

# OpenLimit

Technology leader in the area of electronic authentication, signature, data transfer and long-term storage solutions

# **Company Presentation**



- Secure Electronic Handshake -

May 2015



- Introduce OpenLimit and its unique positioning in the growth market of high-end security technologies to protect critical infrastructures
- Present the investment opportunity for those seeking exposure to
  - Megatrends of the Internet of Things (IoT), "smart grid" and telematics technologies, Industry 4.0, legal compliance, and the combat against cyber crime / hacking attacks, with a focus on securing networks and devices, communication and data transfer as well as long-term archiving
  - Regulated sectors such as Energy, Healthcare, eGovernment and also Gaming where certified technology is already or will be key
  - Business with proven leadership position in Germany and international reach
  - Overview of Financials 2014
- Address your questions



# OpenLimit's Vision – Cipen Limit Secure Electronic Handshake

#### **The Problem:**

Cyber crime, hacking attacks, eavesdropping, insecure data channels. Who am I dealing with? Who / what can I trust? For how long?

#### **Our Mission:**

Our technologies enable people and machines globally to communicate without limits in ways that are *secure, verifiable* and *identifiable* 







- USP: first company in the world to have the highest international security standard for signature software (Common Criteria EAL 4+). The company's expertise in the area of certified IT security is the key to opening up other business segments.
- Important contracts in recent years:
  - Developed the first generation AusweisApp, the user software for the new ID card (nPA) in Germany, as well as the eID server
  - Exclusive partnership with Power Plus Communications AG for development of a Smart Meter Gateway to secure the transfer of electronic meter data
  - Exclusive contract with T-Systems to develop the "Konnektor" for the healthcare market
  - Partner of Fujitsu for the biometric authentication solution Fujitsu PalmSecure truedentity, whereby truedentity was developed by OpenLimit
  - Exclusive global cooperation partner of Fujitsu for evidentiary value-preserving long-term storage of electronic files (certified product "Fujitsu SecDocs powered by OpenLimit")
- Corporate structure: headquarters in Baar (Switzerland) and an office in Berlin. 68 people currently employed.
- Listed on the stock exchange in Germany (symbol: O5H)





## Board of Directors



René C. Jäggi President, Delegate



Professor Radu Popescu-Zeletin Member

## Management Board



Marc Gurov Chief Executive Officer



Reinhard Stüber Sr. Vice-President

Armin Lunkeit Chief Development Officer



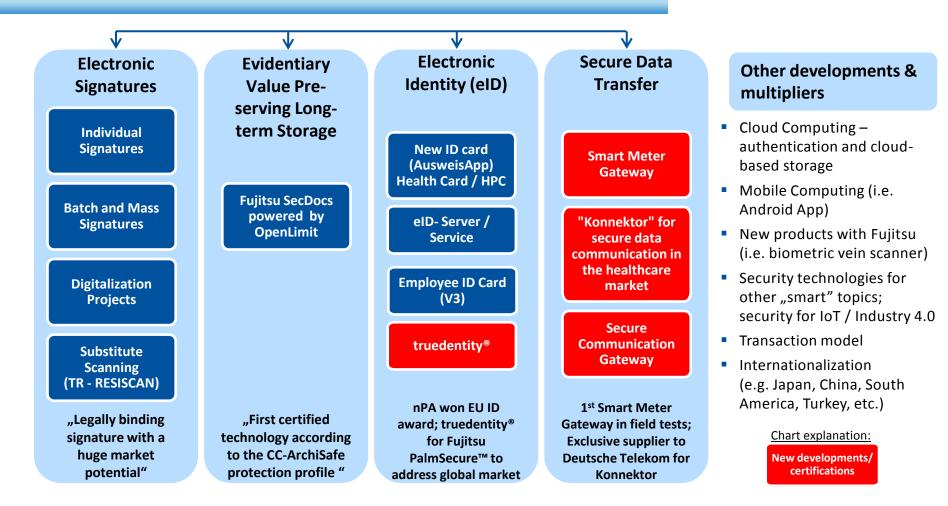
Maik Pogoda Chief Commercial Officer



Christian Fuessinger Chief Financial Officer

Change to the Management Board in the spring of 2014 – new CCO to strengthen the sales team

# 4 Pillars to Bundle the Strengths of Copen Limit OpenLimit as a Technology Leader

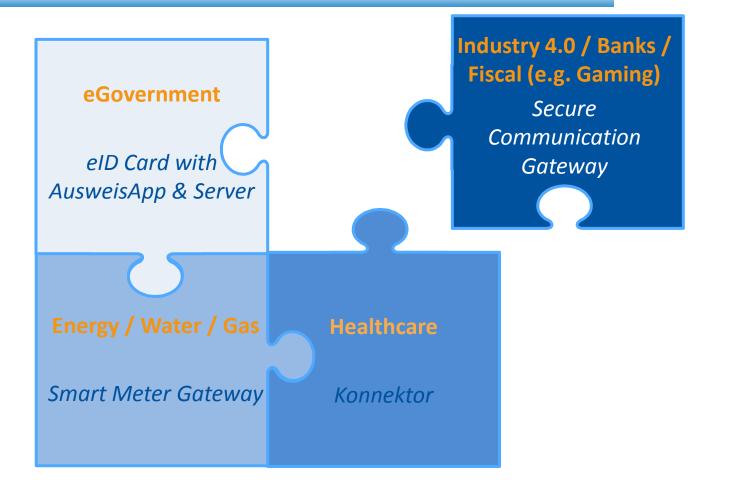


The product portfolio has been rebalanced over the past several years and now includes certified technologies for "Secure data transfer" as the fourth main pillar



# Securing Critical Infrastructures -Current Product Portfolio

# We Secure Critical Infrastructure Copen Limit Components with Certified Technology



OpenLimit has developed and maintains the software solutions for the critical online security infrastructure for the Government ID card, and is developing key security components for the Energy as well as the Healthcare sector in Germany







- Software for citizens that wish to use their German national ID card for authentication processes vis-à-vis government and industry applications
- > OpenLimit developed the software for Atos (formerly Siemens IT Solutions & Services), the general contractor for project of the German Federal **Department of The Interior**
- OpenLimit has developed and maintains the eID-Server,
  - > Server software utilized by authorities and companies that wish to integrate the national ID card in their online processes
  - > The eID-service of the Bundesdruckerei is based on the OpenLimit eIDserver
- **OpenLimit** has acquired **customers** and service providers for the eIDserver, such as: Datev, init, KDRS and Worldline





Age Verification

Citizen Services

Info Terminals

**Electronic Signature** 



Access Controls



Online Registration

Automatic Filling of Forms

Barrier-free Internet Services

**OpenLimit has developed software components for the critical** online security infrastructure for the German ID card

# Next step in eID: Secure Authentication for cross-vertical markets

- truedentity® FUJITSU
- New solution for digital identities increases access security for cloud services, online applications, physical access control, internet-of-things etc.
- Based on developments for the highly secure eID infrastructure of the German ID card
  - <u>Backend</u>: truedentity<sup>®</sup> server with the option of extending to the eID server helps to reduce costs and guarantees the security of the investment
  - Frontend: flexible, i.e. depending on the security requirement and use case, different clients can be used: software tokens, USB sticks and mobile apps, biometric devices or the new ID card
- In addition to authorities, particularly attractive for the strong user authentication in the corporate environment and context of Industry 4.0
  - ➢ <u>Plant security</u>: truedentity<sup>®</sup> as a standard software solution for Fujitsu PalmSecure<sup>™</sup> hand vein scanner and ID Match currently being realized. Use cases: admission/access control; time recording; cashless payment
  - Network security: patent pending for highly secure truedentity<sup>®</sup> version ("Basalt"), for secure access to networks providing protection against man-in-the-middle hacking attacks and other "cyber security" threats, including in banks

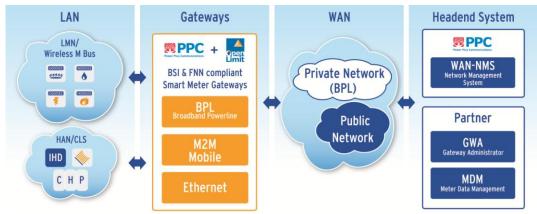
truedentity<sup>®</sup> makes highly secure authentication possible – for both people <u>and</u> machines







- Smart Meter Gateway
- OpenLimit is developing a Smart Meter Gateway together with partner PPC (Power Plus Communications)
- According to an EU directive, secure data transfer is the key prerequisite for intelligent energy grids ("smart grids")
- The new German Energy Industry Act (EnWG) requires implementation of a Smart Meter Gateway for certain user groups
- OpenLimit / PPC have a leading market position:
  - > First application for BSI-certification filed in Germany
  - > First pilotable Smart Meter Gateway developed
  - First BSI-SMGW pilot project in Germany in the form of a field test at the Düsseldorf municipal works; To-date pilots with 3 of the major 4 energy providers
  - Only supplier on the market offering SMGWs with three different communication modules: Broadband Powerline, M2M (mobile) & Ethernet
  - Interoperability e.g. integration with all leading GWA (Gateway Administration) partners as well as various smart meter company solutions



E-World 2015: OL-PPC SMGW demonstrated by:



OpenLimit / PPC are developing a FNN-compliant SMGW with full systems interoperability and a choice of three different communication modules OpenLimit is also getting

positioned for other European Energy markets

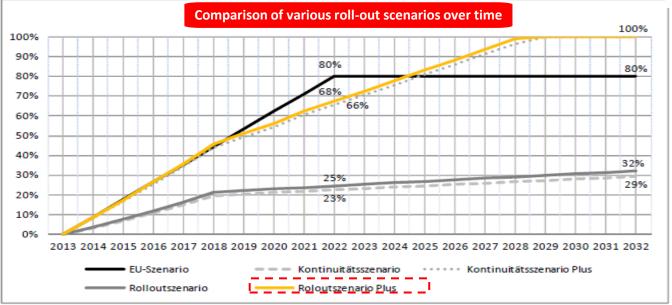




## **Market Potential (Germany)**

- 2013/07/30: Ernst & Young publishes study carried out on behalf Ministry of Economic Affairs and Energy or the BMWi
  - The recommended "rollout scenario plus" provides for the mandatory introduction of 11.9 million Smart Meter Gateways before year 2022
  - Further potential of ca. 3 million for OpenLimit / PPC based on the advantages of SMGWs compared to metering systems without SMGW





Source: Ernst & Young cost-benefit analysis (30/07/2013)

- 2015/02/09: Ministry publishes "Key principles for ordinances governing smart grids"
  - : Start of mandatory rollout delayed until 2017/01/01
  - + : certainty of rollout, €100 p.a. cost limit and "grandfathering" of installed SMGW base underpins commercial case → earlier roll-out push by energy companies likely

# Secure Data Communication Cpen Limit for Healthcare Market ("Konnektor")

- Healthcare telematics allows the secure connection of the IT systems of all service providers (doctors' practices, hospitals, pharmacies)
- Advantage for the patient data protection and data security:
  - Replacement of insecure media (e.g. CD-ROM, USB stick) when exchanging sensitive data, as in future such exchanges will take place in a closed network made up of trustworthy participants
  - Access to patient data when the patient and the doctor authenticate each other with smart cards (electronic healthcare card or health professional card)



Konnektor

**T**··Svstems··

- The Konnektor is one of the key security components for IT access in the German healthcare system
  - The Society for Telematics Applications of the Healthcare Card (gematik) invites tenders for development of the Konnektor
  - 12/2013: T-Systems is awarded the contract for one of two lots to set up the healthcare telematics infrastructure
  - > At the same time, OpenLimit receives an exclusive order to develop a Konnektor for T-Systems
  - > The Konnektor facilitates synergies with further development of the SMGW and signature technologies
  - Since the security and reliability of the Konnektor has a decisive influence on the security of the telematics infrastructure, security testing and certification from the BSI is required
  - > In the subsequent nationwide rollout phase, OpenLimit will function as T-Systems' exclusive supplier

## **OpenLimit develops the key security component for the healthcare market**

- > Exclusive order from T-Systems in the solid 7-digit EUR range
- Market potential: in the nationwide rollout, 196'000 doctors, 21'000 pharmacies, 2'000 hospitals and 200 health insurers will be serviced
- Rollout expected to begin on 01.07.2016

# Market Potential (5+ Years) – Selected Existing Projects Limit (based on project <u>contribution margins</u>)

## **Smart Meter Gateway**

#### Market potential

(Source: E & Y Cost-benefit Analysis commissioned by German Government)

11.9 m (E&Y rollout+ scenario) <u>3.0 m (replace IHD meters)</u> ca.15.0 m SMGWs

## Market share 25%-30%

- ✓ Leader in SMGW development
  - 1st registration for certification
  - 1st pilotable device (now 4 pilots)
- ✓ Best positioned with top players
  - Partner PPC leader in BPL
  - Reseller contract with Elster
  - Siemens, Worldline, Bosch, Cuculus, itron, Robotron working with SMGW from OL / PPC
  - e.on, RWE, Stadtwerke DUS etc.

## Konnektor

#### Market potential

(Basis: market participants healthcare sector Germany)

#### Standard Konnektor

Doctors / surgeries	196,000
Pharmacies	21,000
Total	217,000

Highspeed-Konnektor-Server Hospitals 6,000

## Market share 25%-50%

- Two separate consortia won tender for subsidised development of Konnektor
- ✓T-Systems (Deutsche Telekom) as market leader awarded exclusive supplier contract to OL
- Price point / margins expected to be higher than for SMGW (additional features)

# truedentity®

# Market potential – high but difficult to estimate

- Currently highly fragmented market for high-security authentication but elevated levels of security in strong demand
- Applications: Access control, time records, cashless payments, unique authentication, etc.

## Strong partner in Fujitsu

- truedentity<sup>®</sup> based on technologies developed for German ID card → sophisticated & proven
- Fujitsu hold global patent on hand vein scanning technology, the most secure biometric feature
- ✓ truedentity<sup>®</sup> as standard software solution for Fujitsu PalmSecure<sup>™</sup>
- ✓ Joint business model/global rollout

Potential Contribution Margin

€ 65-110 m

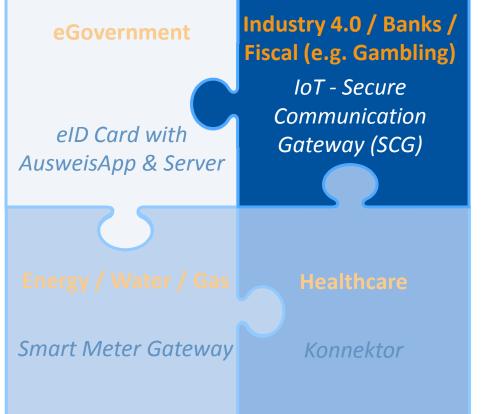
*Note*: Rough estimates subject to potential project / rollout delays and significant execution risks. Does not include cross-selling and follow-on sales opportunities, replacement cycles etc..



# A Security Platform for the "Internet of Things" including Industry 4.0





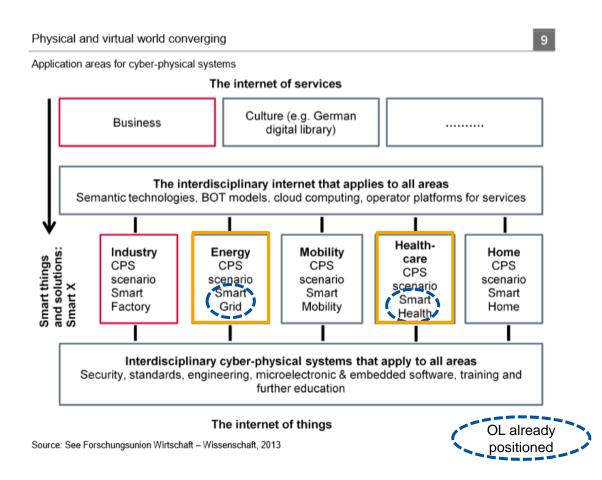


# SCG - key functionalities

- Identity of people & machines
- Secure remote & physical access
- > Update mechanisms

OpenLimit is combining its current portfolio of security technologies for critical infrastructure to provide solutions for the needs of a broad range of industries

# Everything Gets Connected in the Upen Limit Internet of Things. But: Data Security?



### Security of utmost importance:

"Data Security is a Prerequisite for Succesful "Industrie 4.0" Implementation"

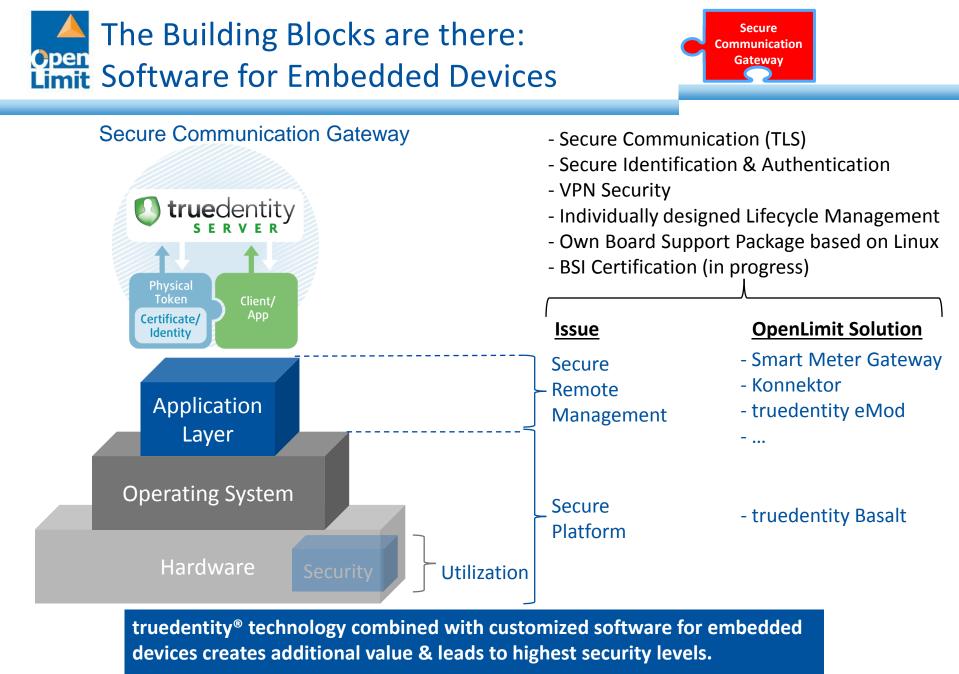
(Source: Joint press release of Infineon Technologies and Deutsche Telekom, 21 Oct 2014)

#### Investment need:

"To assume a leading role in Industry 4.0, Europe will have to invest EUR 90 bn a year over the next 15 years – a total of EUR 1,350 bn"

(Source: Roland Berger, Report The new industrial revolution – how Europe will succeed, p 15, March 2014)

As more and more and even the simplest devices get connected online, ensuring cyber security is a key prerequisite for smart technologies to finally take off. OpenLimit has already gained leading positions in 2 of the 5 markets depicted (Energy and Healthcare)

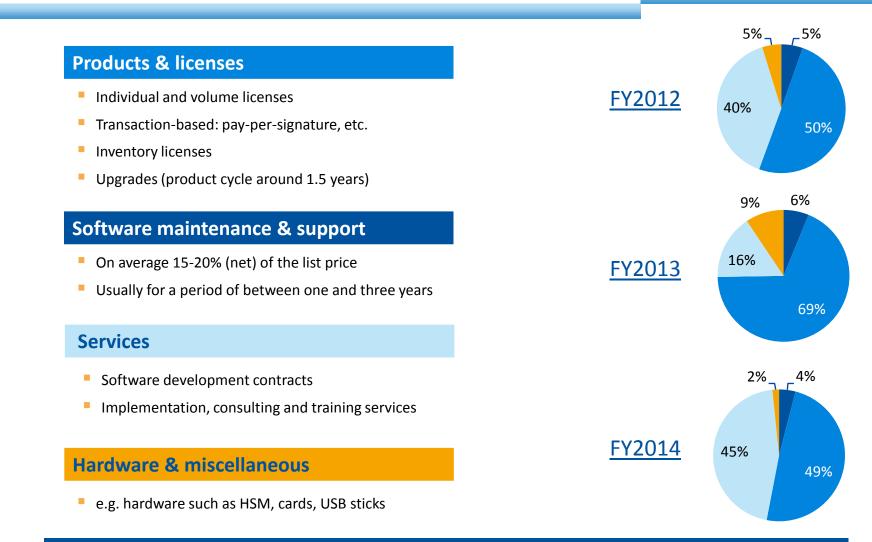


Limited investment need to combine existing technologies.



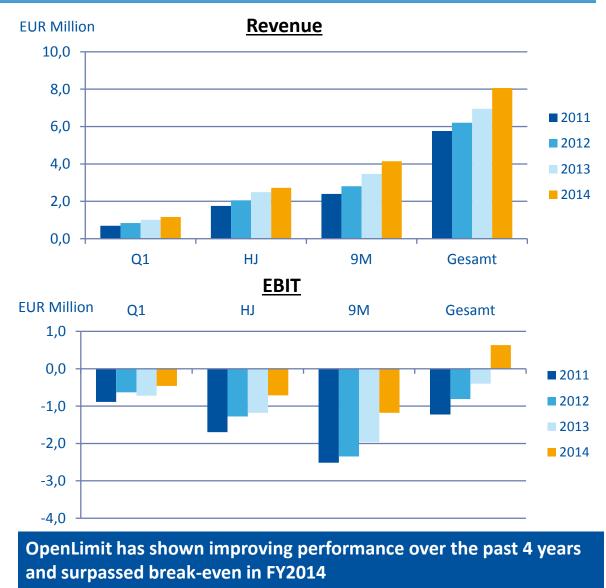
# **Financial Update**

# Open Limit How Does OpenLimit Generate Sales?



Focus on licensing & transaction revenues but services also important. Hardware revenues likely to increase significantly (Smart Communication Gateway)





# What are others saying about OpenLimit? Limit The Perspectives of Equity Analysts

- In 2014, OpenLimit was able to achieve a result in line with expectations of equity research analysts
  - Revenue of around EUR 8.0 million
  - > Operating result: EBIT of EUR 0.6 million surpassed the breakeven point

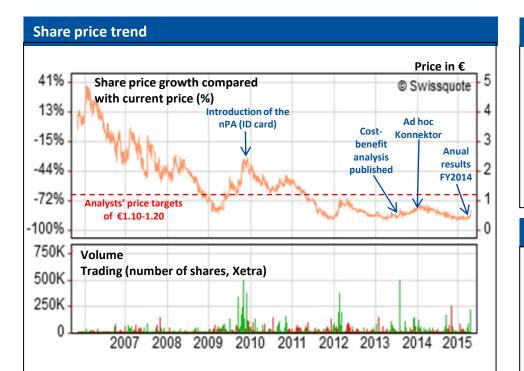
Analyst	Date	Revenue (€ million)					Net result (Mio. €)			Recom- mendat-	Target price	
		2015	2016	2017	2015	2016	2017	2015	2016	2017	ion	(€)
First Berlin (Dr. Karsten v. Blumenthal)	30/04/2015 Growth margin	<b>9.1</b> +13%	<b>10.5</b> +15%	<b>13.6</b> +30%	<b>0.7</b> 7.4%	<b>1.4</b> 13.2%	<b>2.7</b> 19.8%	<b>0.3</b> 3.1%	<b>1.1</b> 10.1%	<b>2.1</b> 15.6%	Buy	1.10
Montega AG (A. Braun / A. Drews)	<b>24/04/2015</b> Growth margin	<b>8.9</b> +10.3%	<b>10.5</b> +18%	<b>12.6</b> +20%	<b>0.8</b> 9.3%	<b>1.6</b> 15.6%	<b>2.7</b> 21.6%	<b>0.3</b> 3.4%	<b>1.0</b> 9.5%	<b>1.5</b> 11.9%	Buy	1.20

#### Additional upside possible

- > truedentity<sup>®</sup>, Konnektor order and Smart Meter Gateway only partially included by analysts
- Current developments like match-on-device / hand vein scanner (Fujitsu), the Japanese signature market (and other countries), secure communication gateway not yet taken into consideration
- > Good pipeline with partners, but low visibility for own invoicing of sales (e.g. SecDocs)
- > Operating leverage for licensing models can allow profitability to increase disproportionately

Positive outlook is also confirmed by equity analysts.

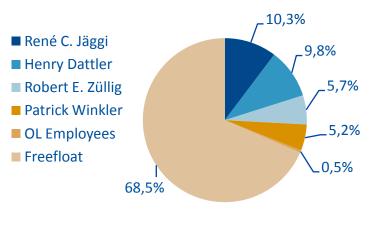
Effect of current developments to some extent not yet quantified in research



- Overt the past 12 months the OpenLimit share price has traded in a range of €0.33-0.82, significantly below research ratings
- Goal close valuation gap on the back of positive newsflow, stable sharholding, and strategic developments

#### **General information on O5H share**

#### **Shareholding Structure**



## Despite the positive outlook trading in O5H has been weak → Considerable upside potential



**Only company** in the world to offer the **highest international security standard** for signature software (Common Criteria EAL 4+)

**Experience in delivering lighthouse projects**: Exclusive supplier to Siemens / Atos of the AusweisApp, the user software for the new German ID card, which has been issued to 6-8 million citizens per year since November 2010

Through its **cooperation with reputable partners** and thanks to its technological advantage, OpenLimit is in a **favorable position in growth markets** such as "smart" technologies, Internet of Things and Industry 4.0

- In 2015, OpenLimit is expected to offer the first CC-certified Smart Meter
   Gateway technology on the German market
- Exclusive contract with T-Systems for the development of the Konnektor for the healthcare market
- ✓ truedentity<sup>®</sup> is a highly sophisticated eID technology which will be offered together with the Fujitsu PalmSecure<sup>™</sup> hand vein scanner (ID Match) solution
- Together with Fujitsu, OpenLimit offers the first certified solution of its kind for evidentiary value-preserving **long-term storage** of electronic documents

OpenLimit's business model is shifting towards high-margin licensing and transaction revenues as well as development contracts

**Data protection and security** play an ever more important role. **New business segments are opening up** here for OpenLimit, which can be served by leveraging existing technology building blocks with strong partners





# Select References & Further Details

# Providing Secure, Certified IT Solutions Contemporation for the secure of th

<u>eID-Server</u> for public authorities and industry clients

AusweisApp Client Software for all German ID-Card Holders

Atos



#### Bundesagentur für Arbeit

<u>OpenLimit CC-Sign</u> Client Software for eSignatures

#### <u>BatchSign</u>

Client software for the digitization of documents

#### Fujitsu SecDocs powered by OpenLimit Solution for long-term data storage

Secure Data Communication Technologies



<u>truedentity®</u> Authentication technology for Fujitsu PalmSecure™ (hand-vein scanner)

Fujitsu SecDocs powered by OpenLimit

#### **BatchSign**

**T**··Systems···

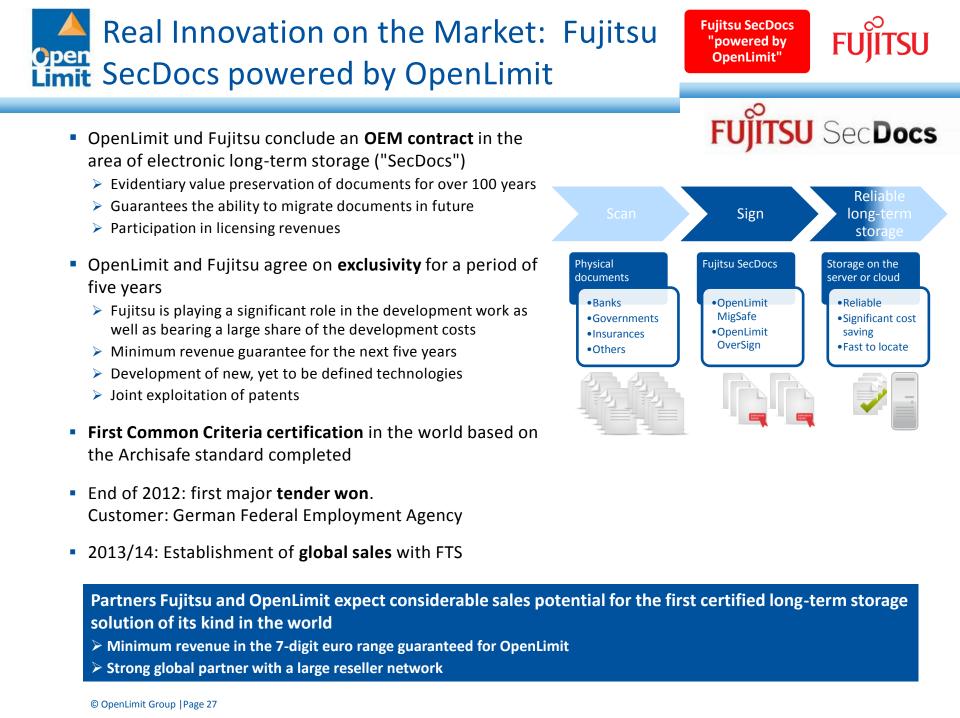
#### <u>Konnektor</u> Device for secure transmission of patient data in the healthcare market





#### Smart Meter Gateway

Device for secure transmission of electrical consumption data





- OpenLimit technologies are already being used in Europe's largest digitalization project (DiBAS)
  - Billions of social insurance documents from the Federal Employment Agency are scanned by Deutsche Post and Fujitsu with the help of OpenLimit technologies
  - > Tender accepted back in 2010, operational use started in mid-2012
  - Follow-up order DiBAS II already received
  - > Transaction model with revenue generated for each scanned document
- New Technical Guideline "TR RESISCAN" published as a guideline for "Replacement Scanning" in 2013
  - The aim is to file documents digitally after the scanning process so that the original paper document can be destroyed
  - From a technological point of view, the OpenLimit signature components are in compliance with the requirements of TR RESISCAN
- New Client product release of OpenLimit CC Sign (Nov. 3<sup>rd</sup>, 2014)
  - Version 2.8 replaces all previous versions and meets the highest technical standards and contains attractive additional functions
- Next steps:
  - Printers/scanners should be coupled with OpenLimit technologies, so that documents can be signed and filed during the scanning process
  - > Internationalization: first customers in Japan for OL signature technologies

#### OL is a leader in the signature market and is well positioned for the future:

- > Important experience gained in the processing of large digitalization projects
- OL signature components certified and already in compliance with TR-RESISCAN
- > Important building block to deliver projects such as Konnektor



Electronic Signature FUJITSU

Strategy, Roadmap & Growth Development Limit (Equity Research Forecast – Median in €M)

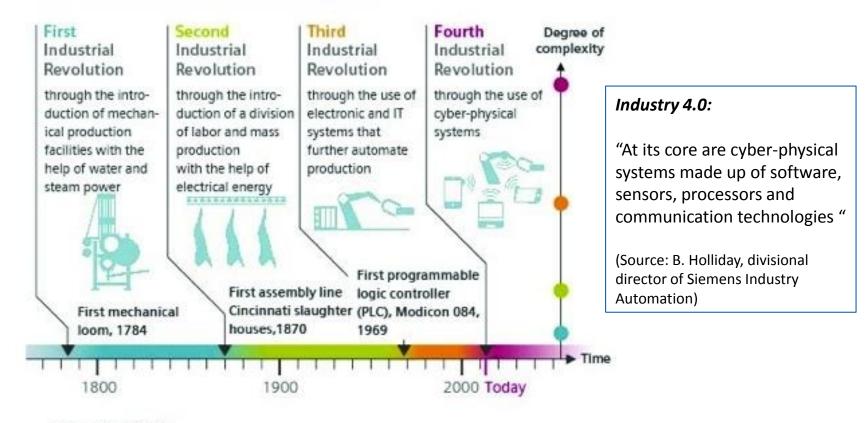


As technological leader, OpenLimit is well positioned to benefit disproportionally from expected growth dynamics in the market



Secure Communication Gateway

## From Industry 1.0 to Industry 4.0



Source: DFKI (2011)

Intelligent factories that link up every part of the production chain with next generation wireless automation could mark a sea change in manufacturing

# Key Financial Figures (A Comparison Limit between 2014 and 2013)

	CHANGE IN %	01.01.2014 - 31.12.2014	01.01.2013 - 31.12.2013
INCOME STATEMENT		IN EUR	IN EUR
Revenue	16%	8'066'219	6'954'890
Total income	18%	11'036'949	9'375'849
EBITDA	52%	3'270'183	2'157'281
EBIT	260%	629'615	-393'869
(-) Loss / Profit for the period	123%	139'481	-610'697
Result per share - basic & diluted	123%	0.007	-0.032
BALANCE SHEET		31.12.2014	31.12.2013
Balance total	9%	13'523'772	12'374'307
Current assets	12%	7'291'823	6'487'257
Non-current assets	6%	6'231'949	5'887'050
Current liabilities	39%	4'076'701	2'942'148
Long term liabilities	-8%	1'338'386	1'454'109
Equity	2%	8'108'684	7'978'050
CASH FLOW STATEMENT		01.01.2014 - 31.12.2014	01.01.2013 - 31.12.2013
Cash flow from ongoing activities	579%	2'777'269	408'875
Net cash from operating activities	1072%	2'422'217	206'721
Cash flow from investment activities	-22%	-3'035'468	-2'498'118
Cash flow from financing activities	-8%	957'251	1'039'602
Cash and cash equivalent end of period	55%	969'134	625'134
PERSONNEL			
Employees per end of 31st December	1%	68	67



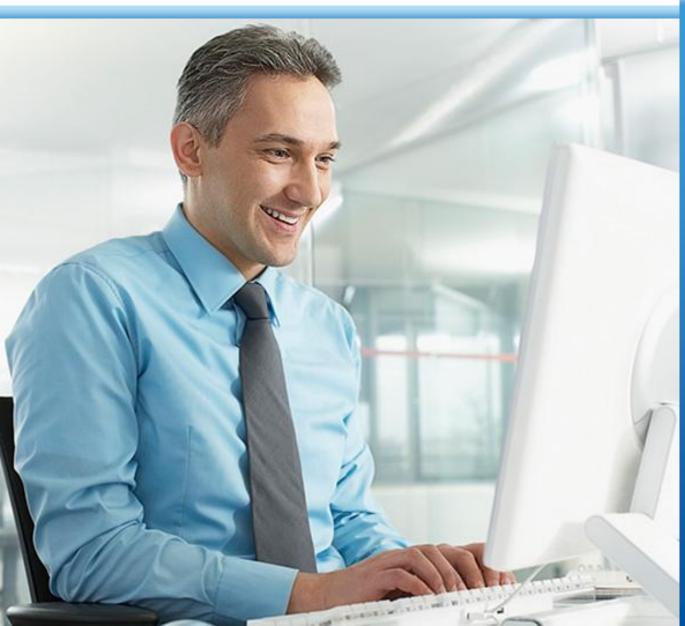
**OpenLimit Gruppe** Geschäftsbericht 2014

# **OpenLimit surpassed the break-even point for the 2013 financial year**



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