



SILVIA QUANDT
RESEARCH GMBH



OPENLIMIT HOLDING AG – REAPING THE REWARDS OF CONTINUED COMMITMENT

_ GERMAN EID TO BE INTRODUCED IN NOVEMBER 2010.
OPENLIMIT WILL SUPPLY THE AUSWEISAPP

_ SECDOCS IN CERTIFICATION BY BSI

_ EUROPE'S LARGEST DIGITIZATION PROJECT IN THE PUBLIC SECTOR
AWARDED TO OPENLIMIT BY FUJITSU

_ BUY RECOMMENDATION, FAIR VALUE € 3.15

Key Messages to take from this Note

Germany will introduce its electronic ID card on November 1st 2010. OpenLimit has developed the software that powers the electronic functionalities of the ID card. The client solution AusweisApp will be rolled out to an estimated 4-6 million German citizens per year and the server solution eID server will be used by public and private institutions alike to enable secure and legally binding transactions. Hence, Openlimit is positioned at the core of the new e-ID Service infrastructure.

OpenLimit is well ahead of the field when it comes to digital signatures, digital document signing or authenticating stored documents. It currently holds the only certified EAL 4+ solution.

We see enormous potential in Fujitsu's SecDocs product, the heart of which is the OpenLimit Middleware technology for long-term storage, as we believe, that digital storage once secure and manipulation free, will take off as a mass market by corporations trying to cut down on costs. The savings of physical storage make the investment in the software look pale in comparison. We see massive opportunities for banks, insurances as well as tax and medical records. Long-term we believe that the majority of long-term storing will go digital.

We further believe that OpenLimit and its partners will extend their leadership in the German digital signature market especially on the back of the AusweisApp.

OpenLimit Holding AG

About OpenLimit Holding AG

OpenLimit stands out with its highly advanced development and marketing of customer-orientated, reliable and internationally certified signature software. OpenLimit also provides customer support with specialist expertise and the best possible service partnership synergies.

OpenLimit collaborates closely with renowned partners such as Adobe Systems, CSC, Fujitsu Technology Solutions, Ingram Micro, Microsoft, Sun Microsystems, Deutscher Sparkassenverlag, Swisscom Solutions and Siemens. Adobe Systems has developed the "intelligent PDF file" with an integrated field for generating signatures. In addition to other multimedia contents, a certified electronic signature can be generated in online forms using the OpenLimit signature software. This is legally accorded the same status as the hand-written signature in the member states of the European Union, Switzerland and many other countries.

The OpenLimit security technologies comprise universally applicable signature software with encryption functionality, which is currently the only such solution world-wide to have been certified in compliance with the Common Criteria EAL4+. The OpenLimit document technologies incorporate a PDF, PDF/A and TIFF producer and allow the user to merge or repair PDF documents. The storage technologies from OpenLimit supplement storing solutions taking into consideration legally compliant and audit-secure, long-term storages.

As well as implementation, consulting and training services, OpenLimit offers all-round, support services throughout Europe for all its products through its partner, Fujitsu Technology Solutions. The customer can call a toll-charge hotline, purchase a support package for one year, or sign a software maintenance agreement.

Recent Highlights

- **Nov 10th 2009**
awarded Bürger Client by Siemens AG
- **Feb 8th 2010**
contracted for one of the largest digitalization projects in Europe by a large German government agency
- **March 5th 2010**
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September 6th 2010

OpenLimit and Jinit[agree on online cooperation where OpenLimit will provide the IT-infrastructure for using the new eID for online services

OpenLimit was awarded the contract for one of the largest and most ambitious public sector projects in Europe. In order to reduce the amount of paper used by the administration, all documents of a large German government agency will be digitized, signed and electronically stored in order to make documents available in electronic form in the future. In addition to existing documents, new documents will also be maintained electronically.

The project volume is comprised of a fixed component for the software licenses implemented, services, software maintenance per annum and a variable component per signature to be applied to the estimated one to three billion documents. Based on these parameters, the project volume over the next five years will be in the seven digit Euro range. The parties agreed on confidentiality pertaining to exact contract conditions.

Digital Signature Market

E-Business and e-Government applications often require qualified electronic signatures as an equivalent replacement for handwritten signatures for completing legally binding contracts or administrative procedures. Therefore, the electronic ID card will be prepared to hold a qualified certificate in accordance with the German Signature Act (SigG 2001).

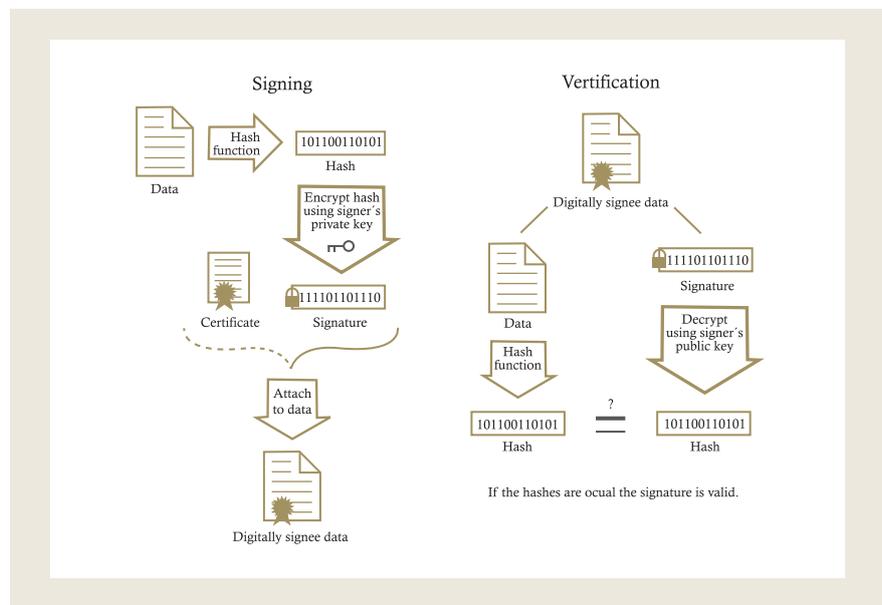
The qualified electronic signature provided by the electronic ID card (upon the holder's request) will make substantial contributions to facilitating legal transactions over the Internet. With respect to the German Signature Act (SigG 2001), only qualified signatures are equivalent to handwritten signatures. We consider two examples of possible applications in the following.

At present, employers in Germany issue about 60 million income statements for their employees per year (Federal Ministry of the Interior 2008). This practice consumes a lot of paper. An innovation referred to as ELENA (which is the abbreviation for the German expression "elektronischer Entgeltnachweis", i.e. electronic remuneration statement) is supposed to improve this situation (Federal Parliament 2008). Instead of issuing certificates on paper, employers transmit the income data electronically to a central repository. To ensure confidentiality the income data is encrypted before it is stored in the repository. Queries to the database by authorized officials can only be performed provided that the employee involved has approved. The employee may give his or her consent by registering for the ELENA procedure and providing his or her qualified electronic signature. ELENA is supposed to start in January 2012. Citizens will be able to retrieve their electronic income statements from the repository, for example in order to apply for social security benefits such as unemployment compensation, child-raising allowance or housing allowance.

One among many application scenario regarding the use of the qualified electronic signature functionality provided by the ID card is signing electronic bills. This is

an important issue in e-Business. According to the German Value Added Tax Act (Umsatzsteuergesetz, UStG), electronic bills only entitle to input tax deduction if they show a qualified electronic signature (UStG 2005, §14). Although qualified electronic signatures are already possible at present; the electronic ID card will facilitate this proceeding since issuing additional signature cards will no longer be necessary.

In terms of what OpenLimit does, we are talking of a qualified digital signature based on an EAL 4+ standard the currently most sophisticated and secure encryption out in the market.



Source: OpenLimit, Silvia Quandt Research GmbH

Additional security precautions

Putting the private key on a smart card

All public key/private key cryptosystems depend entirely on keeping the private key secret. A private key can be stored on a user's computer, and protected by a local password, but this has two disadvantages:

- __ The user can only sign documents on that particular computer
- __ The security of the private key depends entirely on the security of the computer

A more secure alternative is to store the private key on a smart card or even more conveniently on an electronic ID card (eID) which the user will always carry on his person. Typically, a user must activate his smart card by entering a personal identification number or PIN code (thus providing two-factor authentication). It can be arranged that the private key never leaves the smart card, although this is not always implemented. If the smart card is stolen, the thief will still need the PIN code

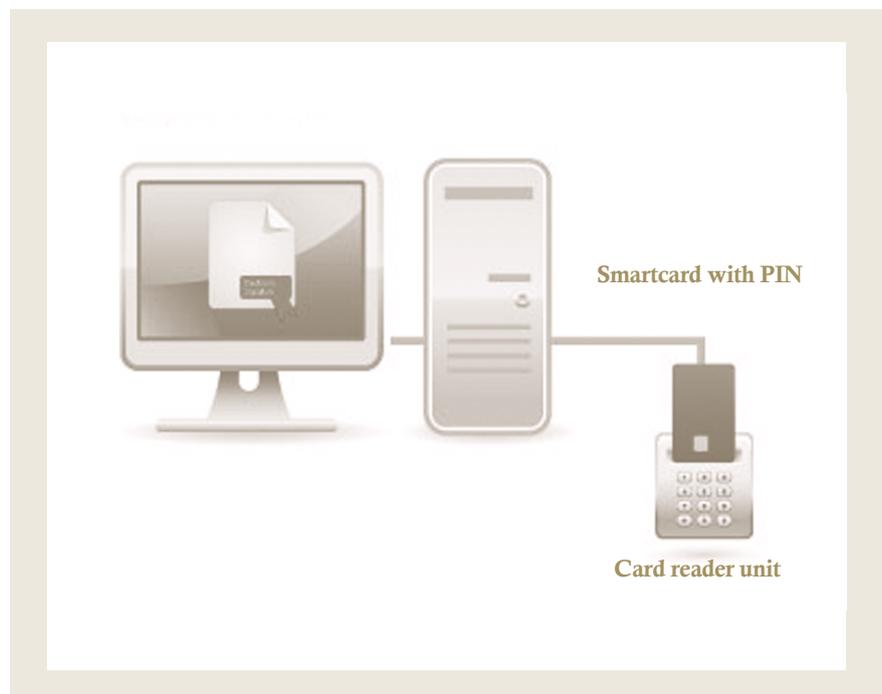
to generate a digital signature. This reduces the security of the scheme to that of the PIN system, although it still requires an attacker to possess the card.

A mitigating factor is that private keys, if generated and stored on smart cards, are usually regarded as difficult to copy, and are assumed to exist in exactly one copy. Thus, the loss of the smart card may be detected by the owner and the corresponding certificate can be immediately revoked. Private keys that are protected by software only may be easier to copy, and such compromises are far more difficult to detect.

Using smart card readers with a separate keyboard

Entering a PIN code to activate the smart card commonly requires a numeric keypad. Some card readers have their own numeric keypad (Class 2 and above).

This is safer than using a card reader integrated into a PC, and then entering the PIN using that computer's keyboard. Readers with a numeric keypad are meant to circumvent the eavesdropping threat where the computer might be running a keystroke logger, potentially compromising the PIN code.



Source: OpenLimit AG

The German electronic ID card

According to §1 of the German Identity Card Act (Gesetz über Personalausweise, PersAuswG), every German citizen aged over 16 years is obliged to hold an ID card to be able to prove his or her identity (PersAuswG 1986). The data on the ID card includes the signature and biometric photograph of the holder as well as his or her full name, day and place of birth, height, eye colour, address and citizenship.

In July 2008 the German Federal Government approved the law governing the electronic ID card. The ID card is supposed to be issued to German citizens starting November 2010. The credit card sized identification document will provide an ISO 14443 (ISO 2009) compliant contactless RFID chip. In the following we explain the three different functions of the ID card.

1. Identification (electronic passport function)

The electronic ID card may be used for identity checks within the country and also as a travel document for specific countries in substitution for a valid passport. As to the current non-electronic ID cards, personal information such as name and address will be visibly applied to the new card to allow for identity checks by visual inspection. In addition, the electronic ID card will provide biometric information about the owner. While the digitalized photograph is mandatory, each citizen may decide whether his or her fingerprints are to be stored digitally on the ID card. Biometric data is exclusively accessible to sovereign authorities.

*This area is covered
by OpenLimit*

2. Electronic identification for e-Government and e-Business applications (electronic ID function)

In addition to the human readable information on the ID card, the holder's personal data is stored securely on the RFID chip in the card. This enables citizens to authenticate against third parties such as online service providers in e-Government and e-Business. Upon the holder's request, the electronic ID function of the ID card can be activated or deactivated at any time by the competent authority, i.e. the identity cards office. Making use of the electronic ID function requires a computer and a certified card reader. The ID card holder proves his or her identity to the service provider. The service provider proves its authorization to read personal data from the card. The latter is accomplished by providing a certificate of authorization which the service provider receives from a public agency upon justified application.

*This area is covered
by OpenLimit too*

3. Qualified electronic signature

The ID card allows for an optional chargeable certificate which supports qualified electronic signatures according to the German Signature Act (Signaturgesetz, SigG 2001). Citizens who decide to include such a certificate in their ID card can thereafter use it for issuing legally binding electronic signatures as an equivalent to handwritten signatures. This facilitates many e-Government and e-Business applications.

Microsoft, Lotus Notes and most commonly used browsers. It can also be used to verify the validity of existing signatures. Documents can simply be signed with a mouse-click and converted into PDF/A format for long-term storing purposes.

Administration Client

The German government intends to introduce new identity cards (eID) capable of carrying a digital signature in November 2010 to all legitimate citizens. Last October a test involving 30 companies to enable them to conduct online business within a legal and recognised framework was started.

To achieve this, the German government intends to introduce the AusweisApp to use the eID functionality of these new identity cards. Companies bidding to deliver this client need to have fully functional software running by 31 October 2010 and also need to provide an eID-Service, which is a server product used by companies and government agencies to authenticate eIDs.

This probably surprised some companies pitching for the deal since not only the client but also the processes behind it were needed. This is probably why the consortium led by Siemens AG and involving both the Bundesdruckerei and OpenLimit AG won the pitch.

eID middleware

This is what OpenLimit does for the AusweisApp

Specific middleware intended to be used together with the card has been developed by OpenLimit. The middleware is necessary for the interaction between the eID card and the application on the user's computer. Before using the eID card for the creation of electronic signatures, the user needs to download and install the middleware on his/her computer. In Germany the eID middleware should permit Online authentication.

The middleware is implemented into each specific application by bridging between the applications itself and the device actually performing the cryptographic operations (the eID card, in conjunction with the compatible card readers). It consists out of two independent interface implementations.

For Microsoft® standard applications, a so-called Cryptographic Service Provider implements the cryptographic operations from the smartcard. An application calls this implementation through a standard interface called Crypto API. This API enables application developers to add authentication, encoding, and encryption to their Win32®-based applications. Application developers can use functions in the CryptoAPI without knowing anything about the underlying implementation, in much the same way as they can use a graphics library without knowing anything about the particular graphics hardware configuration. The middleware establishes the link between the abstract CryptoAPI and the underlying PKCS#11 interface.

Secondly, typically in non-Microsoft applications, the PKCS#11 (v2.11) interface is used. Custom applications can also make use of this interface instead of the CryptoAPI interface. The PKCS#11 interface is sometimes also called Cryptoki.

If a signature is requested with the signature key, the middleware will show a user interface to either ask the user to enter a PIN, or ask the user to supply a PIN at the PIN pad reader. Noteworthy is that the Belgian eID card currently uses one PIN for accessing the authentication and the signature key.

Stork

The aim of the STORK project is to establish a European eID Interoperability Platform that will allow citizens to establish new e-relations across borders, just by presenting their national eID.

Cross-border user authentication for such e-relations will be applied and tested by the project by means of five pilot projects that will use existing government services in EU Member States. In time however, additional service providers will also become connected to the platform thereby increasing the number of cross-border services available to European users.

Thus in the future, you should be able to start a company, get your tax refund, or obtain your university papers without physical presence; all you will need to access these services is to enter your personal data using your national eID, and the STORK platform will obtain the required guarantee (authentication) from your government.

User-centric Approach = Privacy Guarantee

The role of the STORK platform is to identify a user who is in a session with a service provider, and to send his data to this service. Whilst the service provider may request various data items, the user always controls the data to be sent. The explicit consent of the owner of the data, the user, is always required before his data can be sent to the service provider.

This user centric approach was not taken to satisfy some philosophical preferences, but in line with the legislative requirements of all the various countries involved that oblige concrete measures to be taken to guarantee that a citizen's fundamental rights, such as his privacy, are respected.

The first prototypes for this approach were developed by OpenLimit.

SecDocs - Long Term Storage

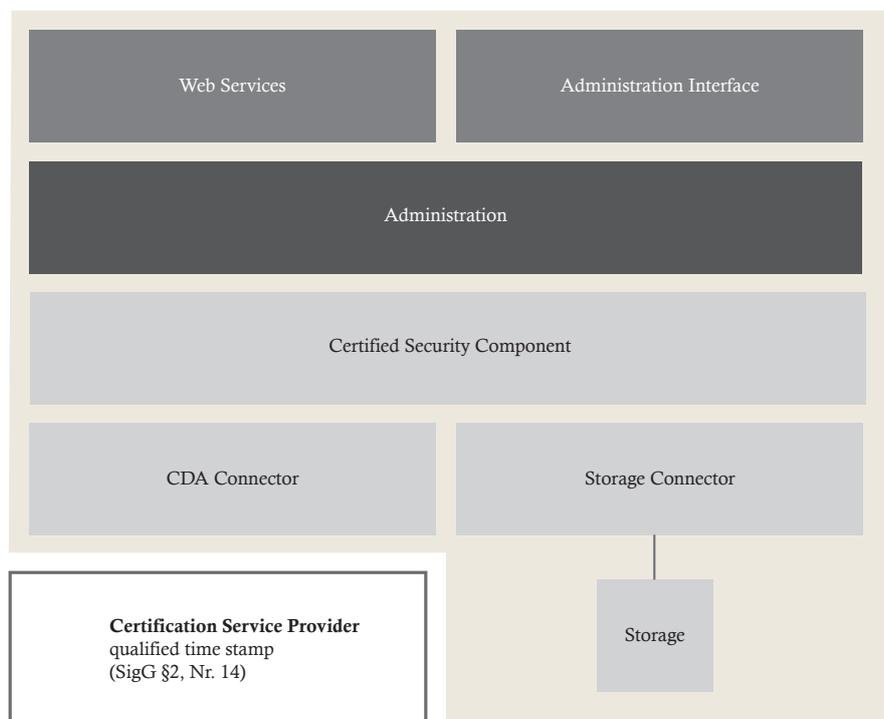
SecDocs is a service-oriented storing solution that enables provable long-term storing of documents via time stamps and electronic signatures. The solution is the result of intensive collaboration between Fujitsu, OpenLimit and NetApp and unites their know-how from their respective areas of competence. The solution is multilayer-modular, can be used by multi-clients and was developed for the most commonly used operating systems and middleware solutions. An extensive range of connectors enables the connection to different storage systems and trust centres, enabling users to implement the solution flexibly.

In order for users to utilize the full functional spectrum of the solution, Fujitsu developed enterprise functions and complemented these with storing functions. This guarantees an extremely high availability and failure safety of the solution. The technologies which preserve the evidentiary value of electronic documents were developed by OpenLimit. With evidence records being integrated into the storage

environment, users can easily transfer data to other storage technologies – regardless of the application being used today. The revision-safe data storage systems of NetApp complete the scope of services of the solution. During the implementation SecDocs into existing dynamic IT infrastructures, Fujitsu supports its customers with extensive support services.

On March 5th 2010, Fujitsu and OpenLimit received the BSI-Certification-ID for the Long-Term Storing Solution SecDocs. The certification is subject to international security criteria “Common Criteria EAL4+” on the basis of the ArchiSafe-protection profile and the technical guideline 03125. SecDocs, i.e. the base technologies of SecDocs, responsible for provable long-term storing, is the first solution to be evaluated by the BSI.

SecDocs is designed to make paper records redundant. Digital documents have always been vulnerable to tampering, which has severely hampered their value as written evidence. SecDocs uses date stamps and electronic signatures to make electronic documents tamperproof and safeguard their evidential value thereby facilitating the replacement of paper with digital documents. We estimate that the cost savings just taking tax records, bank/transaction records as well as insurance records to be several hundred million € annually.

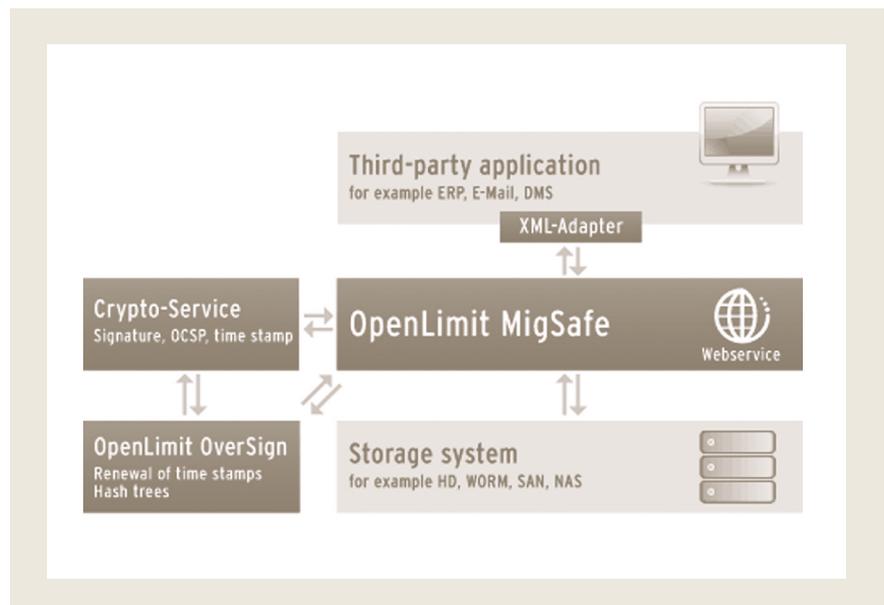


Source: Fujitsu.com

We believe SecDocs and similar products to be a market worth hundreds of millions of Euros. We also believe that OpenLimit and Fujitsu are perfectly placed to take a significant market share in the storing market which should make up the majority of future earnings.

MigSafe

OpenLimit MigSafe is an overall middleware solution. It allows customers to move files from any specialist application to a suitable storage medium with the MigSafe middleware. The technology relies on a globally deployable Web service technology and XML-based document containers with unique identification numbers. This will guarantee loss-free migration of digital storage in the future – thus electronic documents will still be readable in 100 years.



Source: OpenLimit AG

SWOT Analysis

Strengths

- Strong links to industry standards and leading players such as Microsoft, Siemens, Fujitsu Technologies and Adobe. Seal of approval by the German state and state institutions. Exclusive Partner for the German AusweisApp (Middleware).
- Strong and diversified product portfolio.
- Strong partnership with Fujitsu leading to the only global digitally signed storing solution (SecDocs).
- The first and currently still only company with a certified digital signature product according to Common Criteria EAL 4+.

Weaknesses

- Market still small and fragmented. A lot of upfront investments needed for Europe wide (global) certification.
- Many projects take years to reap benefits meaning up-front investments and long periods of return. OpenLimit is dependent on the market development.
- The dilution of shareholder interests in the past has spooked many investors. OpenLimit needs to ensure that existing shareholder interests are properly honoured going forward. We believe that this was caused by an extraordinary situation that should not repeat itself.
- Dependent on Siemens for the Ausweisapp since Siemens has the general contract. OpenLimit is the junior partner.
- OpenLimit is dependent on regulatory factors as well as political manoeuvring.

Opportunities

- __ Nearly limitless. From legal emails to contracts, from doing business with local authorities to secure shopping on the internet. We are talking mass market applications.
- __ With an electronic identification card on the programme of several European governments and, new forms of digital health cards => scalability.
- __ Corporations can assure that documents sent and received are not manipulated. The same goes for emails., again we are talking scalability.
- __ Long-term storing. An increasing number of digitally signed documents will need to be stored securely and checked for manipulation in regular intervals in order to maintain their legal enforceability. Together with Fujitsu, OpenLimit has developed a solution which will be rolled out globally.

Threats

- __ Delays in large projects can cause a liquidity squeeze as well as negative perception.
- __ OpenLimit's competitive lead could be eroded as new technologies/algorithms emerge.
- __ The technology could be Integrated into an OS (i.e. by Microsoft) or into a product like Acrobat (Adobe). Also one of the global IT services companies like IBM could develop a similar solution and use its huge marketing muscle to penetrate markets.
- __ Electronic signature applications could fail to achieve widespread market acceptance.
- __ The current discussions about the safety and security of the German eID card.

Financials

Income Statement

<i>CHFm</i>	2009	2010e	2011e	2012e	2013e
Revenue	6,587,862	8,234,828	10,293,534	13,896,271	19,454,780
add S/W development	2,972,482	3,685,878	4,607,347	5,298,449	2,649,225
Total Income	9,560,344	11,920,705	14,900,881	19,194,721	22,104,005
Cost of goods sold	135,213	184,771	312,919	479,868	552,600
Personel expenses	6,653,574	6,986,253	7,824,603	8,998,293	10,078,089
Depreciation	1,977,831	2,432,679	3,040,849	3,496,976	1,748,488
Operational expenses	2,024,208	2,226,629	2,800,000	3,000,000	2,500,000
Income from Operations	-1,230,482	90,373	922,511	3,219,583	7,224,828
Financial Income	17,253	22,500	1,500	2,200	45,000
Financial expense	171,467	675,000	250,000	275,000	12,500
Income before Taxes	-1,384,696	-562,127	674,011	2,946,783	7,257,328
Taxes	580,514	0	375,000	180,000	1,306,319
Net Income	-804,182	-562,127	1,049,011	3,126,783	5,951,009
Dividend paid	0	0	0	2,000,000	3,000,000
Net income after dividends	-804,182	-562,127	1,049,011	1,126,783	2,951,009
Shares outstanding	16,797,412	18,086,885	18,086,885	18,086,885	18,086,885
DPS	0.00	0.00	0.00	0.11	0.17
EPS	-0.05	-0.03	0.06	0.17	0.33

Source: Silvia Quandt Research GmbH

Balance sheet

<i>CHFm</i>	2009	2010e	2011e	2012e	2013e
Receivables	7,305,910	6,879,000	8,195,485	8,637,624	9,946,802
Cash and equivalents	1,357,773	422,500	600,500	1,850,000	3,550,000
Current Assets	8,663,683	7,301,500	8,795,985	10,487,624	13,496,802
Intangible Asset	4,682,915	5,936,113	7,502,611	9,304,084	10,204,820
Plant & Equipment	144,769	150,000	155,000	185,000	198,000
Non-current Assets	4,827,684	6,086,113	7,657,611	9,489,084	10,402,820
Total Assets	13,491,368	13,387,613	16,453,596	19,976,708	23,899,623
Share capital	5,276,066	5,276,066	5,276,066	5,276,066	5,276,066
Share premium	11,063,645	11,063,645	11,063,645	11,063,645	11,063,645
Provisions for Bonuses	1,412,716	1,624,623	1,868,317	2,148,564	2,470,849
Accumulated profit (loss)	-5,032,553	-5,836,735	-6,398,862	-5,349,851	-4,223,068
Equity	12,719,874	12,127,599	11,809,166	13,138,425	14,587,492
Accounts payable	492,484	802,844	3,668,687	5,502,732	6,952,130
Tax liabilities	18,784	0	325,743	585,552	1,535,000
Current liabilities	511,268	802,844	3,994,430	6,088,284	8,487,130
Pension liabilities	260,226	457,170	650,000	750,000	825,000
Total equity & liabilities	13,491,368	13,387,613	16,453,596	19,976,709	23,899,622

Source: Company data, Silvia Quandt Research GmbH

N.B. We expect OpenLimit to change its accounting to Euros in 2011 which will avoid Forex swings affecting the P&L. The 2010 financial expenses includes CHF 500' FX losses which mostly are non-cash flow relevant

Conclusion

OpenLimit is one of the best positioned companies to play the current and future trend of qualified digital signatures and, electronic storing. Providing a software capable of signing any document on any platform, we believe that OpenLimit is technologically well ahead of the competition.

We believe that similarly to digitalisation this will become a huge market in the next few years and that now is the time to position oneself.

We remain comfortable with our €3.15 price target given the huge market opportunities and the new visibility with the introduction of the German eID card on November 1st. We believe that OpenLimit can and will gain further storing wins in the next 12 months together with its partners.

We remain a Buy on OpenLimit with a price target of €3.15

This analysis was prepared by Jacques Abramowicz, Head of Technology, Media and Telecommunications and was first published 27 October 2010. Silvia Quandt Research GmbH, Grüneburgweg 18, 60322 Frankfurt is responsible for its preparation. German Regulatory Authority: Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), Graurheindorfer Str. 108, 53117 Bonn and Lurgallee 12, 60439 Frankfurt.

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Number of recommendations from Silvia Quandt Research GmbH in 2010	Thereof recommendations for issuers to which investment banking services were provided during the preceding twelve months
Buy 61	28
Neutral 20	2
Avoid 7	0

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- (b) has **lead managed or co-lead managed** a public offering of the securities of the company or companies in the previous 12 months;
- (c) has provided **investment banking services** for the company or companies analysed during the last 12 months for which a compensation has been or will be paid;
- (d) is serving as a liquidity provider for the company's securities by issuing buy and sell orders;
- (e) is party to an agreement with the company or companies that is the subject of the analysis relating to the production of the recommendation;
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