

## Latest de-rating offers upside

*After two years of lacklustre share price performance for German telcos, we believe the time is ripe for brave investors to move into this sector. We have four BUY, one HOLD and one SELL ratings on the sector. We do not see any large fourth MNO market entrant with the coming 5G auctioning in Germany and prefer asset-light business models propagated by 1&1 Drillisch, Freenet or United Internet. 5G should not lead to consensus changes as investments are well flagged by incumbents. During the market sell-off in October/November, telco companies outperformed and are perceived as “safe havens” due to their resilient business model and high and, in our view, sustainable dividend policy ranging from 4% (DTE) to almost 10% (Freenet). We would also like to flag the sectors cheap valuation ranging from 5x EV/EBITDA for DTE to de-rated DRI from 18x peak to now 9x FY19 EV/EBITDA levels. The German cable industry moves into a duopolistic market structure (post merged VOD/LBTY cable asset deal) and a high probability exists for Tele Columbus to hunt for “trophy assets” resulting from any concessions enforced by the EC.*

### What to watch for in the German telecommunications space

The German telecommunication market suffered from regulatory effects in 2017 and 2018 with roaming and MTR/FTR cuts for MNOs. These cuts impacted resellers and MVNOs such as 1&1 Drillisch, United Internet or Freenet. We believe that the worst is behind us and that German MNOs are now preparing for new investments into 5G spectrum and network infrastructure.

German operators still benefit from a three-tiered MNO telco market, dominated by Deutsche Telekom, Vodafone and Telefonica Deutschland and market research shows, that consumers did not benefit in the past from intensified competition and are paying high tariffs for low 4G gigabyte usage compared to EU and OECD countries.

M&A in Germany is rather limited for MVNOs such as 1&1 Drillisch as the mobile market relies on MVNO agreements and capacity provided by MNOs, but see ample room for Tele Columbus to hunt for “trophy assets” if the planned cable merger between VOD and LBTY is approved by the European Commission in return for concessions.

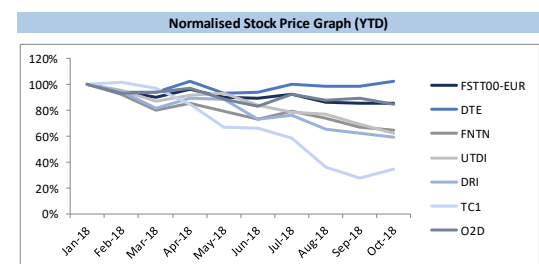
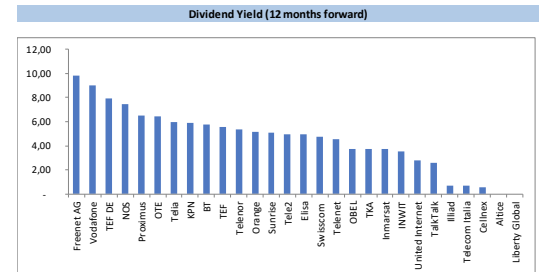
In the near term, 5G auctioning as well as potential new entrants in the German market, further network & infrastructure investments and European wide M&A transactions should be in the focus of investors.

### Top Picks

Our most preferred stocks in the German telco universe are 1&1 Drillisch (Buy, TP: EUR 56) and cable operator Tele Columbus (Buy, TP: EUR 4.80), which should excel in good and bad economic times, as telco spending is mainly driven by available/increasing personal income rather than GDP growth rates.

The least preferred stock in our coverage universe is Telefonica Deutschland (Sell, TP: EUR 2.70) as the company does not offer any compelling convergence play, underinvests in network infrastructure and, in our view, might be squeezed between MNOs (Deutsche Telekom, Vodafone) and discounters (1&1 Drillisch, Freenet, resellers).

## Sector German Telecommunication



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## Operators reported a good Q3 and encouraging guidance

*Good operating performance from operators and resellers/MVNO, limited M&A opportunities in the German market and preparation for 5G auctioning in the German market at the beginning of 2019*

The 3Q18 earnings season was solid with Deutsche Telekom surpassing our expectations while Telefonica Deutschland met targets but missed on main KPIs such as net adds and churn in past quarters. On average, European telco companies posted revenue and EBITDA 1.8% and 3.3% above our initial estimates for the quarter and show in general that the mobile service revenue (MSR) is growing again after years of disappointment. Visibility on the full-year 2018 also increased despite heavy promotions by Telefonica Deutschland especially in the discount segment. In the case of Deutsche Telekom, T-Mobile US is the horse to watch, as most of the guidance increase in EBITDA stems from operational excellence and execution on main KPIs (net adds, churn, retention, cost control) at its US entity. DTE was able to increase EBITDA for a third time by EUR 100m in each quarter now and adjusted its guidance toward the high end of the already exuberant consensus estimate of EUR 22.9-23.7bn range.

## M&A update

Compared to the US market, we do not expect big telco mergers in Europe, as synergy potential would be limited despite comparable market sizes in terms of available customers and SIM counts. While the US market is inherently homogenous, the European market lacks this and shows different consumer behaviour in terms of tariffs, post- and pre-paid market structure as well as competitive landscape among operators and resellers/MVNOs.

Therefore no big deals were announced in Q3. Vodafone has announced its proposed acquisition of Liberty Global's assets in Germany (mainly cable business with LBTY's UnityMedia and KabelBW assets) and is currently waiting for the regulatory go-ahead from EU antitrust authorities.

**Exhibit 1: M&A transactions in the European telecommunication and cable sector**

Date	Target	Acquirer	%	Trans. Value	Net Debt	100%	TV/Revenue	TV/EBIT	TV/EBITDA	EBITDA	EBITDA margin
Apr-14	Numericable Group	Altice SA	78%	3,991	2,665	5,086	4.9	25.4	11.3	352	43.6%
Jul-14	Grupo Corporativo ONO SA	Vodafone	100%	7,200			4.5	25.2	10.5	686	43.0%
Oct 14	Get AS	TDC A/S	100%	1,667			6.2		11.8	141	52.3%
Oct 14	Virgin Media	Liberty Global	100%	22,620	8,938		3.4	20.1	8.4	2,709	40.4%
Nov-14	Sky Italia Srl	Sky PLC	100%	3,319			1.2		11.5	289	10.1%
Dec 14	Ziggo	Liberty Global	72%	9,823	2,996	13,739	6.5	16.6	11.4	859	56.7%
Sep-15	Sky Deutschland AG	Sky PLC	100%	1,994			1.1		23.1	86	4.8%
Oct 16	Business Application (United Internet)	Warburg Pincus	33%	850		2,550	2.0		12.5	204	16.0%
Dec 16	Strato	United Internet	100%	600			4.7		12.2	49	38.6%
April 17	Com Hem Holding AB	Kinnevik AB	19%	427		3,384	3.3	23.0	11.3	300	30.0%
May 17	Host Europe Group	GoDaddy	100%	1,807	1,168	2,975	4.0	33.8	10.6	280	37.3%
Dec 17	UPC Austria (Liberty Media)	Deutsche Telekom	100%	1,900			6.3		10.6	180	50.0%
Jan-18	Com Hem	Tele2	100%	3,300			6.6		12.7	260	52.0%
Nov-18	Tele2	Deutsche Telekom	25%	190	250	1,010	4.0		13.5	75	30.0%
Average							4.2	24.0	12.2	462	36.1%
Median							4.3	24.1	11.5	270	39.5%

Source: Pareto

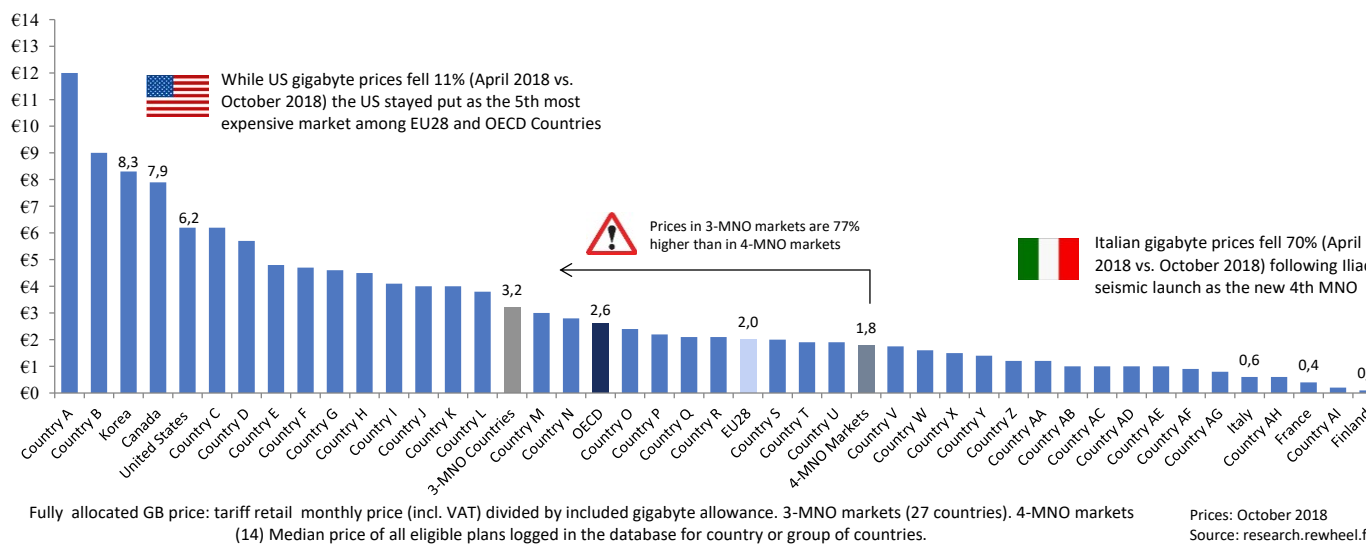
Vodafone's US\$ 22bn proposed acquisition of Liberty Global's assets in Germany and Eastern Europe is likely to face a full EU antitrust investigation according to latest press articles. If the European Commission demands VOD to offer concessions to pass this deal, we are convinced that Tele Columbus will be a main beneficiary of cable remedies in the German market able to hunt for "trophy assets" in regions where TC1 is underrepresented. We believe that such a large merger and tie-up of German cable assets (VOD's Kabel Deutschland and LBTY's UnityMedia and KabelBW) would pose severe competition issues in the cable segment. The Commission is scheduled to wrap up its preliminary review by Dec. 11, 2018.

The EU Commission has just given unconditional clearance for Deutsche Telekom's acquisition of Tele2's Dutch business after initial concerns.

## Market structure and 5G spectrum

In Italy, the entrant of a fourth operator (Iliad moved into the Italian market) completely changed the competitive landscape in this market. With the upcoming 5G auctioning in Germany, lobbying groups such as BREKO or the German Cartel authorities would welcome a fourth operator (next to Deutsche Telekom, Vodafone and Telefonica Deutschland) for better competition in tariffs and pricing for end consumers. As the Italian market shows (see Exhibit 2), Iliad's proactive and aggressive move resulted in price cuts of up to 70% for certain gigabyte bundles.

**Exhibit 2: Italian market (four operators) a precursor for more competition in German telco market (three operators) with 5G**



Source: Pareto, Rewheel Research

Clearly a market with three operators rather than four leads to higher tariffs and less choice for consumers. Prices in three MNO markets (i.e. Germany) are on average 77% higher than in four MNO markets according to market researcher Rewheel. The aggressive Italian 5G spectrum auction (total proceeds of EUR 6.55bn) triggered significant concerns among investors on potentially increasing costs also for German operators for the much-needed frequencies regarding industrial, automation and automotive connectivity (see Exhibit XX: Share price performance YTD). Based on the Italian outcome and unfavourable comments by United Internet's CEO to potentially bid for 5G spectrum led to the belief that UTDI and 1&1 Drillisch abandon their asset light model, and move into a fully regulated and asset-heavy MNO business.

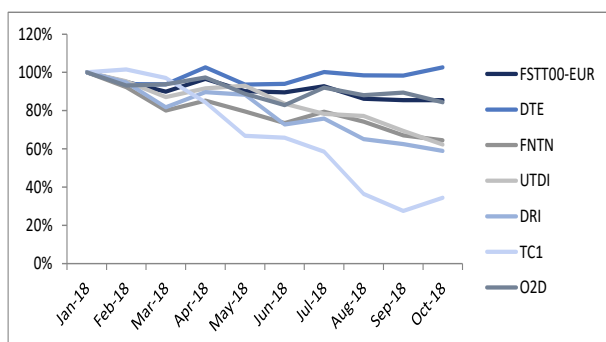
The forthcoming auctions include Germany (2GHz and 3.6GHz bands), UK (700MHz), Spain (700MHz) and Belgium (multi band from 700MHz to 3.6GHz). Germany's Federal Networks Agency (BNetzA - Bundesnetzagentur) has already presented the draft terms for the 5G auction planned for early 2019. Coverage for 5G should reach 98% of the households by 2022 with 100 Mbps speed and 300 Mbps by the end of 2025. Nevertheless, German Cartel and antitrust regulator already called for a fourth mobile carrier to enter the domestic market when 5G licenses are auctioned in 2019 as the three MNO market did not lead to more competition and lower tariffs for end-consumers. The draft does not foresee any national roaming clause which was requested by resellers and MVNOs such as United Internet, Freenet or 1&1 Drillisch.

Deutsche Telekom, Vodafone and Telefonica Deutschland have said that allowing network access to other operators and MVNOs would put them at a further disadvantage, as these firms will not have to invest significant resources in network infrastructure.

## Share price performance of German telcos

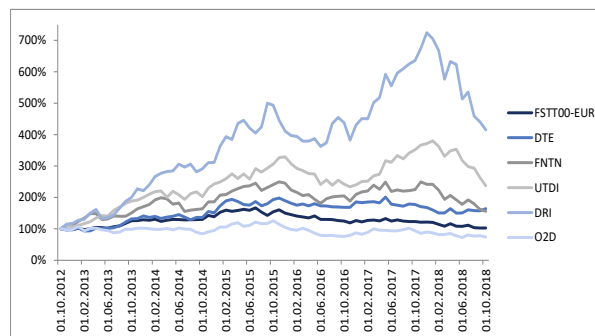
Fear among investors regarding intensified promotions by incumbents such as Telefonica Deutschland's discount brand BLAU and uncertain requirements regarding 5G auctioning, resulted in overall dismal share price performance YTD (exception: DTE +3%). The sector underperformed since the beginning of the year vs. the DJ Stoxx TMI; but amid the recent sharp market correction telcos proved their defensive qualities with DTE moving up during the October/November slump.

**Exhibit 3: Stock Prices (YTD)**



Source: Pareto, FactSet

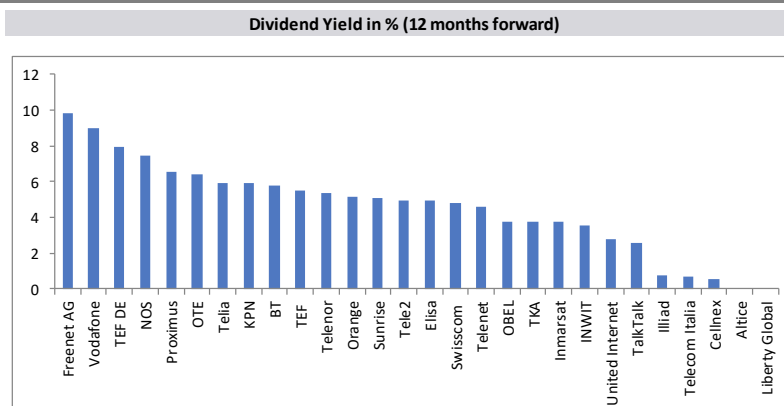
**Exhibit 4: Stock Prices (2012-2018)**



Source: Pareto, FactSet

This performance in October/November is definitely a result of the telco sector offering a healthy and, in our view, sustainable dividend yield especially after the severe YTD share price falls in the sector. We had generally trimmed our target prices to account for a tougher competitive landscape and now see good entry points for several German telco and cable operators. DTE should also benefit from a favourable US\$ FX effect, especially for 1Q19 results due to its TMUS operations. The -65% share price decrease of Tele Columbus was mainly due to profit warning after integration problems and higher integration costs of its latest acquisitions of cable operators such as pepcom and primacom. Also its high leverage with its 5.5x ND/EBITDA ratio and low trading volume scared investors and led to this rout in its share price in 2018.

**Exhibit 5: Dividend Yield (12 months forward)**

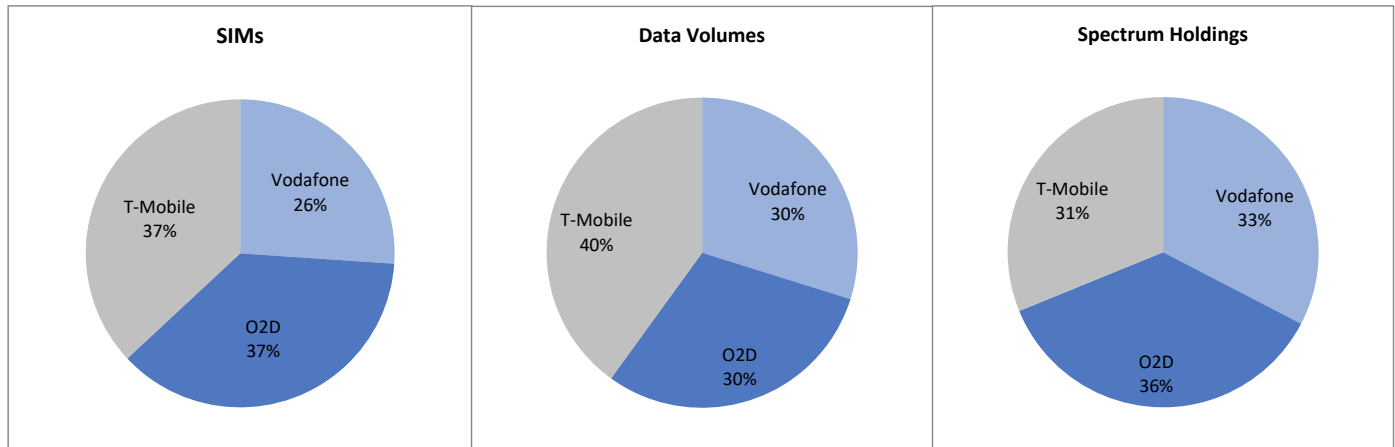


Source: Pareto, FactSet

### Investments pay-off for capex spenders

Although, German MNOs (Mobile Network Operators) do not differ much in terms of market share for SIM, data volume or spectrum holdings, quality, reliability and customer service orientation is a clear differentiator and gives DTE a clear lead in almost all test results by independent magazines.

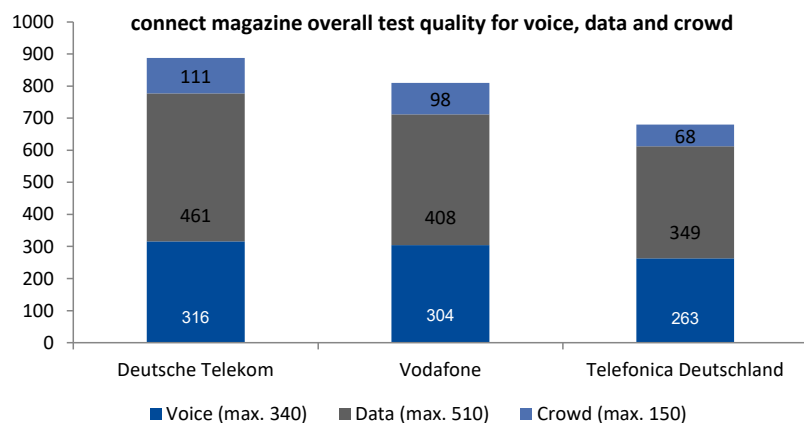
**Exhibit 6: Market share for MNOs by different segments**



Source: Pareto, Rewheel Research

For the eighth time in succession, Deutsche Telekom wins the “connect” mobile network test in Germany. DTE won in all categories such as mobile calls, mobile Internet, availability and coverage in Germany.

**Exhibit 7: And the winner is Deutsche Telekom (best mobile network in GER)**



Source: Pareto, connect magazine

Connect magazine asserts DTE a high quality not only in highly populated areas where it competes head to head with its two main competitors, Vodafone and Telefonica Deutschland, but also high LTE availability in rural regions.

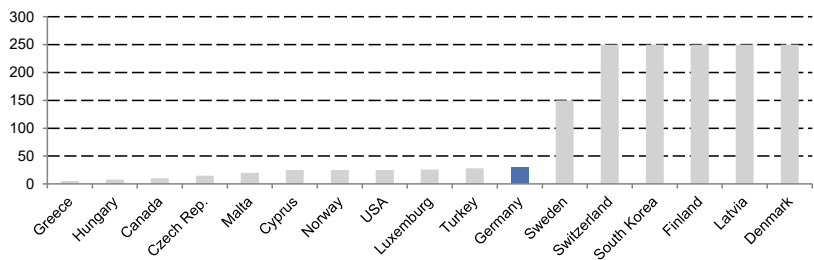
In a direct comparison with previous year's result, Vodafone dropped slightly in this year's connect network test. While network quality in metropolitan areas continues to improve for VOD customers, the rural population often has to live with GSM and EDGE standards.

Telefonica Deutschland also improved its KPIs significantly compared to the previous year (especially its enhanced network quality in larger cities) but misses to its competitors in smaller towns and on connecting roads or railways.

For mobile phone calls all three German mobile networks offer a high quality due to investments in the LTE network (VoLTE ) and into EVS (Enhanced Voice Services) codec, which allows voice calls in hi-fi quality.

All these investments have a high price for German consumers, paying one of the highest tariffs within the EU and receiving one of the lowest GB rates for EUR 30.00 compared to other EU or OECD countries. As can be seen in the following graph (Germany highlighted), Germany is among the countries with the lowest gigabytes that EUR 30.00 could buy. According to Rewheel Research analysis, German consumers pay one of the highest tariffs for 30GB of usage, while other countries such as Estonia, Denmark or Latvia offer unlimited plans that were assigned 250GB finite volume to have better comparison regarding different pricing models/tariffs.

Exhibit 8: How many 4G GB EUR 30 buys in EU/OECD countries



Source: Pareto, Rewheel Research

**Exhibit 9: Telecommunication and cable coverage universe (recommendation and target price)**

Name	Recommendation	Target Price	Last Price	Up/Downside	Market Cap (EURm)	Analyst
<b>Operators</b>						
Deutsche Telekom	Hold	15,50	15,43	0%	73.469	Cengiz Sen
Telefonica Deutschland	Sell	2,70	3,65	-26%	10.850	Cengiz Sen
<b>MVNOs/Reseller</b>						
United Internet	Buy	63,00	39,30	60%	7.874	Cengiz Sen
1&1 Drillisch AG	Buy	56,00	44,04	27%	5.982	Cengiz Sen
Freenet	Buy	28,00	17,75	58%	2.272	Cengiz Sen
<b>Cable operator</b>						
Tele Columbus	Buy	4,80	3,78	27%	482	Cengiz Sen
<b>Telco hardware</b>						
Gigaset	Buy	0,58	0,41	42%	54	Cengiz Sen

Source: Pareto

**Exhibit 10: Telecommunication and cable coverage universe (valuation multiples)**

Name	PE (adj) 2018e	PE (adj) 2019e	Div. Yield 2018e	Div. Yield 2019e	P/BV 2018e	P/BV 2019e
<b>Operators</b>						
Deutsche Telekom	30,3	27,4	4,5%	4,9%	2,44	2,50
Telefonica Deutschland	-	-	7,4%	7,6%	1,46	1,63
<b>MVNOs/Reseller</b>						
United Internet	15,8	14,2	3,1%	3,3%	1,82	1,70
1&1 Drillisch AG	19,2	16,4	4,2%	4,9%	1,95	1,85
Freenet	9,3	9,0	9,6%	9,9%	1,55	1,52
<b>Cable operator</b>						
Tele Columbus	19,6	14,0	0,0%	0,0%	0,91	0,85
<b>Telco hardware</b>						
Gigaset	14,3	11,2	0,0%	0,0%	1,94	1,66

Source: Pareto

## Lean but not mean

**1&1 Drillisch (DRI) is the fourth largest mobile provider in Germany, operating under an MBA-MVNO (Mobile Bitstream Access Mobile Virtual Network Operator) agreement and currently has over 13m customers in its Mobile Access (around 9m) and DSL/VDSL (around 4m) unit. Drillisch merged with United Internet's (UTDI) mobile access business 1&1 Telecom and formed this new entity, with UTDI as the main shareholder holding approximately 73% of the company. UTDI's founder and CEO is also the CEO of DRI. We have a BUY rating on the shares with a target price of EUR 56.00 per share.**

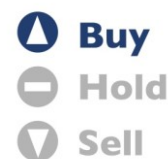
### Investment Case

DRI operates an asset-light model and has lean operating structures compared to mobile network operators such as DTE, VOD or O2D. DRI will, in our view, hugely benefit from economies of scale with its business combination of 1&1 and able to realize at least operating synergies of almost EUR 200-250m p.a. in the next years. With a low capex spend, we estimate that 90% of all synergies is related to OPEX and around 10% on capex.

DRI is debt free and we assume an excellent conversion rate of nearly 50% on EBITDA level. Therefore, DRI should emerge as a significant dividend payer in coming years, with a dividend yield of above 5% going forward. DRI already started a buyback program in the magnitude of EUR 80m and should reward shareholders handsomely with a payout ratio of 80%. Expansion into other European markets is not on their agenda and national M&A targets are limited (small bolt-on transactions possible to enlarge its online presence and subscriber base), M&A therefore is not a big topic for DRI currently.

EURm	2016	2017	2018e	2019e	2020e
Revenues	710	2.812	3.656	3.905	4.100
EBITDA	120	504	726	843	937
EBIT	59	440	595	700	785
EPS	0,48	2,28	2,29	2,69	3,02
EPS adj	0,54	2,35	2,29	2,69	3,02
DPS	1,80	1,60	1,83	2,15	2,42
EV/EBITDA	19,1	18,1	10,8	9,0	8,1
EV/EBIT	39,1	20,7	13,2	10,8	9,7
P/E adj	75,7	29,3	19,2	16,4	14,6
P/B	7,90	2,46	1,95	1,85	1,85
ROE (%)	8,3	15,2	10,4	11,6	12,7
Div yield (%)	4,4	2,3	4,2	4,9	5,5
Net debt	57	(230)	62	(193)	(193)

Source: Pareto



Target price (EUR)	56
Share price (EUR)	44

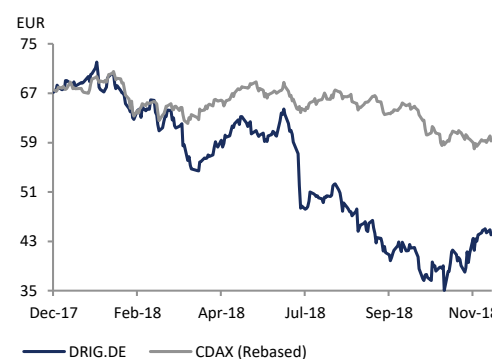
### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	DRIG.DE, DRI GY
Sector	Telecom
Shares fully diluted (m)	135,8
Market cap (EURm)	5.982
Net debt (EURm)	62
Minority interests (EURm)	0
Enterprise value 18e (EURm)	7.846
Free float (%)	28

### Performance



Source: Factset

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*Drillisch has a lean corporate structure and should generate good FCF going forward*

## Company profile

1&1 Drillisch AG (DRI) operates as a telecommunications provider in Germany. DRI provides its customers with a portfolio of services and products from the fields of DSL, mobile voice, and data services. It markets postpaid and prepaid products in the networks of Telefónica Deutschland (Vodafone, as well as landline and DSL products, including the related applications, such as home networking, online storage, telephony, and video on demand or IPTV. The company was founded in 1988 and is headquartered in Maintal, Germany.

## Upcoming Drivers and Triggers

Drillisch will report FY18 figures beginning March 2019 without giving a fixed date currently.

All eyes are on the 5G auctioning in Germany beginning in 1Q19. More importantly for DRI and UTDI are agreements on “national roaming” as neither DRI nor UTDI will change their asset light model as the fourth largest operator benefitting from all technological improvements by their partner and network provider Telefonica Deutschland.

## Risks to our Investment Case

While the stock de-rated (~35% YTD) this year, we believe that investors feared the CEO’s statement to invest into 5G infrastructure and turn from an asset-light to an asset-heavy business model. We believe these worries are not justified as DRI as well as UTDI search for possibilities of national roaming to participate in the prospects of 5G.

Besides that, DRI has long term contracts with O2D until FY30 regarding its MBA-MVNO contract and fill the network capacity offered by O2D with DRI’s own subscribers.

An entrance by an independent fourth player into the German market (as happened in Italy with Illiad) could severely harm the tariff structures as experienced in Italy, where data tariffs plunged 80% from pre-Iliad entrance levels.

## Valuation and recommendation

We expect DRI to generate significant FCF after 2018 as its capex spend should be limited to around 2-3% of sales p.a. This justifies a premium to incumbents that trade around 5-6x EV/EBITDA in Europe and around 8x for Freenet in the German market.

We believe that its asset-light model and FCF potential should justify a re-rating of the shares in FY19 and start distributing a decent dividend to shareholders or buyback shares as currently done in the open market.

The company is currently trading on 9x FY19 EV/EBITDA valuations and multiples have contracted from levels of ~18x before the merger happened on a stand-alone basis for Drillisch at that time.

We set our target price at EUR 56.00 with a BUY rating on the stock.

## Exhibit 11: DCF model

EUR m	2018	2019	Phase I 2020	2021	2022	2023	2024	Phase II 2025	2026	2027	Phase III 2028
<b>Sales</b>	<b>3,656.0</b>	<b>3,904.6</b>	<b>4,099.8</b>	<b>4,263.8</b>	<b>4,391.8</b>	<b>4,512.5</b>	<b>4,625.3</b>	<b>4,717.8</b>	<b>4,788.6</b>	<b>4,848.5</b>	<b>4,897.0</b>
Sales growth	n/m	6.8%	5.0%	4.0%	3.0%	2.8%	2.5%	2.0%	15%	13%	10%
<b>EBIT</b>	<b>595.0</b>	<b>700.0</b>	<b>785.3</b>	<b>886.0</b>	<b>865.8</b>	<b>862.0</b>	<b>854.6</b>	<b>841.6</b>	<b>847.4</b>	<b>851.0</b>	<b>854.3</b>
EBIT margin	16.3%	17.9%	19.2%	20.8%	19.7%	19.1%	18.5%	17.8%	17.7%	17.6%	17.4%
<b>Tax</b>	<b>(178.5)</b>	<b>(210.0)</b>	<b>(235.6)</b>	<b>(265.8)</b>	<b>(259.8)</b>	<b>(258.6)</b>	<b>(256.4)</b>	<b>(252.5)</b>	<b>(254.2)</b>	<b>(255.3)</b>	<b>(256.3)</b>
Normative tax rate EBIT	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
<b>NOPAT</b>	<b>416.5</b>	<b>490.0</b>	<b>549.7</b>	<b>620.2</b>	<b>606.1</b>	<b>603.4</b>	<b>598.2</b>	<b>589.1</b>	<b>593.2</b>	<b>595.7</b>	<b>598.0</b>
<b>Depreciation</b>	<b>70.8</b>	<b>72.0</b>	<b>78.5</b>	<b>88.3</b>	<b>87.2</b>	<b>87.8</b>	<b>89.0</b>	<b>90.2</b>	<b>91.2</b>	<b>92.1</b>	<b>93.2</b>
in % of Sales	19%	18%	19%	2.1%	2.0%	19%	19%	19%	19%	19%	19%
<b>Capex</b>	<b>(71.3)</b>	<b>(76.1)</b>	<b>(79.9)</b>	<b>(83.1)</b>	<b>(85.6)</b>	<b>(88.0)</b>	<b>(90.2)</b>	<b>(92.0)</b>	<b>(93.4)</b>	<b>(94.5)</b>	<b>(93.0)</b>
in % of Sales	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	19%
<b>Provision delta</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.7</b>
in % of Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Change in working capital</b>	<b>(212.1)</b>	<b>(14.0)</b>	<b>(25.0)</b>	<b>(9.2)</b>	<b>(7.2)</b>	<b>(6.8)</b>	<b>(6.3)</b>	<b>(5.2)</b>	<b>(4.0)</b>	<b>(3.4)</b>	<b>(2.7)</b>
in % of Sales	-5.8%	-0.4%	-0.6%	-0.2%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
<b>Other current assets delt</b>	<b>(57.8)</b>	<b>(10.4)</b>	<b>(10.4)</b>	<b>(11.4)</b>	<b>(12.6)</b>	<b>(13.8)</b>	<b>(15.2)</b>	<b>(16.7)</b>	<b>(18.4)</b>	<b>(20.2)</b>	<b>(4.1)</b>
in % of Sales	-1.6%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.4%	-0.4%	-0.4%	-0.1%
<b>Free Cash Flow</b>	<b>146.6</b>	<b>462.1</b>	<b>513.5</b>	<b>605.1</b>	<b>588.3</b>	<b>583.1</b>	<b>575.9</b>	<b>565.8</b>	<b>569.0</b>	<b>570.0</b>	<b>592.2</b>
FCF growth	nm	nm	11.6%	17.8%	-2.8%	-0.9%	-12%	-18%	0.6%	0.2%	3.9%
<b>Present Value FCF</b>	<b>145.6</b>	<b>430.7</b>	<b>449.2</b>	<b>496.7</b>	<b>453.1</b>	<b>421.4</b>	<b>390.6</b>	<b>360.1</b>	<b>339.8</b>	<b>319.4</b>	<b>5,962.7</b>
<b>PV Phase I</b>		<b>1,975</b>			<b>MCap</b>		<b>7,604</b>		<b>Targ. equity ratio</b>		<b>99.1%</b>
<b>PV Phase II</b>		<b>1,831</b>			<b>Risk premium</b>		<b>5.00%</b>		<b>Beta</b>		<b>0.6</b>
<b>PV Phase III</b>		<b>5,963</b>			<b>Risk free rate</b>		<b>3.50%</b>		<b>WACC</b>		<b>6.57%</b>
<b>Total present value</b>		<b>9,769</b>									
+ capital increase/buy backs/disposal		<b>0</b>									
+ associates & other financial assets		<b>0</b>									
- market value of minorities		<b>0</b>									
+ cash and liquid assets		<b>230</b>									
- interest bearing debt*		<b>92</b>									
<b>Implied MCap</b>		<b>9,907</b>									
<b>Number of shares</b>		<b>177</b>									
<b>Implied value per share</b>		<b>56</b>									
<i>Source: Pareto</i>											

Sensitivity Analysis	Growth rate Phase III				
	0.0%	0.5%	1.0%	1.5%	2.0%
6.24%	54	56	59	63	68
6.40%	52	55	58	61	66
6.57%	51	53	56	59	63
6.73%	50	52	54	58	61
6.89%	48	51	53	56	59

<b>PROFIT &amp; LOSS (fiscal year) (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Revenues</b>	<b>290</b>	<b>290</b>	<b>630</b>	<b>710</b>	<b>2.812</b>	<b>3.656</b>	<b>3.905</b>	<b>4.100</b>
<b>EBITDA</b>	<b>71</b>	<b>85</b>	<b>105</b>	<b>120</b>	<b>504</b>	<b>726</b>	<b>843</b>	<b>937</b>
Depreciation & amortisation	(10)	(10)	(36)	(61)	(64)	(131)	(143)	(152)
<b>EBIT</b>	<b>61</b>	<b>75</b>	<b>69</b>	<b>59</b>	<b>440</b>	<b>595</b>	<b>700</b>	<b>785</b>
Net interest	117	(3)	(3)	(3)	(9)	-	-	-
<b>Profit before taxes</b>	<b>178</b>	<b>73</b>	<b>66</b>	<b>56</b>	<b>431</b>	<b>595</b>	<b>700</b>	<b>785</b>
Taxes	(22)	(23)	(20)	(29)	(121)	(190)	(224)	(251)
Minority interest	-	-	-	-	-	-	-	-
<b>Net profit</b>	<b>156</b>	<b>50</b>	<b>46</b>	<b>26</b>	<b>310</b>	<b>405</b>	<b>476</b>	<b>534</b>
EPS reported	3,24	1,03	0,85	0,48	2,28	2,29	2,69	3,02
<b>EPS adjusted</b>	<b>3,35</b>	<b>1,09</b>	<b>0,91</b>	<b>0,54</b>	<b>2,35</b>	<b>2,29</b>	<b>2,69</b>	<b>3,02</b>
DPS	1,60	1,70	1,75	1,80	1,60	1,83	2,15	2,42
<b>BALANCE SHEET (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Tangible non current assets	1	3	11	11	15	22	27	27
Other non-current assets	101	99	379	354	3.840	3.774	3.697	3.697
Other current assets	62	57	175	137	651	943	988	1.016
Cash & equivalents	187	317	123	93	230	(62)	193	193
<b>Total assets</b>	<b>352</b>	<b>476</b>	<b>689</b>	<b>595</b>	<b>4.736</b>	<b>4.677</b>	<b>4.906</b>	<b>4.933</b>
Total equity	218	331	353	283	3.805	3.992	4.203	4.203
Interest-bearing non-current debt	86	89	101	144	-	-	-	-
Interest-bearing current debt	-	-	65	6	-	-	-	-
Other Debt	48	56	170	162	931	685	703	730
<b>Total liabilities &amp; equity</b>	<b>352</b>	<b>476</b>	<b>689</b>	<b>595</b>	<b>4.736</b>	<b>4.677</b>	<b>4.906</b>	<b>4.933</b>
<b>CASH FLOW (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Cash earnings	165	60	82	88	374	535	619	686
Change in working capital	(4)	3	(9)	(19)	60	(212)	(14)	(25)
Cash flow from investments	257	(8)	(324)	(37)	(3.549)	(71)	(76)	(80)
Cash flow from financing	(255)	183	119	(192)	3.923	(382)	(152)	(400)
Net cash flow	110	130	(194)	(31)	137	(291)	255	-
<b>CAPITALIZATION &amp; VALUATION (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Share price (EUR end)</b>	<b>21,0</b>	<b>29,6</b>	<b>39,1</b>	<b>40,9</b>	<b>68,8</b>	<b>44,0</b>	<b>44,0</b>	<b>44,0</b>
Number of shares end period	48	53	59	55	136	177	177	177
Net interest bearing debt	(101)	(228)	43	57	(230)	62	(193)	(193)
<b>Enterprise value</b>	<b>912</b>	<b>1.334</b>	<b>2.332</b>	<b>2.297</b>	<b>9.120</b>	<b>7.846</b>	<b>7.592</b>	<b>7.592</b>
EV/Sales	3,1	4,6	3,7	3,2	3,2	2,1	1,9	1,9
<b>EV/EBITDA</b>	<b>12,9</b>	<b>15,7</b>	<b>22,2</b>	<b>19,1</b>	<b>18,1</b>	<b>10,8</b>	<b>9,0</b>	<b>8,1</b>
EV/EBIT	14,9	17,7	33,7	39,1	20,7	13,2	10,8	9,7
P/E reported	6,5	28,7	46,1	84,7	30,1	19,2	16,4	14,6
<b>P/E adjusted</b>	<b>6,3</b>	<b>27,2</b>	<b>42,9</b>	<b>75,7</b>	<b>29,3</b>	<b>19,2</b>	<b>16,4</b>	<b>14,6</b>
P/B	4,7	4,7	6,5	7,9	2,5	1,9	1,9	1,9
<b>FINANCIAL ANALYSIS &amp; CREDIT METRICS</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
ROE adjusted (%)	95,2	19,2	14,4	9,3	15,6	10,4	11,6	12,7
Dividend yield (%)	7,6	5,7	4,5	4,4	2,3	4,2	4,9	5,5
EBITDA margin (%)	24,4	29,4	16,7	16,9	17,9	19,9	21,6	22,9
EBIT margin (%)	21,1	26,0	11,0	8,3	15,6	16,3	17,9	19,2
NIBD/EBITDA	(1,42)	(2,68)	0,40	0,48	(0,46)	0,08	(0,23)	(0,21)
EBITDA/Net interest	-	31,84	31,09	37,92	58,79	-	-	-

## All eyes on T-Mobile US and Sprint merger

*Deutsche Telekom (DTE) showed an excellent operational performance in FY18, with all its segments growing organically and even its ailing T-Systems division showed good performance in Q3. In our view, all eyes will now be on the T-Mobile US and Sprint merger, which is expected to close by mid-year 2019. We rate the shares as a Hold with a target price of EUR 15.50 per share.*

### Investment Case

Deutsche Telekom showed a good operational performance in all its business segments in FY18. After lacklustre growth in previous years primarily due to its mobile services business (impacted by regulatory issues such as roaming, cuts in mobile and fixed termination rates), it seems that FY18 is an inflection year for DTE with lots of catalyst in FY19.

DTE's business is mainly driven by its US operations (T-Mobile US TMUS) showing strong operational KPIs after its merger with US Metro PCS and by using the cash contribution from the failed merger attempt with AT&T for expansion of its US mobile services businesses.

This led to significant net add contributions for TMUS in past quarters, surpassing incumbents such as AT&T and Verizon in their home markets. TMUS gained significant market share against its competitors and guides for significant net adds of 3.8m to 4.1m in FY18.

Currently, TMUS is in a merger process with Sprint (fourth largest mobile operator) with 27m subscribers. We expect a closing of the deal in mid-2019 after the FCC and DoJ end their consultations on the merger in February/March 2019. Possible remedy obligations especially for their pre-paid and wholesale businesses could jeopardize the merger.

EURm	2016	2017	2018e	2019e	2020e
Revenues	73.095	74.947	75.542	75.920	76.300
EBITDA	22.544	23.970	23.850	24.391	25.220
EBIT	9.164	9.384	9.443	9.718	10.453
EPS	0,57	0,73	0,51	0,56	0,68
EPS adj	0,81	1,09	0,51	0,56	0,68
DPS	0,60	0,65	0,70	0,75	0,80
EV/EBITDA	6,1	5,6	5,9	5,8	5,6
EV/EBIT	15,0	14,2	15,0	14,6	13,4
P/E adj	20,1	13,5	30,3	27,4	22,6
P/B	2,61	2,29	2,44	2,50	2,51
ROE (%)	9,1	11,5	8,0	9,0	11,1
Div yield (%)	3,7	4,4	4,5	4,9	5,2
Net debt	51.190	50.888	54.522	53.656	50.222

Source: Pareto



Target price (EUR)	16
Share price (EUR)	15

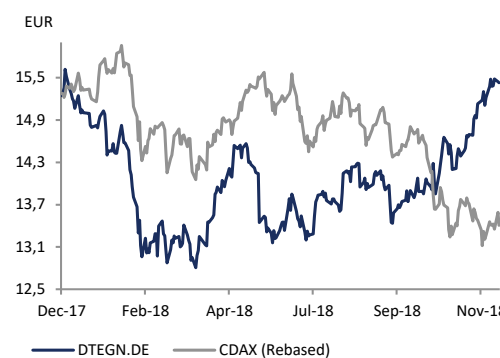
### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	DTEGN.DE, DTE GY
Sector	Telecom
Shares fully diluted (m)	4.761,5
Market cap (EURm)	73.469
Net debt (EURm)	54.522
Minority interests (EURm)	13.199
Enterprise value 18e (EURm)	141.190
Free float (%)	68

### Performance



Source: Factset

### Analysts

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## Company profile

Deutsche Telekom AG (DTE), together with its subsidiaries, provides integrated telecommunication services mainly in Germany, Europe and the US. It offers fixed-network services, including voice and data communication services based on fixed-network and broadband technology; and sells terminal equipment and other hardware products, as well as services to resellers. The company also provides mobile voice and data services to consumers and business customers; sells mobile devices and other hardware products; and sells mobile services to resellers and to companies that purchases and markets network services to third parties, such as mobile virtual network operators (MVNOs). In addition, it offers Internet services; Internet-based TV products (Magenta TV/Entertain) and services; and information and communication technology systems for multinational corporations and public sector institutions with an infrastructure of data centers and networks under the T-Systems brand, as well as call center services. The company has over 150m mobile customers (TMUS 70m), and approximately 28m fixed-network and 19m broadband lines.

*All eyes on US merger and operational performance of DTE's other businesses*

## Upcoming Triggers and Drivers

We expect an ongoing good mobile, fixed and broadband business for DTE in the German market and believe that TMUS is on track to deliver good Q4 results as well. Net adds in Germany and Europe should be in-line with our estimates and expect TMUS to surpass its own guidance of 3.8m to 4.1m net adds in 2018.

We expect a decision by the FCC and DoJ on the planned merger after the 180 days consultation period which should end in late February/beginning March 2019.

## Risk to the Investment Case

A failure of the planned TMUS and S merger would negatively impact our investment case. As a merged entity, TMUS and S would control a vast chunk of the pre-paid mobile market in the US (supposed to reach 65%), command a strong foothold in the wholesale market and third party MVNO (mobile virtual network operator) agreements that could be an issue for the US DoJ and the FCC authorities.

In its first draft, Germany's telecom regulator (Bundesnetzagentur) expanded requirements for network suppliers like DTE, VOD and O2D to invest along all national highways as well as main national roads and railways to be covered by high-speed internet connection by 2022. This could lead to higher investments into 5G network infrastructure than originally anticipated.

## Valuation and recommendation

Despite a de-rating of the whole telco sector in Europe, DTE is still trading at an undemanding 5-6x FY19/20 EV/EBITDA level, while incumbent peers in Europe trade around 6-7x consensus EV/EBITDA multiples. We believe that a re-rating is highly dependent on the closing of the TMUS / S merger and value DTE according to our DCF model.

The significant FCF generation of above EUR 6bn p.a. should give DTE shareholders a good visibility in terms of dividend distribution and should result in a 5% yield going forward.

Our target price of EUR 15.50 per share implies a target EV/EBITDA of 5.4x for FY19 and is in-line with our European peer group. As we have a Hold rating on DTE, upside potential is rather limited and highly dependent on the closing of the US merger.

## Exhibit 12: SOTP valuation

Component	Method	FY19e EBITDA	Multiplier	Value contribution	in % of total EV/equity value
Germany	European Peer EV/EBITDA'19e	9.2	5.0	46.2	32.2%
T-Mobile US	T-Mobile US EV/EBITDA'19e	11.0	7.4	81.4	56.7%
Europe net of OTE	European Peer EV/EBITDA'19e	3.5	5.0	17.5	12.2%
T-Systems	Atos Origin EV/EBITDA'19e	0.5	4.9	2.5	1.7%
GHS and Elimination / Consolidation	5x EV/EBITDA'19e	-0.8	5.0	-4.1	-2.9%
Subtotal net of OTE		23.4	6.1	143.4	100.0%
Net financial debt net of OTE	FY19e year end value before spectrum outlay			-53.0	
Pension provision net of OTE	FY19e year end value			-7.9	
Value of minorities net of OTE	Market value estimate (T-Mobile US, HUN, CR, MAC)			-14.0	
Value of financial assets net of UK				7.2	
Subtotal equity value before investments/ other components				75.7	
UK	EE stake / proceeds			2.5	3.4%
OTE	Market value plus 10% for mgmt. control			2.0	2.7%
Own shares	Market value (20m)			0.3	0.4%
Future spectrum outlay	NPV for potential outlay mainly 2019 (Germany + Poland + US)			-5.5	-7.5%
Legal claims	Next to other items (mainly toll collect paid in 2018 EUR 1bn)			-1.3	-1.7%
Equity Value				73.8	100.0%
Fully diluted number of shares				4.8	
Equity value per share				15.5	

Source: Pareto

## Exhibit 13: DCF valuation

EUR bn	Phase I				Phase II						Phase III
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Sales	75.5	75.9	76.3	76.7	77.1	77.4	77.8	78.2	78.6	79.0	79.8
Sales growth	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	10%
Adj. EBIT	9.8	10.1	10.5	10.8	11.1	11.4	11.7	12.0	12.4	12.7	12.8
EBIT margin	13.0%	13.3%	13.7%	14.0%	14.4%	14.7%	15.0%	15.4%	15.7%	16.1%	16.0%
Tax	(1.7)	(2.0)	(2.2)	(2.3)	(2.4)	(2.5)	(2.7)	(2.7)	(2.8)	(3.0)	(2.9)
Tax rate	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.4%
NOPAT	8.1	8.1	8.2	8.4	8.6	8.8	9.1	9.3	9.5	9.7	9.8
Depreciation	12.7	12.7	12.6	12.4	12.2	12.0	11.9	11.9	12.0	12.1	12.2
in % of Sales	16.8%	16.7%	16.5%	16.2%	15.9%	15.5%	15.3%	15.2%	15.2%	15.3%	15.3%
Capex	(13.0)	(12.3)	(11.6)	(10.9)	(10.2)	(10.6)	(11.1)	(11.5)	(12.0)	(12.4)	(13.0)
in % of Sales	17.2%	16.2%	15.2%	14.2%	13.2%	13.7%	14.2%	14.7%	15.2%	15.7%	16.2%
Provision delta	(0.4)	(0.5)	(0.5)	(0.4)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	0.0
in % of Sales	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	0.0%
Change in working capital	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0
in % of Sales	0.5%	0.1%	0.1%	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.0%
Other current assets delt	(0.7)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	0.1
in % of Sales	-1.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.1%
Free Cash Flow	7.0	8.1	8.8	9.6	10.2	9.8	9.5	9.2	9.1	8.9	9.2
FCF growth	nm	nm	nm	9.9%	6.1%	-4.0%	-3.3%	-2.5%	-1.7%	-1.7%	2.9%
Present Value FCF	6.9	7.4	7.5	7.7	7.6	6.8	6.1	5.6	5.1	4.7	74.7
PV Phase I	29.6				MCap		72.3	Targ. equity ratio		79.5%	
PV Phase II	35.8				Risk premium		5.00%	Beta		0.96	
PV Phase III	74.7				Risk free rate		3.50%	WACC		7.42%	
Total present value	140.1										
+ changes in equity	0.0										
+ associates & other financial assets	7.2										
- Legal claims	0.0										
- market value of minorities	14.0										
+ cash and liquid assets	6.6										
- interest bearing debt*	65.9										
Implied Mcap	74.0										
Number of shares	4.8										
Implied value per share	15.5										
Upside potential	2%										

Source: Pareto

<b>PROFIT &amp; LOSS (fiscal year) (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Revenues	60.132	62.658	69.228	73.095	74.947	75.542	75.920	76.300
EBITDA	15.833	17.821	18.388	22.544	23.970	23.850	24.391	25.220
Depreciation & amortisation	(10.903)	(10.574)	(11.360)	(13.380)	(14.586)	(14.407)	(14.673)	(14.767)
EBIT	4.930	7.247	7.028	9.164	9.384	9.443	9.718	10.453
Net interest	(2.802)	(2.897)	(2.250)	(4.617)	(4.390)	(3.981)	(3.665)	(3.109)
Profit before taxes	2.128	4.350	4.778	4.547	4.994	5.461	6.053	7.344
Taxes	(924)	(1.106)	(1.276)	(1.443)	558	(1.578)	(1.749)	(2.122)
Minority interest	(274)	(320)	(248)	(429)	(2.090)	(1.462)	(1.620)	(1.966)
Net profit	930	2.924	3.254	2.675	3.462	2.421	2.684	3.256
EPS reported	0,22	0,68	0,76	0,57	0,73	0,51	0,56	0,68
EPS adjusted	0,22	0,73	1,11	0,81	1,09	0,51	0,56	0,68
DPS	0,70	0,50	0,55	0,60	0,65	0,70	0,75	0,80
<b>BALANCE SHEET (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Tangible non current assets	37.427	39.616	44.637	46.758	46.878	49.937	51.939	52.265
Other non-current assets	53.798	54.777	61.851	69.879	70.051	70.628	68.290	66.145
Other current assets	16.208	24.468	24.730	18.388	17.764	17.963	18.056	18.148
Cash & equivalents	10.715	10.499	12.702	13.460	6.641	11.007	14.873	18.307
Total assets	118.148	129.360	143.920	148.485	141.334	149.535	153.159	154.866
Total equity	32.063	34.066	38.150	38.845	42.470	43.258	44.229	46.135
Interest-bearing non-current debt	43.708	44.669	47.941	50.228	49.171	57.171	60.171	60.171
Interest-bearing current debt	7.891	10.558	14.439	14.422	8.358	8.358	8.358	8.358
Other Debt	34.486	40.067	43.390	44.990	41.335	40.747	40.400	40.202
Total liabilities & equity	118.148	129.360	143.920	148.485	141.334	149.535	153.159	154.866
<b>CASH FLOW (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Cash earnings	12.107	13.818	14.862	16.484	20.138	18.291	18.977	19.988
Change in working capital	(437)	(761)	2.281	(555)	(187)	388	112	113
Cash flow from investments	(14.484)	(12.811)	(22.045)	(18.979)	(16.898)	(18.043)	(14.338)	(13.646)
Cash flow from financing	3.869	1.390	4.649	(536)	(10.216)	4.667	(571)	(3.809)
Net cash flow	4.669	(216)	2.203	758	(6.819)	4.366	3.866	3.434
<b>CAPITALIZATION &amp; VALUATION (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Share price (EUR end)	12,4	13,3	16,7	16,4	14,8	15,4	15,4	15,4
Number of shares end period	4.451	4.476	4.553	4.677	4.761	4.761	4.761	4.761
Net interest bearing debt	40.884	44.728	49.678	51.190	50.888	54.522	53.656	50.222
Enterprise value	104.394	112.664	134.418	137.221	133.071	141.190	141.944	140.572
EV/Sales	1,7	1,8	1,9	1,9	1,8	1,9	1,9	1,8
EV/EBITDA	6,6	6,3	7,3	6,1	5,6	5,9	5,8	5,6
EV/EBIT	21,2	15,5	19,1	15,0	14,2	15,0	14,6	13,4
P/E reported	57,5	19,5	22,1	28,6	20,3	30,3	27,4	22,6
P/E adjusted	57,4	18,1	15,0	20,1	13,5	30,3	27,4	22,6
P/B	2,3	2,3	2,6	2,6	2,3	2,4	2,5	2,5
<b>FINANCIAL ANALYSIS &amp; CREDIT METRICS</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
ROE adjusted (%)	3,0	9,5	13,2	9,9	12,8	5,6	6,1	7,2
Dividend yield (%)	5,6	3,8	3,3	3,7	4,4	4,5	4,9	5,2
EBITDA margin (%)	26,3	28,4	26,6	30,8	32,0	31,6	32,1	33,1
EBIT margin (%)	8,2	11,6	10,2	12,5	12,5	12,5	12,8	13,7
NIBD/EBITDA	2,58	2,51	2,70	2,27	2,12	2,29	2,20	1,99
EBITDA/Net interest	5,65	6,07	7,50	4,64	5,06	5,99	6,66	8,11

## Strategic decisions to be made in 2019

**Freenet AG (FNTN) is the fifth largest mobile services provider and reseller in the German market with more than 11m contract ownership of which more than 6m are post-paid customers and the rest in pre-paid and no-frills segment. Together with this asset and its DVB-T2 spectrum as well as its business operation in IPTV (waipu.TV) and fibre network (Exaring), FNTN is the perfect fit for collaboration or M&A for non-convergence operators or other subscription/consumer related platforms/companies.**

### Investment Case

We believe that FNTN will focus on strategic growth areas and further strengthen its FNTN TV (DVB-T2) and waipu.TV (IPTV) positioning. In our view, it is essential that FNTN TV and waipu.TV partners with established content providers or other subscriber platforms, to enhance the scope and leverage of its TV units. We believe that 250k paying subscribers (FNTN guidance) for waipu.TV is not enough to scale this business and compete against other IPTV platforms such as DTE's Magenta TV (3.6m HHs) or VOD's GIGA TV. 2019 will be a year of strategic decisions and FNTN is able to lever certain parameters to its favour.

Management already indicated that its shareholding of Sunrise is available for sale and would result in one-off gross gains of approximately EUR 185m despite unfavourable EUR/CHF FX movements since 2016 (excluding the received Sunrise dividends). We also expect that the Swiss mobile market will consolidate and new entrants will move into this market via acquisitions. Such a move would significantly reduce FNTN's net debt position with a potential sale to around EUR 500-600m in FY19. FNTN is clearly unhappy about the adverse share price development of CECONOMY (CEC), as FNTN holds 10% of the company via a capital increase in 2018.

EURm	2016	2017	2018e	2019e	2020e
Revenues	3.362	3.507	2.858	2.886	2.915
EBITDA	402	409	426	433	443
EBIT	278	261	282	291	303
EPS	1,78	2,24	1,91	1,98	2,06
EPS adj	1,78	2,24	1,91	1,98	2,06
DPS	1,60	1,65	1,70	1,75	1,80
EV/EBITDA	12,1	13,0	8,4	8,2	7,9
EV/EBIT	17,6	20,4	12,8	12,2	11,6
P/E adj	15,0	13,8	9,3	9,0	8,6
P/B	2,52	2,76	1,55	1,52	1,48
ROE (%)	17,0	20,5	16,8	17,1	17,4
Div yield (%)	6,0	5,4	9,6	9,9	10,1
Net debt	1.416	1.350	1.305	1.278	1.251

Source: Pareto



Target price (EUR)	28
Share price (EUR)	18

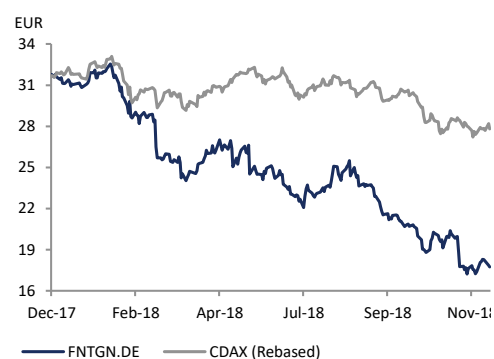
### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	FNTGN.DE, FNTN GY
Sector	Telecom
Shares fully diluted (m)	128,0
Market cap (EURm)	2.272
Net debt (EURm)	1.305
Minority interests (EURm)	19
Enterprise value 18e (EURm)	3.596
Free float (%)	100

### Performance



Source: Factset

### Analysts

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*5G spectrum already on their balance (via DVB-T2 licenses) and waipu.TV / Exaring offer upside potential and collaboration potential with non-convergence operators*

## Company profile

Freenet AG (FNTN) provides telecommunication, TV/IPTV/terrestrial and multimedia, mobile communications, mobile Internet, and digital lifestyle services in Germany. FNTN offers its postpaid and prepaid services under the mobilcom-debitel brand, as well as no-frills services under the klarmobil, freenetMobile, callMobile, and debitel light brands. FNTN also offers services related to IPTV (waipu.TV) as well as DVB-T2 (freenet TV) services for end users; in the field of digital motion picture entertainment; payment services for end customers; and digital products and entertainment formats for downloading, displaying, and use on mobile devices. Further, it distributes and sells mobile communications devices and additional services for mobile data communications; and offers e-commerce/advertising services, as well as develops and provides communication and IT solutions, and other services for corporate customers. It operates approximately 530 mobilcom-debitel shops and 43 stores under the GRAVIS brand. The company also sells its products through approximately 400 electronic stores; and online platforms. FNTN was founded in 2005 and is headquartered in Büdelsdorf, Germany.

## Upcoming Drivers and Triggers

Mobile communications should develop steadily as seen in past quarters with a clear focus on post-paid customers and high ARPU KPIs in the range of EUR 21-22. This segment is a good FCF generator covering future dividend payments for shareholders.

FNTN will surely accelerate the speed regarding further strategic cooperation to benefit from CEC's on- and offline presence.

Freenet is expected to report FY18 results on 25<sup>th</sup> March 2019.

## Risks to our Investment Case

FNTN has several debt instruments (especially promissory notes) that will mature in 2019-2021 with a total re-financing size of EUR 763m. Any adverse moves in refinancing costs could severely dampen FNTN's financial position with more than EUR 1.3bn in net debt.

FNTN engaged in several acquisitions in the past and any adverse development in these revenue generating units could lead to goodwill amortization while its equity ratio currently stands significantly below its targeted 50%.

## Valuation and recommendation

We value FNTN at EUR 28.00 per share using our DCF model and rate the stock a BUY. Based on our FY19 EBITDA estimates, this implies a 11x EV/EBITDA multiple. Given its diversified investment profile into mobile communications, TV, IPTV, fibre and Swiss mobile operations and other investments and the potential of an uptake of its TV services in 2019, we view this multiple as justified.

Focus on longer term contracts, ARPU uplift in past quarters as well as good net adds in its post-paid mobile operations as well as continued rising Sunrise dividend payments could further spur EBITDA and lead to upside potential for our FY19 estimates (currently 4% below consensus estimates at EUR 450m).

EUR m	Phase I					Phase II					Phase III			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		2028		
Sales	2,858.2	2,885.6	2,914.5	2,943.6	2,973.1	3,002.8	3,032.8	3,063.2	3,093.8	3,124.7	3,140.4			
Sales growth	-8.5%	10%	10%	10%	10%	10%	10%	10%	10%	10%	0.5%			
EBIT	281.6	291.4	303.4	312.9	319.2	331.0	341.8	351.6	360.7	369.2	377.6			
EBIT margin	9.9%	10.1%	10.4%	10.6%	10.7%	11.0%	11.3%	11.5%	11.7%	11.8%	12.0%			
Tax	(33.8)	(35.0)	(36.4)	(37.5)	(38.3)	(49.7)	(51.3)	(52.7)	(54.1)	(55.4)	(94.4)			
Normative tax rate EBIT	12.0%	12.0%	12.0%	12.0%	12.0%	16.0%	15.0%	16.0%	16.0%	15.0%	25.0%			
NOPAT	247.8	256.5	267.0	275.4	280.9	281.4	290.5	298.9	306.6	313.8	283.2			
Depreciation	144.6	141.6	139.1	137.0	135.2	127.9	121.8	116.6	112.2	108.4	102.2			
in % of Sales	5.1%	4.9%	4.8%	4.7%	4.5%	4.3%	4.0%	3.8%	3.6%	3.5%	3.3%			
Capex	(138.6)	(140.0)	(141.4)	(142.8)	(144.2)	(111.1)	(112.2)	(113.3)	(114.5)	(115.6)	(116.2)			
in % of Sales	4.9%	4.9%	4.9%	4.9%	4.9%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%			
Provision delta	(3.3)	(3.2)	(3.0)	(2.8)	(2.6)	(2.5)	(2.3)	(2.2)	(2.1)	(1.9)	0.2			
in % of Sales	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%			
Change in working capita	17.0	(0.7)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.4)			
in % of Sales	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Other current assets delt	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9	5.9	3.5			
in % of Sales	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%			
Free Cash Flow	272.9	259.8	266.6	271.6	274.2	300.7	302.7	304.9	307.3	309.8	272.4			
FCF growth	nm	nm	2.6%	1.9%	0.9%	9.7%	0.7%	0.7%	0.8%	0.8%	-12.1%			
Present Value FCF	271.1	240.2	229.5	217.6	204.4	208.7	195.6	183.4	172.0	161.4	2,046.3			
PV Phase I	1,162.9				MCap		2,321.5	Targ. equity ratio			85.0%			
PV Phase II	921.0				Risk premium		5.00%	Beta			0.90			
PV Phase III	2,046.3				Risk free rate		3.50%	WACC			7.44%			
Total present value	4,130.2													
+ capital increase/buy backs/disposal	0.0													
+ associates & other financial assets	833.2													
- market value of minorities	-111.0				Sensitivity		Growth rate Phase III							
+ cash and liquid assets	322.8				Analysis		-0.5%	0.0%	0.5%	1.0%	1.5%			
- interest bearing debt*	1,761.1						28	29	30	32	33			
Implied Mcap	3,636.1						7.1%	28	29	31	32			
Number of shares	128.0				WACC		7.4%	26	27	28	31			
							7.6%	26	27					

Source: Pareto

<b>PROFIT &amp; LOSS (fiscal year) (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Revenues</b>	<b>3.193</b>	<b>3.040</b>	<b>3.118</b>	<b>3.362</b>	<b>3.507</b>	<b>2.858</b>	<b>2.886</b>	<b>2.915</b>
<b>EBITDA</b>	<b>357</b>	<b>365</b>	<b>370</b>	<b>402</b>	<b>409</b>	<b>426</b>	<b>433</b>	<b>443</b>
Depreciation & amortisation	(56)	(64)	(71)	(124)	(148)	(145)	(142)	(139)
<b>EBIT</b>	<b>301</b>	<b>301</b>	<b>299</b>	<b>278</b>	<b>261</b>	<b>282</b>	<b>291</b>	<b>303</b>
Net interest	(43)	(40)	(44)	(34)	62	(18)	(18)	(18)
<b>Profit before taxes</b>	<b>258</b>	<b>261</b>	<b>255</b>	<b>244</b>	<b>323</b>	<b>263</b>	<b>274</b>	<b>286</b>
Taxes	(20)	(12)	(33)	(28)	(47)	(32)	(33)	(34)
Minority interest	0	(1)	(0)	12	11	12	12	12
<b>Net profit</b>	<b>239</b>	<b>247</b>	<b>221</b>	<b>228</b>	<b>287</b>	<b>244</b>	<b>253</b>	<b>264</b>
EPS reported	1,87	1,93	1,73	1,78	2,24	1,91	1,98	2,06
<b>EPS adjusted</b>	<b>1,87</b>	<b>1,93</b>	<b>1,73</b>	<b>1,78</b>	<b>2,24</b>	<b>1,91</b>	<b>1,98</b>	<b>2,06</b>
DPS	1,45	1,50	1,55	1,60	1,65	1,70	1,75	1,80
<b>BALANCE SHEET (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Tangible non current assets	34	34	33	493	436	434	433	433
Other non-current assets	1.522	1.546	1.615	2.652	2.777	2.772	2.772	2.774
Other current assets	810	806	806	821	779	666	670	674
Cash & equivalents	111	112	270	318	323	369	395	422
<b>Total assets</b>	<b>2.477</b>	<b>2.498</b>	<b>2.724</b>	<b>4.285</b>	<b>4.314</b>	<b>4.241</b>	<b>4.270</b>	<b>4.303</b>
Total equity	1.240	1.294	1.379	1.402	1.463	1.483	1.507	1.534
Interest-bearing non-current debt	518	518	218	1.674	1.666	1.666	1.666	1.666
Interest-bearing current debt	20	20	421	60	7	7	7	7
Other Debt	700	666	706	1.148	1.178	1.084	1.090	1.096
<b>Total liabilities &amp; equity</b>	<b>2.477</b>	<b>2.498</b>	<b>2.724</b>	<b>4.285</b>	<b>4.314</b>	<b>4.241</b>	<b>4.270</b>	<b>4.303</b>
<b>CASH FLOW (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Cash earnings	295	313	293	341	424	376	382	391
Change in working capital	(22)	3	(27)	0	(14)	113	(5)	(5)
Cash flow from investments	(108)	(89)	(137)	(879)	(128)	(139)	(140)	(141)
Cash flow from financing	(304)	(191)	(98)	890	(272)	(218)	(224)	(230)
Net cash flow	(94)	1	158	48	5	46	26	27
<b>CAPITALIZATION &amp; VALUATION (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Share price (EUR end)</b>	<b>21,8</b>	<b>23,7</b>	<b>31,3</b>	<b>26,8</b>	<b>30,8</b>	<b>17,8</b>	<b>17,8</b>	<b>17,8</b>
Number of shares end period	128	128	128	128	128	128	128	128
Net interest bearing debt	427	427	369	1.416	1.350	1.305	1.278	1.251
<b>Enterprise value</b>	<b>3.218</b>	<b>3.464</b>	<b>4.432</b>	<b>4.884</b>	<b>5.327</b>	<b>3.596</b>	<b>3.557</b>	<b>3.518</b>
EV/Sales	1,0	1,1	1,4	1,5	1,5	1,3	1,2	1,2
<b>EV/EBITDA</b>	<b>9,0</b>	<b>9,5</b>	<b>12,0</b>	<b>12,1</b>	<b>13,0</b>	<b>8,4</b>	<b>8,2</b>	<b>7,9</b>
EV/EBIT	10,7	11,5	14,8	17,6	20,4	12,8	12,2	11,6
P/E reported	11,7	12,3	18,1	15,0	13,8	9,3	9,0	8,6
<b>P/E adjusted</b>	<b>11,7</b>	<b>12,3</b>	<b>18,1</b>	<b>15,0</b>	<b>13,8</b>	<b>9,3</b>	<b>9,0</b>	<b>8,6</b>
P/B	2,3	2,4	3,0	2,5	2,8	1,6	1,5	1,5
<b>FINANCIAL ANALYSIS &amp; CREDIT METRICS</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
ROE adjusted (%)	19,7	19,5	16,5	16,4	20,0	16,6	16,9	17,4
Dividend yield (%)	6,7	6,3	4,9	6,0	5,4	9,6	9,9	10,1
EBITDA margin (%)	11,2	12,0	11,9	12,0	11,7	14,9	15,0	15,2
EBIT margin (%)	9,4	9,9	9,6	8,3	7,4	9,9	10,1	10,4
NIBD/EBITDA	1,20	1,17	1,00	3,52	3,30	3,06	2,95	2,83
EBITDA/Net interest	8,38	9,07	8,43	11,88	-	23,42	24,16	24,97

## All or nothing

*Gigaset (GGS) is the world's third largest cordless phone producer behind Vtech and Panasonic and Europe's market leader in DECT telephones. Its product portfolio includes consumer and business/professional telecommunications solutions from digital IP based corded and cordless products, home network solutions, mobile devices and IP based telco solutions for small and home offices and SMEs including cloud computing solutions for different devices. Every year, GGS launches around 200 new products or variants across all its product segments: Consumer Products, Home Networks, Mobile Devices and Business/Professional Customers. We rate GGS as a BUY and set a target price of EUR 0.58 per share.*

### Investment Case

GGS is still in a restructuring mode after severe revenue and earnings losses in the past years. Cordless and corded consumer products are in a structural decline, with volumes and pricing dropping 5-7% p.a. across European countries. Main market for GGS is Europe, where it continues to sell 60% of its products mainly to countries such as Germany, France, Italy, The Netherlands while the rest goes to the Asia Pacific region.

GGS is financially backed by Goldin Fund, which belongs to Pan Sutong, one of the richest Hongkong Chinese businesspersons. Unfortunately, GGS is a financial asset and suffered severely from the downturn in fixed-line telephony.

Lately, GGS focussed more on its two new segments (Mobile Devices and Home Networks) and also on its high margin Business/Professional telecommunications segment, growing revenue by almost 10% in that segment yoy. This development is especially visible in the German Business DECT market. While gaining market share in a declining Consumer Products segment, we fear that the oversaturated Mobile Devices segment could lose momentum in 2019 and possibly lead to inventory corrections.

EURm	2016	2017	2018e	2019e	2020e
Revenues	282	293	285	281	285
EBITDA	30	30	23	24	25
EBIT	13	12	5	7	9
EPS	0,03	0,06	0,03	0,04	0,05
EPS adj	0,03	0,06	0,03	0,04	0,05
DPS					
EV/EBITDA	2,0	1,0	-	-	-
EV/EBIT	4,8	2,6	-	-	-
P/E adj	25,2	10,2	14,3	11,2	8,6
P/B	6,09	3,35	1,94	1,66	1,39
ROE (%)	24,2	37,6	14,6	16,0	17,5
Div yield (%)					
Net debt	(47)	(49)	(54)	(62)	(70)

Source: Pareto



Target price (EUR)	0,58
Share price (EUR)	0,41

### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	GGS.DE, GGS GY
Sector	Hardware & Equipment
Shares fully diluted (m)	132,5
Market cap (EURm)	54
Net debt (EURm)	-54
Minority interests (EURm)	0
Enterprise value 18e (EURm)	0
Free float (%)	27

### Performance



Source: Factset

**Pareto Securities AS has been paid by the issuer to produce this research report. This material is considered by Pareto Securities to qualify as an acceptable minor non-monetary benefit according to the EU MIFID 2 directive.**

### Analysts

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*High risk, high reward  
investment profile for  
GGS shareholders*

## Company profile

Gigaset AG (GGS) operates in the area of telecommunications in Germany and internationally. The company operates through Consumer Products, Business Customers, Home Networks, and Mobile Devices segments. It offers digital enhanced cordless telecommunications (DECT) telephones; corded desk telephones, telephone systems, professional DECT systems, and mobile components for small and medium-sized enterprises; smart security solutions for condominiums and houses, including alarm systems, alarm sirens, cameras, sensors, light control products, and smart home apps and accessories; and smartphones and related accessories. The company also provides IP phones, ISDN phones, handsets, telephone accessories, telephone spare parts, and elderly phones. GGS also sells its smartphones through its online channel. GGS is headquartered in Munich, Germany and owned by Goldin Fund Pte. Ltd (73.5% stakeholder).

## Upcoming Drivers and Triggers

We believe that a business combination would make sense, as its main shareholder (HK Chinese businessperson) is not involved in the operations and regards GGS as a financial asset. Companies such as Vtech, Panasonic, Philips or DORO (from Sweden) might have interest in the worldwide number three player in cordless telephony. Consolidation has already started in the US with Mitel acquiring Shoretel for an EV of US\$ 430m last year. Usually, GGS reports FY19 figures at the end of April.

## Risks to our Investment Case

While the stock lost almost ~30% YTD, GGS could see downside pressure with a massive increase of its inventory position after 9M results. GGS stems against a structural downturn in the cordless telephony market in the consumer segment, and burns cash in its newly created smartphone and home networks unit. Currently the equity ratio stands at 11% and any big write-off would severely impact GGS' going concern capability. We would not expect any major cash infusion by its largest shareholder (Goldin Fund) and doubt that a consolidation at this stage is imminent for GGS.

## Valuation and recommendation

We value GGS based on our DCF model and set a target price of EUR 0.58 per share with a BUY rating on the stock.

We expect GGS to finally turnaround its businesses latest by FY20 and growing again 1.5% p.a., significantly below EU GDP rates, as the restructuring is complete and GGS looking for new business opportunities in the telecommunication and electronics market. Capex spend should be limited to around 5% of sales p.a.

## Exhibit 15: DCF model

EUR m	2018	2019	Phase I 2020	2021	2022	2023	2024	Phase II 2025	2026	2027	Phase III 2028
<b>Sales</b>	<b>285.0</b>	<b>280.5</b>	<b>284.7</b>	<b>289.0</b>	<b>293.3</b>	<b>297.7</b>	<b>302.2</b>	<b>306.7</b>	<b>311.3</b>	<b>316.0</b>	<b>316.3</b>
Sales growth	n/m	-16%	15%	15%	15%	15%	15%	15%	15%	15%	0.7%
<b>EBIT</b>	<b>5.2</b>	<b>6.6</b>	<b>8.6</b>	<b>10.1</b>	<b>11.6</b>	<b>13.0</b>	<b>14.3</b>	<b>15.7</b>	<b>17.0</b>	<b>18.4</b>	<b>19.1</b>
EBIT margin*	18%	2.4%	3.0%	3.5%	3.9%	4.4%	4.7%	5.7%	5.5%	5.8%	6.0%
<b>Normative tax rate EBIT</b>	<b>(1.5)</b>	<b>(2.0)</b>	<b>(2.6)</b>	<b>(3.0)</b>	<b>(3.5)</b>	<b>(3.9)</b>	<b>(4.3)</b>	<b>(4.7)</b>	<b>(5.1)</b>	<b>(5.5)</b>	<b>(5.7)</b>
Tax rate	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
<b>NOPAT</b>	<b>3.6</b>	<b>4.6</b>	<b>6.0</b>	<b>7.1</b>	<b>8.1</b>	<b>9.1</b>	<b>10.0</b>	<b>11.0</b>	<b>11.9</b>	<b>12.9</b>	<b>13.3</b>
<b>Depreciation</b>	<b>17.5</b>	<b>16.9</b>	<b>16.5</b>	<b>16.3</b>	<b>16.2</b>	<b>16.1</b>	<b>16.1</b>	<b>16.2</b>	<b>16.3</b>	<b>16.4</b>	<b>16.5</b>
in % of Sales	6.1%	6.0%	5.8%	5.6%	5.5%	5.4%	5.3%	5.3%	5.2%	5.2%	5.2%
<b>Capex</b>	<b>(15.2)</b>	<b>(14.9)</b>	<b>(15.2)</b>	<b>(15.4)</b>	<b>(15.6)</b>	<b>(15.8)</b>	<b>(16.0)</b>	<b>(16.2)</b>	<b>(16.5)</b>	<b>(16.7)</b>	<b>(16.4)</b>
in % of Sales	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.2%
<b>Provision delta</b>	<b>(0.0)</b>	<b>(0.0)</b>	<b>(0.0)</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>(1.9)</b>
in % of Sales	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	-0.6%
<b>NWC delta</b>	<b>0.6</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>
in % of Sales	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
<b>Other current assets delt</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>0.0</b>
in % of Sales	0.1%	0.1%	0.1%	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%
<b>Free Cash Flow</b>	<b>6.8</b>	<b>7.6</b>	<b>8.1</b>	<b>9.2</b>	<b>9.4</b>	<b>10.2</b>	<b>10.9</b>	<b>11.7</b>	<b>12.6</b>	<b>13.4</b>	<b>12.2</b>
FCF growth	nm	nm	nm	nm	2.5%	7.7%	7.5%	7.3%	7.7%	6.9%	-9.2%
<b>Present Value FCF</b>	<b>6.7</b>	<b>6.7</b>	<b>6.3</b>	<b>6.4</b>	<b>5.8</b>	<b>5.6</b>	<b>5.3</b>	<b>5.1</b>	<b>4.8</b>	<b>4.6</b>	<b>33.7</b>
<b>PV Phase I</b>		<b>31.9</b>				<b>MCap</b>	<b>63.3</b>		<b>Targ. equity ratio</b>		<b>100.0%</b>
<b>PV Phase II</b>		<b>25.4</b>				<b>Risk premium</b>	<b>5.00%</b>		<b>Beta</b>		<b>1.80</b>
<b>PV Phase III</b>		<b>33.7</b>				<b>Risk free rate</b>	<b>3.50%</b>		<b>WACC</b>		<b>12.50%</b>
<b>Total present value</b>		<b>91.0</b>									
+ capital increase/buy backs		<b>0.0</b>									
+ associates & other financial assets		<b>18.4</b>									
- market value of minorities		<b>0.0</b>									
+ cash and liquid assets		<b>49.1</b>									
- interest bearing debt**		<b>81.4</b>									
<b>Implied Mcap</b>		<b>77.1</b>									
<b>Number of shares</b>		<b>132.5</b>									
<b>Implied value per share</b>		<b>0.58</b>									
						<b>Sensitivity Analysis</b>	<b>Growth rate Phase III</b>				
							<b>-0.9%</b>	<b>-0.4%</b>	<b>0.1%</b>	<b>0.6%</b>	<b>1.1%</b>
						<b>11.9%</b>	0.60	0.61	0.62	0.63	0.65
						<b>12.2%</b>	0.58	0.59	0.60	0.61	0.62
						<b>12.5%</b>	0.56	0.57	<b>0.58</b>	0.59	0.60
						<b>12.8%</b>	0.55	0.56	0.56	0.57	0.59
						<b>13.1%</b>	0.53	0.54	0.55	0.56	0.57

Source: Pareto

<b>PROFIT &amp; LOSS (fiscal year) (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Revenues</b>	<b>371</b>	<b>326</b>	<b>305</b>	<b>282</b>	<b>293</b>	<b>285</b>	<b>281</b>	<b>285</b>
<b>EBITDA</b>	<b>11</b>	<b>16</b>	<b>4</b>	<b>30</b>	<b>30</b>	<b>23</b>	<b>24</b>	<b>25</b>
Depreciation & amortisation	(26)	(28)	(21)	(18)	(18)	(17)	(17)	(17)
<b>EBIT</b>	<b>(15)</b>	<b>(12)</b>	<b>(16)</b>	<b>13</b>	<b>12</b>	<b>5</b>	<b>7</b>	<b>9</b>
Net interest	(4)	(1)	(3)	(1)	(1)	0	0	0
<b>Profit before taxes</b>	<b>(19)</b>	<b>(13)</b>	<b>(20)</b>	<b>12</b>	<b>11</b>	<b>5</b>	<b>7</b>	<b>9</b>
Taxes	(16)	(4)	(2)	(7)	(3)	(2)	(2)	(3)
Minority interest	-	-	-	-	-	-	-	-
<b>Net profit</b>	<b>(35)</b>	<b>(17)</b>	<b>(22)</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>6</b>
EPS reported	(0,59)	(0,15)	(0,17)	0,03	0,06	0,03	0,04	0,05
<b>EPS adjusted</b>	<b>(0,59)</b>	<b>(0,15)</b>	<b>(0,17)</b>	<b>0,03</b>	<b>0,06</b>	<b>0,03</b>	<b>0,04</b>	<b>0,05</b>
<b>BALANCE SHEET (EURm)</b>								
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>	
Tangible non current assets	40	34	30	25	23	22	20	19
Other non-current assets	45	59	54	52	48	48	47	47
Other current assets	125	108	97	97	106	103	101	101
Cash & equivalents	57	50	41	47	49	54	62	70
<b>Total assets</b>	<b>267</b>	<b>251</b>	<b>221</b>	<b>222</b>	<b>227</b>	<b>227</b>	<b>230</b>	<b>237</b>
Total equity	39	41	18	18	24	28	33	39
Interest-bearing non-current debt	0	0	-	-	-	-	-	-
Interest-bearing current debt	30	0	0	-	-	-	-	-
Other Debt	198	210	203	204	203	199	198	198
<b>Total liabilities &amp; equity</b>	<b>267</b>	<b>251</b>	<b>221</b>	<b>222</b>	<b>227</b>	<b>227</b>	<b>230</b>	<b>237</b>
<b>CASH FLOW (EURm)</b>								
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>	
Cash earnings	(8)	11	(1)	22	26	21	22	23
Change in working capital	7	11	11	1	(13)	2	2	(0)
Cash flow from investments	(23)	(14)	(15)	(11)	(13)	(15)	(15)	(15)
Cash flow from financing	46	(5)	1	(0)	-	-	-	-
Net cash flow	2	(7)	(10)	7	2	5	8	8
<b>CAPITALIZATION &amp; VALUATION (EURm)</b>								
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>	
<b>Share price (EUR end)</b>	<b>0,98</b>	<b>0,64</b>	<b>0,58</b>	<b>0,82</b>	<b>0,61</b>	<b>0,41</b>	<b>0,41</b>	<b>0,41</b>
Number of shares end period	59	113	132	132	132	132	132	132
Net interest bearing debt	(27)	(50)	(41)	(47)	(49)	(54)	(62)	(70)
<b>Enterprise value</b>	<b>31</b>	<b>23</b>	<b>36</b>	<b>61</b>	<b>32</b>	<b>(0)</b>	<b>(8)</b>	<b>(16)</b>
EV/Sales	0,1	0,1	0,1	0,2	0,1	-	-	-
<b>EV/EBITDA</b>	<b>2,8</b>	<b>1,4</b>	<b>8,4</b>	<b>2,0</b>	<b>1,0</b>	-	-	-
EV/EBIT	-	-	-	4,8	2,6	-	-	-
P/E reported	-	-	-	25,2	10,2	14,3	11,2	8,6
<b>P/E adjusted</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25,2</b>	<b>10,2</b>	<b>14,3</b>	<b>11,2</b>	<b>8,6</b>
P/B	1,5	1,8	4,3	6,1	3,3	1,9	1,7	1,4
<b>FINANCIAL ANALYSIS &amp; CREDIT METRICS</b>								
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>	
ROE adjusted (%)	-	-	-	24,2	37,6	14,6	16,0	17,5
EBITDA margin (%)	3,0	5,1	1,4	10,8	10,4	7,9	8,4	8,8
EBIT margin (%)	-	-	-	4,6	4,2	1,8	2,4	3,0
NIBD/EBITDA	(2,42)	(3,04)	(9,34)	(1,56)	(1,62)	(2,39)	(2,63)	(2,79)
EBITDA/Net interest	-	2,38	-	-	-	-	-	-

## FCF and dividend potential

*Tele Columbus AG (TC) operates cable networks in Germany and is the second largest cable operator after the merger of Vodafone (Kabel Deutschland) and Liberty Media (UnityMedia, Kabel BW) cable operations. TC should benefit from any remedy agreement of the European Commission or the German Cartel authorities decide to partially sell regional assets to TC. After warning at the beginning of the year, management tries to regain trust of its investors and we view that a focus on FCF and dividend payment from FY19 onwards would bring investors back into the stock. We rate TC as a BUY with a target price of EUR 4.80 per share.*

### Investment Case

Poor execution to up-sell its Internet & Telephony as well as its Premium TV offers to consumers with generally higher ARPU compared to its classic TV segment, led to the profit warning at the beginning of the year. In our view, changing its brand to PYUR also confused consumers and delayed TC's catch-up potential in terms of higher Internet & Telephony as well as Premium TV penetration compared to Vodafone or Liberty Media in the German market. Nevertheless, we see execution risks to be low as progress has been made since its profit warning, by connecting all subsidiaries to one platform and using the PYUR brand for all its offerings with extended marketing campaigns until the end of the year.

With new management on board since March 2018, we believe that operational turnaround should start with its relaunch of its PYUR brand in 4Q18 but should take time to be visible until the end of FY19.

Besides an operational improvement and better KPIs from 2019 onwards, we see a good chance that its core shareholder United Internet (28% holding in TC) will push for changes in the supervisory board and see a good M&A opportunity at these depressed levels.

EURm	2016	2017	2018e	2019e	2020e
Revenues	477	496	492	506	518
EBITDA	216	197	237	249	254
EBIT	62	41	99	113	120
EPS	(0,10)	(0,15)	0,19	0,27	0,31
EPS adj	0,15	0,38	0,19	0,27	0,31
DPS	-	-	-	-	0,05
EV/EBITDA	10,5	12,9	7,9	7,4	7,2
EV/EBIT	36,7	61,2	18,9	16,3	15,1
P/E adj	51,3	24,3	19,6	14,0	12,2
P/B	1,91	2,32	0,91	0,85	0,80
ROE (%)	-	-	4,7	6,3	6,8
Div yield (%)	-	-	-	-	1,3
Net debt	1.248	1.344	1.382	1.352	1.325

Source: Pareto



Target price (EUR)	4,8
Share price (EUR)	3,8

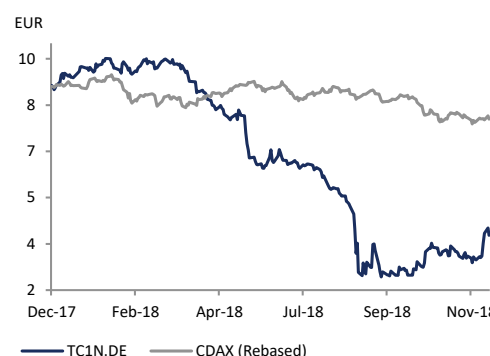
### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	TC1N.DE, TC1 GY
Sector	Telecom
Shares fully diluted (m)	127,6
Market cap (EURm)	482
Net debt (EURm)	1.382
Minority interests (EURm)	11
Enterprise value 18e (EURm)	1.874
Free float (%)	72

### Performance



Source: Factset

### Analysts

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*Stabilizing on low levels and FCF as well as dividend payment will be a priority for shareholders*

## Company profile

Tele Columbus AG (TC) operates cable networks in Germany. It operates through two segments, TV and Internet & Telephony. The TV segment offers digital TV and radio services, as well as premium TV packages that comprise approximately 75 additional digital TV programs. The Internet & Telephony segment provides fixed network services, such as Internet and telephony services, as well as mobile telephony services. The company also engages in the construction of fiber-optic city networks in its Others division. TC serves approximately 3.6m residential units. The company was formerly known as Tele Columbus Holding GmbH and changed its name to Tele Columbus AG in September 2014. Tele Columbus AG was founded in 1972 and is headquartered in Berlin, Germany.

## Upcoming Drivers and Triggers

United Internet and Deutsche Telekom were publicly discussing a JV regarding FTTH roll-out in Germany. DTE prefers partnerships (as shown with EWE, a local utility company in Lower-Saxony covering 1m homes) for mass FTTH roll-out to split costs. Any agreement with UTDI would, in our view, not impact TC business as we see limited overbuild in TC regions and UTDI's CEO responding hesitantly and insisting on a smaller participation of 25% as heavy capex requirements would impact UTDI's finances.

The final UTDI "put" scenario of a full M&A could be considered as UTDI's leverage ratio currently stands at 1.5x ND/EBITDA but after resolving TC's turnaround and KPI improvement within the next two years.

## Risks to our Investment Case

The operational transformation will not happen overnight and any issues with customer related issues or technical integration problems with its latest primacom and pepcom acquisitions could negatively impact our investment case.

Subdued consumer acceptance despite heavy promotions of its broadband offerings could negatively impact our revenue and earnings forecast going forward.

## Valuation and recommendation

While the stock de-rated (~67% YTD) this year, we believe that the prospects to generate a significant FCF after its five year capex expansion plan and upgrade to DOCSIS 3.0 within the entire group, should justify a re-rating potential in FY19. The company is currently trading on 7x FY19 EV/EBITDA valuations and multiples have contracted from levels of ~9x at start of the year. European M&A transactions in the cable sector achieved high 12-13x forward EV/EBITDA multiples in the past as the sector and the business model is seen as resilient and non-GDP related.

We value TC on our DCF based analysis and see a good FCF and dividend payer in future and set our target price at EUR 4.80 with a BUY rating on the stock. TC's current market cap stands at only EUR 480m but the high leverage ratio of around 5.5x (covenant on its latest loan is at comfortable 6.5x) gives TC a total EV of EUR 1.8bn, implying Equity/EV of ~22%. With a good FCF potential we believe that TC is able to reduce its net debt, pay a decent dividend and swap its Equity/EV ratio to levels of around 0.5x resulting in our fair value of EUR 4.80 per share.

## Exhibit 16: DCF model

EUR m	2018	2019	Phase I 2020	2021	2022	2023	2024	Phase II 2025	2026	2027	Phase III 2028
<b>Sales</b>	<b>492,1</b>	<b>506,1</b>	<b>518,2</b>	<b>530,6</b>	<b>543,4</b>	<b>556,4</b>	<b>569,8</b>	<b>583,4</b>	<b>597,4</b>	<b>611,8</b>	
Sales growth	n/m	2.8%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	
<b>EBIT</b>	<b>99,1</b>	<b>113,4</b>	<b>120,4</b>	<b>127,2</b>	<b>133,8</b>	<b>140,5</b>	<b>146,4</b>	<b>151,8</b>	<b>156,8</b>	<b>161,3</b>	
EBIT margin	20.1%	22.4%	23.2%	24.0%	24.6%	25.2%	25.7%	26.0%	26.2%	26.4%	
<b>Tax</b>	<b>(11,6)</b>	<b>(15,9)</b>	<b>(18,1)</b>	<b>(20,5)</b>	<b>(23,0)</b>	<b>(25,5)</b>	<b>(27,8)</b>	<b>(29,9)</b>	<b>(31,9)</b>	<b>(33,8)</b>	
Tax rate	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	
<b>NOPAT</b>	<b>87,5</b>	<b>97,5</b>	<b>102,2</b>	<b>106,6</b>	<b>110,8</b>	<b>115,0</b>	<b>118,7</b>	<b>121,9</b>	<b>124,9</b>	<b>127,5</b>	
<b>Depreciation</b>	<b>137,6</b>	<b>135,6</b>	<b>133,7</b>	<b>132,3</b>	<b>131,1</b>	<b>129,5</b>	<b>128,7</b>	<b>128,6</b>	<b>129,0</b>	<b>129,9</b>	
in % of Sales	28.0%	26.8%	25.8%	24.9%	24.1%	23.3%	22.6%	22.0%	21.6%	21.2%	
<b>Capex</b>	<b>(140,0)</b>	<b>(145,5)</b>	<b>(138,6)</b>	<b>(136,6)</b>	<b>(134,5)</b>	<b>(126,6)</b>	<b>(129,6)</b>	<b>(132,7)</b>	<b>(135,9)</b>	<b>(139,2)</b>	
in % of Sales	28.5%	28.8%	26.8%	25.8%	24.8%	22.8%	22.8%	22.8%	22.8%	22.8%	
<b>Provision delta</b>	<b>0,5</b>	<b>0,6</b>	<b>0,5</b>	<b>0,6</b>	<b>0,5</b>	<b>0,6</b>	<b>0,5</b>	<b>0,6</b>	<b>0,5</b>	<b>0,6</b>	
in % of Sales	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	
<b>Change in working capital</b>	<b>(0,2)</b>	<b>0,8</b>	<b>0,7</b>	<b>0,7</b>	<b>0,8</b>	<b>0,8</b>	<b>0,8</b>	<b>0,8</b>	<b>0,8</b>	<b>0,9</b>	
in % of Sales	0.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	
<b>Other current assets delt</b>	<b>(0,3)</b>	<b>(0,2)</b>	<b>(0,2)</b>	<b>(0,3)</b>	<b>(0,3)</b>	<b>(0,3)</b>	<b>(0,3)</b>	<b>(0,3)</b>	<b>(0,3)</b>	<b>(0,3)</b>	
in % of Sales	-0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	
<b>Free Cash Flow</b>	<b>85,1</b>	<b>88,8</b>	<b>98,4</b>	<b>103,2</b>	<b>108,4</b>	<b>118,9</b>	<b>118,8</b>	<b>118,8</b>	<b>119,0</b>	<b>119,3</b>	<b>2,316,8</b>
FCF growth		4.4%	10.8%	4.9%	5.1%	9.7%	-0.1%	0.0%	0.2%	0.3%	2.0%
<b>Present Value FCF</b>	<b>84,6</b>	<b>82,4</b>	<b>85,1</b>	<b>83,3</b>	<b>81,7</b>	<b>83,5</b>	<b>77,8</b>	<b>72,6</b>	<b>67,8</b>	<b>63,4</b>	<b>1,231,7</b>
PV Phase I		417,2				MCap	481,5		Targ. equity ratio		75,0%
PV Phase II		365,3				Risk premium	5,00%		Beta		1,0
PV Phase III		1.231,7				Risk free rate	3,50%		WACC		7,2%
<b>Total present value</b>		<b>2,014,1</b>									
+ capital increase/share buy back		0,0									
+ associates & other financial assets		1,7									
- market value of minorities		49,9									
+ cash and liquid assets		49,3									
- interest bearing debt*		1.404,4									
<b>Implied Mcap</b>		<b>610,8</b>									
<b>Number of shares</b>		<b>127,6</b>									
<b>Implied value per share</b>		<b>4,8</b>									
Upside potential		27%									

Source: Pareto

## Exhibit 17: Transaction multiples in the European cable sector

Date	Target	Acquirer	%	Trans. Value	Net Debt	100%	TV/Revenue	TV/EBIT	TV/EBITDA	EBITDA	EBITDA margin	
Apr 14	Numericable Group	Altice SA	78%	3,991	2,665	5,086	4.9	25.4	11.3	352	43.6%	
Jul 14	Grupo Corporativo ONO SA	Vodafone	100%	7,200			4.5	25.2	10.5	686	43.0%	
Oct 14	Get AS	TDC A/S	100%	1,667			6.2		11.8	141	52.3%	
Oct 14	Virgin Media	Liberty Global	100%	22,620	8,938		3.4	20.1	8.4	2,709	40.4%	
Nov 14	Sky Italia Srl	Sky PLC	100%	3,319			1.2		11.5	289	10.1%	
Dec 14	Ziggo	Liberty Global	72%	9,823	2,996	13,739	6.5	16.6	11.4	859	56.7%	
Sep 15	Sky Deutschland AG	Sky PLC	100%	1,994			1.1		23.1	86	4.8%	
Oct 16	Business Application (United Internet)	Warburg Pincus	33%	850		2,550	2.0		12.5	204	16.0%	
Dec 16	Strato	United Internet	100%	600			4.7		12.2	49	38.6%	
April 17	Com Hem Holding AB	Kinnevik AB	19%	427		3,384	3.3	23.0	11.3	300	30.0%	
May 17	Host Europe Group	GoDaddy	100%	1,807	1,168	2,975	4.0	33.8	10.6	280	37.3%	
Dec 17	UPC Austria (Liberty Media)	Deutsche Telekom	100%	1,900			6.3		10.6	180	50.0%	
Jan 18	Com Hem	Tele2	100%	3,300			6.6		12.7	260	52.0%	
Average								4.2	24.0	12.1	492	36.5%
Median								4.5	24.1	11.4	280	40.4%

Calculation with current estimate for FY2018e	
No of shares TC1	128
Total net debt	1,355
Sales FY18e	492
EBITDA FY18e	237
EV/EBITDA multiple	12.1
EV TC1	2,875
MV TC1	1,520
Implied TC1 M&A transaction price/share	11.9

Source: Pareto

PROFIT & LOSS (fiscal year) (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Revenues	206	213	279	477	496	492	506	518
EBITDA	91	84	73	216	197	237	249	254
Depreciation & amortisation	(63)	(51)	(75)	(155)	(156)	(138)	(136)	(134)
EBIT	28	33	(1)	62	41	99	113	120
Net interest	(28)	(47)	(63)	(72)	(70)	(60)	(60)	(60)
Profit before taxes	(0)	(14)	(64)	(11)	(28)	39	53	60
Taxes	(9)	(8)	(1)	(0)	12	(12)	(16)	(18)
Minority interest	(3)	(2)	(3)	(3)	(2)	(3)	(3)	(3)
Net profit	(12)	(24)	(68)	(13)	(19)	25	34	40
EPS reported	(0,21)	(1,20)	(1,04)	(0,10)	(0,15)	0,19	0,27	0,31
EPS adjusted	(0,27)	(0,47)	0,01	0,15	0,38	0,19	0,27	0,31
DPS	-	-	-	-	-	-	-	0,05
BALANCE SHEET (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Tangible non current assets	208	210	601	605	610	648	686	714
Other non-current assets	374	383	1 427	1 412	1 392	1 364	1 328	1 313
Other current assets	37	45	69	69	82	82	84	86
Cash & equivalents	78	29	90	61	49	(3)	22	44
Total assets	696	667	2 187	2 147	2 133	2 090	2 121	2 157
Total equity	(62)	(107)	547	535	517	540	581	620
Interest-bearing non-current debt	44	641	1 272	1 284	1 350	1 335	1 330	1 325
Interest-bearing current debt	578	3	50	26	43	43	43	43
Other Debt	136	131	318	302	222	172	166	169
Total liabilities & equity	696	667	2 187	2 147	2 133	2 090	2 121	2 157
CASH FLOW (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Cash earnings	54	29	10	144	139	165	173	176
Change in working capital	13	(8)	(25)	9	(7)	(0)	1	1
Cash flow from investments	(55)	(52)	(731)	(138)	(137)	(140)	(145)	(139)
Cash flow from financing	9	22	679	(12)	84	(15)	(5)	1
Net cash flow	37	(49)	61	(29)	(12)	(52)	25	22
CAPITALIZATION & VALUATION (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Share price (EUR end)			9,4	7,9	9,3	3,04	3,04	3,04
Number of shares end period	57	20	65	128	128	128	128	128
Net interest bearing debt	544	614	1 232	1 248	1 344	1 382	1 352	1 325
Enterprise value			1 848	2 264	2 532	1 780	1 753	1 728
EV/Sales			6,6	4,7	5,1	3,6	3,5	3,3
EV/EBITDA			25,2	10,5	12,9	7,5	7,0	6,8
EV/EBIT			-	36,7	-	18,0	15,5	14,4
P/E reported			-	-	-	15,8	11,3	9,8
P/E adjusted			-	51,3	24,3	15,8	11,3	9,8
P/B			1,1	1,9	2,3	0,7	0,7	0,6
FINANCIAL ANALYSIS & CREDIT METRICS	2013	2014	2015	2016	2017	2018e	2019e	2020e
ROE adjusted (%)	-	-	0,2	3,6	9,2	4,6	6,1	6,6
Dividend yield (%)			-	-	-	-	-	1,6
EBITDA margin (%)	44,2	39,5	26,3	45,4	39,7	48,1	49,2	49,0
EBIT margin (%)	13,7	15,7	-	12,9	8,3	20,1	22,4	23,2
NIBD/EBITDA	5,97	7,30	16,80	5,77	6,82	5,84	5,43	5,22
EBITDA/Net interest	3,10	2,09	2,26	3,45	3,79	3,92	4,12	4,24

## “Sandwiched” between incumbents and discounters

*Telefonica Deutschland (O2D) is the third largest mobile network operator (MNO) in the German market but surpassed both, Deutsche Telekom and Vodafone, in terms of subscribers with nearly 50m post- and pre-paid customers primarily in the consumer segment. We believe O2D is “sandwiched” between incumbents and hard-discounters such as 1&1 Drillisch, ALDI or other resellers using O2D’s network with MVNO or distribution agreements. We rate O2D as a SELL and a target price of EUR 2.70 per share.*

### Investment Case

Since our O2D initiation, the share price has underperformed and it has been a tough year for the telecommunications sector so far losing between -18% YTD for O2D to -37% for 1&1 Drillisch. DTE is the only exception so far (+2.5%). For O2D, we have slightly adjusted our numbers for earnings but have changed our assumptions especially for capex, as we believe that O2D is currently underinvesting in network and customer acquisition.

Net add growth weakened in Q3 to +233k after Q2 with +333k and came in weaker than expected with our estimate of +250k despite heavy promotions and new tariff initiatives especially at the end of the quarter in its discount segment BLAU. With increased discounted tariffs for its BLAU brand, we believe that net new adds will lead to lower ARPU recognition in coming quarters and hence a deterioration in lfl mobile service revenue growth. This is already reflected in our revenue and DCF model (revenue decrease of -1% p.a. on average until FY22). Our capex assumptions have gone up from 13% of sales to 18-20% in the mid-term (until FY22 and similar to DTE or other European peers) reflecting a more cautious view on FCF generation and dividend sustainability going forward. We reiterate our SELL rating and our target price of EUR 2.70 per share.

EURm	2016	2017	2018e	2019e	2020e
Revenues	7.503	7.296	7.190	7.118	7.065
EBITDA	1.828	1.785	1.815	1.851	1.872
EBIT	(50)	(84)	(43)	71	141
EPS	(0,06)	(0,13)	(0,03)	0,01	0,03
EPS adj	(0,06)	(0,13)	(0,03)	0,01	0,03
DPS	0,25	0,26	0,27	0,28	0,29
EV/EBITDA	7,3	7,7	6,7	6,7	6,8
EV/EBIT	-	-	-	-	89,8
P/E adj	-	-	-	-	-
P/B	1,29	1,50	1,46	1,63	1,83
ROE (%)	-	-	-	0,4	1,4
Div yield (%)	6,1	6,2	7,4	7,6	8,0
Net debt	1.145	1.318	1.264	1.548	1.833

Source: Pareto



Target price (EUR)	2,7
Share price (EUR)	3,6

### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	O2DN.DE, O2D GY
Sector	Telecom
Shares fully diluted (m)	2.975,0
Market cap (EURm)	10.850
Net debt (EURm)	1.264
Minority interests (EURm)	0
Enterprise value 18e (EURm)	12.114
Free float (%)	22

### Performance



Source: Factset

### Analysts

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*Neither fish nor fowl*

## Company profile

Telefónica Deutschland Holding AG (O2D) provides telecommunication and connectivity solutions to private and business customers in Germany. The company offers voice, data, and value added services in mobile and fixed line networks; and access to infrastructure and services for its wholesale partners. It scales back in Unbundled Local Loop services, including fixed line telephony and high speed Internet, as it leases line from incumbents such as Deutsche Telekom and Vodafone in the German market as O2D lacks own infrastructure. O2D offers its products and services through a network of independently operated franchise and premium partner shops, and online and telesales channels, as well as indirect selling channels, such as partnerships and co-operations with retailers. It markets its products and services under the O2, BLAU, AY YILDIZ, Ortel Mobile, TürkeiSIM, netzclub, BASE, FONIC, O2 Unite, Vivo, and Movistar brands. O2D has approximately 50m customers and is the largest mobile network operator in Germany, surpassing DTE and VOD last year. The company is based in Munich, Germany and has Telefonica SA (Spain) as its main shareholder (69%) while KPN owns 5%.

## Upcoming Drivers and Triggers

We believe that the market is still waiting on O2D's potential participation in the auctioning of 5G spectrum in Germany. The first draft, which will be discussed and decided by the German regulator on 26th November, shows already some severe investment obligations into infrastructure for 5G and would under-line our capex assumptions of more than 13% of sales as guided by O2D.

As O2D relies on foreign network and infrastructure for its fixed-line and broadband offerings, O2D has an inherent competitive disadvantage in terms of additional offerings at competitive prices to its subscribers. Therefore, we believe that O2D has to invest heavily i.e. into streaming platforms or buy OTT platforms such as Zattoo, Magine or do a collaboration with Freenet's IPTV offering waipu.TV or fibre network operator Exaring (also owned by FNTN).

## Risks to our Investment Case

Our investment case could be in jeopardy, when social media and consumer related companies such as Amazon, Google (YouTube), Microsoft (via LinkedIn/Skype), Facebook or other players, could see O2D as a good platform, with 50m contractually signed customers, to cross-sell services and address customers directly. Any M&A activity would clearly harm our case.

## Valuation and recommendation

Valuation is still at elevated levels for O2D based on our estimates and above European peers such as Deutsche Telekom, Vodafone, BT Group or Telecom Italia. We believe this premium is not justified as capex/sales ratio stands at unsustainably low levels of 13% compared to European peers spending more than 15-20% of sales into network, spectrum and infrastructure. Therefore a dividend yield of almost 8% is in our view not sustainable in the long run.

Despite a de-rating of the whole telco sector in Europe, O2D is still trading at 6-7x EV/EBITDA levels, while incumbent peers in Europe trade around 5x EV/EBITDA consensus multiples. We believe that a de-rating will start soon, as more clarity on 5G auctioning is available and reiterate our SELL rating and DCF based target price of EUR 2.70 per share (25% downside).

Exhibit 18: DCF valuation

EUR m	Phase I					Phase II					Phase III
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	
Revenues	7.190	7.118	7.065	7.029	6.994	6.977	6.977	6.994	7.029	7.082	
growth rate	-15%	-10%	-0,7%	-0,5%	-0,5%	-0,3%	0,0%	0,3%	0,5%	0,8%	
EBIT	-43	71	141	176	280	349	488	560	597	637	
EBIT margin	-0,6%	10%	2,0%	2,5%	4,0%	5,0%	7,0%	8,0%	8,5%	9,0%	
Tax	-1	-9	-18	-23	-36	-45	-63	-73	-78	-83	
Tax rate	-2%	13%	13%	13%	13%	13%	13%	13%	13%	13%	
Depr. & Amort.	1.859	1.780	1.731	1.722	1.644	1.256	1.256	1.259	1.125	1.062	
% of sales	25,9%	25,0%	24,5%	24,5%	23,5%	18,0%	18,0%	18,0%	16,0%	15,0%	
Capex	-939	-1.281	-1.272	-1.336	-1.399	-1.256	-1.256	-1.259	-1.125	-1.062	
% of sales	13,1%	18,0%	18,0%	19,0%	20,0%	18,0%	18,0%	18,0%	16,0%	15,0%	
Change in WC & P	12	8	6	4	4	4	-7	-7	-7	-7	
% of sales	-0,2%	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%	0,1%	0,1%	0,1%	0,1%	
Free Cash Flow	888	568	588	543	492	307	418	480	513	547	10.476
growth rate	nm	-36,0%	3,5%	-7,6%	-9,4%	-37,5%	36,0%	14,8%	6,9%	6,8%	10%
Present Value FCF	884	532	518	451	384	226	289	312	314	315	6.030
PV Phase I	2.769				Risk free rate		3,5%	Targ. equity ratio		65%	
PV Phase II	1.455				Premium Equity		5,0%	Beta		0,8	
PV Phase III	6.030				Premium Debt		1,0%	WACC		6,3%	
Enterprise value	10.254				Sensitivity		Growth in phase III				
- Net Debt	1318						0,0%	0,5%	1,0%	1,5%	2,0%
- Pension Provisions	151				5,6%		2,7	2,9	3,1	3,5	3,8
- Minorities & Peripherals	0				6,0%		2,5	2,7	2,9	3,2	3,5
- Paid-out dividends for last FY	-714				WACC		6,3%	2,4	2,5	2,7	3,2
							6,6%	2,2	2,4	2,5	3,0
Equity value (EUR bn)	8.071				6,9%		2,1	2,2	2,4	2,5	2,7
Number of shares (bn)	2.975										
Value per share (EUR)	2,7										
Current Price (EUR)	3,6										
Downside	-26%										
Source: Pareto											

Source: Pareto

Exhibit 19: European peer group multiples (consensus estimates)

Company	EV/EBITDA	
	2019e	2020e
Deutsche Telekom AG	4.9	4.7
Vodafone Group Plc	5.6	5.4
Telefonica SA	5.1	5.0
Telecom Italia S.p.A.	4.2	4.1
BT Group plc	4.9	4.8
Royal KPN NV	6.9	6.6
Orange SA	4.7	4.5
Swisscom AG	7.3	7.2
<b>Median</b>	<b>5.0</b>	<b>4.9</b>
<b>Telefonica Deutschland Holding AG</b>	<b>6.4</b>	<b>6.3</b>
relative	28.1%	28.1%
<b>Fair value per share at peer median</b>	<b>2.56</b>	<b>2.42</b>
<b>Downside to current share price</b>	<b>-26%</b>	<b>-30%</b>
<b>Fair value / share (av.)</b>	<b>2.49</b>	

Source: Pareto

PROFIT & LOSS (fiscal year) (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Revenues	4.914	5.522	7.888	7.503	7.296	7.190	7.118	7.065
EBITDA	1.161	1.087	1.758	1.828	1.785	1.815	1.851	1.872
Depreciation & amortisation	(1.056)	(1.733)	(2.021)	(1.878)	(1.869)	(1.859)	(1.780)	(1.731)
EBIT	105	(646)	(263)	(50)	(84)	(43)	71	141
Net interest	(27)	(41)	(48)	(36)	(34)	(36)	(36)	(38)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	78	(687)	(311)	(86)	(118)	(79)	35	103
Taxes	(1)	(34)	(72)	(90)	(262)	(2)	(5)	(13)
Minority interest	-	-	-	-	-	-	-	-
Net profit	78	(721)	(383)	(176)	(380)	(81)	31	90
EPS reported	0,06	(0,45)	(0,13)	(0,06)	(0,13)	(0,03)	0,01	0,03
EPS adjusted	0,04	(0,45)	(0,14)	(0,06)	(0,13)	(0,03)	0,01	0,03
DPS	0,37	0,24	0,24	0,25	0,26	0,27	0,28	0,29
BALANCE SHEET (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Tangible non current assets	2.896	5.029	4.507	4.217	4.041	3.560	3.300	3.060
Other non-current assets	3.569	8.384	7.865	8.207	7.539	7.100	6.862	6.642
Other current assets	1.848	2.753	3.739	2.264	1.933	1.912	1.898	1.887
Cash & equivalents	709	1.721	543	613	587	641	357	72
Total assets	9.021	17.887	16.654	15.301	14.100	13.213	12.417	11.662
Total equity	5.999	11.380	10.321	9.408	8.297	7.442	6.669	5.930
Interest-bearing non-current debt	1.448	2.415	2.254	1.758	1.905	1.905	1.905	1.905
Interest-bearing current debt	-	-	-	-	-	-	-	-
Other Debt	1.570	4.003	4.003	4.029	3.747	3.714	3.692	3.676
Total liabilities & equity	9.021	17.887	16.654	15.301	14.100	13.213	12.417	11.662
CASH FLOW (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Cash earnings	1.199	1.931	1.820	278	1.579	1.778	1.810	1.821
Change in working capital	71	(528)	18	1.581	123	(12)	(8)	(6)
Cash flow from investments	(664)	(689)	(1.083)	(452)	(1.022)	(939)	(1.281)	(1.272)
Cash flow from financing	(315)	365	(875)	(1.210)	(597)	(774)	(804)	(828)
Net cash flow	385	1.012	(1.178)	70	(26)	54	(283)	(285)
CAPITALIZATION & VALUATION (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Share price (EUR end)	4,75	4,41	4,89	4,07	4,19	3,65	3,65	3,65
Number of shares end period	1.412	1.620	2.975	2.975	2.975	2.975	2.975	2.975
Net interest bearing debt	739	694	1.711	1.145	1.318	1.264	1.548	1.833
Enterprise value	7.441	7.845	16.262	13.253	13.771	12.114	12.397	12.682
EV/Sales	1,5	1,4	2,1	1,8	1,9	1,7	1,7	1,8
EV/EBITDA	6,4	7,2	9,3	7,3	7,7	6,7	6,7	6,8
EV/EBIT	70,7	-	-	-	-	-	-	89,8
P/E reported	86,1	-	-	-	-	-	-	-
P/E adjusted	-	-	-	-	-	-	-	-
P/B	1,1	0,6	1,4	1,3	1,5	1,5	1,6	1,8
FINANCIAL ANALYSIS & CREDIT METRICS	2013	2014	2015	2016	2017	2018e	2019e	2020e
ROE adjusted (%)	0,8	-	-	-	-	-	0,4	1,4
Dividend yield (%)	7,8	5,4	4,9	6,1	6,2	7,4	7,6	8,0
EBITDA margin (%)	23,6	19,7	22,3	24,4	24,5	25,3	26,0	26,5
EBIT margin (%)	2,1	-	-	-	-	-	1,0	2,0
NIBD/EBITDA	0,64	0,64	0,97	0,63	0,74	0,70	0,84	0,98
EBITDA/Net interest	43,28	26,51	36,63	50,78	52,50	49,97	51,56	49,00

## Moving up the premium ladder

*United Internet AG (UTD), through its subsidiaries, operates as a mobile service and webhost applications provider. It operates through its so called Access and Applications segments. In the Access segment, UTDI, via its 73% shareholding in 1&1 Drillisch, emerged as the fourth largest mobile operator in the German market with above 13m customers in the post- and pre-paid market. In the Applications segment, UTDI offers webhosting, cloud and domain management services and has operations in Germany, the UK, France, Italy, Canada, Mexico and the USA.*

### Investment Case

UTDI emerged as the fourth largest mobile service provider in the German market after incumbents such as Deutsche Telekom, Vodafone and Telefonica Deutschland. With the merger of its 1&1 mobile business and Drillisch, UTDI now holds 73% of the combined entity and also holds a 28% stake in Tele Columbus, which is the second largest cable operator behind the post-merged Vodafone (Kabel Deutschland)/Liberty Media (UnityMedia & Kabel BW) entity with a 10% market share in German cable market (counted HHs).

We believe that UTDI will sell or will hold an IPO for its Business Applications (BA) unit, which belongs 2/3<sup>rd</sup> to UTDI, while Warburg Pincus acquired a 33% stake in this division in 2016. WP also has a stake in the US Endurance International (EIGI US) company and since UTDI has large operations in the US, we believe that BA merger or contribution in kind with EIGI US would make sense via "reverse-IPO" its BA unit and having a listed entity in the US.

UTDI runs an asset-light mobile services business but investors fear that with the upcoming German 5G spectrum auctioning at the beginning of 2019, UTDI might overspend and move into an asset-heavy business, that, in our view, will not be considered by UTDI as the MBA/MVNO contract with Telefonica Deutschland is sufficient to expand its market share further until FY30.

EURm	2016	2017	2018e	2019e	2020e
Revenues	3.949	4.206	5.206	5.451	5.614
EBITDA	841	1.253	1.220	1.308	1.383
EBIT	647	959	807	878	938
EPS	0,88	3,06	2,48	2,76	3,02
EPS adj	0,88	1,69	2,48	2,76	3,02
DPS	0,80	0,85	1,20	1,30	1,40
EV/EBITDA	10,9	10,5	7,5	6,6	5,9
EV/EBIT	14,2	13,7	11,3	9,8	8,6
P/E adj	42,1	33,9	15,8	14,2	13,0
P/B	6,31	2,88	1,82	1,70	1,58
ROE (%)	15,3	23,6	11,9	12,3	12,6
Div yield (%)	2,2	1,5	3,1	3,3	3,6
Net debt	1.637	1.617	1.151	627	69

Source: Pareto



Target price (EUR)	63
Share price (EUR)	39

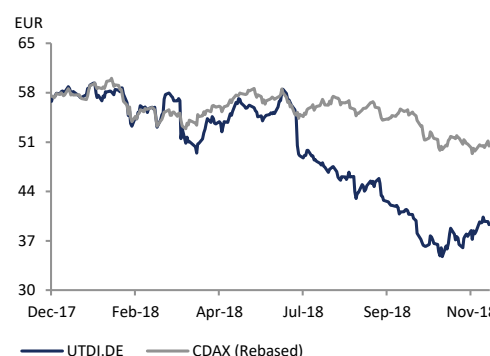
### Forecast changes

%	2018e	2019e	2020e
Revenues	NM	NM	NM
EBITDA	NM	NM	NM
EBIT adj	NM	NM	NM
EPS reported	NM	NM	NM
EPS adj	NM	NM	NM

Source: Pareto

Ticker	UTDI.DE, UTDI GR
Sector	Telecom
Shares fully diluted (m)	200,4
Market cap (EURm)	7.874
Net debt (EURm)	1.151
Minority interests (EURm)	89
Enterprise value 18e (EURm)	9.114
Free float (%)	60

### Performance



Source: Factset

### Analysts

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## Company profile

United Internet AG, through its subsidiaries, operates as an Internet service provider. It operates through Access and Applications segments. The Access segment offers landline and mobile Internet access products; and related applications, including home networks, online storage, telephony, and video-on-demand or IPTV. This segments also provides data and network solutions for small and medium-sized companies; and infrastructure services for large corporations under the 1&1, winSIM, yourfone, and smartmobile.de brands. The Applications segment provides applications, such as domains, home pages, Webhosting, servers and e-shops, group work, online storage, and office software applications, as well as personal information management applications comprising e-mail, to-do lists, appointments, and addresses; and customers performance-based advertising and sales platforms on the Internet. This segment offers its products to home-users and business-users under the Sedo, GMX, mail.com, WEB.DE, 1&1, Arsys, Fasthosts, home.pl, InterNetX, ProfitBricks, Strato, and united-domains brands. It also provides customers professional services in the field of active domain management. The company has operations in Germany, France, the United Kingdom, Italy, the Netherlands, Austria, Poland, Switzerland, Spain, Canada, Mexico, and the United States. United Internet AG was founded in 1988 and is based in Montabaur, Germany.

*Surviving on its own but a classical takeover target for big social media companies*

## Upcoming drivers and triggers

We do not believe that UTDI will emerge as a fourth full-sized telco operator in the German market, starting with 5G investments and spectrum licenses in the German market. With the 1&1 Drillisch business combination, UTDI has full access to Telefonica Deutschland's (O2D) mobile network and infrastructure and benefits from all upcoming new technology like 5G that O2D is going to implement in the German market.

The next catalyst for UTDI would be the sale, IPO or business combination with another entity of its Business Applications business. UTDI is working hard to prepare its BA unit for such as a move and would expect more clarity into 2019 with a potential listing in FY20. With more than 13m mobile services subscribers in Germany addressing the discount (Drillisch) and premium markets (1&1) as well as its Business and Consumer Applications business with more than 40m subscribers, UTDI itself could be of interest for foreign social media and consumer related heavyweights to address mobile/web users directly and use cross-selling potential for OTT services (Netflix, Amazon, Facebook, Google/Alphabet, LinkedIn etc.).

UTDI will report its FY18 results on 28<sup>th</sup> March 2019.

## Risk to our Investment Case

While the stock de-rated (~33% YTD), we believe that investors feared the CEO's statement to invest into 5G infrastructure and turn from an asset-light to an asset-heavy business model. We believe these worries are not justified as DRI as well as UTDI search for possibilities of national roaming to participate in the prospects of 5G. An entrance by an independent fourth player into the German market (as happened in Italy with Iliad) could severely harm the tariff structures as experienced in Italy, where data tariffs plunged 80% from pre-Iliad entrance levels.

## Valuation and Recommendation

We expect DRI to generate significant FCF after 2018 as its capex spend should be limited to around 2-3% of sales p.a. As UTDI is a major shareholder with a 73% stake, we apply our DCF and SOTP valuation on UTDI and rate the stock a BUY with a target price of EUR 63.00.

## Exhibit 20: DCF model

EUR m	2018	2019	Phase I 2020	2021	2022	2023	2024	Phase II 2025	2026	2027	Phase III 2028
<b>Sales</b>	<b>5,205.9</b>	<b>5,450.9</b>	<b>5,614.4</b>	<b>5,754.8</b>	<b>5,898.6</b>	<b>6,046.1</b>	<b>6,197.2</b>	<b>6,352.2</b>	<b>6,511.0</b>	<b>6,673.7</b>	<b>6,840.6</b>
Sales growth	n/m	4.7%	3.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<b>EBIT</b>	<b>806.9</b>	<b>877.6</b>	<b>937.6</b>	<b>998.4</b>	<b>1,061.8</b>	<b>1,136.7</b>	<b>1,208.5</b>	<b>1,283.1</b>	<b>1,360.8</b>	<b>1,441.5</b>	<b>1,522.0</b>
EBIT margin	15.5%	16.1%	16.7%	17.4%	18.0%	18.8%	19.5%	20.2%	20.9%	21.6%	22.2%
<b>Tax</b>	<b>(247.4)</b>	<b>(275.0)</b>	<b>(300.8)</b>	<b>(328.4)</b>	<b>(350.9)</b>	<b>(379.1)</b>	<b>(406.5)</b>	<b>(435.0)</b>	<b>(464.7)</b>	<b>(495.6)</b>	<b>(528.2)</b>
Tax rate	32.0%	32.0%	32.0%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%
<b>NOPAT</b>	<b>559.5</b>	<b>602.6</b>	<b>636.8</b>	<b>670.0</b>	<b>710.9</b>	<b>757.5</b>	<b>801.9</b>	<b>848.1</b>	<b>896.1</b>	<b>945.9</b>	<b>993.9</b>
<b>Depreciation</b>	<b>412.7</b>	<b>429.9</b>	<b>445.6</b>	<b>396.6</b>	<b>387.4</b>	<b>381.1</b>	<b>377.2</b>	<b>375.4</b>	<b>375.3</b>	<b>376.8</b>	<b>379.1</b>
in % of Sales	7.9%	7.9%	7.9%	6.9%	6.6%	6.3%	6.1%	5.9%	5.8%	5.6%	5.5%
<b>Capex</b>	<b>(291.5)</b>	<b>(305.2)</b>	<b>(314.4)</b>	<b>(322.3)</b>	<b>(330.3)</b>	<b>(338.6)</b>	<b>(347.0)</b>	<b>(355.7)</b>	<b>(364.6)</b>	<b>(373.7)</b>	<b>(384.3)</b>
in % of Sales	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
<b>Provision delta</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>
in % of Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Change in working capital</b>	<b>37.1</b>	<b>3.2</b>	<b>2.2</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>(1.2)</b>
in % of Sales	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other current assets delta</b>	<b>23.7</b>	<b>5.4</b>	<b>3.5</b>	<b>3.1</b>	<b>3.2</b>	<b>3.3</b>	<b>3.4</b>	<b>3.5</b>	<b>3.6</b>	<b>3.7</b>	<b>(0.8)</b>
in % of Sales	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%
<b>Free Cash Flow</b>	<b>741.9</b>	<b>736.4</b>	<b>774.1</b>	<b>749.6</b>	<b>773.4</b>	<b>805.6</b>	<b>837.8</b>	<b>873.6</b>	<b>912.8</b>	<b>955.1</b>	<b>986.8</b>
FCF growth	n/m	-0.7%	5.1%	-3.2%	3.2%	4.2%	4.0%	4.3%	4.5%	4.6%	3.3%
<b>Present Value FCF</b>	<b>736.1</b>	<b>674.6</b>	<b>654.7</b>	<b>585.3</b>	<b>557.5</b>	<b>536.2</b>	<b>514.8</b>	<b>495.6</b>	<b>478.1</b>	<b>461.8</b>	<b>7,556.5</b>
<b>PV Phase I</b>		<b>3,208.3</b>			<b>MCap</b>		<b>10,237.9</b>		<b>Targ. equity ratio</b>		<b>91.2%</b>
<b>PV Phase II</b>		<b>2,486.4</b>			<b>Risk premium</b>		<b>5.00%</b>		<b>Beta</b>		<b>1.05</b>
<b>PV Phase III</b>		<b>7,556.5</b>			<b>Risk free rate</b>		<b>3.50%</b>		<b>WACC</b>		<b>8.31%</b>
<b>Total present value</b>		<b>13,251.2</b>									
+ other changes in equity		0.0									
+ associates & other financial assets		751.7									
- market value of minorities		0.0									
+ cash and liquid assets		609.2									
- interest bearing debt*		1,993.8									
<b>Implied Mcap</b>		<b>12,618.3</b>									
<b>Number of shares</b>		<b>200</b>									
<b>Implied value per share</b>		<b>63</b>									

Sensitivity	Analysis	Growth rate Phase III				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.90%	61	64	68	71	76
	8.11%	60	62	65	69	73
	8.31%	58	60	63	66	70
	8.52%	56	58	61	64	67
	8.73%	55	57	59	62	65

Source: Pareto

<b>PROFIT &amp; LOSS (fiscal year) (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Revenues</b>	<b>2.656</b>	<b>3.065</b>	<b>3.716</b>	<b>3.949</b>	<b>4.206</b>	<b>5.206</b>	<b>5.451</b>	<b>5.614</b>
<b>EBITDA</b>	<b>407</b>	<b>738</b>	<b>771</b>	<b>841</b>	<b>1.253</b>	<b>1.220</b>	<b>1.308</b>	<b>1.383</b>
Depreciation & amortisation	(95)	(121)	(215)	(193)	(294)	(413)	(430)	(446)
<b>EBIT</b>	<b>312</b>	<b>617</b>	<b>556</b>	<b>647</b>	<b>959</b>	<b>807</b>	<b>878</b>	<b>938</b>
Net interest	(16)	(38)	(21)	(280)	(68)	(34)	(18)	2
<b>Profit before taxes</b>	<b>296</b>	<b>579</b>	<b>535</b>	<b>367</b>	<b>891</b>	<b>773</b>	<b>859</b>	<b>940</b>
Taxes	(89)	(132)	(169)	(188)	(242)	(247)	(275)	(301)
Minority interest	(1)	(0)	(0)	(0)	(37)	(30)	(33)	(36)
<b>Net profit</b>	<b>206</b>	<b>447</b>	<b>366</b>	<b>179</b>	<b>612</b>	<b>496</b>	<b>551</b>	<b>603</b>
EPS reported	1,07	2,28	1,80	0,88	3,06	2,48	2,76	3,02
<b>EPS adjusted</b>	<b>1,06</b>	<b>1,33</b>	<b>1,76</b>	<b>0,88</b>	<b>1,69</b>	<b>2,48</b>	<b>2,76</b>	<b>3,02</b>
DPS	0,40	0,60	0,70	0,80	0,85	1,20	1,30	1,40
<b>BALANCE SHEET (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Tangible non current assets	116	689	665	655	747	831	910	982
Other non-current assets	781	2.093	2.399	2.500	5.725	5.520	5.316	5.114
Other current assets	312	827	706	795	795	904	938	960
Cash & equivalents	61	64	107	123	339	609	938	1.301
<b>Total assets</b>	<b>1.270</b>	<b>3.673</b>	<b>3.878</b>	<b>4.074</b>	<b>7.606</b>	<b>7.865</b>	<b>8.102</b>	<b>8.357</b>
Total equity	308	1.205	1.150	1.198	4.051	4.406	4.751	5.130
Interest-bearing non-current debt	317	1.344	1.507	1.338	1.708	1.512	1.317	1.122
Interest-bearing current debt	23	30	29	422	248	248	248	248
Other Debt	622	1.095	1.191	1.115	1.599	1.698	1.786	1.856
<b>Total liabilities &amp; equity</b>	<b>1.270</b>	<b>3.673</b>	<b>3.878</b>	<b>4.074</b>	<b>7.606</b>	<b>7.865</b>	<b>8.102</b>	<b>8.357</b>
<b>CASH FLOW (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
Cash earnings	302	568	582	373	943	938	1.014	1.085
Change in working capital	(13)	21	4	(45)	(41)	37	3	2
Cash flow from investments	(213)	(2.007)	(503)	(539)	(3.631)	(292)	(305)	(314)
Cash flow from financing	90	1.114	306	387	365	45	65	85
Net cash flow	(1)	3	43	16	216	270	329	363
<b>CAPITALIZATION &amp; VALUATION (EURm)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
<b>Share price (EUR end)</b>	<b>30,9</b>	<b>37,5</b>	<b>50,9</b>	<b>37,1</b>	<b>57,3</b>	<b>39,3</b>	<b>39,3</b>	<b>39,3</b>
Number of shares end period	195	198	205	204	200	200	200	200
Net interest bearing debt	279	1.310	1.429	1.637	1.617	1.151	627	69
<b>Enterprise value</b>	<b>6.314</b>	<b>8.725</b>	<b>11.877</b>	<b>9.199</b>	<b>13.164</b>	<b>9.114</b>	<b>8.623</b>	<b>8.101</b>
EV/Sales	2,4	2,8	3,2	2,3	3,1	1,8	1,6	1,4
<b>EV/EBITDA</b>	<b>15,5</b>	<b>11,8</b>	<b>15,4</b>	<b>10,9</b>	<b>10,5</b>	<b>7,5</b>	<b>6,6</b>	<b>5,9</b>
EV/EBIT	20,2	14,1	21,4	14,2	13,7	11,3	9,8	8,6
P/E reported	29,0	16,5	28,3	42,1	18,7	15,8	14,2	13,0
<b>P/E adjusted</b>	<b>29,0</b>	<b>28,2</b>	<b>29,0</b>	<b>42,1</b>	<b>33,9</b>	<b>15,8</b>	<b>14,2</b>	<b>13,0</b>
P/B	19,8	6,2	9,1	6,3	2,9	1,8	1,7	1,6
<b>FINANCIAL ANALYSIS &amp; CREDIT METRICS</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018e</b>	<b>2019e</b>	<b>2020e</b>
ROE adjusted (%)	81,5	34,5	30,4	15,2	12,9	11,7	12,0	12,2
Dividend yield (%)	1,3	1,6	1,4	2,2	1,5	3,1	3,3	3,6
EBITDA margin (%)	15,3	24,1	20,8	21,3	29,8	23,4	24,0	24,6
EBIT margin (%)	11,8	20,1	15,0	16,4	22,8	15,5	16,1	16,7
NIBD/EBITDA	0,68	1,78	1,85	1,95	1,29	0,94	0,48	0,05
EBITDA/Net interest	25,21	14,60	36,99	3,00	14,41	36,15	72,15	-

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	"Hold"	Pareto Securities Research expects this financial instrument's total return to be between -10% and 10% over the next 12 months
	"Sell"	Pareto Securities Research expects this financial instrument's total return to be negative by more than 10% over the next 12 months

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## Appendix A

Disclosure requirements pursuant to the Norwegian Securities Trading Regulations section 3-10 (2) and section 3-11 (1), letters a-b

The below list shows companies where Pareto Securities AS - together with affiliated companies and/or persons – own a portion of the shares exceeding 5 % of the total share capital in any company where a recommendation has been produced or distributed by Pareto Securities AS.

Companies	No. of shares	Holdings in %	Companies	No. of shares	Holdings in %
Helgeland Sparebank	1.988.203	9,53%	SpareBank 1Østfold Akersl	1.129.560	9,12%
Pareto Bank ASA	10.839.382	18,49%	Sparebanken Vest	4.506.060	7,63%

Pareto Securities AS or its affiliates own as determined in accordance with Section 13(d) of the US Exchange Act, 1 % or more of the equity securities of:

Companies	No. of shares	Holdings in %	Companies	No. of shares	Holdings in %
Helgeland Sparebank	1.988.203	9,53%	SpareBank 1SMN	1.879.292	1,45%
NHST Media Group AS	21.475	1,85%	SpareBank 1Østfold Akersl	1.129.560	9,12%
Pareto Bank ASA	10.839.382	18,49%	Sparebanken Møre	311.739	3,15%
Selvaag Bolig ASA	2.179.147	2,32%	Sparebanken Sør	460.589	2,94%
SpareBank 1BV	1.549.440	2,46%	Sparebanken Vest	4.506.060	7,63%
SpareBank 1Nord-Norge	1.129.459	1,12%			

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Please find below an overview of material interests in shares held by employees in Pareto Securities AS, in companies where a recommendation has been produced or distributed by Pareto Securities AS. "By material interest" means holdings exceeding a value of NOK 50 000.

Company	Analyst holdings*	Total holdings	Company	Analyst holdings*	Total holdings	Company	Analyst holdings*	Total holdings
AF Gruppen	0	1.675	Golden Ocean Group	0	1.824	Prosafe	0	5.984
Aker	0	514	Grieg Seafood	0	770	Protector Forsikring	0	14.285
Aker BP	0	860	Helgeland Sparebank	0	1.700	REC Silicon	0	159.908
Aker Solutions	0	2.085	Høegh LNG	0	8.703	SailMar	0	130
AKVA Group	0	1.500	Ice Group AS	0	55.500	Sandnes Sparebank	0	18.032
Archer	0	73.520	Jæren Sparebank	0	500	Scatec Solar	0	35.635
Atea	0	450	Komplett Bank	0	99.357	Seadrill	0	6.615
Austevoll Seafood	0	5.780	Kongsberg Gruppen	0	4.010	Selvaag Bolig	0	10.000
Avance Gas	0	34.201	Lerøy Seafood	0	33.795	SpareBank 1BV	0	10.000
Axactor	0	21.647	Marine Harvest	0	1.864	SpareBank 1Nord-Norge	0	30.000
Bonheur	0	44.509	Monobank	0	1.355.000	SpareBank 1SMN	0	16.590
Borr Drilling	0	4.415	NEXT Biometrics	0	1.730	SpareBank 1SR-Bank	0	39.187
BWLPG	0	5.569	Nordic Semiconductor	0	6.000	SpareBank 1Østlandet	0	2.891
DNB	0	35.822	Norsk Hydro	0	112.501	Sparebanken Møre	0	6.550
DNO	0	24.392	Northern Drilling	0	2.099	Sparebanken Sør	0	43.280
DOF	0	138.498	Norwegian Air Shuttle	0	3.172	Sparebanken Øst	0	3.000
Entra	0	14.362	Norwegian Property	0	150.000	Storebrand	0	5.005
Equinor	0	10.266	Ocean Yield	0	31.967	Subsea 7	0	7.351
Europris	0	14.510	Odffjell Drilling	0	8.731	Telenor	0	2.272
Faroe Petroleum	9.600	9.600	Orkla	0	23.746	TGS-NOPEC	0	2.000
Flex LNG	0	13.352	Panoro Energy	0	5.670	XXL	0	7.270
Frontline	0	13.943	Pareto Bank	0	963.509	Yara International	0	19.079
Gjensidige Forsikring	0	8.547	Petroleum Geo-Services	0	57.884	Zenterio	0	78.865

This overview is updated monthly (last updated 21.11.2018).

\*Analyst holdings refer to positions held by the Pareto Securities AS analyst covering the company.

## Appendix B

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letters e-f, ref the Securities Trading Act Section 3-10

Overview over issuers of financial instruments where Pareto Securities AS have prepared or distributed investment recommendation, where Pareto Securities AS have been lead manager/co-lead manager or have rendered publicly known not immaterial investment banking services over the previous 12 months:

Africa Energy	Floatel	Okea AS
Akva Group	Fortum	Pandion Energy
Arnarlax	Genel Energy	Pareto Bank
Atlantic Sapphire AS	Gfinity Plc	Petro Matad Limited
Avida Holding AB	Gulf Keystone Petroleum	Petrolat LLC
Bank Norwegian	Hertha BSC GmbH	Pioneer Public Properties Finland Oy
Borealis Finance	Hunter Group	Point Resources AS
Borr Drilling Limited	Idavang A/S	Quant AB
Brado AB	Instabank	Sakthi Global Auto Holdings
Camanchaca	Komplett Bank	Sand Hill Petroleum
DNO ASA	McDermott International	SAS
DOF ASA	MMA Offshore	Scatec Solar
Echo Energy	Monobank ASA	Scorpio Tankers
Eco Atlantic Oil and Gas	Nemaska Lithium	Shamran
Eidesvik Offshore	Northern Drilling	Siccar Point Energy
Eland Oil & Gas	Northmill Group AB	SL Bidco
Embarcadero Maritime II LLC	Norwegian Air Shuttle	SpareBank 1 Buskerud-Vestfold
Faroe Petroleum	Ocean Yield	Sparebanken Vest
FFS Bidco	Odfjell	Union Maritime Limited
Filo Mining Corp	Odfjell Drilling	Zwipe AS
Flex LNG		

*This overview is updated monthly (this overview is for the period 31.10.2017 – 31.10.2018).*

## Appendix C

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11(4)

### Distribution of recommendations

Recommendation	% distribution
Buy	76%
Hold	20%
Sell	4%

### Distribution of recommendations (transactions\*)

Recommendation	% distribution
Buy	100%
Hold	0%
Sell	0%

\* Companies under coverage with which Pareto Securities Group has on-going or completed public investment banking services in the previous 12 months

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## Appendix D

This section applies to research reports prepared by Pareto Securities AB.

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The Pareto Group has material holdings of other financial instruments than shares issued by the following companies included in Pareto Securities AB's research coverage universe: None

### Disclosure of assignments and mandates

Overview over issuers of financial instruments where Pareto Securities AB has prepared or distributed investment recommendation, where Pareto Securities AB has been lead manager or co-lead manager or has rendered publicly known not immaterial investment banking services over the previous twelve months:

Aspire	Green Landscaping Holding	Powercell	Sedana Medical
Cibus Nordic Real Estate	Lehto Group	Magnolia Bostad	Shamara Petroleum
Climeon	Organoclick	SciBase	Vostok New Ventures

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Byggmästare Anders J Ahlström	Delarka Holding	SciBase Holding	Vostok Emerging Finance
Byggpartner i Dalarna	International Petroleum Corporation	Sedana Medical	

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## Appendix E

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letter d, ref the Securities Trading Act Section 3-10

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Baywa	GFT Technologies *	MTU Aero Engines	Surteco Group *
Biotest *	Gigaset *	OVH Holding AG	Szygy AG *
Brenntag	Heidelberg Pharma *	Procredit Holding *	TAKKT AG
CORESTATE Capital Holding S.A.	Hypoport AG	PSI SOFTWARE AG *	Vapiano
Daldrup & Soehne *	Intershop Communications AG	PWO *	va-Q-tec *
Demire	Logwin *	RIB Software *	Viscom *
Epigenomics AG *	Manz AG *	S&T AG *	windeln.de
Euromicron AG *	MAX Automation SE *	Schaltbau Holding AG	
Eyemaxx Real Estate	Merkur Bank	SCOUT24	

\* The designated sponsor services include a contractually agreed provision of research services.

## Appendix F

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letter g, ref the Securities Trading Act Section 3-10

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Baywa	Intershop Communications AG	OVH Holding AG	
BB Biotech	Merkur Bank	Schaltbau Holding AG	
Eyemaxx Real Estate	MOBOTIX AG	Siegfried Holding AG	

This overview is updated monthly (last updated 05.12.2018).