

OpenLimit Holding AG

Switzerland / Software
 Primary exchange: Frankfurt
 Bloomberg: O5H GR
 ISIN: CH0022237009

H1 figures &
 capital increase

RATING
PRICE TARGET **BUY**
 Return Potential **€1.00**
 Risk Rating 132.6%
 High

CAPITAL INCREASE EASES TIGHT LIQUIDITY SITUATION

On 30 September, OpenLimit increased its capital by €1.4m to bolster its cash position and repay debt. A few days earlier, OpenLimit had reported H1 figures and held a conference call. Sales increased 9% to €3.3m in line with our expectations, but EBIT was below our forecast and the previous year's figure due to increased costs. The company has adjusted its guidance. New guidance is that revenues could be below the previous year's figure and costs higher. Given the company's stretched resources, we lower our estimates. We however continue to believe that OpenLimit – together with its strong partners – has an excellent market position in the German e-health market and smart meter market. The start of the smart meter roll-out in 2017 looks set to strongly boost revenues in 2017E and 2018E. To support growth, OpenLimit may require further financing, and we expect management to take corresponding action. An updated DCF model yields a new price target of €1.00 (previously: €1.20). We reiterate our Buy rating.

Capital increase eases tight liquidity situation At the end of H1, the cash position amounted to only €30k. The liquidity situation was tight due to slow incoming payments, project delays, and long payment terms. In September, OpenLimit issued 2.73m shares at €0.50 and received gross proceeds of €1.37m. Ca. €0.8m were used to reduce debt and ca. €0.6m to bolster the cash position.

H1: Higher sales – lower EBIT Although sales rose 9% to €3.3m (H1/15: €3.0m, FBe: €3.4m), EBIT was significantly below the previous year's level (€-1.0m vs. €-0.3m, FBe: €0.3m). The main reason was an increase in material costs to €0.6m from €0.1m in H1/15 as OpenLimit had to acquire software licences to be able to licence its own products. The net result was €-1.3m (H1/15: €-0.6m, FBe: €-0.6m).

(p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2013	2014	2015	2016E	2017E	2018E
Revenue (€m)	6.95	8.07	8.69	8.70	12.45	15.67
Y-o-y growth	12.0%	16.0%	7.7%	0.1%	43.1%	25.9%
EBIT (€m)	-0.39	0.63	0.97	-0.06	1.92	3.50
EBIT margin	-5.7%	7.8%	11.1%	-0.7%	15.4%	22.3%
Net income (€m)	-0.61	0.14	0.33	-0.48	1.33	2.80
EPS (diluted) (€)	-0.03	0.01	0.02	-0.02	0.05	0.11
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-2.29	-0.61	-0.61	-0.88	1.01	3.36
Net gearing	26.6%	34.9%	38.3%	29.7%	16.9%	-11.1%
Liquid assets (€m)	0.63	0.97	0.30	0.39	0.47	2.83

RISKS

Risks include, but are not limited to: project delays, regulatory delays, erosion of the company's competitive lead, and the failure of the company's products to achieve broad market acceptance.

COMPANY PROFILE

OpenLimit technologies enable people and machines globally to communicate securely, identifiably and provably. Base technologies and products are developed in the following areas: electronic identities, electronic signatures, evidentiary value-preserving long-term storage of data and documents, and secure data transmission between machines.

MARKET DATA

As of 15 Nov 2016

Closing Price	€ 0.43
Shares outstanding	21.88m
Market Capitalisation	€ 9.41m
52-week Range	€ 0.35 / 0.73
Avg. Volume (12 Months)	19,705

Multiples	2015	2016E	2017E
P/E	30.6	n.a.	7.5
EV/Sales	1.5	1.5	1.0
EV/EBIT	13.4	n.a.	6.8
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 30 Jun 2016

Liquid Assets	€ 0.03m
Current Assets	€ 8.12m
Intangible Assets	€ 6.07m
Total Assets	€ 15.02m
Current Liabilities	€ 6.19m
Shareholders' Equity	€ 7.59m

SHAREHOLDERS

René C. Jäggi	10.3%
Heinrich Dattler	9.8%
Robert E. Züllig	5.7%
Patrick Winkler	5.2%
Free Float	69.0%



Balance sheet remains stretched Financial debt increased to €4.1m (€3.1m short-term, €1.0m long-term) at the end of H1. OpenLimit received a 750k loan from WiseKey which will have to be repaid on 31 March 2017 if the merger is not completed. In June, OpenLimit issued a €1.5m convertible loan which is due on 30/06/2018 and refinanced two former convertible loans. The conversion price is €0.80. Pension liabilities remained stable at €0.2m. The net debt position thus rose to €4.4m at 30/06/2016 from €3.3m at 31/12/2015. Equity declined to €7.6m from €8.7m due mainly to the net loss of €1.3m. The equity share fell to 51% from 57% at the end of 2015. The capital raise increased equity by ca. €1.4m and lowered net debt to ca. €3.0m.

Working capital requirements were high. Receivables remained at the very high level of €7.7m and payables increased to €1.0m from €0.7m at the end of 2015. Net working capital thus amounted to €6.7m.

Negative free cash flow Despite the net loss of €1.3m, operating cash flow was positive (€0.6m) due mainly to depreciation of €1.4m. CAPEX of €1.6m resulted in a free cash flow of €-1.0m. Cash flow from financing activities amounted to €0.7m and reflects the placement of convertible loans and loans.

WiseKey merger negotiations taking longer than initially assumed In July, OpenLimit and the Geneva-based cybersecurity company, WiseKey International Holding (WiseKey) signed a memorandum of understanding (MoU) under which the two companies intend to merge. Both OpenLimit and WiseKey provide technologies which enable people and machines to communicate in ways which are secure, verifiable and identifiable. The merger negotiations are taking longer than initially communicated. Whether they will be successful or not is currently difficult to predict.

T-Systems has significantly expanded Konnektor development contract Based on the expanded Konnektor development contract the total order value (2014-17) amounts to a lower double-digit million Euro sum. This is roughly twice as high as the initial contract value. The expansion itself amounts to a low single-digit million Euro sum for 2016-17. OpenLimit has developed the Konnektor which will guarantee secure communication between the stakeholders of the German healthcare system. The government wants to connect all practices and hospitals with the telematics infrastructure by mid 2018. OpenLimit will receive a mid single-digit million Euro sum from T-Systems for intellectual property developed in connection with the Konnektor, payable in tranches on the achievement of pre-defined milestones.

Smart Meter Gateway roll-out starts in January 2017 The Smart Meter Gateway (SMG) guarantees secure communication between utilities and the local meters of end consumers. The SMG market potential is 12 – 15 million devices. The German Bundestag passed the “Law to digitalise the energy transition” in July 2016, and the roll-out is scheduled to start in January 2017. It will take place over eight years and we expect SMG installations of almost 2 million devices per annum. The SMG roll-out looks set to be a major revenue driver for OpenLimit in coming years.

OpenLimit has developed the SMG together with its partner PPC, and both are in an excellent competitive position to gain a ca. 30% share in the SMG market. At the eWorld trade fair in February, OpenLimit and PPC presented the SMG together with 35 partners – among them well-known companies such as Bosch, Elster, E.ON Metering, Robotron, Siemens, and Thüga. Approximately two thirds of the top 50 utilities in Germany are customers of the jointly developed SMG.

First reference project for PalmSecure trueidentity successfully completed Fujitsu has been marketing OpenLimit’s software for secure online authentication – trueidentity – together with its hand vein scanner PalmSecure on a global scale since April 2016. The two factor authentication offers excellent protection against identity misuse.



A first project at a global player in Finland has already been successfully completed and we expect further projects in coming months. OpenLimit receives a share in the licence fees and can generate further revenues from adaption, integration, and education projects.

Supervisory Board President René Jäggi severely injured Mr Jäggi is a key figure at the company and has been largely responsible for strategy and its implementation. It is currently unclear if and when he can resume his work. This puts further strain on management resources as his tasks have to be taken over by other Management and Supervisory Board members.

Temporary suspension of the stock from trading ended on 2 November The recent capital increase was executed by a reputable Swiss bank which has also been responsible for the capital increases of the past nine years. During the capital increase it turned out that the procedure to register previous capital increases in Germany was not in compliance with German standards. This resulted in the temporary suspension of the shares from trading in Germany. The problems have been solved and the stock is trading again. The suspension has thus nothing to do with OpenLimit's operating business or the co-operation and merger talks.

Forecasts adjusted Given the tight liquidity situation which absorbs management capacity and the additional strain on resources due to the absence of Mr Jäggi, we believe that OpenLimit will only reach last year's revenue level (€8.7m) in 2016. Due to increased costs we lower our EBIT forecast to €-0.1m. We have also lowered our forecasts for 2017E (see figure 2 overleaf).

Buy reiterated at lower price target Based on lower forecasts and the dilutive effect of the capital increase, an updated DCF model yields a new price target of €1.00 (previously: €1.20). The model values OpenLimit on a stand-alone basis. We will maintain this approach until the WISeKey merger is successfully completed. We still see a strong likelihood that OpenLimit will solve its short-term problems and note that medium-term prospects are now based on much higher visibility as the law determining the SMG roll-out has been passed. In addition, the agreement with T-Systems that it should make milestone payments for OpenLimit's intellectual property regarding the Konnektor development will deliver predictable cash inflows.

Figure 1: Reported figures versus forecasts

All figures in €m	H1-16A	H1-16E	Delta	H1-15	Delta
Sales	3.30	3.40	-3.1%	3.03	8.9%
EBIT	-1.01	-0.32	-	-0.30	-
margin	-30.8%	-9.3%	-	-10.0%	-
Net income	-1.26	-0.55	-	-0.59	-
margin	-38.2%	-16.1%	-	-19.5%	-
EPS in € (diluted)	-0.07	-0.02	-	-0.03	-

Source: First Berlin Equity Research, OpenLimit Holding AG

**Figure 2: Revisions to forecasts**

All figures in €m	2016E			2017E			2018E		
	Old	New	Delta	Old	New	Delta	Old	New	Delta
Sales	10.05	8.70	-13.4%	13.63	12.45	-8.7%	15.67	15.67	0.0%
EBIT	1.04	-0.06	-	2.69	1.92	-28.8%	3.50	3.50	0.0%
margin	10.3%	-0.7%		19.7%	15.4%		22.3%	22.3%	
Net income	0.74	-0.48	-	2.12	1.33	-37.2%	2.83	2.80	-1.2%
margin	7.4%	-5.5%		15.6%	10.7%		18.1%	17.8%	
EPS in € (diluted)	0.03	-0.02	-	0.09	0.05	-43.4%	0.12	0.11	-10.9%

Source: First Berlin Equity Research



VALUATION MODEL

DCF valuation model								
All figures in EUR '000								
	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Net sales	8,700	12,450	15,671	17,834	20,103	22,446	24,822	27,182
NOPLAT	-62	1,662	2,963	3,472	4,117	4,703	5,243	5,744
+ depreciation & amortisation	2,840	2,828	2,808	2,249	2,117	2,060	2,032	2,007
Net operating cash flow	2,778	4,490	5,771	5,722	6,235	6,764	7,275	7,751
- total investments (CAPEX and WC)	-3,239	-3,154	-2,244	-1,596	-2,853	-2,938	-2,976	-2,961
Capital expenditures	-3,378	-2,951	-2,601	-2,265	-2,383	-2,471	-2,523	-2,533
Working capital	140	-203	357	669	-470	-467	-453	-428
Free cash flows (FCF)	-461	1,336	3,526	4,126	3,382	3,826	4,299	4,790
PV of FCF's	-445	1,112	2,530	2,552	1,802	1,757	1,702	1,634

All figures in thousands	
PV of FCFs in explicit period (2016E-2030E)	21,405
PV of FCFs in terminal period	6,776
Enterprise value (EV)	28,181
+ Net cash / - net debt	-2,987
+ Investments / minority interests	0
Shareholder value	25,193

Fair value per share in EUR 1.00

WACC		Terminal growth rate						
		0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%
12.0%	Cost of equity	1.55	1.57	1.60	1.63	1.66	1.70	1.74
13.0%	Pre-tax cost of debt	1.37	1.39	1.41	1.43	1.46	1.48	1.51
14.0%	Tax rate	1.23	1.24	1.25	1.27	1.29	1.31	1.33
15.0%	After-tax cost of debt	1.10	1.11	1.12	1.13	1.15	1.16	1.18
16.0%	Share of equity capital	0.99	1.00	1.01	1.02	1.03	1.04	1.05
17.0%	Share of debt capital	0.90	0.91	0.92	0.92	0.93	0.94	0.95
18.0%		0.82	0.83	0.83	0.84	0.84	0.85	0.86
19.0%		0.75	0.76	0.76	0.77	0.77	0.77	0.78

* For layout reasons, the figure only displays figures until 2023, but the model runs until 2030.



INCOME STATEMENT

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
Revenues	6,955	8,066	8,689	8,700	12,450	15,671
Own work	2,421	2,971	3,251	3,300	2,864	2,507
Cost of goods sold	157	263	211	957	1,121	1,410
Gross profit	6,798	7,803	8,479	7,743	11,330	14,261
Personnel costs	5,461	6,018	6,529	6,699	7,470	8,114
Depreciation and amortisation	2,551	2,641	2,755	2,840	2,828	2,808
Other operating income	0	0	0	0	0	0
Other operating expenses	1,601	1,486	1,480	1,566	1,980	2,351
Operating income (EBIT)	-394	630	966	-62	1,916	3,496
Net financial result	-186	-369	-458	-442	-330	-166
Non-operating expenses	0	0	0	0	0	0
Pre-tax income (EBT)	-580	261	508	-504	1,586	3,330
Income taxes	31	121	182	-25	254	533
Minority interests	0	0	0	0	0	0
Net income / loss	-611	139	327	-479	1,332	2,797
Diluted EPS (in €)	-0.03	0.01	0.02	-0.02	0.05	0.11
EBITDA	2,157	3,270	3,722	2,778	4,743	6,303
Ratios						
Gross margin	97.7%	96.7%	97.6%	89.0%	91.0%	91.0%
EBIT margin on revenues	-5.7%	7.8%	11.1%	-0.7%	15.4%	22.3%
EBITDA margin on revenues	31.0%	40.5%	42.8%	31.9%	38.1%	40.2%
Net margin on revenues	-8.8%	1.7%	3.8%	-5.5%	10.7%	17.8%
Tax rate	-5.3%	46.5%	35.8%	5.0%	16.0%	16.0%
Expenses as % of revenues						
Personnel costs	78.5%	74.6%	75.1%	77.0%	60.0%	51.8%
Depreciation and amortisation	36.7%	32.7%	31.7%	32.6%	22.7%	17.9%
Other operating expenses	23.0%	18.4%	17.0%	18.0%	15.9%	15.0%
Y-Y Growth						
Revenues	12.0%	16.0%	7.7%	0.1%	43.1%	25.9%
Operating income	n.m.	n.m.	53.5%	n.m.	n.m.	82.5%
Net income/ loss	n.m.	n.m.	134.1%	n.m.	n.m.	110.0%



BALANCE SHEET

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
Assets						
Current assets, total	6,487	7,292	8,437	8,494	8,660	10,991
Cash and cash equivalents	625	969	303	389	473	2,833
Short-term investments	0	0	0	0	0	0
Receivables & other	5,862	6,323	8,134	8,104	8,186	8,158
Inventories	0	0	0	0	0	0
Other current assets	0	0	0	0	0	0
Non-current assets, total	5,887	6,232	6,703	7,286	7,409	7,203
Property, plant & equipment	112	110	110	116	136	162
Goodwill & other intangibles	4,875	5,272	5,842	6,420	6,523	6,291
Other assets	900	850	750	750	750	750
Total assets	12,374	13,524	15,139	15,780	16,068	18,194
Shareholders' equity & debt						
Current liabilities, total	2,942	4,063	5,689	5,319	4,776	4,104
Short-term debt	1,290	2,457	2,901	2,422	2,000	1,000
Accounts payable & other	1,653	1,606	2,775	2,884	2,763	3,091
Current provisions	0	0	0	0	0	0
Other current liabilities	0	0	13	13	13	13
Long-term liabilities, total	1,454	1,352	757	880	380	380
Long-term debt	1,250	1,000	500	578	78	78
Deferred revenue	0	0	0	0	0	0
Other liabilities	204	352	257	302	302	302
Minority interests	0	0	0	0	0	0
Shareholders' equity	7,978	8,109	8,694	9,581	10,912	13,709
Share capital	4,605	4,605	4,605	5,424	5,424	5,424
Capital reserve	9,882	9,882	9,882	10,428	10,428	10,428
Other reserves	1,873	1,994	2,070	2,070	2,070	2,070
Treasury stock	0	0	0	0	0	0
Loss carryforward / retained earnings	-8,382	-8,372	-7,863	-8,342	-7,010	-4,213
Total consolidated equity and debt	12,374	13,524	15,139	15,780	16,068	18,194
Ratios						
Current ratio (x)	2.20	1.79	1.48	1.60	1.81	2.68
Quick ratio (x)	2.20	1.79	1.48	1.60	1.81	2.68
Book value per share (€)	0.40	0.35	0.38	0.41	0.43	0.54
Net cash	-2,119	-2,827	-3,333	-2,845	-1,839	1,521
Net gearing	26.6%	34.9%	38.3%	29.7%	16.9%	0.0%
Return on equity (ROE)	-7.7%	1.7%	3.8%	-5.0%	12.2%	20.4%
Days of sales outstanding (DSO)	307.7	286.1	341.7	340.0	240.0	190.0



CASH FLOW STATEMENT

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
EBIT	-394	630	966	-62	1,916	3,496
Depreciation and amortisation	2,551	2,641	2,755	2,840	2,828	2,808
EBITDA	2,157	3,271	3,721	2,778	4,743	6,303
Changes in working capital	-2,040	-494	-730	140	-203	357
Other adjustments	90	-354	-280	-417	-584	-699
Operating cash flow	207	2,422	2,712	2,501	3,956	5,962
CAPEX	-77	-65	-75	-78	-87	-94
Investments in intangibles	-2,421	-2,971	-3,251	-3,300	-2,864	-2,507
Free cash flow	-2,291	-613	-614	-878	1,006	3,360
Debt financing, net	1,040	957	-78	-401	-922	-1,000
Equity financing, net	0	0	0	1,365	0	0
Other changes in cash	0	0	0	0	0	0
Net cash flows	-1,252	344	-692	87	84	2,360
Cash, start of the year	1,877	625	969	303	389	473
Cash, end of the year	625	969	277	389	473	2,833
EBITDA/share (in €)	0.11	0.14	0.16	0.12	0.19	0.25
Y-Y Growth						
Operating cash flow	-95.1%	1068.9%	12.0%	-7.8%	58.2%	50.7%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	234.1%
EBITDA/share	29.4%	31.6%	13.8%	-26.8%	57.0%	32.9%

FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	10 October 2005	€4.20	Buy	€5.20
2...47	↓	↓	↓	↓
48	1 September 2015	€0.71	Buy	€1.10
49	18 November 2015	€0.68	Buy	€1.10
50	4 May 2016	€0.55	Buy	€1.20
51	Today	€0.43	Buy	€1.00

Authored by: Dr. Karsten von Blumenthal, Analyst

Company responsible for preparation:

First Berlin Equity Research GmbH

Mohrenstraße 34
10117 Berlin

Tel. +49 (0)30 - 80 93 96 85 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com

www.firstberlin.com

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

Copyright© 2016 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 34B OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO THE GERMAN ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS [FINANV]

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular the German Securities Trading Act [WpHG], Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and the German Ordinance on the Analysis of Financial Instruments [FinAnV] into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with Section 34b Paragraph 1 of the German Securities Trading Act [WpHG] and Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) financial analyses may only be passed on or publicly distributed if circumstances or relations which may cause conflicts of interest among the authors, the legal entities responsible for such preparation or companies associated with them are disclosed along with the financial analysis.

First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest (further information and data may be provided on request):

- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

If despite these measures one or more of the aforementioned conflicts of interest cannot be avoided on the part of the author or First Berlin, then reference shall be made to such conflict of interest.

PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

ASSET VALUATION SYSTEM

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

STRONG BUY: An expected favourable price trend of more than 50% combined with sizeable confidence in the quality and forecast security of management.

BUY: An expected favourable price trend of more than 25% percent.

ADD: An expected favourable price trend of between 0% and 25%.

REDUCE: An expected negative price trend of between 0% and -15%.

SELL: An expected negative price trend of more than -15%.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: <http://firstberlin.com/disclaimer-english-link/>

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Lurgiallee 12, 60439 Frankfurt

EXCLUSION OF LIABILITY (DISCLAIMER)

RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.

NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA, Canada and/or the United Kingdom (Great Britain).