ad pepper media International N.V.

The Netherlands / Internet Services Frankfurt Bloomberg: APM GR ISIN: NL0000238145

Preliminary Q2/23 figures RATINGBUYPRICE TARGET€ 3.50Return Potential52.2%Risk RatingMedium

CAUTIOUSLY OPTIMISTIC FOR H2

ad pepper (APM) has reported Q2 revenue and EBITDA, which were in line with guidance and our forecasts. Revenue declined 8% y/y to \in 5.4m. However, EBITDA improved slightly from \in -186k to \in 418k. This shows that cost savings more than offset the revenue contraction. Despite the still challenging macro-economic environment, APM is cautiously optimistic for H2 because of a tentative recovery of customers' e-commerce and advertising activities and the initiated cost savings. We expect H2 to be stronger than H1 and stick to our forecasts. We believe that the main share price driver will be the planned purchase of a majority stake in solute Holding GmbH & Co. KG (solute), a leading price comparison portal business in the German market (billiger.de and shopping.de). If APM succeeds in consolidating solute, it would transform into a company with almost \in 60m in revenue and >400 employees. An updated DCF model, which does not yet incorporate the planned transaction, yields an unchanged price target of \in 3.50. Our rating remains Buy.

Q2 as expected Gross sales were down 10% y/y at €21.0m. APM was guiding for €5.4m in revenue and reached this figure. EBITDA slightly improved from €-186k to €-118k due to cost savings (see figure 1 overleaf). Liquid funds including securities at fair value rose 2% y/y to €21.5m.

All three operating segments with positive EBITDA in Q2 Although the ad pepper media segment's revenue continued to fall (-18% y/y to €609k), EBITDA remained slightly positive (€31k). The Webgains segment reported a revenue decline of 4% to €2.9m. The EBITDA loss of Q2/22 (€270k) was converted into a €288k gain. Given the weaker topline this was a good result. The ad agents segment had to swallow a 12% revenue decline y/y to €1.9m. EBITDA fell from €212k to €72k. All three segments together generated EBITDA of €391k versus €74k in Q2/22. However, this good performance was partly eaten up by higher admin costs (€509k versus €260k in Q2/22).

(p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2020	2021	2022	2023E	2024E	2025E
Revenue (€m)	25.62	27.65	24.87	24.18	26.60	29.12
Y-o-y growth	17.6%	7.9%	-10.0%	-2.8%	10.0%	9.5%
EBIT (€m)	6.56	4.38	1.28	1.54	2.47	3.42
EBIT margin	25.6%	15.8%	5.1%	6.4%	9.3%	11.7%
Net income (€m)	3.66	1.73	-0.89	-0.37	0.32	1.13
EPS (diluted) (€)	0.17	0.08	-0.04	-0.02	0.02	0.06
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	2.60	1.91	1.71	1.39	1.26	1.08
Net gearing	-115.0%	-104.2%	-108.0%	-116.0%	-117.1%	-111.3%
Liquid assets (€m)	24.33	20.70	17.01	17.74	18.27	18.70

RISKS

The main risks are regulatory changes, technological innovations, dependence on key customers, and intense competition.

COMPANY PROFILE

ad pepper media International N.V. is an international digital performance marketing company, which acts as a holding for its three operating units ad pepper media (lead generation & audience targeting), Webgains (affiliate network), and ad agents (full service agency). The company is headquartered in Nuremberg, Germany.

MARKET DAT	A	As of 2	20 Jul 2023
Closing Price			€ 2.30
Shares outstand	ling		20.26m
Market Capitalis	ation	\$	€ 46.59m
52-week Range		€ 1.	.44 / 2.59
Avg. Volume (12	2 Months)		5,293
Multiples	2022	2023E	2024E
P/E	n.a.	n.a.	145.9
EV/Sales	0.9	0.9	0.8
EV/EBIT	17.0	14.1	8.8
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA Liquid Assets Current Assets	As of 31 Mar 2023 € 12.49m € 32.76m
Intangible Assets	€ 0.31m
Total Assets	€ 36.84m
Current Liabilities	€ 20.97m
Shareholders' Equity	€ 15.07m
SHAREHOLDERS	
EMA B.V.	44.1%
Euro Serve Media GmbH	2.6%
Treasury shares	5.8%
Free Float	47.5%

ad pepper media Revenue EBITDA	0.61 0.03	0.58	5.2%					
	0.03		5.2%	8				
EBITDA			0.270	0.74	-18.0%	1.14	1.46	-21.8%
		0.02	55.0%	0.13	-76.5%	0.03	0.17	-80.1%
margin	5.1%	3.5%	-	17.8%	-	2.9%	11.4%	-
Webgains								
Revenue	2.92	2.87	1.7%	3.03	-3.5%	5.75	6.26	-8.2%
EBITDA	0.29	0.20	43.3%	-0.27	-	0.48	-0.14	-
margin	9.8%	7.0%	-	-8.9%	-	8.3%	-2.2%	-
ad agents								
Revenue	1.87	1.95	-4.2%	2.11	-11.5%	3.61	4.03	-10.6%
EBITDA	0.07	0.02	323.5%	0.21	-66.0%	-0.03	0.46	-
margin	3.9%	0.9%	-	10.1%	-	-0.7%	11.5%	-
Admin & Consolidation								
Revenue	0.00	0.00		0.00	-	0.00	0.00	-
EBITDA	-0.51	-0.38	-	-0.26	-	-0.93	-0.64	-
Group								
Revenue	5.40	5.40	0.0%	5.88	-8.2%	10.50	11.75	-10.7%
EBITDA	-0.12	-0.14	-	-0.19	-	-0.45	-0.16	-
margin	-2.3%	-2.6%	-	-3.2%	-	-4.2%	-1.3%	-

Π

Figure 1: Reported figures versus forecasts

Source: First Berlin Equity Research, ad pepper media International N.V.

H2 should be stronger than H1 Various cost optimisation measures have already kicked in during Q2 and will have an even greater effect in H2. Furthermore, the e-commerce and advertising activities of APM's customers have started to recover. Falling inflation rates and improving consumer confidence bode well for H2. And Q4 (Christmas!) is the seasonally strongest quarter.

The EU inflation rate decreased to 6.4% in June from 7.1% in May 2023. This is the eighth consecutive fall since October 2022, when inflation reached a high at 11.5%. The EU Consumer Confidence increased to -17.2 points in June from -18.3 points in May 2023. This is the highest value since February 2022.

In the United Kingdom, Webgains' main market, consumer price inflation dropped to 7.9% in June 2023, marking the lowest level since March 2022. The UK GfK Consumer Confidence indicator rose to -24 in June 2023 from -27 in May, improving for the fifth straight month as British households grew more optimistic about their finances and the economy for the coming year despite stubborn inflation and rising interest rates. The June figure was also the highest in 17 months.

Why do we believe that the acquisition of a majority stake in solute is value-accretive? Both APM and solute are online performance marketing companies. solute's product offering is largely complementary to the one of APM. If both companies join forces, market penetration will be broader and deeper. Bringing together both companies' client bases offers cross-selling potential. Furthermore, combined, the companies would achieve critical mass with joint sales of almost €60m and ca. 420 employees (see our comment as of 5 July).

Buy reiterated at unchanged price target An updated DCF model yields an unchanged €3.50 price target. We confirm our Buy rating. The H1 report will be published on 18 August 2023.

VALUATION MODEL

DCF valuation model								
All figures in EUR '000	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Netrevenue	24,179	26,597	29,124	31,890	34,919	38,228	41,821	45,687
NOPLAT	407	1,093	1,799	2,209	2,611	3,069	3,589	4,175
+ depreciation & amortisation	1,009	1,001	946	915	977	1,018	1,051	1,082
Net operating cash flow	1,416	2,094	2,745	3,124	3,587	4,087	4,641	5,257
- total investments (CAPEX and WC)	48	-759	- 1,691	-986	- 520	-583	-653	-730
Capital expenditures	- 193	-266	- 349	-446	-489	-535	- 585	-640
Working capital	242	-493	- 1,341	- 540	-31	- 48	-67	- 91
Free cash flows (FCF)	1,464	1,335	1,055	2,138	3,067	3,504	3,988	4,527
PV of FCF's	1,397	1, 14 5	8 14	1,485	1,917	1,970	2,017	2,061

All figures in thousands	
PV of FCFs in explicit period (2023E-2037E)	27,551
PV of FCFs in terminal period	22,321
Enterprise value (EV)	49,872
+ Net cash / - net debt	15,645
+ Investments / minority interests	7,252
Shareholder value	72,769
Number of shares (diluted)	20,501
Fair value per share in EUR	3.55

Terminal growth	2.0%
Terminal EBIT margin	17.5%

Fair value per share in EUR	3.55					Terminal g	row th rate			
				0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%
WACC	11.1%		7.1%	5.41	5.64	5.92	6.24	6.64	7.13	7.75
Cost of equity	11.1%		8.1%	4.68	4.83	5.01	5.22	5.46	5.75	6.10
Pre-tax cost of debt	5.0%	U U	9.1%	4.13	4.23	4.36	4.49	4.65	4.84	5.05
Tax rate	25.0%	AC	10.1%	3.70	3.78	3.86	3.96	4.07	4.19	4.33
After-tax cost of debt	3.8%	≥	11.1%	3.36	3.42	3.48	3.55	3.63	3.71	3.81
Share of equity capital	100.0%		12.1%	3.09	3.13	3.18	3.23	3.28	3.35	3.41
Share of debt capital	0.0%		13.1%	2.87	2.90	2.93	2.97	3.01	3.06	3.11
Price target in EUR	3.50		14.1%	2.68	2.71	2.73	2.76	2.79	2.83	2.86

 * for layout purposes the model shows numbers only to 2030, but runs until 2037

INCOME STATEMENT

All figures in EUR '000	2020A	2021A	2022A	2023E	2024E	2025E
Gross sales	101,344	111,539	98,229	95,507	105,058	115,039
Media costs	75,729	83,893	73,361	71,328	78,461	85,915
Revenues	25,615	27,646	24,868	24,179	26,597	29,124
Cost of sales	928	1,059	1,164	1,262	1,250	1,165
Gross profit	24,687	26,587	23,704	22,917	25,347	27,959
S&M	13,411	15,739	16,638	16,067	17,000	17,765
G&A	7,108	7,707	7,164	6,719	7,010	7,863
Other operating income	1,514	530	937	954	638	699
Other operating expenses	234	477	651	555	505	553
EBITDA	6,559	4,378	1,275	1,539	2,471	3,421
Depreciation and amortisation	1,111	1,184	1,088	1,009	1,001	946
Operating income (EBIT)	5,448	3,194	187	530	1,470	2,476
Net financial result	-116	-38	-131	-76	-73	29
Non-operating expenses	0	0	0	0	0	0
Pre-tax income (EBT)	5,332	3,156	56	454	1,396	2,505
Income taxes	991	592	306	123	377	676
Minority interests	-677	-839	-643	-700	-700	-700
Net income / loss	3,664	1,725	-893	-369	319	1,128
Diluted EPS (in €)	0.17	0.08	-0.04	-0.02	0.02	0.06
Ratios						
Gross margin in % of gross sales	24.4%	23.8%	24.1%	24.0%	24.1%	24.3%
Gross margin in % of revenues	96.4%	96.2%	95.3%	94.8%	95.3%	96.0%
EBITDA margin in % of revenues	25.6%	15.8%	5.1%	6.4%	9.3%	11.7%
EBIT margin	21.3%	11.6%	0.8%	2.2%	5.5%	8.5%
Net margin	14.3%	6.2%	-3.6%	-1.5%	1.2%	3.9%
Tax rate	18.6%	18.8%	542.6%	27.0%	27.0%	27.0%
Expenses as % of sales or revenues						
Media costs (as % of gross sales)	74.7%	75.2%	74.7%	74.7%	74.7%	74.7%
S&M (as % of revenues)	52.4%	56.9%	66.9%	66.5%	63.9%	61.0%
G&A (as % of revenues)	27.7%	27.9%	28.8%	27.8%	26.4%	27.0%
Depreciation and amortisation	4.3%	4.3%	4.4%	4.2%	3.8%	3.2%
Other operating expenses	0.9%	1.7%	2.6%	2.3%	1.9%	1.9%
Y-Y Growth						
Gross sales	21.0%	10.1%	-11.9%	-2.8%	10.0%	9.5%
Net revenues	17.6%	7.9%	-10.0%	-2.8%	10.0%	9.5%
EBITDA	86.8%	-33.3%	-70.9%	20.7%	60.6%	38.5%
Operating income	116.3%	-41.4%	-94.1%	183.0%	177.4%	68.4%
Net income/ loss	171.0%	-52.9%	n.m.	n.m.	n.m.	253.3%

BALANCE SHEET

All figures in EUR '000	2020A	2021A	2022A	2023E	2024E	2025E
Assets						
Current assets, total	44,718	40,753	35,692	35,746	37,607	38,566
Cash and cash equivalents	24,330	20,704	17,008	17,738	18,274	18,699
Short-term investments	29	26	258	258	258	258
Receivables	19,727	19,319	17,568	16,892	18,217	18,751
Inventories	0	0	0	0	0	0
Other current assets	632	704	858	858	858	858
Non-current assets, total	4,123	5,599	8,262	8,105	8,095	8,158
Property, plant & equipment	412	346	230	157	174	220
Goodw ill & other intangibles	737	628	374	291	264	280
Right-of-use assets	1,568	1,177	1,318	1,318	1,318	1,318
Financial assets	1,406	3,448	6,260	6,260	6,260	6,260
Other assets	0	0	79	79	79	79
Total assets	48,841	46,352	43,954	43,851	45,702	46,723
Shareholders' equity & debt						
Current liabilities, total	26,761	25,318	27,448	27,014	27,846	27,038
Short-term debt	0	0	0	0	0	0
Accounts payable	20,738	20,247	20,836	20,402	21,234	20,426
Current provisions	0	0	0	0	0	0
Other current liabilities	5,280	4,566	6,089	6,089	6,089	6,089
Lease liabilities	743	505	523	523	523	523
Long-term liabilities, total	1,242	946	840	840	840	840
Long-term debt	0	0	0	0	0	0
Lease liabilities	953	741	840	840	840	840
Other liabilities	289	205	0	0	0	0
Minority interests	1,157	1,413	1,176	1,876	2,576	3,276
Shareholders' equity	19,681	18,675	14,490	14,121	14,441	15,569
Share capital	1,075	1,075	1,075	1,075	1,075	1,075
Capital reserve	63,782	63,782	63,782	63,782	63,782	63,782
Other reserves	0	0	0	0	0	0
Loss carryforw ard / retained earnings	-45,176	-46,182	-50,367	-50,736	-50,416	-49,288
Total consolidated equity and debt	48,841	46,352	43,954	43,851	45,702	46,723
Ratios						
Current ratio (x)	1.67	1.61	1.30	1.32	1.35	1.43
Quick ratio (x)	1.67	1.61	1.30	1.32	1.35	1.43
Net debt	-22,634	-19,458	-15,645	-16,375	-16,911	-17,336
Net gearing	-115.0%	-104.2%	-108.0%	-116.0%	-117.1%	-111.3%
Equity ratio	42.7%	43.3%	35.6%	36.5%	37.2%	40.3%
Book value per share (in €)	0.93	0.89	0.71	0.69	0.71	0.76
Return on equity (ROE)	18.6%	9.2%	-6.2%	-2.6%	2.2%	7.2%
Return on investment (ROI)	7.5%	3.7%	-2.0%	-0.8%	0.7%	2.4%
Return on assets (ROA)	7.5%	3.7%	-2.0%	-0.8%	0.7%	2.4%

Π

CASH FLOW STATEMENT

All figures in EUR '000	2020A	2021A	2022A	2023E	2024E	2025E
EBIT	5,448	3,194	187	530	1,470	2,476
Depreciation and amortisation	1,111	1,184	1,088	1,009	1,001	946
EBITDA	6,559	4,378	1,275	1,539	2,471	3,421
Changes in w orking capital	-1,527	636	3,256	242	-493	-1,341
Other adjustments	-1,650	-2,806	-2,600	-198	-450	-647
Operating cash flow	3,382	2,208	1,931	1,582	1,528	1,433
Investments in PP&E	-238	-121	-108	-97	-133	-175
Investments in intangibles	-549	-178	-111	-97	-133	-175
Free cash flow	2,595	1,909	1,712	1,389	1,262	1,084
Acquisitions & disposals, net	10	57	1,938	0	0	0
Other investments	-994	-1,999	-5,000	0	0	0
Investment cash flow	-1,771	-2,241	-3,281	-193	-266	-349
Debt financing, net	0	0	0	0	0	0
Equity financing, net	-978	-2,489	-1,232	0	0	0
Dividends paid	0	0	0	0	0	0
Other financing	-1,300	-1,340	-1,124	-659	-725	-659
Financing cash flow	-2,278	-3,829	-2,356	-659	-725	-659
FOREX & other effects	-232	236	10	0	0	0
Net cash flows	-899	-3,626	-3,696	730	537	425
Cash, start of the year	25,229	24,330	20,704	17,008	17,738	18,274
Cash, end of the year	24,330	20,704	17,008	17,738	18,274	18,699
EBITDA/share (in €)	0.31	0.21	0.06	0.08	0.12	0.17
Y-Y Growth						
Operating cash flow	-47.8%	-34.7%	-12.5%	-18.1%	-3.4%	-6.2%
Free cash flow	-56.4%	-26.4%	-10.3%	-18.9%	-9.1%	-14.1%
EBITDA/share	87.1%	-32.7%	-69.9%	19.7%	60.6%	38.5%

Imprint / Disclaimer

First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

First Berlin Equity Research GmbH is one of the companies monitored by BaFin with regard to its compliance with the requirements of Section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) Market Abuse Regulation (MAR) and Markets in Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Commission Delegated Regulation and Markets in Financial Instruments Regulations (MiFIR).

Anschrift: First Berlin Equity Research GmbH Friedrichstr. 34 10117 Berlin Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680 Fax: +49 (0) 30-80 93 9 687 E-Mail: <u>info@firstberlin.com</u>

Amtsgericht Berlin Charlottenburg HR B 103329 B UST-Id.: 251601797 Ggf. Inhaltlich Verantwortlicher gem. § 6 MDStV First Berlin Equity Research GmbH

Authored by: Dr. Karsten von Blumenthal, Analyst All publications of the last 12 months were authored by Dr. Karsten von Blumenthal.

Company responsible for preparation: First Berlin Equity Research GmbH, Friedrichstraße 69, 10117 Berlin

The production of this recommendation was completed on 21 July 2023 at 09:34

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

Copyright 2023 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 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF 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 ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MIFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) 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 art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set forth in accordance with Article 34 (2) lit. (b) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 lit. (b) of such article shall be designed to ensure that relevant persons engaged in different business activities involvies at level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

In addition, First Berlin shall pursuant to Article 5 of the Commission Delegated Regulation (EU) 2016/958 disclose in their recommendations all relationships and circumstances that may reasonably be expected to impair the objectivity of the financial analyses, including interests or conflicts of interest, on their part or on the part of any natural or legal person working for them under a contract, including a contract of employment, or otherwise, who was involved in producing financial analyses, concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates.

With regard to the financial analyses of ad pepper media International N.V. the following relationships and circumstances exist which may reasonably be expected to impair the objectivity of the financial analyses: The author, First Berlin, or a company associated with First Berlin reached an agreement with the ad pepper media International N.V. for preparation of a financial analysis for which remuneration is owed.

Furthermore, 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:

- The author, First Berlin, or a company associated with First Berlin owns a net long or short position exceeding the threshold of 0.5 % of the total issued share capital of the analysed company;
- 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;

With regard to the financial analyses of ad pepper media International N.V. the following of the aforementioned potential conflicts of interests or the potential conflicts of interest mentioned in Article 6 paragraph 1 of the Commission Delegated Regulation (EU) 2016/958 exist: The author, First Berlin, or a company associated with First Berlin reached an agreement with the ad pepper media International N.V. for preparation of a financial analysis for which remuneration is owed.

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.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014).

First Berlin notes that is has concluded a contract with the issuer to prepare financial analyses and is paid for that by the issuer. First Berlin makes the financial analysis simultaneously available for all interested security financial services companies. First Berlin thus believes that it fulfils the requirements of section 64 WpHG for minor non-monetary benefits.

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:

Category			2
Current market	capitalisation (in €)	0 - 2 billion	> 2 billion
Strong Buy ¹	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

¹ The expected price trend is in combination with sizable confidence in the quality and forecast security of management

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of $\leq 0 - \leq 2$ billion, and Category 2 companies have a market capitalisation of $> \leq 2$ billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

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.

RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	9 January 2018	€4.06	Add	€4.30
239	Ļ	Ļ	Ļ	Ļ
40	1 July 2022	€2.55	Buy	€4.60
41	20 July 2022	€2.24	Buy	€4.40
42	31 August 2022	€2.06	Buy	€4.40
43	20 October 2022	€2.25	Buy	€3.60
44	25 November 2022	€1.75	Buy	€3.60
45	7 February 2023	€2.15	Buy	€4.00
46	25 April 2023	€1.91	Buy	€3.50
47	5 July 2023	€2.28	Buy	€3.50
48	Today	€2.30	Buy	€3.50

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: https://firstberlin.com/disclaimer-english-link/

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main

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

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 and/or Canada.