

ADVA Optical Networking SE

Germany / Technology
 Frankfurt
 Bloomberg: ADV GR
 ISIN: DE0005103006

Update

RATING
BUY

PRICE TARGET
€ 20.00

Return Potential 28.7%
 Risk Rating High

NET BENEFIT OF STRONG USD CANCELS OUT LONGER CHIP SHORTAGE

ADVA and ADTRAN continue to experience very strong order intake. However, the negative impact of the strength of the US Dollar on cost of goods sold, and our expectation that the components shortage will last longer than we previously modelled, prompt us to lower our 2022 and 2023 standalone gross margin forecasts for both companies. Our overall valuation remains unchanged though, because the positive effect of the stronger USD on the merger exchange transaction (each ADVA share will be exchanged for 0.8244x the value of each ADTRAN share) cancels out the impact of lower margins in 2022 and 2023. Our Buy recommendation and price target of €20.00 are unchanged.

Negative impact of stronger USD and component shortages on gross margins in 2022/23 Ca. 75% of ADVA's cost of goods sold and 40% of its revenues are denominated in USD. So ADVA's proforma gross margin narrows when the USD strengthens against the Euro. The current EURUSD rate is 4.3% below the year-end 2021 level. If the current FX rate is sustained until the end of 2021, the average 2022 EURUSD rate will be 7.3% below the 2021 figure. Meanwhile, current COVID-19 related lockdowns in China suggest that components could remain in short supply into 2023. Against the background of current very high demand, we have raised our standalone revenue forecasts for both ADVA and ADTRAN, but lowered 2022 and 2023 gross margin forecasts as shown in figures 1 and 2 overleaf.

Final approval for the merger still expected later this quarter or in Q3 Our price target is based on the future merged ADVA/ADTRAN entity. The relevant US authorities have given permission for the transaction to take place, but final approval is still required in Germany. ADVA's management expect this to be forthcoming later this quarter or in Q3. Figure 3 shows changes to our forecasts for the merged company.

(p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2020	2021	2022E	2023E	2024E	2025E
Revenue (€m)	564.96	603.32	1264.97	1421.03	1569.76	1718.82
Y-o-y growth	9.8%	6.8%	109.7%	12.3%	10.5%	9.5%
EBIT (€m)	27.47	45.30	-6.90	84.06	185.53	215.58
EBIT margin	4.9%	7.5%	-0.5%	5.9%	11.8%	12.5%
Net income (€m)	20.31	59.22	-5.44	62.71	138.77	161.27
EPS (diluted) (€)	0.40	1.15	-0.06	0.65	1.40	1.60
DPS (€)	0.00	0.00	0.33	0.33	0.33	0.33
FCF (€m)	38.76	58.98	-24.52	30.91	98.43	122.66
Net gearing	13.0%	-8.5%	-6.1%	-5.7%	-12.3%	-19.5%
Liquid assets (€m)	64.88	108.99	145.41	152.74	181.31	266.42

RISKS

Risks include but are not limited to: higher prices and restricted availability of components due to the semiconductor crisis, currency risk (particularly USD appreciation/GBP depreciation).

COMPANY PROFILE

ADVA develops, manufactures, and sells optical networking solutions to deliver data, storage, voice, and video services. To date, the company's networking solutions have been deployed in more than 10,000 enterprises and more than 300 carrier networks around the world. Founded in 1994 and headquartered in Munich, Germany, ADVA had 1,973 employees at the end of December 2021.

MARKET DATA

As of 11 Apr 2022

Closing Price	€ 15.54
Shares outstanding	51.45m
Market Capitalisation	€ 799.47m
52-week Range	€ 9.53 / 15.56
Avg. Volume (12 Months)	176,497

Multiples	2021	2022E	2023E
P/E	13.5	n.a.	24.1
EV/Sales	1.3	1.1	1.0
EV/EBIT	17.0	n.a.	16.9
Div. Yield	0.0%	2.1%	2.1%

STOCK OVERVIEW



COMPANY DATA

As of 31 Dec 2021

Liquid Assets	€ 108.90m
Current Assets	€ 335.65m
Intangible Assets	€ 189.90m
Total Assets	€ 601.52m
Current Liabilities	€ 195.53m
Shareholders' Equity	€ 339.91m

SHAREHOLDERS

EGORA Group	14.5%
JPMorgan Chase & Co	5.9%
UBS AG	5.5%
Samson Rock Capital LLP	5.0%
Free float and other	69.2%



Figure 1: Changes to our ADVA standalone forecasts

€000's	Q1/22E			FY/22 guidance	FY/22E			FY/23E		
	Old	New	Δ%		Old	New	Δ%	Old	New	Δ%
Sales	156,031	161,810	3.7%	650,000 to 700,000	654,737	660,373	0.9%	720,210	726,410	0.9%
Proforma gross profit	53,050	51,779	-2.4%	-	237,009	229,758	-3.1%	279,189	270,822	-3.0%
<i>margin (%)</i>	34.0%	32.0%	-	-	36.2%	34.8%	-	38.8%	37.3%	-
Proforma selling/mkting costs	-15,603	-16,181	-	-	-65,474	-66,037	-	-72,021	-72,641	-
<i>% sales</i>	-10.0%	-10.0%	-	-	-10.0%	-10.0%	-	-10.0%	-10.0%	-
Proforma G&A costs	-8,738	-9,044	-	-	-35,169	-35,467	-	-39,104	-39,444	-
<i>% sales</i>	-5.6%	-5.6%	-	-	-5.4%	-5.4%	-	-5.4%	-5.4%	-
Proforma net R&D costs	-18,568	-19,255	-	-	-77,914	-78,584	-	-79,223	-79,905	-
<i>% sales</i>	-11.9%	-11.9%	-	-	-11.9%	-11.9%	-	-11.0%	-11.0%	-
Other op. income and costs	780	809	3.7%	-	3,274	3,302	0.9%	3,601	3,632	0.9%
<i>% sales</i>	0.5%	0.5%	-	-	0.5%	0.5%	-	0.5%	0.5%	-
Proforma EBIT	10,921	8,108	-25.8%	39,000 to 70,000	61,726	52,971	-14.2%	92,442	82,463	-10.8%
<i>margin (%)</i>	7.0%	5.0%	-	6% to 10%	9.4%	8.0%	-	12.8%	11.4%	-
Reported EBIT	9,532	6,667	-30.1%	-	55,556	46,748	-15.9%	85,655	75,618	-11.7%
<i>margin (%)</i>	6.1%	4.1%	-	-	8.5%	7.1%	-	11.9%	10.4%	-

Source: ADVA Optical Networking SE; First Berlin Equity Research estimates

Figure 2: Changes to our ADTRAN standalone forecasts

USD 000's	FY/22E			FY/23E	Old	New	Δ%
	Old	New	Δ%				
Sales	659,942	662,755	0.4%	752,334	755,541	0.4%	
Non-GAAP gross profit	245,125	237,232	-3.2%	319,742	287,449	-10.1%	
<i>margin (%)</i>	37.1%	35.8%	-	42.5%	38.0%	-	
SG&A	-131,988	-132,551	-	-135,420	-135,997	-	
<i>% sales</i>	-20.0%	-20.0%	-	-18.0%	-18.0%	-	
R&D	-116,971	-117,477	-	-124,135	-124,664	-	
<i>% sales</i>	-17.7%	-17.7%	-	-16.5%	-16.5%	-	
Reconciliation GAAP to non-GAAP operating cost	16,000	16,000	0.0%	16,280	16,280	0.0%	
<i>% sales</i>	2.4%	2.4%	-	2.2%	2.2%	-	
Non-GAAP operating profit	12,166	3,204	-73.7%	76,467	43,068	-43.7%	
<i>margin (%)</i>	1.8%	0.5%	-	10.2%	5.7%	-	

Source: First Berlin Equity Research estimates

Our 2022 forecast for the merged entity incorporates USD22.3m (€19.8m) of transaction costs and USD24.9m (€22.1m) of costs relating to the replacement of ADVA stock options and the modification of ADTRAN performance stock units. These costs are detailed in Form S-4. The proforma end June 2021 balance sheet in Form S-4 shows a net USD479.4m increase in intangible assets over and above the combined standalone balance sheets. This reflects developed technology, customer backlog, customer relationships and brand value identified at ADVA. We have assumed that this figure is written off against the combined entity's opening balance sheet and so have not shown any related depreciation in our forecasts from 2022.



Buy recommendation and price target of €20.00 unchanged Under the terms of the merger, each ADVA share will be exchanged for 0.8244x the value of each ADTRAN share. Based on an updated DCF valuation of the combined entity, we now value the ADTRAN share at USD26.39 (previously: USD26.72). Multiplying this figure by 0.8244 and dividing by the current EURUSD exchange rate of 1.088 (previously 1.101) produces a value for the ADVA share of €20.00 (unchanged). The positive impact of the stronger USD on the merger exchange transaction thus cancels out the negative impact of US strength and component shortages on margins in 2022/23. We are leaving our Buy recommendation and price target of €20.00 unchanged.

Figure 3: Changes to forecasts (merged entity)

€000's	2022E			2023E			2024E			2025E			2026E		
	New	Old	Δ%	New	Old	Δ%	New	Old	Δ%	New	Old	Δ%	New	Old	Δ%
Revenues	1,264,966	1,251,119	1.1%	1,421,032	1,403,343	1.3%	1,569,764	1,550,138	1.3%	1,718,823	1,697,301	1.3%	1,856,328	1,833,086	1.3%
Cost of goods sold	-817,831	-791,640	-	-869,715	-815,081	-	-887,508	-875,120	-	-974,492	-945,456	-	-1,052,452	-1,021,092	-
Gross profit	447,135	459,479	-2.7%	551,318	588,262	-6.3%	682,256	675,018	1.1%	744,330	751,846	-1.0%	803,877	811,993	-1.0%
margin (%)	35.3%	36.7%	-	38.8%	41.9%	-	43.5%	43.5%	-	43.3%	44.3%	-	43.3%	44.3%	-
S,G & A costs	-262,978	-260,096	-	-231,567	-225,281	-	-254,489	-251,227	-	-267,829	-264,404	-	-284,634	-281,012	-
R&D costs	-193,809	-191,276	-	-238,736	-235,091	-	-245,560	-242,504	-	-264,542	-261,228	-	-285,706	-282,127	-
Net other op. inc.	2,748	2,673	2.8%	3,046	2,955	3.1%	3,320	3,221	3.1%	3,619	3,511	3.1%	3,909	3,792	3.1%
EBIT	-6,903	10,780	n.a.	84,060	130,845	-35.8%	185,528	184,509	0.6%	215,578	229,724	-6.2%	237,446	252,646	-6.0%
margin (%)	-0.5%	0.9%	-	5.9%	9.3%	-	11.8%	11.9%	-	12.5%	13.5%	-	12.8%	13.8%	-
Net interest	-355	-353	-	-445	-439	-	-501	-494	-	-553	-545	-	-606	-598	-
Pre-tax income (EBT)	-7,258	10,427	n.a.	83,615	130,406	-35.9%	185,027	184,015	0.6%	215,026	229,178	-6.2%	236,840	252,049	-6.0%
Income taxes	1,815	-2,607	-	-20,904	-32,601	-	-46,257	-46,004	-	-53,756	-57,295	-	-59,210	-63,012	-
Net income / loss	-5,444	7,820	n.a.	62,712	97,804	-35.9%	138,770	138,011	0.6%	161,269	171,884	-6.2%	177,630	189,037	-6.0%
Diluted EPS (in €)	-0.06	0.08	n.a.	0.65	1.01	-35.9%	1.40	1.40	0.6%	1.60	1.71	-6.2%	1.76	1.87	-6.0%
Adjusted EBITDA	54,906	72,071	-23.8%	134,599	180,674	-25.5%	242,575	240,752	0.8%	279,124	292,372	-4.5%	306,665	320,888	-4.4%
margin (%)	4.3%	5.8%	-	9.5%	12.9%	-	15.5%	15.5%	-	16.2%	17.2%	-	16.5%	17.5%	-

Source: First Berlin Equity Research estimates

Figure 4: DCF model

DCF valuation model									
All figures in USD 000s									
	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	
Net sales	1,386,656	1,545,657	1,707,432	1,869,563	2,019,128	2,170,520	2,333,314	2,508,372	
NOPLAT	-5,936	72,321	159,988	185,920	204,792	220,178	236,727	226,977	
+ depreciation & amortisation	40,303	44,131	49,909	55,764	60,866	65,592	70,441	75,650	
Stock compensation	27,452	10,840	12,141	13,355	14,423	15,577	16,823	18,169	
Net operating cash flow	61,819	127,292	222,038	255,039	280,082	301,348	323,992	320,796	
- total investments (CAPEX and WC)	-88,667	-89,563	-105,930	-111,117	-113,626	-111,093	-120,154	-129,943	
Capital expenditures	-54,753	-66,999	-70,055	-73,010	-76,491	-81,808	-87,908	-94,465	
Working capital	-33,914	-22,565	-35,875	-38,108	-37,135	-29,285	-32,246	-35,479	
Free cash flows (FCF)	-26,847	37,728	116,109	143,921	166,456	190,256	203,838	190,853	
PV of FCF's	-25,348	32,892	93,467	106,977	114,244	120,571	119,279	103,121	

All figures in thousands	
PV of FCFs in explicit period (2022E-2035E)	1,279,875
PV of FCFs in terminal period	1,243,857
Enterprise value (EV)	2,523,732
+ Net cash / - net debt	-77,054
+ PV cash proceeds of future option exercise	63,002
Shareholder value	2,663,788
Current shares outstanding	96,121
+ PV no shares issued against future option exercise	4,818
Proforma no shares	100,939
Fair value per ADTRAN share in USD	26.39

WACC	8.3%
Cost of equity	9.5%
Pre-tax cost of debt	2.0%
Tax rate	25.0%
After-tax cost of debt	1.5%
Share of equity capital	85.0%
Share of debt capital	15.0%
Fair value per ADTRAN share in USD	26.39
Fair value per ADVA share in EUR	20.00

WACC	Terminal growth rate						
	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%
6.80%	35.74	35.92	36.14	36.42	36.78	37.28	37.98
7.30%	32.32	32.32	32.32	32.32	32.32	32.31	32.31
7.80%	29.46	29.35	29.21	29.05	28.86	28.61	28.28
8.30%	27.03	26.85	26.64	26.39	26.09	25.72	25.25
8.80%	24.93	24.72	24.47	24.17	23.82	23.40	22.88
9.30%	23.12	22.88	22.61	22.30	21.93	21.49	20.96
9.80%	21.53	21.28	21.01	20.69	20.32	19.89	19.38

* for layout purposes the model shows numbers only to 2029, but runs until 2035

Source: First Berlin Equity Research estimates



INCOME STATEMENT

All figures in EUR '000	2020A	2021A	2022E	2023E	2024E	2025E	2026E
Revenues	564,958	603,317	1,264,966	1,421,032	1,569,764	1,718,823	1,856,328
Cost of goods sold	-368,416	-384,759	-817,831	-869,715	-887,508	-974,492	-1,052,452
Gross profit	196,542	218,558	447,135	551,318	682,256	744,330	803,877
Sales, general & admin. expenses	-96,700	-101,754	-262,978	-231,567	-254,489	-267,829	-284,634
Research and development expenses	-74,997	-76,723	-193,809	-238,736	-245,560	-264,542	-285,706
Net other operating income	2,628	5,214	2,748	3,046	3,320	3,619	3,909
Operating income (EBIT)	27,473	45,295	-6,903	84,060	185,528	215,578	237,446
Net interest income/(expense)	-2,607	-1,735	-355	-445	-501	-553	-606
Other financial gains and losses, net	-47	2,676	0	0	0	0	0
Pre-tax income (EBT)	24,819	46,236	-7,258	83,615	185,027	215,026	236,840
Income taxes	-4,505	12,982	1,815	-20,904	-46,257	-53,756	-59,210
Net income / loss	20,314	59,218	-5,444	62,712	138,770	161,269	177,630
Diluted EPS (in €)	0.40	1.15	-0.06	0.65	1.40	1.60	1.76
Adjusted EBITDA	54,487	78,501	54,906	134,599	242,575	279,124	306,665
Ratios							
Gross margin	34.8%	36.2%	35.3%	38.8%	43.5%	43.3%	43.3%
Adjusted EBITDA margin on revenues	9.6%	13.0%	4.3%	9.5%	15.5%	16.2%	16.5%
EBIT margin on revenues	4.9%	7.5%	-0.5%	5.9%	11.8%	12.5%	12.8%
Net margin on revenues	3.6%	9.8%	-0.4%	4.4%	8.8%	9.4%	9.6%
Tax rate	-18.2%	28.1%	-25.0%	-25.0%	-25.0%	-25.0%	-25.0%
Expenses as % of revenues							
Sales, general & admin. expenses	17.1%	16.9%	20.8%	16.3%	16.2%	15.6%	15.3%
Research and development expenses	13.3%	12.7%	15.3%	16.8%	15.6%	15.4%	15.4%
Y-Y Growth							
Revenues	1.5%	6.8%	109.7%	12.3%	10.5%	9.5%	8.0%
Operating income	128.9%	64.9%	n.m.	n.m.	120.7%	16.2%	10.1%
Net income/ loss	188.3%	191.5%	n.m.	n.m.	121.3%	16.2%	10.1%



BALANCE SHEET

All figures in EUR '000	2020A	2021A	2022E	2023E	2024E	2025E	2026E
Assets							
Current assets, total	247,575	335,653	744,143	825,365	923,420	1,079,672	1,247,683
Cash and cash equivalents	64,881	108,987	145,414	152,742	181,310	266,425	369,244
Restricted cash	0	0	61	53	96	200	348
Receivables	83,880	82,972	278,683	310,155	343,194	376,337	406,444
Inventories	90,124	129,205	293,845	332,893	366,450	401,298	433,402
Other current assets	8,690	14,489	26,140	29,522	32,370	35,412	38,245
Non-current assets, total	252,397	265,871	704,802	739,089	765,384	789,762	812,591
Property, plant & equipment	31,235	33,326	95,924	113,200	129,126	141,603	152,931
Goodwill	67,036	71,595	421,285	424,577	424,577	424,577	424,577
Other intangible assets	118,913	118,308	50,670	55,564	58,160	61,539	64,575
Deferred tax assets	7,233	15,339	18,139	20,574	22,683	24,850	26,838
Other non-current assets	27,980	27,303	118,784	125,172	130,838	137,193	143,670
Total assets	499,972	601,524	1,448,945	1,564,454	1,688,803	1,869,434	2,060,274
Shareholders' equity & debt							
Current liabilities, total	130,638	195,532	399,425	449,742	466,566	497,894	524,351
Financial liabilities	15,492	25,289	33,356	35,610	18,569	15,665	12,057
Accounts payable	44,151	83,223	199,214	226,018	241,477	255,975	267,210
Tax liabilities	1,808	5,769	13,310	15,094	16,636	18,224	19,682
Other current liabilities	69,187	81,251	153,544	173,020	189,884	208,030	225,402
Long-term liabilities, total	106,116	66,080	297,600	325,797	326,620	347,520	367,385
Lease liabilities	21,998	19,013	21,998	21,998	21,998	21,998	21,998
Financial liabilities	47,129	22,518	44,273	47,264	24,647	20,792	16,003
Provisions for pensions	8,545	7,401	22,073	25,049	27,632	30,277	32,699
Other provisions	1,558	2,440	1,821	2,003	2,184	2,380	2,570
Deferred tax liabilities	13,522	2,151	140,414	143,232	144,665	146,376	148,033
Other non-current liabilities	13,364	12,557	90,840	110,251	129,675	150,075	170,650
Shareholders' equity	263,218	339,912	751,920	788,915	895,617	1,024,020	1,168,538
Total consolidated equity and debt	499,972	601,524	1,448,945	1,564,454	1,688,803	1,869,434	2,060,274
Ratios							
Net debt	34,090	-28,765	-45,772	-44,872	-110,557	-199,891	-308,832
Net gearing	13.0%	-8.5%	-6.1%	-5.7%	-12.3%	-19.5%	-26.4%
Book value per share (in €)	5.24	6.71	7.74	7.97	8.90	10.13	11.52
Return on equity (ROE)	2.7%	19.6%	-1.0%	8.1%	16.5%	16.8%	16.2%



CASH FLOW STATEMENT

All figures in EUR '000	2020A	2021A	2022E	2023E	2024E	2025E	2026E
Income before tax	24,819	46,236	-7,258	83,615	185,027	215,026	236,840
Depreciation and amortisation	64,729	70,407	36,767	40,572	45,885	51,268	55,959
Changes in working capital	11,968	6,511	-30,937	-20,745	-32,982	-35,035	-34,141
Income tax paid	-2,099	-1,911	1,815	-20,904	-46,257	-53,756	-59,210
Other adjustments inc. stock compensation	-2,274	2,010	25,043	9,966	11,162	12,278	13,260
Operating cash flow	97,143	123,253	25,428	92,505	162,835	189,780	212,709
Investments in PP&E	-13,648	-15,899	-36,314	-43,974	-47,362	-47,898	-50,100
Investments in intangibles	-44,740	-48,377	-13,634	-17,622	-17,044	-19,225	-20,224
Free cash flow	38,755	58,977	-24,520	30,908	98,429	122,657	142,385
Acquisitions & disposals, net	0	0	0	0	0	0	0
Other	34	5	0	0	0	0	0
Investment cash flow	-58,354	-64,271	-49,948	-61,597	-64,406	-67,123	-70,324
Debt financing, net	-18,500	-15,000	9,701	7,441	-37,074	-4,114	-5,975
Lease liabilities	-6,986	-4,627	0	0	0	0	0
Equity financing, exercise of stock options	1,273	6,608	0	0	0	0	0
Dividends paid	0	0	0	-32,165	-32,744	-33,323	-33,443
Other	-2,553	-1,780	0	0	0	0	0
Financing cash flow	-26,766	-14,799	9,701	-24,724	-69,818	-37,437	-39,418
FOREX & other effects	-1,405	-77	0	329	0	0	0
Net cash flows	10,618	44,106	-14,818	6,513	28,611	85,219	102,967
Cash, start of the year	54,263	64,881	160,293	145,475	152,795	181,406	266,625
Cash, end of the year	64,881	108,987	145,475	152,795	181,406	266,625	369,592
EBITDA/share (in €)	1.08	1.54	0.57	1.39	2.45	2.77	3.03
Y-Y Growth							
Operating cash flow	45.2%	26.9%	-79.4%	263.8%	76.0%	16.5%	12.1%
Free cash flow	503.8%	52.2%	n.m.	n.m.	218.5%	24.6%	16.1%
EBITDA/share	-25.4%	43.2%	-63.0%	142.5%	77.0%	13.1%	9.5%

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UST-Id.: 251601797

Ggf. Inhaltlich Verantwortlicher gem. § 6 MDStV

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The production of this recommendation was completed on 12 April 2022 at 09:46

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

Category		1	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 €0 – €2 billion, and Category 2 companies have a market capitalisation of > €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.

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RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	17 September 2019	€6.53	Buy	€8.50
2...1	↓	↓	↓	↓
2	27 October 2020	€6.34	Add	€8.20
3	12 January 2021	€8.05	Add	€11.00
4	2 March 2021	€9.63	Buy	€12.50
5	27 April 2021	€10.04	Buy	€13.00
6	27 July 2021	€12.96	Buy	€14.40
7	2 September 2021	€13.72	Buy	€14.40
8	10 January 2022	€13.64	Add	€18.00
9	4 March 2022	€14.94	Buy	€20.00
10	Today	€15.54	Buy	€20.00

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- key sources of information in the preparation of this research report
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