currencies on the device (multi-currency). The requirements set out by retailers were reflected fully in the definition of the 'ep2 open system'. Because it is a completely new system, all components are affected by these changes, requiring retailers to make changes in their entire EFT/POS environment. All these changes should ensure that the needs of card owners and retailers as well as those of card issuers and processors are fully met, while ensuring cost-effective operations for all involved.

ep2 migration

By moving to ep2, Switzerland has become the European leader in the switch to EMV and offers an ideal basis for the migration to EMV chip cards. Maestro Switzerland has already completed its migration to the EMV chip. Three quarters of PostFinance Cards should be migrated by the end of the year. The credit card migration is still only beginning.

SEPA

In Europe, the EU finance ministers agreed to introduce a **Single Euro Payments Area (SEPA)** by 1 January 2008. Cross-border card payments within the EU community should in future be easier and ostensibly also more cost-effective than before. EU legislation offers a standard legal framework for SEPA. The specifics of the European framework, however, have not yet been completed and the consequences for Switzerland cannot yet be assessed in detail. With regard to **SEPA compatibility**, the progressive ep2 specification is well-positioned.

The main activities of TeCo ep2 in financial year 2007

TeCo ep2 meetings in 2007

The **Inaugural Meeting** took place on 12.04.07 and the first regular annual **General meeting** was held in November 07. The **ep2 workgroup**, consisting of 14 representatives at present, convened three times during the 2007 financial year. It offers members numerous opportunities for cooperation and a full exchange of information and experiences. Furthermore, two Agr ep2 **workshops** and three regular **board meetings** were held during the year under review.

Focal topics of 2006-2008

- Successful completion of the first certification of a vending machine in accordance with ep2
- Regulation of card number concealment on the sales slip as per VEZ interface V.5.1
- Definition of an abbreviated sales slip
- Regulation of brand information
- Revision of the RAF (electronic reconciliation advice)
- Definition of the tip function for the business areas restaurant and hotel
- Clarification of the contactless issue
- Reworking of the 'vending machines' certification process
- Introduction of a minimum EMV version for ep2 CA
- PCI audit of the ep2 specification
- Development of the ep2 V.4.1.0 specification

Thank you to our members

The work on ep2 in the year under review again involved great contributions by TeCo ep2 members who made their specialists available for collaboration on the ep2 project. The Association would like to take this opportunity to extend its heartfelt thanks to all involved for their tremendous and expert contributions.

TeCo ep2 members as at 31.10.07

Aduno SA Via alle Fornaci 1 6930 Bedano	Tel.: 058-234 56 78 Fax: 058-234 51 08 info@aduno.ch
Diners Club International Seestrasse 25 Postfach 2198 8022 Zürich	Tel.: 058-750 80 80 Fax: 058-750 80 81
JCB International Co. Ltd. Place de Cornavin 12 1201 Genève	Tel.: 022-732 62 44 Fax: 022-732 62 48
PostFinance Nordring 8 3030 Bern	Tel.: 031-338 11 11 Fax: 031-338 79 21
Swisscard AECS AG Neugasse 18 Postfach 8810 Horgen	Tel.: 044-659 61 11 Fax: 044-659 61 12
Telekurs Multipay AG Hardturmstrasse 201 8005 Zürich	Tel.: 044-832 91 11 Fax: 044-832 91 15
Verband Elektronischer Zahlungsverkehr VEZ Frohburgstrasse 98 8006 Zürich	Tel.: 044-363 14 00 Fax: 044-363 15 25 vez@ku-law.ch

Members of the Executive Board as at 31.10.07

Chairman	
Thönen Hans-Rudolf PostFinance Engehaldenstrasse 37 3030 Bern	031-338 39 48 hans-rudolf.thoenen@postfinance.ch
Other members	
Bula Roger VEZ (SBB) Brückfeldstrasse 16 3000 Bern	051-220 49 97 roger.bula@sbb.ch
Casalini Dario Diners Club International Seestrasse 25 8022 Zürich	044-835 44 74 dario.casalini@citigroup.com
Halder Daniel Swisscard AECS AG Neugasse 18 8810 Horgen	044-659 61 16 daniel.h.halder@swisscard.ch
Moser Hans-Martin Telekurs Multipay Hardturmstrasse 201 8005 Zürich	044-832 92 00 hansmartin.moser@telekurs.com
Nef Hansruedi Aduno SA Via alle Fornaci 1 6930 Bedano	058-234 54 21 hansruedi.nef@aduno.ch
Steim Pierre-André VEZ (MGB) Limmatstrasse 152 8031 Zürich	079-769 60 57 pierre-andre.steim@mgb.ch
von Fels Uwe JCB International Co. Ltd. 12, Place de Cornavin 1201 Genève	022-732 53 40 fels.jcb@bluewin.ch

Members of the ep2 workgroup (Agr ep2) as at 31.10.07

Chairman	
Loosli Adrian PostFinance Engenhaldenstrasse 37 3030 Bern	031-338 66 58 adrian.loosli@postfinance.ch
Other members	
Andris Reto R. Swisscard AECS AG Neugasse 18 8810 Horgen	044-659 64 54 reto.r.andris@swisscard.ch
Brielmayer Viljem Telekurs Multipay Hardturmstrasse 201 8005 Zürich	044-832 92 78 viljem.brielmayer@telekurs.com
Bühler, Rolf Swisscard AECS AG Neugasse 18 8810 Horgen	044-659 67 41 rolf.buehler@swisscard.ch
Casalini Dario Diners Club International Seestrasse 25 8022 Zürich	058-750 80 45 dario.casalini@citigroup.com
Fäh Rolf Aduno SA Via alle Fornaci 1 6930 Bedano	079-445 08 42 rolf.faeh@aduno.ch
Federspiel Gianpaolo PostFinance Engenhaldenstrasse 37 3030 Bern	031-338 10 15 gianpaolo.federspiel@postfinance.ch
Häusermann Richard Telekurs Card Solutions Hardturmstrasse 201 8021 Zürich	044-279 64 54 richard.haeusermann@telekurs.com
Helbling Barbara Aduno SA Via alle Fornaci 1 6930 Bedano	058-234 54 14 barbara.helbling@aduno.ch
Molnar René VEZ (MGB) Limmatstrasse 152 8005 Zürich	044-277 35 10 rene.molnar@gmlu.ch

Osley Martin Zühlke Wiesenstrasse 10a 8952 Schlieren	044-733 66 89 martin.osley@zuehlke.com
Tüscher Richard VEZ (SBB) Brückfeldstrasse 16 3000 Bern	051-220 55 41 richard.rt.tuescher@sbb.ch
von Fels Uwe JCB International Co. Ltd. 12, Place de Cornavin 1201 Genève	022-732 53 40 fels.jcb@bluewin.ch
Veugel Roger PostFinance Engenhaldenstrasse 37 3030 Bern	031-338 89 30 roger.veugel@postfinance.ch

ep2 project team @ Zühlke

Osley Martin PL & Specifications Zühlke Engineering AG	044-733 66 89 mos@zuehlke.com
Habicht Martin PL Certification/ Testing Zühlke Engineering AG	044-733 66 45 hab@zuehlke.com
Bonhoff Christian Certification/Testing Zühlke Engineering AG	044-733 65 42 cbo@zuehlke.com
Meyer A. Certification Zühlke Engineering AG	044-733 67 23 my@zuehlke.com
Sabbatella Mario Certification/ Testing Zühlke Engineering AG	044-733 65 06 sab@zuehlke.com

Business management

Advokaturbüro Utzinger K. Utzinger, attorney at law Frohburgstrasse 98, 8006 Zürich	Tel.: 044-363 14 00 Fax: 044-363 15 25 ep2@ku-law.ch
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Auditors

Indumi Emanuel PostFinance Nordring 8, 3030 Bern	031-338 56 96 emanuel.indumi@postfinance.ch
Halder Daniel Swisscard AECS AG Neugasse 18, 8810 Horgen	044-659 61 16 daniel.h.halder@swisscard.ch

Postal address

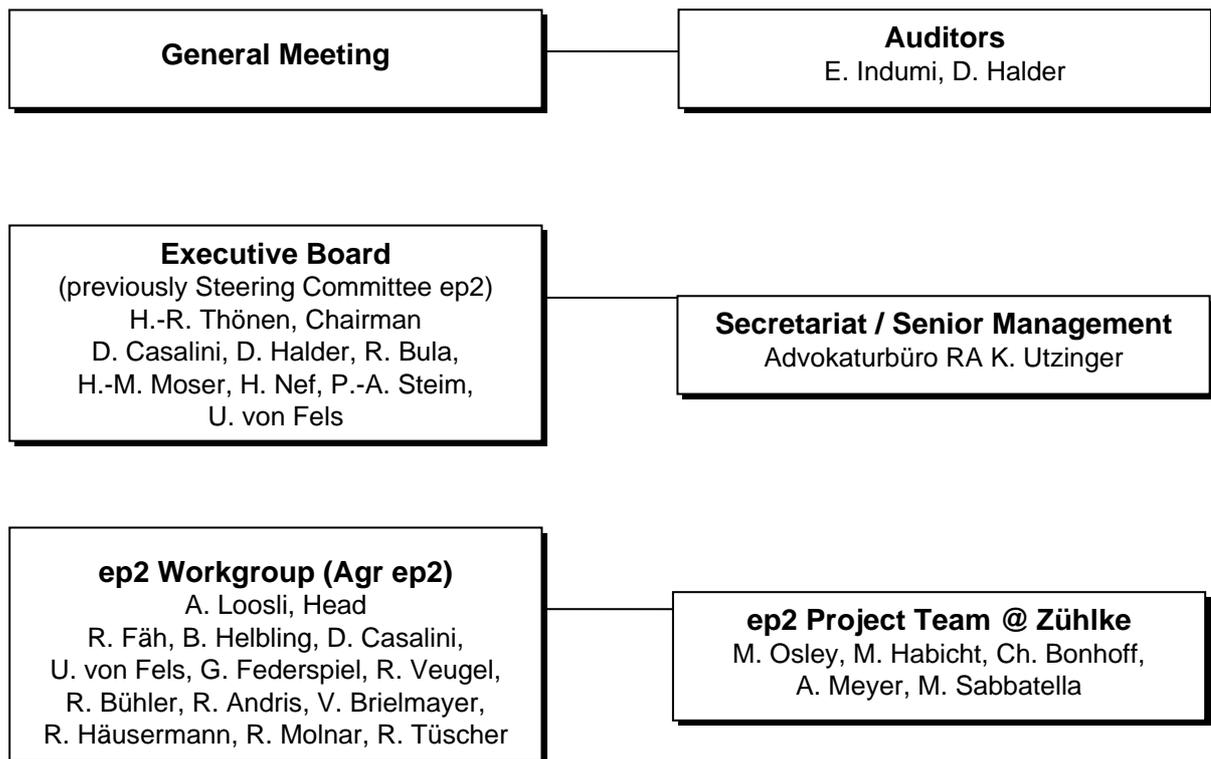
Technical Cooperation ep2 (TeCo ep2) Frohburgstrasse 98, 8006 Zürich	Tel.: 044-363 14 00 Fax: 044-363 15 25 ep2@ku-law.ch www.eftpos2000.ch
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Bank account details (PostFinance)

Technical Cooperation ep2 8006 Zürich Account no. 85-336407-6	
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Zürich, October 07, TeCo ep2/KU/sis

Technical Cooperation ep2 (TeCo ep2) Organization Chart



Chronology of the technical cooperation on EFT/POS in Switzerland and the most important development stages of the EFT/POS technology

Background (1st system generation):

1985	ec card at filling stations
1986	Workgroup of the Swiss National Bank with representatives of banks, Swiss Post (PTT) and trade
April 1987	Foundation of the Electronic Payment System Association (VEZ)
April 1987	First pilot run by Migros at Schönbühl shopping centre with Migrosbank M-Card, subsequently also with Swiss Post Postomat-Plus card
1987	Production of the first VEZ requirements catalogue for the introduction of electronic payments
March 1988	First pilot test by Coop at Volketswil shopping centre with ec-Direct; transactions transmitted via leased lines
Feb. 1989	Formation of a technical POS-2000 workgroup with representatives of banks, credit card companies, Swiss Post and VEZ
June 1989	Signing of an agreement between banks, Swiss Post and VEZ concerning open system, technical standards and regulation of costs
June 1989	Launch of the model community in Biel with Swiss Post chip card (debit and electronic purse card); recharging possible at all public telephone booths
Dec. 1989	Launch of St. Moritz model community : St. Moritz card and Postomat-Plus card (debit, credit, charge); access control to transport systems, etc.
1989	First VEZ ECR-interface , version 89
1985-90	Bancomat extension to support Postcard and the four credit cards
1990	Development of a procedure for homologating EFT/POS devices
1990	Submission of Transaction Type 3 specifications by credit card companies
1991	First open EFT/POS device for all debit cards (ec card, Postcard, M-Card) but still without credit cards
1991	Standardization of the reconciliation procedure
1992	First open EFT/POS device for debit and credit cards available
1992	VEZ ECR-interface, version 5.1
1992-93	Significant increase in number of terminals and transaction volume; end of actual pilot phase; EFT/POS begins to spread throughout Switzerland
1992	Report by VEZ technical commission on specifications of credit card companies (version 4.2) and Telekurs (version 5.0)

- 1992 Charge card commission: VEZ report on all areas of a multi-functional (chip-) card with rechargeable area
- Nov. 1992 **Pro Langnau association:** Location agreement with concentrator solution
- 1993 Revision of the VEZ requirements catalogue for electronic payments in Swiss retail trade, in catering, hotel trade and service sector
- 1993 **Six different EFT/POS devices** available with ec, Postcard and four credit cards
- 1993 VEZ report on level 3 to Telekurs AG
- March 1995 Collaboration of banks/PostFinance in the area of electronic purse cards and automatic teller machines
- 1995 Submission of level 3 specification by Telekurs AG
- 1996 **Introduction of Swiss banks' Cash electronic purse card** by Europay SA: System rejected by retailers for financial and technical reasons
- Feb. 1996 PostFinance joins the Cash electronic purse card system of Europay SA; Bancomat and Postomat open their systems to each other

Launch of the ep2 project (2nd system generation):

- Feb. 1996 **Agreement between banks, PostFinance and VEZ** with regard to technical collaboration between PostFinance, Telekurs Payserv and VEZ to design the EFT/POS 2000 system (first memorandum of understanding)
- Sept. 1996 Introduction of a new payment system by Europay
- 1996 **EFT/POS 2000 (ep2) workgroup** begins its work. Production of a comprehensive catalogue of requirements
- 1996 **EFT/POS draft specification**
- 1997 **KESS ECR-interface** EI version 0.3
- 1997 Adoption of **prestudy**
- 1997 Submission of minimum hardware requirements for EFT/POS 2000 terminals, V. 1.0
- 1997 Start of project leadership by IBD-Informatik
- 1998 Adoption of **ep2 main study**
- Dec. 1998 Preparation for 'Year-2000 compatibility of EFT/POS systems'
- Nov. 1999 Submission of **ep2 detailed specification**
- 2000 Start of project leadership by Zühlke Engineering
- Dec. 2000 ec card processing problem on turnover-intensive Saturday before Christmas; demand for an emergency receipt solution by VEZ

April 2002	Release of ep2 specification V.1.0.0
Nov. 2002	Launch of ep2 pilot phase ep2-chip mile: Installation of 50 pilot terminals on Bahnhofstrasse in Zürich
2002	Second memorandum of understanding between ep2 parties concerning ep2 acceptance
April 2003	Release of ep2 specification V.2.0.0 , ep2 Business Use Case specification V.2.0.0 and terminal specification add-on V.2.0.0
May 2003	End of pilot run for single terminal solutions and controlled spread of ep2
June 2003	Conclusion of ep2 project and continuation by successor organization (third memorandum of understanding)
July 2003	Release of ep2 specification V.2.0.1 (including vending machines)
Oct. 2003	Development of POS management system (PMS)
2004	Beginning of migration of single terminals in retail trade
Oct. 2004	Release of ep2 specification V.3.0.0 (including fuel station terminals)
2005	20,000 ep2 terminals installed in retail trade
Oct. 2005	Release of ep2 specification V.3.1.0
Oct. 2006	Release of ep2 specification V.4.0.0 (incl. E-Commerce)
2007	70,000 ep2 terminals installed in the retail trade (approx 70% of entire device population in Switzerland)
April 2007	Foundation of the ep2 Technical Cooperation Association (TeCo ep2)

EFT/POS development milestones

Increasing distribution and significance of EFT/POS¹: At the end of 2006, 6.6 million debit cards (Maestro, PostFinance Card), 3.76 million credit cards and around **95,000 terminals** were in use while the transaction volume increased correspondingly (debit: 274.5 million transactions, turnover CHF 23.4 billion; credit²: 89.7 million transactions, turnover CHF 17.2 billion). With the increasing substitution of cash by EFT/POS, 'plastic money' is rapidly becoming the main means of payment.

Zürich, October 07, TeCo ep2/KU/mk/sis

¹ Source: SNB: Monthly statistical report March 2007; see also VEZ Annual Report 06/Statistics pages 22-30

² Transactions by locals and foreigners within Switzerland

Payment terminals in sales: Status as at 5.10.07 (www.eftpos2000.ch)

Terminal		Certification Status		Functionality
Manufacturers	Terminal Type	ep2 HW Certified	ep2 Certified	Description
ARS-Software GmbH	ARS/Pos	see Thales Artema Hybrid	on 18.07.2006	acc. specification V.3.0.0 without: Reservation, Tip, Phone/Mail Order
C.A.R.U.S Retail Information Technology GmbH	cCredit	see VeriFone SC 5000	on 10.05.2005	acc. specification V.2.0.1 , full ep2 functionality
CCV-jeronimo SA	VeriFone Omni 3600 Mobile	on 08.04.2004	on 28.02.2005	acc. specification V.2.0.1 , full ep2 functionality
CCV-jeronimo SA	VeriFone Omni 3740 / SC 5000	on 19.12.2002	on 10.10.2003	acc. specification V.1.0.2, full ep2 functionality
CCV-jeronimo SA	VeriFone Omni 3740 / SC 5000	on 26.10.2004	on 10.06.2005	acc. specification V.2.0.1 , full ep2 functionality
CCV-jeronimo SA	VeriFone VX	on 14.06.2005	on 14.12.2005	acc. specification V.2.0.1 , full ep2 functionality
CCV-jeronimo SA	VeriFone VX 670	on 31.05.2007	in controlled distribution phase V.3.1.0	acc. specification V.3.1.0 , full ep2 functionality
Commtrain Card Solutions AG	Hypercom Optimum 2100	on 29.03.2005	on 10.07.2006	acc. specification V.2.0.1 , full ep2 functionality
Commtrain Card Solutions AG	Hypercom ICE 5500	on 26.03.2003	on 27.04.2004	acc. specification V.1.0.2 without: Reservation, Cash Advance, Mail Order / Phone Order.
Commtrain Card Solutions AG	Hypercom ICE 5500	on 26.03.2003	on 17.06.2005	acc. specification V.2.0.1 , full ep2 functionality
Commtrain Card Solutions AG	Hypercom K1100 / H2200	on 15.12.2006	-	-
Ingenico (Suisse) SA	Ingenico i5310 / i7780 / i7910	on 08.07.2005	on 25.08.2006	acc. specification V.3.0.0 , full ep2 functionality
Ingenico (Suisse) SA	Ingenico i3070 Pin Pad	on 13.06.2006	in pilot phase V.3.0.0	acc. specification V.3.0.0 , full ep2 functionality
Ingenico (Suisse) SA	Ingenico i3380	on 30.06.2006	in acquirer integration test phase V.3.1.0	acc. specification V.3.1.0 , full ep2 functionality
Ingenico (Suisse) SA	Ingenico i5100-i3050	on 08.07.2005	on 30.03.2007	acc. specification V.3.0.0 , full ep2 functionality
Ingenico (Suisse) SA	Ingenico i8200 / i8550	on 01.07.2005	in controlled distribution phase V.3.0.0	acc. specification V.3.0.0 , full ep2 functionality
Ingenico (Suisse) SA	Kameleon	on 27.03.2006	-	-
PayTec AG	PayTec Primus	on 17.09.2007	in acquirer integration test phase V.4.0.0	acc. specification V.4.0.0 , full ep2 functionality
Telekurs Card Solutions AG	C-ZAM / Xenta AUTONOM, PINPAD, COMPACT	on 01.11.2005	in controlled distribution phase V.3.1.0	acc. specification V.3.1.0 , full ep2 functionality
Telekurs Card Solutions AG	C-ZAM / Xentissimo	on 22.09.2006	in controlled distribution phase V.3.1.0	acc. specification V.3.1.0 , full ep2 functionality
Telekurs Card Solutions AG	EPSYS SMASH	on 15.08.2001	on 07.07.2003	acc. specification V.1.0.2, full ep2 functionality
Telekurs Card Solutions AG	davinci AUTONOM, PINPAD, VENDING (unattended), CHECKOUT, SAFE	on 22.03.2005	on 27.02.2006	acc. specification V.2.0.1 , full ep2 functionality
Telekurs Card Solutions AG	smash AUTONOM, PINPAD, COMPACT, MOBILE	on 15.08.2001	on 19.04.2005	acc. specification V.2.0.1 , full ep2 functionality

Thales / Paysys	Artema Desk / MCU 5900	on 10.02.2004	on 02.06.2005	acc. specification V.2.0.1 , full ep2 functionality
Thales / Paysys	Artema Hybrid	on 11.10.2004	on 30.06.2006	acc. specification V.2.0.1 , full ep2 functionality
Thales / Paysys	Artema Mobile / Portable	on 22.01.2004	on 09.06.2005	acc. specification V.2.0.1 , full ep2 functionality
Thales / Paysys	Artema Modular (unattended)	on 27.10.2005	in VM acquirer integration test phase II	acc. specification V.3.0.0 , ep2 vending machine functionality

Versions recommended by VEZ:

V.2.0.1 / V.3.0.0 / V.3.1.0 / V.4.0.0

	Acquirer test phase
	Retail terminals in pilot operation
	Terminals in controlled dissemination
	ep2 certification completed

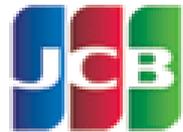
Sales / information:

<ul style="list-style-type: none"> - ARS Software GmbH Plüddemanngasse 67b A - 8010 Graz Tel.: +43 316 424146-0 Fax: +43 316 424146-46 www.ars-software.at 	<ul style="list-style-type: none"> - Commtrain Card Solutions AG Säntisstrasse 2a 9500 Wil Tel.: 071 914 40 20 Fax: 071 914 40 21 www.commtrain.ch 	<ul style="list-style-type: none"> - Telekurs Card Solutions AG Hardturmstrasse 201 Postfach 8021 Zürich Tel.: 0848 66 11 11 Fax: 0848 66 11 12 www.telekurs-card-solutions.com
<ul style="list-style-type: none"> - C.A.R.U.S., see under Telekurs Card Solutions AG 	<ul style="list-style-type: none"> - Ingenico (Suisse) SA Impasse des Ecureuils 2 1763 Granges-Paccot Tel.: 026 460 55 20 Fax: 026 460 55 29 www.ingenico.ch 	<ul style="list-style-type: none"> - Thales, see under: Paysys AG Tannenstrasse 95 8424 Embrach Tel.: 044 866 34 44 Fax: 044 866 34 50 www.paysys.ch
<ul style="list-style-type: none"> - CCV-jeronimo (Zurich) AG Europa-Strasse 13 8152 Glattbrugg/ZH Tel.: 043 211 50 60 Fax: 043 211 50 66 www.jeronimo.ch 	<ul style="list-style-type: none"> - PayTec AG Mülistr. 18 8320 Fehraltorf Tel.: 044 954 88 99 Fax: 044 954 88 98 www.paytec.ch 	

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