Drillisch

(TecDAX, Telecom/Internet)

WARBURG RESEARCH

Buy	**Value Indicators:** EUR	**Share data:**	**Description:**
EUR 84.00 (EUR 72.00)	FCF-Value Potential: 0.00 SotP: 0.00	Bloomberg: DRI GR Reuters: DRIG ISIN: DE0005545503	Drillisch distributes fixed-line and mobile services to residental customers in Germany
Price EUR 70.15 **Upside 19.7 %**	**Market Snapshot:** EUR m Market cap: 12,400 No. of shares (m): 177 EV: 12,205 Freefloat MC: 3,310 Ø Trad. Vol. (30d): 15.70 m	**Shareholders:** Freefloat 26.7 % United Internet 73.3 %	**Risk Profile (WRe):** 2017e Beta: 1.0 Price / Book: 3.2 x Equity Ratio: 79 %

Combined strengths of 1&1 and Drillisch to drive profit and growth

In this note we provide: (1) a brief overview of the German mobile telecommunication market, (2) an analysis of the different price strategies of the various operators/MVNOs and (3) a look at Drillisch's and United Internet's pre-merger business plans, (4) detailed KPI models for the new entity until 2020e and (5) our new financial model for the combined entity.

Our investment hypothesis for Drillisch is rather simple: We are expecting EPS to grow to EUR 3.63 and the FCF per share to EUR 3.90 by 2020e which implies FCF/market cap 2020e of 5.8%. Growth is driven by the combination of the strengths of 1&1 and Drillisch which should raise customer numbers, revenue and profit. **The base case assumptions are that Drillisch remains a "capex-lean", "asset-light" and "net debt free" company.**

The combined entity serves roughly 4.36m DSL and 8.31m mobile customers. The strengths of 1&1 (stand-alone) in mobile include its consumer brand in Germany, its marketing and sales power and its customer relationship management. Drillisch's pre-merger strength is its MBA-MVNO contract with Telefonica network, which guarantees sufficient access to mobile data capacities and technologies on the Telefonica Deutschland network.

Merger offers strong synergy potential: Customer gross additions could be allocated the terms and conditions of the MBA-MVNO contract resulting in lower network costs for the new entity. In a second step, 1&1's Vodafone customer base could gradually be transferred to the Telefonica network, lowering network expenses further. Furthermore, an optimisation of tariffs would have a positive impact on revenues and combined marketing expenses should be lower than for the two stand-alone operations.

Risks to our investment case: Another base case assumption is that the healthy mobile telecommunication market in Germany remains stable over time. In our view, competitor Telefonica Deutschland finds itself in a difficult position as it cannot compete with the premium brands Deutsche Telekom and Vodafone and it is in direct competition with Drillisch, which offers customers the same quality at better prices. The possibility of aggressive price cuts by Telefonica Deutschland to regain customers represents a risk to our investment case.

At an extraordinary general meeting in January 2018, Drillisch shareholders will be asked to approve an option for management to increase the equity by a maximum of 97.2m shares which is 55% of the current outstanding number of shares of 176.76m or a market valuation of EUR 6.5bn. Additionally, shareholders will be asked to give management the permission to initiate obligations ("Schuldverschreibungen") with a nominal value of up to EUR 10bn. In our view, this is not merely a capital authorisation, which is common and gives management greater flexibility. In this case, it is a huge amount of additional capital. If Drillisch utilises both authorisations, our investment case will change substantially – potentially to a capex- and capital-intensive business model.

In the context of our base scenario, we rate the share a Buy with a DCF-based PT of EUR 84.

Rel. Performance vs TecDAX:	
1 month:	-1.9 %
6 months:	14.5 %
Year to date:	-2.6 %
Trailing 12 months:	28.0 %

Company events:	
12.01.18	EGM
22.03.18	FY 2017
09.05.18	Q1
17.05.18	AGM

FY End: 31.12. in EUR m	CAGR (16-20e)	2014	2015	2016	2017e	2018e	2019e	2020e
Sales	54.5 %	290	630	710	2,745	3,340	3,739	4,049
Change Sales yoy		-0.3 %	117.3 %	12.8 %	286.6 %	21.7 %	12.0 %	8.3 %
Gross profit margin		*100.0 %*	*100.0 %*	*100.0 %*	*32.2 %*	*32.5 %*	*34.1 %*	*35.5 %*
EBITDA	71.7 %	85	105	120	525	721	902	1,045
Margin		*29.4 %*	*16.7 %*	*16.9 %*	*19.1 %*	*21.6 %*	*24.1 %*	*25.8 %*
EBIT	100.2 %	75	69	59	460	621	800	943
Margin		*26.0 %*	*11.0 %*	*8.3 %*	*16.8 %*	*18.6 %*	*21.4 %*	*23.3 %*
Net income	121.9 %	50	46	26	300	415	535	641
EPS	65.8 %	0.91	0.84	0.48	1.70	2.35	3.03	3.63
EPS adj.	65.8 %	0.91	0.84	0.48	1.70	2.35	3.03	3.63
DPS	19.8 %	1.70	1.70	1.70	1.80	2.10	2.90	3.50
Dividend Yield		6.4 %	4.2 %	4.5 %	2.6 %	3.0 %	4.1 %	5.0 %
FCFPS		1.21	-1.58	1.36	2.21	2.32	3.28	3.87
FCF / Market cap		4.1 %	-4.0 %	3.2 %	3.1 %	3.3 %	4.7 %	5.5 %
EV / Sales		3.3 x	3.1 x	2.7 x	4.5 x	3.7 x	3.2 x	2.9 x
EV / EBITDA		11.3 x	18.6 x	15.7 x	23.5 x	16.9 x	13.3 x	11.3 x
EV / EBIT		12.8 x	28.3 x	32.2 x	26.8 x	19.6 x	15.0 x	12.5 x
P / E		29.4 x	47.7 x	79.3 x	41.3 x	29.9 x	23.2 x	19.3 x
P / E adj.		29.4 x	47.7 x	79.3 x	41.3 x	29.9 x	23.2 x	19.3 x
FCF Potential Yield		5.4 %	3.8 %	4.1 %	2.9 %	4.1 %	5.2 %	6.1 %
Net Debt		-225	45	86	-50	-195	-405	-576
ROCE (NOPAT)		46.1 %	19.1 %	7.3 %	14.7 %	10.9 %	14.0 %	17.0 %
Guidance:	n.a.							

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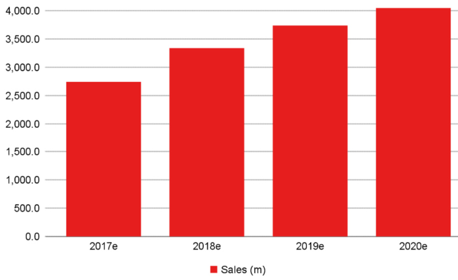
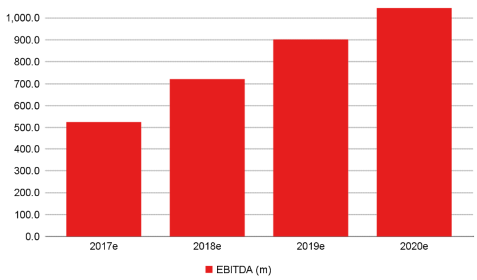
Sales development
in EUR m



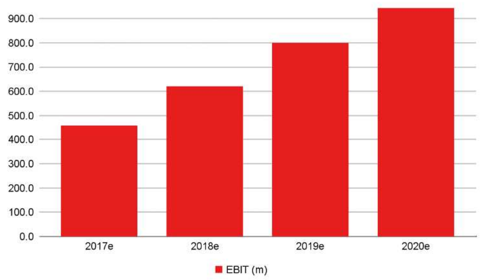
Source: Warburg Research

EBITDA development
in EUR m



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

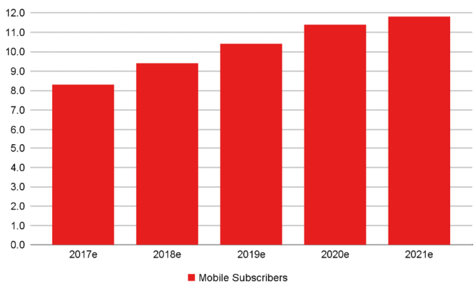
Company Background

- Drillisch sells mobile, fixed-line and value-added services to residential customers in Germany. Its core brands are 1&1, Smartmobil and Yourfone. Drillisch has more than 12m subscribers.
- Drillisch has a broad network operator contract portfolio: Deutsche Telekom, Versatel, Telefonica Deutschland, Vodafone, among others.
- The MBA-MVNO contract with Telefonica Deutschland is based on monthly fixed-mobile data volumes which Drillisch is forced to purchase. Hence, Drillisch has a so-called inventory risk.
- Monthly mobile data volume, which Drillisch is obliged to acquire, is increasing over time and depends on the used monthly mobile data capacity.

Competitive Quality

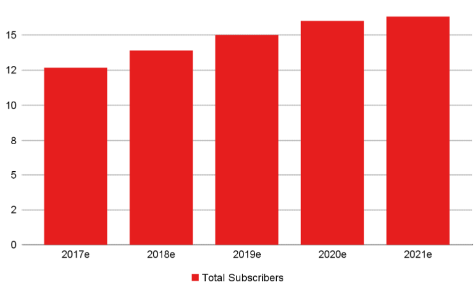
- Drillisch's MBA-MVNO contract with Telefonica Deutschland secures access to sufficient mobile data capacities until 2030 and to all future technologies for attractive network costs.
- Strategic flexibility: With the huge customer base in mobile and fixed-line in combination with the great network operator contracts, Drillisch is able to react flexibly to changing market conditions.
- Strong brand portfolio: 1&1, Smartmobil and Yourfone; 1&1 in particular is a well-known brand in Germany for telecommunication services.
- Capex-lean business model with almost no technology risks: Drillisch acquires all network capacities and does not cover investment in infrastructure.

Mobile Subscribers
in m



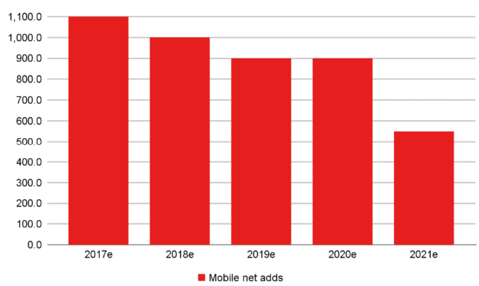
Source: Warburg Research

Total Subscribers
in m



Source: Warburg Research

Mobile net adds
in k



Source: Warburg Research

Summary of Investment Case

Investment triggers

- Our investment case expects EPS to grow to EUR 3.63 and the FCF per share to EUR 3.90 by 2020e which implies a FCF/market cap 2020e of 5.8%. Growth is driven by the combination of the strengths of 1&1 and Drillisch which should increase customer numbers, revenue and profit. **The base case assumptions are that Drillisch remains a "capex-lean", "asset-light" and "net debt free" company.**
- United Internet has not yet signed a profit share agreement, hence UI only has access to the cash flow via dividend payments. As the company is net debt free, all cash flow can be redistributed to shareholders.
- Further catalysts could be Q4/17 results. In Q4/17 we expect a high net addition number of > 250k new net subscribers. Furthermore, the guidance for 2018e should support our growth case.

Valuation

- Our base scenario results in a DCF-based PT of EUR 84.

Growth

- Revenue growth is mainly based on market share gains in the German telecommunication market which results in subscriber growth. Moreover, we expect ARPU growth in mobile as well as in fixed-line broadband.
- EBITDA and EBIT growth is driven by revenue growth, economies of scale in sales and marketing expenses as well as increasing utilization of the monthly acquired mobile network capacities. Cost synergies arising from the merger further contribute to economies of scale.

Competitive quality

- The competitive quality is based on an excellent combination of strong brands, good access to fixed-line and mobile networks and one of the best customer relationship management.
- Mobile network access: Drillisch has secured its network access via an MBA-MVNO contract until 2030 on the Telefonica Deutschland network for existing and all future network technologies. Drillisch has a second MVNO contract for 4G/20 Mbit with Telefonica and a MVNO contract with Vodafone for 3.5G, which is based on the "pay-as-you-go" principle.
- We expect Drillisch to be serving 8.3m mobile subscribers and 4.36m broadband subscribers (or a total subscriber base of 12.6m) at the end of 2017e. Its network access in combination with its strong brands and sales channels, gives Drillisch the flexibility to react to changing markets, e.g. by offering product packages or other new product innovations.

Warburg versus consensus

As there are not many estimates yet available for the new combined Drillisch-UI company, a comparison of our estimates with consensus makes little sense for now.

Company Overview

Segments	Mobile	Fixed-Line	Group
Revenues (2018e; WRe) in EUR m	**1,860**	**1,478**	**3,339**
in% of total	***56%***	***44%***	***100%***
Operations	Distribution of mobile telecommunication services, end devices, bundled products, value-added services	Distribution of fixed-line/broadband telecommunication services, end devices, bundled products, value-added services (such as IP-TV)	
Brands	1&1; Smartmobil	1&1	1&1; Smartmobil
Competitiors	Vodafone, Deutsche Telekom, Unity Media, Freenet, Telefonica Deutschland, City Carriers (Netcologne)		
Customers	Consumers and Small Businesses in Germany		
Suppliers	Network Operators such as Deutsche Telekom and Versatel; Hardware manufacturer (Apple, Samsung,…)		

Strategy	Business Operations	Competitive Quality	Competition
▪ Subscription based ▪ Broadband/ fixed-line and mobile internet services ▪ Focus on consumers in Germany ▪ Capex-light/ non-infrastructure approach ▪ Main focus on online/digital distribution channels ▪ Strong brand portfolio: 1&1 and Smartmobil	▪ Mobile internet - 1&1, Smartmobil, Yourfone - 8.2m subscribers - Long-term MBA-MVNO contract with Telefonica Deutschland about all technologies and speeds - Additional pay-as-you-go contracts with Vodafone and Telefonica D ▪ Broadband/ fixed-line ▪ DSL/ VDSL access - Value addded services: IP-TV - 4.6m subscribers - 1&1 - Network contracts with Deutsche Telekom, Versatel among others	▪ Strong brand portfolio ▪ Great network access in mobile and fixed-line ▪ High strategic flexibility because of a broad product portfolio combined with sufficient network capacities ▪ Distribution network and customer relationship management ▪ No technology or capex risks	▪ Deutsche Telekom ▪ Vodafone ▪ Unity Media ▪ Tele Columbus ▪ Telefonica Deutschland ▪ City carriers such as NetCologne ▪ Freenet ▪ Resellers such as Aldi Talk and Tchibo

Source: Warburg Research

Competitive Quality

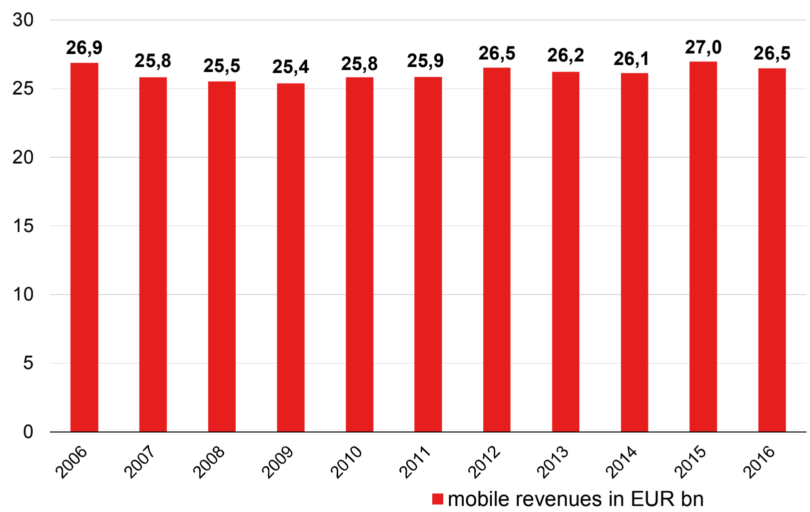
- Mobile telecommunication market has been flat at EUR 26bn for the last 10 years
- SIM card penetration of 150% in Germany
- Combined entity (Drillisch newco) has a post-paid SIM card market share of 12%
- Network operators and MVNOs are in the process of transferring consumers to tariffs with a higher data volume per month which should increase the overall ARPU
- Key points of Drillisch's competitive strengths: MBA-MVNO contract with Telefonica D which secures long-term access to sufficient mobile data capacities and latest technologies, the brand portfolio with 1&1 and Smartmobil, 1&1's strong distribution channels

For 10 years there has been no market growth in mobile telecommunication

Telecommunication markets in Germany

Mobile telecommunication revenues in Germany have been roughly flat for the last 10 years at ~ EUR 26bn.

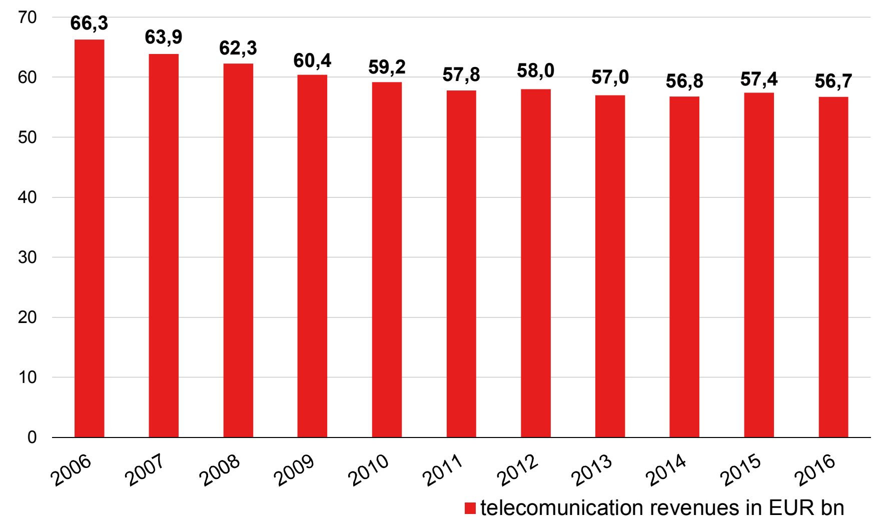
Germany: Mobile telecommunication revenues in EUR bn



Source: Bundesnetzagentur, Warburg Research

In the same period, overall telecommunication revenues decreased from EUR 66.2bn in 2006 to EUR 56.7bn in 2016, driven by regulation and fierce competition.

Germany: Telecommunication revenues in EUR bn

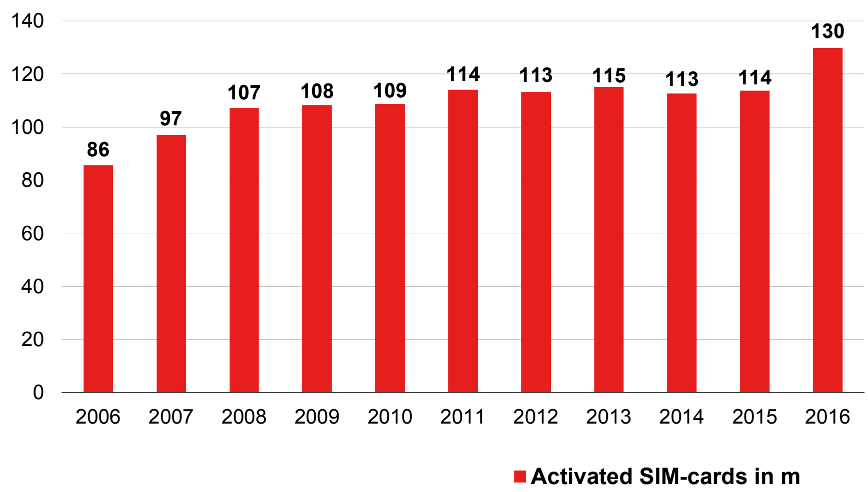


Source: Bundesnetzagentur, Warburg Research

The number of activated SIM cards grew from 109m in 2010 to 130m in 2016. The statistic includes prepaid and postpaid SIM cards and implies penetration of 157%.

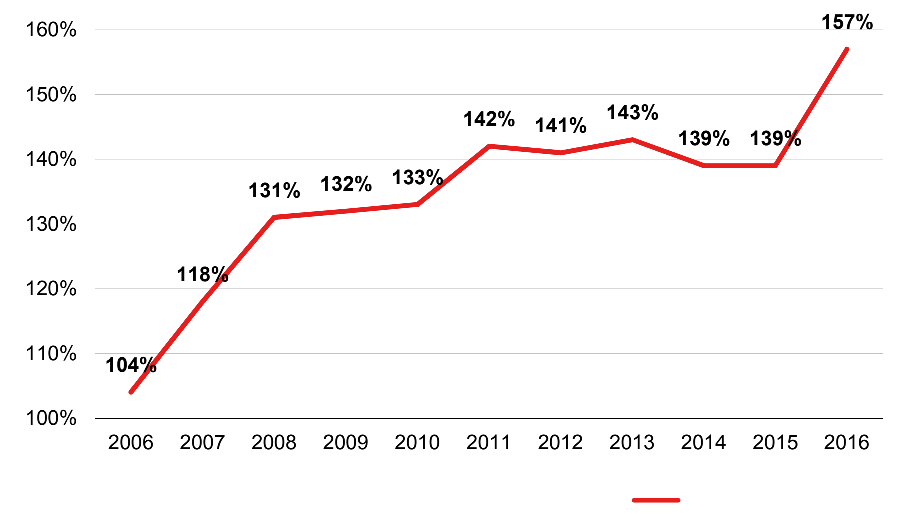
We estimate that the more important postpaid, or subscription-based, SIM cards should have a market share of 51% or 67m cards. End of September 2017, Drillisch had a combined mobile customer base of 8.2m which reflects a market share (in terms of postpaid SIM cards) of 12.2%.

Germany: Activated SIM cards in m



Source: Bundesnetzagentur, Warburg Research

SIM card penetration in Germany



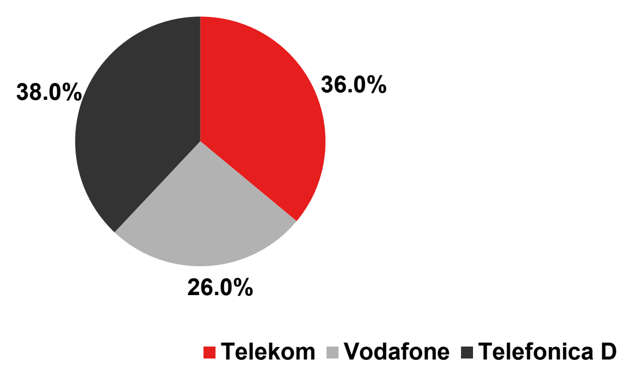
Source: Bundesnetzagentur, Warburg Research

The rather big jump in number of SIM cards and penetration in 2016, as can be seen in the chart above, can be partly explained by an overall change in the counting method.

The German market comprises three network operators (Deutsche Telekom, Vodafone, Telefonica Deutschland), one remaining mobile service provider Freenet, while Drillisch is the only MBA-MVNO player.

The market share of the three network operators is shown below. Figures are taken from the Q3/17 financial statements. The total SIM card market is defined as the sum of the reported SIM cards from the network operators.

Network operator SIM card market as of Q3/17



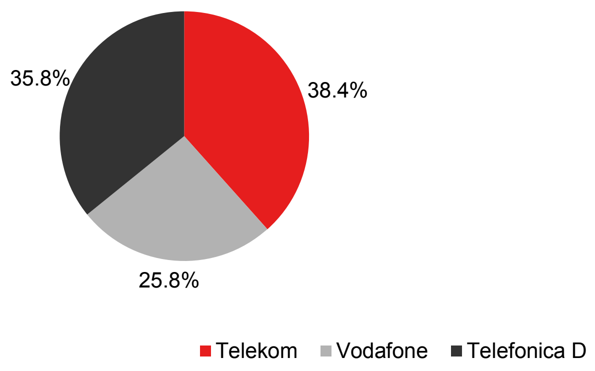
Source: Warburg Research

In our view, more important than the total number of SIM cards is the figure for postpaid customers. Post-paid customers usually sign a contract for a certain period of time and pay a monthly usage fee.

Based on the Q3/17 statements, the network operators serve 66m mobile subscribers.

The relevant market shares are shown below.

Post-paid SIM card Q3/17 (basis: 66m SIM cards)

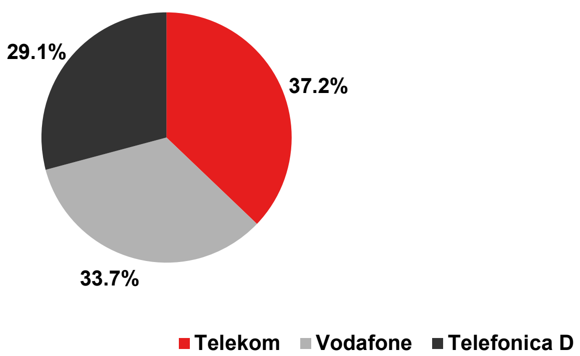


Source: Warburg Research

Drillisch, with 8.2m subscribers, holds a market share of 12% of the postpaid market.

In Q3/17, the sum of the network operator's mobile service revenues stood at EUR 4.61bn. Of that, Deutsche Telekom had a market share of 37.2%, Vodafone 33.7% and Telefonica Deutschland 29.1%.

Network operator market share by mobile service revenues (basis: EUR 4.61bn



Source: Warburg Research

Analysis of mobile tariffs

An analysis of the current tariff structure in the German mobile telecommunication markets is difficult owing to the differences in the package price approaches of the various providers.

Compared to other European countries, **tariffs and prices for mobile data volume are rather high in Germany.** While this reflects the current healthy condition of the German mobile telecommunication market from the point of view of the providers, **there is potential pressure that the gap between market prices in Germany and prices in other European countries could narrow or even close.** In our view, Telefonica Deutschland is in the most difficult position of all the network operators and could substantially change its tariff structure in the hope of regaining momentum and market share.

For instance, research.rewheel.fi sought out the cheapest tariff plans in several countries for a EUR 30 package. In countries such as Finland, Ireland, Denmark, Bulgaria, Croatia consumers receive unlimited mobile data volume per month, in United Kingdom and France a monthly volume of 100 GB, in Austria 50 GB in Italy 45 GB and in Germany, only 30 GB.

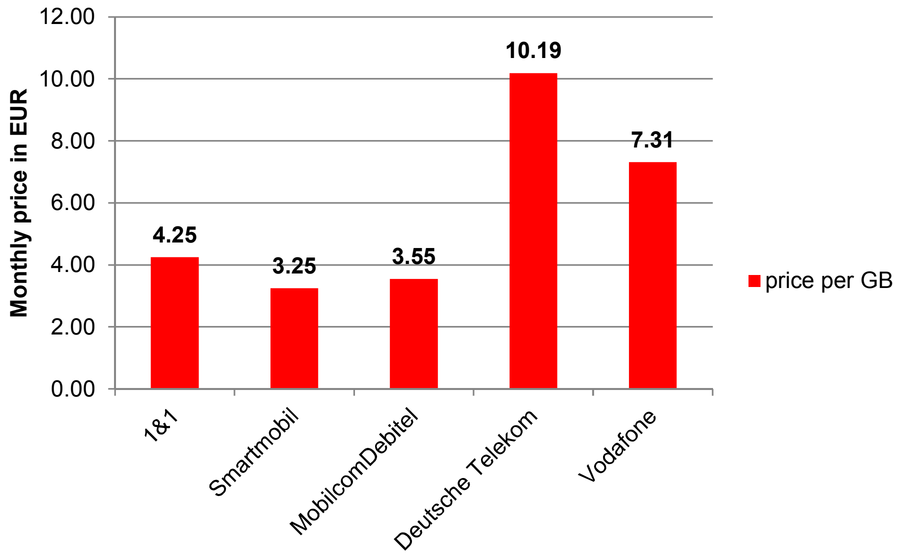
Calculation of the package prices: Our calculated monthly package price includes the monthly payments for 24 months, installation fees and all other fees related to the contract. We differentiate between SIM-only tariffs and packages including a mobile device.

General findings – SIM-only subscriptions

- The tariffs of all providers are so structured that the packages with a rather low monthly mobile data volume (< 3 GB) are rather expensive. Monthly subscription prices decline sharply as the amount of included monthly data volume rises.
- Currently, packages for mobile data volumes < 3 GB range from EUR 2.99 (MobilcomDebitel, special offer for 1 GB volume, 22 Mbit/s; O2 network) to EUR 36.66 (Vodafone) or in terms of price per GB from EUR 6.99 per GB (WEB.DE and GMX) to EUR 21.22 per GB (O2).
- Mobile users pay between EUR 26.26 (1&1) and EUR 72.26 (Telekom) for a 10 GB package, or from EUR 2.62 (1&1) to EUR 7.23 (Telekom) per GB.
- The brands 1&1, Smartmobil, WEB.DE, GMX (brands related to Drillisch) are the most attractive in terms of subscription prices.
- **Conclusions:** The higher monthly mobile data volume, the lower the prices per GB. Deutsche Telekom and Vodafone are the most expensive but justify their pricing by claiming to offer premium network quality. However, in our view, the difference in network quality does not justify the extent of the gap in package prices or prices per GP. For lower volume packages (< 3 GB), some packages are up to 10 times more expensive than the cheapest. The rather high absolute and percentage price differences could potentially be narrowed if stronger price competition returns to the market.

Below we show the price per GB for a 4 GB mobile data package. O2 (Telefonica Deutschland is not included because it currently offers only 1 GB or 10 GB mobile data packages. Smartmobil (Drillisch) is included with its 5 GB package and MobilcomDebitel with its 3 GB package.

Price per mobile GB in EUR for different providers (5 GB volume)



Source: Warburg Research

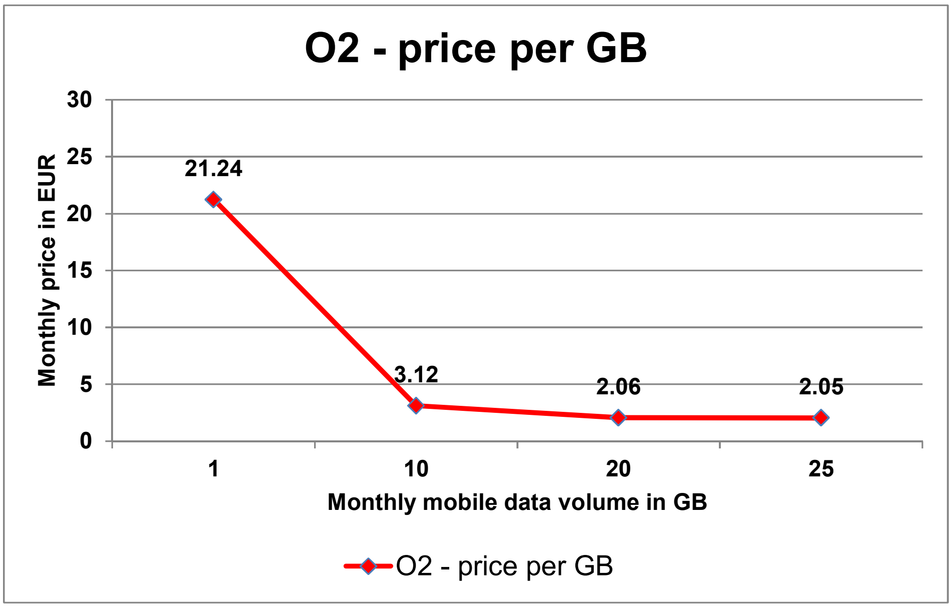
Drillisch's brand with a EUR 3.25/GB tariff is the cheapest while Telekom's comparable tariff is 3.1 times or 215% higher. Interestingly, Drillisch positions its premium 1&1 brand with its 4GB price scheme 30% above its Smartmobil brand (price per GB). Even more important in our view is the high price gap between Deutsche Telekom and Vodafone. Deutsche Telekom sells in its 4 GB package at a price of EUR 10.19 per GB while Vodafone is currently distributing its 4 GB tariff at EUR 7.31 per GB, which represents a price gap of 39%

Price elasticity of the different providers

We define price elasticity as the price per mobile GB for alternative monthly mobile data volume packages.

Telefonica Deutschland

Telefonica Deutschland: price per GB for the O2 brand



Source: Warburg Research

Telefonica Deutschland aims to position its O2 brand as a premium service. In its SIM-only tariff, the 1 GB volume is priced very unattractively at EUR 21.24 per month which is the highest of all mobile offerings. In contrast to the 1 GB package, the 10 GB package is priced at EUR 3.12 per GB (or EUR 31.24 as a monthly subscription price), which is attractive compared to others: Telekom (EUR 7.23 per GB or EUR 72.26), Vodafone (8 GB offering, EUR 4.64 per GB or EUR 37.10 per month).

Obviously, Telefonica's tariff structure would seem to be aiming to increase monthly ARPU. In our view, the company is hoping that customers will sign up for the 10 GB subscription even if their need is well below the 10 GB included volume.

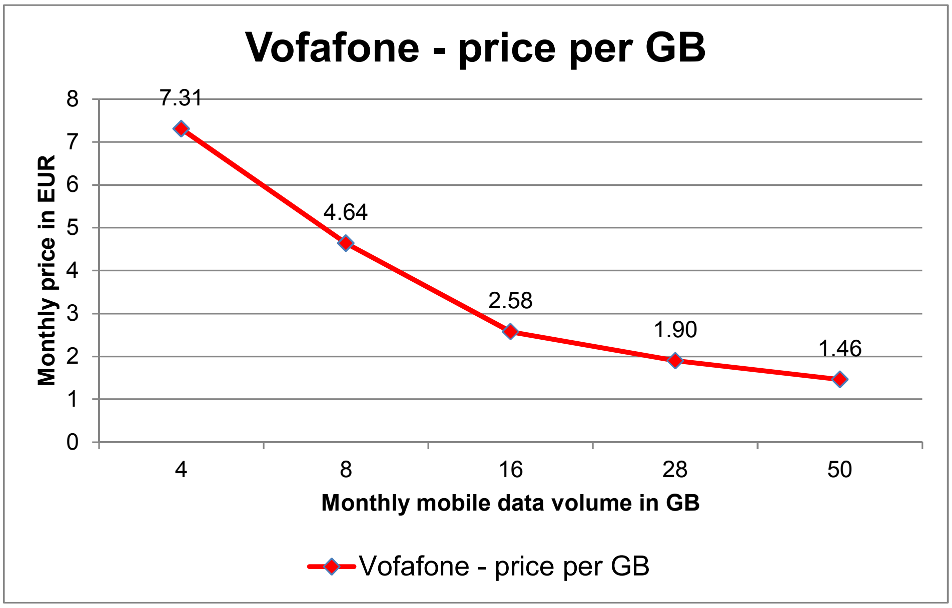
Telefonica Deutschland: SIM-only tariffs

Telefonica Deutschland				
monthly mobile data volume in GB	**1**	**10**	**20**	**25**
O2 - price per GB in EUR	21.24	3.12	2.06	2.05
O2 - subscription price	**21.24**	**31.24**	**41.24**	**51.24**

Source: Warburg Research

Vodafone

Vodafone: price per GB in EUR



Source: Warburg Research

Vodafone: SIM-only tariff

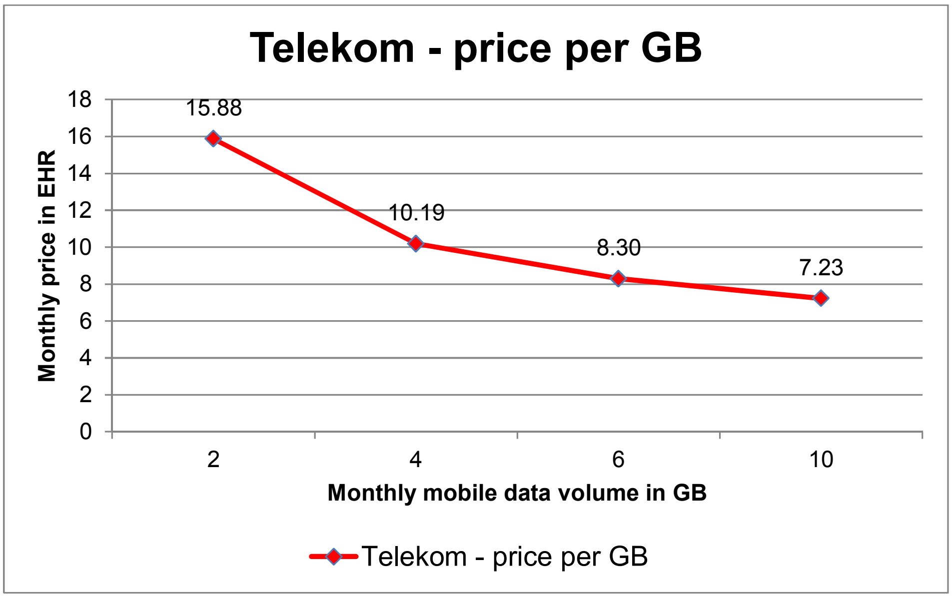
Vodafone					
monthly mobile data volume in GB	**4**	**8**	**16**	**28**	**50**
Vofafone - price per GB in EUR	7.31	4.64	2.58	1.90	1.46
Vodafone - subscription price in EUR	**29.22**	**37.10**	**41.22**	**53.22**	**73.10**

Source: Warburg Research

In our view, Vodafone is currently the most aggressive player selling higher data volumes. The price per GB decreases from EUR 7.31 for the 4 GB data volume package to EUR 1.46 for the 50 GB package. Furthermore, Vodafone is currently positioning itself aggressively against Deutsche Telekom, which does not sell more than 10 GB to consumer customers. Vodafone sells its 16 GB mobile data volume at EUR 41.22 compared to EUR 40.76 for 4 GB at Deutsche Telekom, which means that Vodafone sells four times more data volume for nearly the same price.

Deutsche Telekom

Deutsche Telekom: price per GB in EUR



Source: Warburg Research

Deutsche Telekom: SIM-only tariff

Deutsche Telekom				
monthly mobile data volume in GB	**2**	**4**	**6**	**10**
Telekom - price per GB	15.88	10.19	8.30	7.23
Telekom - subscription price	**31.76**	**40.76**	**49.77**	**72.26**

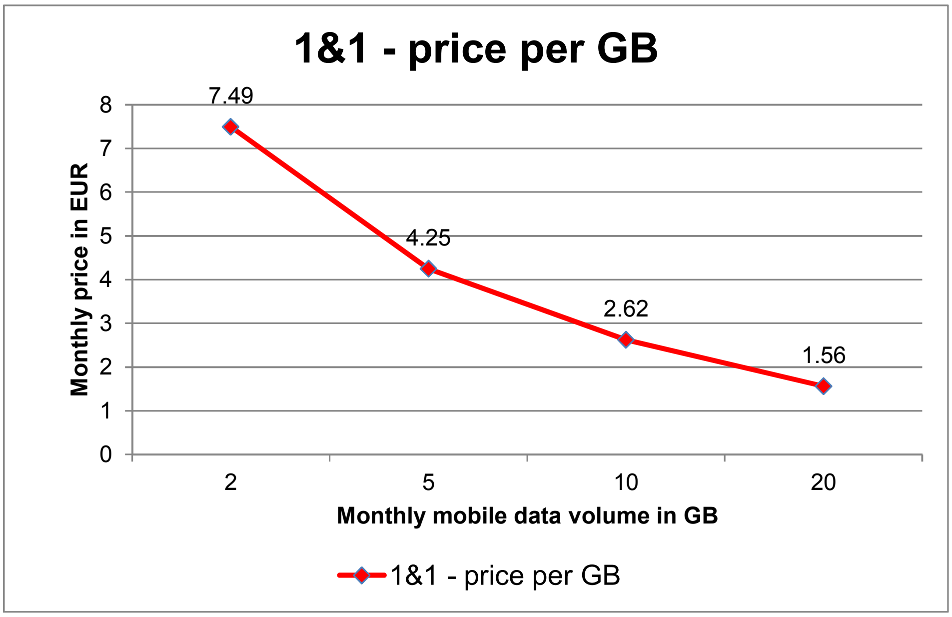
Source: Warburg Research

Deutsche Telekom has the lowest level of price decrease (measured as price per GB) with increasing data volume packages. For the 2 GB package, the price per GB is EUR 15.88 and for the 10 GB tariff, EUR 7.23.

Deutsche Telekom markets its offering as a premium service because it operates the best network in terms of quality and speeds. Furthermore, Deutsche Telekom has introduced its stream-on product which includes several music and video streaming services for free. Users pay still the monthly subscription price e.g. for Netflix but used data volumes for Netflix are not counted as part of the monthly mobile data volume package.

Drillisch – 1&1 brand

1&1: price per GB in EUR



Source: Warburg Research

1&1: SIM-only tariff

Drillisch: 1&1				
monthly mobile data volume in GB	**2**	**5**	**10**	**20**
1&1 - price per GB in EUR	7.49	4.25	2.62	1.56
1&1 - subscription price in EUR	**14.99**	**21.24**	**26.24**	**31.24**

Source: Warburg Research

The tariff structure of 1&1 should be seen in connection with Drillisch's second important brand Smartmobil. Within the Drillisch brand portfolio, 1&1 should be positioned as the premium brand while Smartmobil is for more price-sensitive customers. Currently, Smartmobil offers a 1.5 GB mobile data package for EUR 7.49 and has a special offer for a 5 GB subscription at EUR 14.99. Smartmobil's tariff structure changes frequently. The week before, Smartmobil had a 3 GB offering too.

Like most of the other providers, 1&1 substantially reduces the price per GB with increasing volume. While the price per GB in the 2 GB offering (EUR 14.99/month) is EUR 7.49, 1&1 charges only EUR 2.62 per GB for the 10 GB option (EUR 26.24).

Summary

Comparing prices and pricing strategies is rather difficult as the providers frequently change the monthly package prices, the included monthly mobile data volume or the value-added services.

Providers would also seem to be trying to encourage consumers to opt for higher data volumes and higher ARPU. In our view, tariffs for < 3GB monthly included data volume are still rather expensive and further price cuts are likely.

Furthermore and most important for our Drillisch investment case is that compared to Telefonica Deutschland, Drillisch offers the same network quality in packages with higher included volumes at a cheaper tariff. We think that most of Drillisch's gross additions should come from churn from direct Telefonica own-branded tariffs.

The MBA-MVNO contract with Telefonica Deutschland

As part of the conditions of the merger between Telefonica and E-Plus, the EU ruled that the merged entity (Telefonica D and E-Plus) had to provide at least 20% of the mobile network capacity to MVNOs.

Drillisch was able to secure the complete network capacity, which increased Drillisch's competitive strengths substantially. Below we summarize the contract between Drillisch and Telefonica Deutschland:

- **Contract duration:** five years with two extension options for an additional five years => guaranteed contract duration of one year
- The contract **became effective as of January 1, 2015** => The contract lasts until 2030
- **Upfront payment:** In 2015, Drillisch paid an upfront sum of EUR 150m.
- **Network capacities and glide path:** Drillisch has given a guarantee to acquire 20% of the utilized monthly network capacity of Telefonica Deutschland, irrespective of whether Drillisch can sell it. Network capacity is measured by mobile data usage. The obligation to acquire the full 20% of the utilized capacity will take effect in 2019. Between 2015 and 2019, Drillisch and Telefonica agreed on a glide path. The mandatory capacity to be acquired gradually increases over time until it reaches 20%.
- **Capacity option of 10%:** The contract includes a 10% option which allows Drillisch to purchase up to an additional 10% of the utilized network capacity any time between 2015 and 2019.
- **Technology:** Drillisch receives complete access to all network technologies and mobile data speeds without any time lag.
- **Mobile data capacity growth:** At the time of the contract signing, Drillisch and Telefonica Deutschland agreed a projection for the expected mobile data capacity growth until 2019. The forecast was the basis for all calculations. Furthermore, both companies agreed that Drillisch has to acquire the same percentage figure of the used mobile data capacities even if the used capacity is higher than the projected one. To limit the inventory risk for Drillisch, Telefonica Deutschland agreed to give substantial price discounts for the excess capacity.

The contract puts Drillisch in an excellent competitive position:

- Drillisch is the only provider without its own network but with similar economics to a network operator and the same technology access as Telefonica Deutschland – until 2030.
- Drillisch and Telefonica Deutschland have not published any details on mobile data purchase conditions. However, we believe that purchase conditions are favourable allowing for gross margins of >60% under full utilization.

From an economic point of view, Drillisch takes an inventory risk because it has to pay the monthly delivered mobile data volume even if it cannot sell all volumes to its customer base.

The contract is being monitored by the EU, Telefonica Deutschland is in a weak position when it comes to violating the contract or not fulfilling the rules.

Good mobile and fixed-line network access

In addition to the MBA-MVNO contract with Telefonica Deutschland, Drillisch has the following access to mobile and fixed-line networks after the merger with 1&1:

- Pay-as-you-go contracts with Vodafone and Telefonica Deutschland: 1&1 has two so-called pay-as-you-go contracts which means that 1&1 pays only the monthly used mobile data capacities. Hence, there is no inventory risk. With Vodafone, the contract is only for 3.5G and the contract can be terminated in 2018. Furthermore, 1&1 signed a pay-as-you-go contract for 4G with the old E-Plus. On the basis of this contract, Telefonica Deutschland delivers 4G technology with speed of up to 20 Mbit/s.
- VDSL/DSL access: Drillisch has access to the fibre-optic network of Versatel. Furthermore, it purchases DSL/VDSL connections from Deutsche Telekom.

In our view, Drillisch has sufficient access to mobile and fixed-line networks to flexibly react to potential changes in market conditions.

Mobile network agreements of Drillisch

Vodafone	Telefonica Deutschland	
	MBA-MVNO Model	**Pay-as-you-go MVNO contract for 3G and 4G access**
▪ Pay-as-you-go MVNO contract for 3G and 3.5G access ▪ no LTE ▪ UI pays a fixed price per used voice minute and used mobile data volume (per Gbit)	▪ Signed in 2014 as result of the EU remedy package for the takeover of E-Plus by Telefonica Deutschland ▪ 5-year period until 2019 with two renewal options for Drillisch => 15 year contract from DRI's perspective ▪ Initial Investment of EUR 150m ▪ Glide-path model: DRI is obliged to purchase 20% of the monthly used mobile data capacity from Telefonica Deutschland in 2019e. Between 2015 and 2019e there is a so called glide path model which defines DRI's monthly mobile data purchase volume obligation ▪ There are no restrictions on selling the capacity to wholesalers or other parties. Furthermore, there are no change-of-control parameters ▪ Efficient risk management: In the case that the used mobile data capacity of the network is higher as originally planned and estimated in 2014, Drillisch receives price discounts on the "access" capacity	▪ MVNO contract is based on the contract which UI signed with E-Plus ▪ Currently limited access in terms of speed (only 22 Mbit/s) and coverage (no full LTE coverage on the TEF D network)

Source: Warburg Research

Sources of expected synergies in Drillisch-1&1 merger

United Internet's "1&1" is one of the strongest consumer brands in Germany for mobile and fixed-line consumer services as well as strong online distribution channels. Nevertheless, it did not have sufficient access to mobile data capacities and mobile technologies (e.g. 4G access). Hence, sooner or later, UI would have been at a clear competitive disadvantage to rivals.

As already outlined, Drillisch signed the MBA-MVNO contract securing sufficient mobile data capacities and access to all technologies for 15 years. However, in terms of the existing brand portfolio and distribution power, Drillisch would probably not have been able to sell all the delivered mobile data capacities without severe price cuts and price wars.

Therefore, the most important sources of synergies seem obvious.

The combination of 1&1 and Drillisch should clearly result in far better utilization of the MBA-MVNO contract:

- 1&1's net additions can immediately be transferred to the MBA-MVNO contract which has a substantial impact on Drillisch's operating profit.
- In a second phase, 1&1 customers on the Vodafone network (and only serviced with 3.5G technology) can be switched (step-by-step) to the MBA-MVNO contract.
- Market repair: Before the merger, there was fierce price competition between Drillisch and 1&1. The merger should help to optimize price strategies and tariffs.
- The combination of Drillisch and 1&1 increases the likelihood that the 10% capacity option can be utilized.

Further sources of synergies are summarized in the table below.

Merger Drillisch and 1&1 Telecommunication SE: sources of expected synergies

MBA-MVNO contract	▪ Efficient utilization of network capacities by Drillisch from TEFD ▪ Expansion of product portfolio through secured access to future technologies ▪ Attractive purchasing terms by combining mobile data volumes	▪ **Synergies from 2018 onwards: ~ EUR 50m** ▪ **~ EUR 150m p.a. expected in 2020** ▪ **~ EUR 250m p.a. expected by 2025**
1 & 1 Versatel network	▪ Benefitting from 1 & 1 Versatel's second largest fibre-optic network in GER through Drillisch sales channels	
Marketing & brands	▪ Increased efficiencies in marketing and brand management by portfolio rationalization and leveraging 1 &1 brand	
Procurement	▪ Enhanced joint purchase conditions for hardware, IT infrastructure and other services	▪ **Expected one-off implementation costs of ~EUR 50m**
Cross-selling	▪ Distribution of 1 &1 fixed broadband products through Drillisch shops	

Source: Warburg Research

Operative and strategic flexibility

Drillisch has secured long-term access to mobile and fixed-line networks as well as to the latest technologies and with sufficient capacities. The availability of mobile and fixed-line capacities can be combined with its huge fixed-line and mobile subscriber base and its strong brands and customer relationships. Drillisch does not need to invest in new networks or capacities as this is carried out by its contract partners (for instance, Versatel, Deutsche Telekom, Telefonica Deutschland).

Network access, subscriber base, distribution channels and brands can be combined to react flexibly to changing market conditions. For instance, Drillisch could bundle mobile, fixed-line and IP-TV services if necessary.

In our view there is no other company in the telecom markets with such a strong combination. Deutsche Telekom and Vodafone for instance have a strong brand, networks, distribution channels. However, compared to Drillisch, both are capital intensive because they need to invest in networks and licenses. In our view Deutsche Telekom and Vodafone have the same flexibility but substantially higher capex rates and technology risks.

Potential risk factors for our investment thesis

Potential for fierce new price competition

The first and more important of the two main assumptions of our investment thesis is that the level of competition in the German telecommunication market remains unchanged over time.

- Compared to other European countries, prices for mobile data capacities remain at superior levels in Germany. In many other European countries, package prices are below the German price levels, include far higher data capacities and in many countries even unlimited capacities.
- In our scenario, Telefonica Deutschland would be in the weakest position. It cannot compete with Deutsche Telekom and Vodafone in terms of network quality and brand. On its own network there is price competition from Drillisch which should result in a structural decrease in the direct customer base. This challenging situation may prompt Telefonica D to sharply reduce its prices or increase the included monthly mobile data volume to regain competitive momentum and market share. Such a move would clearly affect our investment case.

Amount of authorized capital

The second main assumption of our investment case is based on Drillisch's capex-light, strong free cash flow-generating business model. Drillisch will hold an extraordinary shareholder meeting in January 2018e. Among other issues, **Drillisch will ask the shareholders to give management the approval to optionally increase the equity by a maximum of 97.2m shares which is 55% of the current outstanding number of shares of 176.76m or a market valuation of EUR 6.5bn**.

Additionally the shareholders should give Drillisch's management the permission to initiate obligations ("Schuldverschreibungen") with a nominal value of up to EUR 10 bn.

In our view this is not a run-of-the-mill capital authorization to provide management with a certain degree of flexibility. It is a huge amount of additional capital. If Drillisch exercises both authorizations, our investment case will change substantially.

Drillisch's current strategy seems rather simple (exploit the MBA-MVNO contract) and does not require a great deal of capex (WRe: < EUR 100m). However, such a huge demand for authorized capital looks as if Drillisch potentially plans to acquire assets or companies – maybe in fixed-line. Clearly, this would change our investment case from a capex-light, strong free cash flow, shareholder-friendly dividend policy to potentially an M&A-driven, capex intensive case. This would be a clear game-changer.

Corporate governance

Such a scenario would immediately raise the question of corporate governance. Ralph Dommermuth, the CEO of United Internet, owns >40% of the company. Versatel is a 100% entity of United Internet which operates the second largest fibre-optic network in Germany. The strategy is to connect more and more households, alternative networks and companies. However, from a strategic point of view, a combination of customers (owned by Drillisch) and network (owned by United Internet) could make sense, in Mr Dommermuth's view. Dommermuth becomes the CEO of Drillisch as of January 2018.

Growth / Financials

- Description and review of the takeover process
- Number of mobile internet subscribers expected to grow from 8.31m at the end of 2017e to 12.16m at the end of 2020e.
- For 2020e we expect group revenues of EUR 4.59bn and an EBITDA of EUR 1.32bn

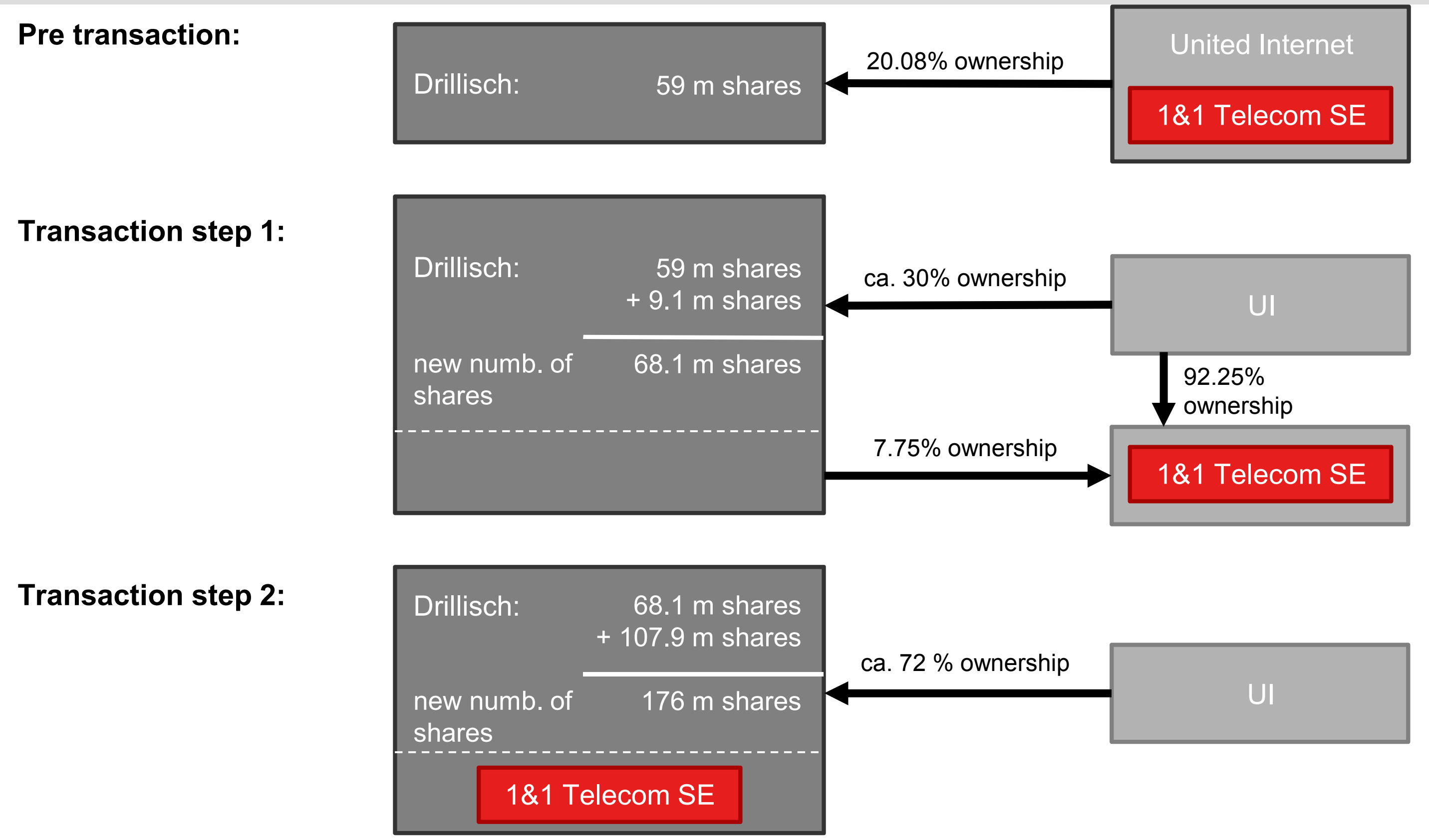
Expected EBIT growth until 2020e relates to customer and ARPU growth as well as cost synergies

Review of the takeover process

- On May 12, 2017 Drillisch and United Internet announced that Drillisch would take over 1&1 Telecommunication SE, which includes the DSL/VDSL and mobile telecommunication businesses, mainly with residential customers and/or consumers. Not included were the telecommunication wholesale business, Versatel's fiber optic network, and 1&1's B2B telecommunication activities.
- The transaction was structured as a so-called reverse IPO on the basis of valuation exchange ratios.
- UI transferred the assets listed above to Drillisch. In exchange for the share transfer, UI received 117m new Drillisch shares via two capital increases. The total number of Drillisch shares increased from 59m to 176m share.s Including UI's 20% DRI stake pre transaction, UI owns 72% or 129.5m Drillisch shares post transaction.
- The transaction valued Drillisch at EUR 2,988m or EUR 50 per Drillisch share (pre capital increase) and 1&1 SE Telecommunication SE at EUR 3,850m. As a result, the value-based exchange ratio between Drillisch and 1&1 Telecommunication SE was 1:1.9.
- The merger was completed as of September 8.
- Because of the reverse takeover, Drillisch 2017e results are 12 months of 1&1 results and four months of Drillisch (pre-transaction) results.

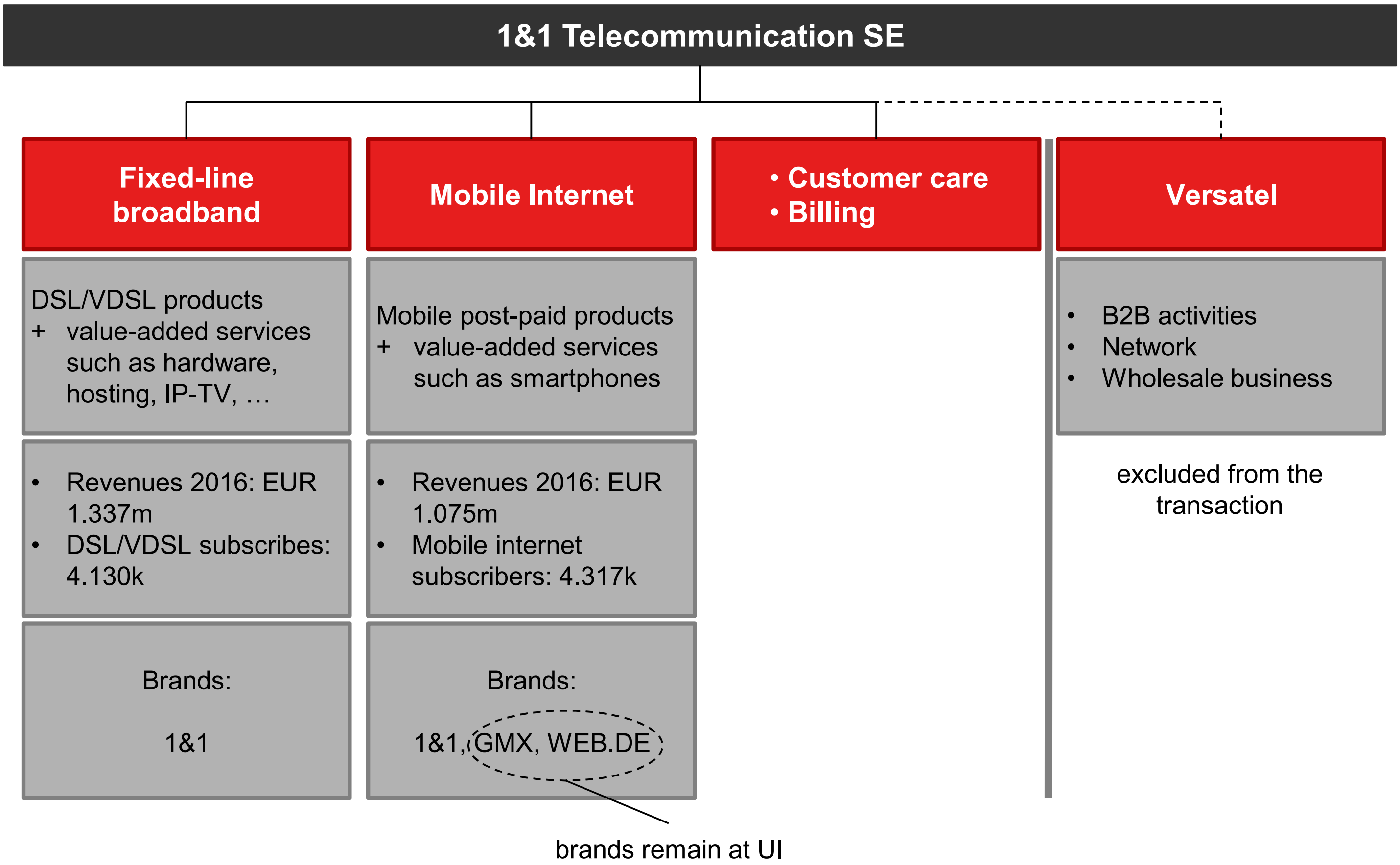
The picture below illustrates the reverse takeover process.

Reverse takeover process Drillisch and 1&1



Source: Warburg Research

1&1 Telecommunication SE: Assets transferred to Drillisch



Source: Warburg Research

1&1 Telecom: Pre-transaction business plan

The following table shows the business plan for 1&1 at the time of the transaction announcement. The business plan was published in the valuation statement.

1&1: Stand-alone business plan pre-merger

		historical				planned			CAGR
in EUR m	**2014**	**2015**	**2016**	**2017e**	**2018e**	**2019e**	**2020e**	**2021e**	**'16-'21**
Sales	**2020**	**2255**	**2431**	**2671**	**2889**	**3123**	**3337**	**3522**	
change		*11.6%*	*7.8%*	*9.9%*	*8.1%*	*8.1%*	*6.9%*	*5.6%*	7.7%
Material Expenses	1462	1558	1699	1886	2032	2200	2324	2468	
change		*6.6%*	*9.1%*	*11.0%*	*7.7%*	*8.3%*	*5.6%*	*6.2%*	7.8%
Gross Profit	**558**	**697**	**733**	**785**	**856**	**922**	**1013**	**1054**	
Margin	27.6%	30.9%	30.1%	29.4%	29.6%	29.5%	30.4%	29.9%	
change		*24.9%*	*5.2%*	*7.1%*	*9.0%*	*7.7%*	*9.9%*	*4.0%*	7.5%
Administrative and general Expense	312	396	356	335	344	356	361	367	0.6%
Other Operating Income	23	19	23	21	22	22	22	23	0.0%
Other Operating Expenses	8	28	19	17	23	24	25	26	6.1%
EBIT	**261**	**292**	**380**	**454**	**510**	**564**	**649**	**685**	
Margin	12.9%	12.9%	15.6%	17.0%	17.7%	18.1%	19.5%	19.4%	
change		*11.9%*	*30.1%*	*19.5%*	*12.3%*	*10.6%*	*15.1%*	*5.5%*	12.5%
Depreciation	23	22	9	18	20	26	26	26	25.2%
EBITDA	**284**	**314**	**389**	**472**	**531**	**590**	**675**	**711**	
Margin	14.0%	13.9%	16.0%	17.7%	18.4%	18.9%	20.2%	20.2%	
change		*10.6%*	*23.9%*	*21.3%*	*12.5%*	*11.1%*	*14.4%*	*5.3%*	12.8%
Financial result	-9	-18	-11	-6	-2	-2	-4	-3	
Non-recurring result	119								
Expense from transfer of profits	119	1	1						
EBT	**252**	**273**	**369**	**448**	**508**	**562**	**645**	**682**	
Margin	12.5%	12.1%	15.2%	16.8%	17.6%	18.0%	19.3%	19.4%	
change		*8.3%*	*35.2%*	*21.4%*	*13.4%*	*10.6%*	*14.8%*	*5.7%*	13.1%
Income Taxes	81	85	112	133	151	167	191	202	12.6%
Effective tax rate	*32.3%*	*31.2%*	*30.3%*	*29.7%*	*29.7%*	*29.7%*	*29.7%*	*29.7%*	
Net Income	**170**	**188**	**257**	**315**	**357**	**395**	**453**	**479**	
Margin	8.4%	8.3%	10.6%	11.8%	12.4%	12.7%	13.6%	13.6%	
change		*10.6%*	*36.7%*	*22.6%*	*13.3%*	*10.6%*	*14.7%*	*5.7%*	13.3%

Source: Warburg Research

Stand-alone and pre-transaction, 1&1 expected to increase revenues by 7.7% CAGR (16-21e) to EUR 2.522m. In our view, expected growth was based on a mix of ARPU und subscriber growth. In fixed-line, UI forecast revenue growth of 4.3% CAGR (16-21e) to EUR 1.7bn. The business plan includes the introduction of an own IP-TV product as well as the assumption of migrating existing customers to higher bandwidth products with a higher ARPU.

In mobile internet, UI anticipated revenue growth of 12% CAGR (16-21e) to EUR 1.82bn, mainly driven by customer growth in our view.

While revenue growth (CAGR 16-21e) was forecast at +7.7%, EBITDA growth was anticipated at 12.8% to EUR 711m. Between 2016 and 2021e, 1&1's EBITDA margin was expected to increase from 16.0% to 20.2%.

Between 2016 and 2021e, cost of sales were seen growing at the same rate as sales. Hence, margin expansion related mainly to other expenses, marketing expenses and administration expenses which are assumed to remain almost flat over the period.

Drillisch: Pre-transaction business plan

The following table shows the business plan for Drillisch at the time of the transaction announcement. The business plan was published in the valuation statement.

Drillisch: Stand-alone business plan pre-merger (valuation report)

		historical				planned			CAGR
in EUR m	**2014**	**2015**	**2016**	**2017e**	**2018e**	**2019e**	**2020e**	**2021e**	**16-'21**
Sales	**290**	**499**	**567**	**699**	**823**	**953**	**1,045**	**1,125**	
change		*72.1%*	*13.6%*	*23.3%*	*17.7%*	*15.8%*	*9.7%*	*7.7%*	*14.7%*
Material Expenses	147	244	309	373	433	517	569	608	
change		*66.0%*	*26.6%*	*20.7%*	*16.1%*	*19.4%*	*10.1%*	*6.9%*	*14.5%*
Gross Profit	**143**	**255**	**258**	**326**	**390**	**436**	**476**	**517**	
Margin	49.3%	51.1%	45.5%	46.6%	47.4%	45.8%	45.6%	46.0%	
change		*78.3%*	*1.2%*	*26.4%*	*19.6%*	*11.8%*	*9.2%*	*8.6%*	*14.9%*
Personnel Expenses	25	38	49	52	56	59	61	62	*4.8%*
Other Operating Income	1	15	14	6	6	7	8	9	*-8.5%*
Other Operating Expenses	36	116	101	109	109	109	113	117	*3.0%*
Other Capitalised Services	2	2	2						
Adjusted EBITDA	**85**	**118**	**125**	**174**	**235**	**278**	**313**	**348**	
Margin	29.3%	23.6%	22.0%	24.9%	28.6%	29.2%	30.0%	30.9%	
change		*38.8%*	*5.9%*	*39.2%*	*35.1%*	*18.3%*	*12.6%*	*11.2%*	*22.7%*
Depreciation	10	36	61	49	33	31	27	23	*-17.7%*
EBIT	**75**	**82**	**64**	**125**	**202**	**247**	**286**	**325**	
Margin	25.9%	16.4%	11.3%	17.9%	24.5%	25.9%	27.4%	28.9%	
change		*9.3%*	*-22.0%*	*95.3%*	*61.6%*	*22.3%*	*15.8%*	*13.6%*	*38.4%*
EBT	**73**	**66**	**56**	**124**	**201**	**247**	**286**	**325**	*42.1%*
Taxes on Income	23	20	29	35	62	74	88	101	*28.3%*
Tax Rate	31.0%	30.3%	52.4%	28.4%	31.0%	30.1%	30.9%	31.2%	
Net Income	**50**	**46**	**27**	**89**	**139**	**173**	**198**	**224**	
Margin	17.2%	9.2%	4.8%	12.7%	16.9%	18.2%	18.9%	19.9%	
change		*-8.0%*	*-41.3%*	*229.6%*	*56.2%*	*24.5%*	*14.5%*	*13.1%*	*52.7%*

Source: Warburg Research

Between 2016 and 2021e, sales should grow from EUR 567m to EUR 1,125m or by a CAGR (16-21e) of 14.7%. Revenue growth was based on a mix of ARPU and subscriber growth. In the same period, EBITDA is forecast to increase by 2.77x to EUR 348m or by 22.8% CAGR (16-21e) implying an EBITDA margin increase from 22.0% in 2016 to 31.0% in 2021e.

Major drivers of EBITDA growth are personnel expenses which should only grow +5.2% CAGR (16-21e) and other personnel expenses which should remain almost flat over time.

KPI analysis for Drillisch newco, Drillisch old and 1&1

As already pointed out, Drillisch's 9M results are (1) nine months of 1&1 telecommunication SE and (2) one month of Drillisch results ("pre" transaction, September.

At first sight, analysis of the published results seems rather difficult because Drillisch substantially reduced the disclosure compared to the previous reporting.

However, combining United Internet's 9M-KPI table, the numbers in the valuation report and Drillisch 9M results allow some conclusions to be drawn.

Blended ARPU calculation for 1&1 9M/17 results

- We estimate Drillisch's stand-alone revenues in September at roughly EUR 55m. This figure can be deducted from the reported 9M/17 sales figure for the merged entity (nine months 1&1, one month Drillisch) of EUR 1,965m. Hence, based on our assumptions, 1&1 telecommunication SE's revenues stood at EUR 1,910
- Based on the United Internet 9M/17 statement, DSL/VDSL customer base stood at 4.33m and mobile internet subscribers amounted to 4.71m.
- From the customer numbers, we calculate the average number of total customers in the first 9M/17 of 8.26m.
- **1&1's revenues of EUR 1.91bn can be divided by the average number of total customers resulting in a blended ARPU number of EUR 25.68.**

The next table summarizes our approach.

Blended ARPU calculation for 1&1 telecommunication SE

1&1 reported 9m/17 group revenues in EUR m	1,965
1 month contribution of Drillisch in EUR m (WRe)	55
Calculated 9m/17 1&1 revenues in EUR m (WRe)	1,910
1&1 total customer base as of 31.12.2016 (DSL and mobile) in m	8.54
1&16 total customer base as of 30.09.2017 (DSL and mobile) in m	9.04
Average total customer base in m	8.26
blended ARPU/month (WRe) in EUR	**25.68**

Source: Warburg Research

KPI analysis for 1&1 Telecommunication SE

The valuation statement (published in May 2017 with regards to the announced reverse takeover) shows the historical numbers and the business plan for 1&1 SE Telecommunication SE.

The table below shows financial numbers for the years 2014–2017e as well as our calculations for important KPI.

- Blended ARPU = blended ARPU is defined as group revenues divided by the total subscriber base (DSL/VDSL + mobile internet).
- ARPU mobile: ARPU mobile is mobile revenues divided by the mobile internet customer base. ARPU includes services revenues, value-added services revenues and hardware revenues (smartphones).
- ARPU broadband: ARPU broadband is calculated as fixed-line revenues divided by the DSL/VDSL customer base. The ARPU figure includes service revenues, hardware revenues and value-added services revenues (such as IP-TV).
- 2017e figures are our assumptions on the basis of UI's Q2/17 and 9M/17 results as well as the 9M/17 statement by Drillisch.

KPI table 1&1 Telecommunication SE

1&1 Telecommunication SE	2013	2104	2015	2016	2017e
Group Revenues in EUR m		**2,020**	**2,255**	**2,431**	**2,522**
change			*11.6%*	*7.8%*	*3.7%*
DSL complete customers in m	**3.18**	**3.47**	**4.08**	**4.22**	**4.36**
change		9.1%	17.6%	3.4%	3.3%
Mobile Internet cusomers in m	**1.98**	**2.6**	**3.48**	**4.31**	**4.84**
change		*31.3%*	*33.8%*	*23.9%*	*12.3%*
Revenues Other in EUR m	130	98	66	55	38
Total subscriber base in m	**5.16**	**6.07**	**7.56**	**8.53**	**9.2**
change		*17.6%*	*24.5%*	*12.8%*	*7.9%*
Blended ARPU/year in EUR		**342**	**321**	**295**	**280**
Blended ARPU/month EUR		**28.5**	**26.8**	**24.6**	**23.4**
change			*-6.2%*	*-8.1%*	*-5.1%*
Fixed-line revenues in EUR m		**1,270**	**1,317**	**1,337**	**1,385**
Revenues Other in EUR m		98	66	55	38
Fixed-line revenues DSL/VDSL in EUR m		**1,172**	**1,251**	**1,282**	**1,347**
change			*6.7%*	*2.5%*	*5.1%*
ARPU Broadband in EUR		**29.37**	**27.62**	**25.74**	**26.17**
Mobile Revenues in EUR m		**732**	**905**	**1,075**	**1,175**
change			*23.6%*	*18.8%*	*9.3%*
ARPU mobile in EUR		**26.64**	**24.81**	**23.00**	**21.40**
change			*-6.9%*	*-7.3%*	*-6.9%*

Source: Warburg Research

There are some interesting findings:

- Blended ARPU decreased -6.2% in 2015 to EUR 26.80, -8.1% to EUR 24.60 in 2016 and we expect a decrease of -5.1% to EUR 23.40 in 2017e. The trend can by explained analyzing the ARPU trend for broadband and mobile.
- ARPU broadband stood at EUR 29.37 in 2014 and decreased by -12.5% to EUR 25.74 in 2016. In 2015, UI transferred the Versatel DSL customer base to 1&1 which had a lower ARPU (WRe: ~ EUR 25) and therefore had a negative effect on the ARPU broadband. Furthermore, UI has started to migrate customers to VDSL subscriptions and higher bandwidths and granted many customers a discount in the first 12 months. Additionally, we believe that the gross addition shares of WEB.DE and GMX DSL/VDSL subscribers have increased over time. DSL and VDSL customers contributed from WEB.DE and GMX usually have a lower ARPU:
- We expect the ARPU broadband to increase again slightly in 2017e from EUR 25.74 to EUR 26.17 as the discounts granted to customers for 12 months come to an end and an increasing number of customers pay the full subscription price. This has a positive effect on the ARPU.
- The ARPU mobile sharply decreased from EUR 26.64 in 2014 to EUR 21.40 in 2017e (WRe) or by almost -20%. In our view, among the main reasons for this were firstly, the strong price competition between Drillisch und United Internet and secondly, the gradual increase in the WEB.DE and GMX gross addition share over time. Subscribers

gained over WEB.DE and GMX have a substantially lower ARPU and usually sign up for a SIM-only product.

KPI analysis for Drillisch old

The table below shows Drillisch's stand-alone quarterly ARPU figures for the period Q1/16 – Q2/17.

Drillisch old: ARPU as shown in the quarterly statements

	Q1/16	Q2/16	Q3/16	Q4/16	Q1/17	Q2/17
MVNO subscribers in k	**2,712**	**2,922**	**3,138**	**3,359**	**3,548**	**3,707**
change qoq		*7.7%*	*7.4%*	*7.0%*	*5.6%*	*4.5%*
ARPU gross in EUR	**14.31**	**15.18**	**15.44**	**15.02**	**14.54**	**14.52**
ARPU net in EUR	**12.66**	**13.27**	**13.22**	**12.63**	**12.16**	**12.2**

Source: Warburg Research

- ARPU gross: based on the theoretical MVNO revenues which Drillisch would generate without any discounts in the first 12 months of the subscription period. The ARPU gross is defined as theoretical (or gross) MVNO revenues divided by the average number of MVNO subscribers.
- ARPU net: MVNO revenues billed in the period divided by the average number of MVNO subscribers.
- **ARPU net reached the peak in Q2/16 with EUR 13.27 and stabilized at EUR 12 in Q1/17 and Q2/17.**
- Drillisch's historical ARPU table confirms our own KPI calculations for the Q3/17 which we derived from the published valuation statement.

Drillisch: Historical stand-alone figures and expectations for 2017e

Drillisch stand alone	2014	2015	2016	2017e
MVNO Revenues in EUR m	**n.a.**	**398**	**483**	**575**
change			*21%*	*19%*
Hardware Revenues in EUR m	**n.a.**	**63**	**50**	**35**
change			*-21%*	*-30%*
Other Revenues ind EUR m	**n.a.**	**38**	**33**	**20**
change			*-13%*	*-39%*
Group Revenues in EUR m	**290**	**499**	**566**	**630**
change		*72%*	*13%*	*11%*
Total customer base in k	**2,070**	**2,678**	**3,430**	**3,945**
Other customers in k	142	91	71	55
MVNO customers in k	**1,928**	**2,587**	**3,359**	**3,890**
Budget customers in k	**1,211**	**1,932**	**2,863**	**3,243**
volume customers in k	655	717	496	464
Blended ARPU/year in EUR	**140**	**186**	**147**	**151**
blended ARPU/month in EUR	**11.67**	**15.53**	**12.28**	**12.54**

Source: Warburg Research

- Revenue figures have been taken from the valuation statement.
- 2017e expectations are our assumptions for Drillisch stand-alone.
- 2015 ARPU figures are distorted because of the yourfone acquisition.
- **Blended ARPU in 2016 and in 2017e is at EUR 12.28 and EUR 12.54. However, the ARPU calculation includes hardware revenues. Excluding hardware revenues would lead to roughly the same ARPU level as shown in the historical quarterly ARPU table for Drillisch.**

Blended mobile ARPU calculation for Drillisch newco

Our calculations and assumptions in the above chapters allow us to calculate the blended mobile ARPU figure for the Drillisch newco.

ARPU mobile Drillisch newco

Drillisch -old- ARPU 2017e in EUR	12.2
Drillisch -old- average MVNO customer base 2017e in k	3,625
1&1 ARPU mobile 2017e in EUR	21.40
1&1 average customer base 2017e in k	4575
ARPU mobile for Drillisch NewCo 2017e in EUR	**17.33**

Source: Warburg Research

From the set of data shown above the ARPU mobile for the Drillisch NewCo can be derived. The calculated ARPU mobile of EUR 17.33 is the implicit pro-forma ARPU figure for the period 01.01.2017 – 31.12.2017.

Financial and KPI model Drillisch NewCo

KPI and financial model for 2017e – 2020e

We are separating our model into two parts: Fixed-Line and Mobile Internet.

Fixed-Line: We calculated an ARPU 2017e for broadband subscribers of EUR 26.20 in the previous sections. 1&1 should introduce an IP-TV product in Q1/18. Furthermore, existing customers are being converted to higher bandwidth subscriptions over time. As a result we are assuming that the ARPU should slightly increase to EUR 28. The broadband subscriber base should be almost stable over time. In 2021e we model a broadband customer base of 4.69m.

Fixed-Line revenues are estimated to grow from EUR 1.47bn in 2018e to EUR 1.57bn in 2020e which reflects an annual average growth-rate of 1.6%. In 2018e we see a revenue contribution to the group of 44% which should decrease to 34% in 2022e.

Mobile Internet: For 2017 we have derived an ARPU of EUR 17.33 (combined for the 1&1 and Drillisch –old- customer base). The mobile subscriber base should increase from 8.31m by 7.9% CAGR (17e-22e) to 12.16m. In the same period ARPU is expected to increase from EUR 17.33 in 2017 to EUR 21.0. Over time, the share of bundles (SIM card plus mobile handset) should increase driving the ARPU.

Drillisch newco: KPI and Financial model 2017e – 2022e

New Drillisch	2017e	2018e	2019e	2020e	2021e	2022e
Fixed-Line						
Broadband subs in m	**4.36**	**4.48**	**4.58**	**4.68**	**4.69**	**4.69**
Broadband subs net additions in m		0.12	0.10	0.10	0.00	0.01
Broadband ARPU in EUR	26.2	27.5	28.0	28.0	28.0	28.0
fixed-line revenues in EUR m		**1,478.9**	**1,538.9**	**1,572.5**	**1,574.2**	**1,575.8**
change			*4%*	*2%*	*0.1%*	*0.1%*
in% of group revenues		44%	41%	39%	36%	34%
Mobile Internet						
Mobile Internet subs in m	8.31	9.41	10.41	11.31	11.81	12.16
Mobile Internet net adds in m		1.10	1.00	0.90	0.50	0.35
change		13%	11%	9%	4%	3%
mobile internet ARPU in EUR	17.3	17.5	18.5	19.0	20.0	21.0
mobile internet revenues in EUR m		**1,860.6**	**2,200.0**	**2,476.1**	**2,774.4**	**3,020.2**
change			*18%*	*13%*	*12%*	*9%*
in% of group revenues		56%	59%	61%	64%	66%
Revenues Other		0	0	0	0	0
Group						
Group revenues in EUR m		**3,339.5**	**3,738.9**	**4,048.6**	**4,348.6**	**4,596.1**
change			*12%*	*8%*	*7%*	*6%*
EBITDA in EUR m	**630.0**	**733.0**	**935.0**	**1,086.0**	**1,198.3**	**1,329.2**
change		*16%*	*28%*	*16%*	*10%*	*11%*
margin		**21.9%**	**25.0%**	**26.8%**	**27.6%**	**28.9%**
Total subsribers	**12.7**	**13.9**	**15.0**	**16.0**	**16.5**	**16.9**
change		*10%*	*8%*	*7%*	*3%*	*2%*

Source: Warburg Research

Assumptions for the P&L

Compiling a model for Drillisch is currently rather difficult. Firstly, Drillisch has not yet provided pro-forma reporting for the combined entity. Secondly, Drillisch stand-alone reported under the aggregate cost method and United Internet under the function of expense method. Drillisch NewCo has switched to the latter method.

Hence, our current and new P&L model for the new entity will probably be fine-tuned in the next couple of months.

Material expenses include mainly network expenses, handset and hardware costs and D&A. For 2018e we are expecting material expenses of 67.5% of sales. Until 2020e, the ratio should decrease to 64.5% driven by an improving utilization of the MBA-MVNO contract with Telefonica Deutschland.

The second biggest cost item is sales and marketing expenses which we assume to be at 11.2% in 2018e, decreasing to 9.7% by 2019e.

D&A is modelled at EUR 100m, including normal D&A as well as PPA driven items as a result of the reverse takeover.

In 2018e, the company should be net debt free, hence the financial result should play only a minor role.

Based on our current model, we derive an EPS for 2020e of EUR 3.63 compared to EUR 2.35 in 2018e.

Free Cash Flow projections

In this section we define Free Cash Flow (FCF) as:

FCF = EBITDA – capex – financial result – cash taxes

Drillisch's current business model is capex-light. We estimate that normalized capex should be roughly EUR 45m annually. Changes in Working Capital play only a minor role. Drillisch receives monthly, regular payments from its subscribers. Payments to Telefonica fluctuate from quarter to quarter but should balance out over time. Hence, Drillisch's business activities and growth plans should have only a minor effect on working capital movements.

Furthermore, for its operations, Drillisch does not need additional liquid funds, hence we model Drillisch as an interest-bearing debt-free company. That assumption implies financial results of zero.

Based on our assumptions FCF per share should increase to EUR 3.94 by 2020e.

Drillisch: Free Cash Flow projections

figures in EUR m	2018e	2019e	2020e
EBITDA	**721**	**902**	**1,045**
Capex	-45	-45	-47
Taxes	-205	-264	-302
Free Cashflow	**471**	**593**	**697**
Free Cashflow per share in EUR	**2.67**	**3.36**	**3.94**

Source: Warburg Research

Valuation

- Our base case scenario results in a fair value of EUR 84.
- In our base case, we are assuming that Drillisch will remain a capex-lean, non-infrastructure business

Valuation by DCF yields a fair value of EUR 84

DCF approach

We are using a DCF approach to value Drillisch.

WACC: The WACC is calculated at 6.72% including a beta of 1.0.

For our projections until 2020e we have provided a detailed model in our Growth/Financials section. Revenue growth is driven by ARPU increases and customer net additions, EBIT growth by cost synergies and economies of scale.

Between 2020e and 2029e we anticipate a CAGR revenue growth rate of 2.2% which implies a revenue figure of EUR 4.9bn. Under the current business model, revenue is ARPU multiplied by the number of subscribers. Subscriber growth should hit a natural barrier, at which the subscriber base cannot increase substantially without lowering the average profit per subscriber. ARPU growth is limited by the intensive competitive landscape as well as technological progress.

We assume a steady-state EBITDA margin of 30% which translates into an EBIT margin of 28.5%.

Based on our assumption a DCF-based PT of EUR 84 is derived.

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	
Sales	2,745	3,340	3,739	4,004	4,205	4,331	4,417	4,506	4,596	4,688	4,758	4,829	4,902	
Sales change	*286.6 %*	*21.7 %*	*12.0 %*	*7.1 %*	*5.0 %*	*3.0 %*	*2.0 %*	*2.0 %*	*2.0 %*	*2.0 %*	*1.5 %*	*1.5 %*	*1.5 %*	*1.5 %*
EBIT	460	621	800	933	1,030	1,104	1,149	1,217	1,287	1,313	1,332	1,352	1,397	
EBIT-margin	*16.8 %*	*18.6 %*	*21.4 %*	*23.3 %*	*24.5 %*	*25.5 %*	*26.0 %*	*27.0 %*	*28.0 %*	*28.0 %*	*28.0 %*	*28.0 %*	*28.5 %*	
Tax rate (EBT)	*33.3 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	*33.0 %*	
NOPAT	307	416	536	625	690	740	769	815	862	879	893	906	936	
Depreciation	65	100	102	104	109	113	115	117	119	122	119	97	74	
in % of Sales	*2.4 %*	*3.0 %*	*2.7 %*	*2.6 %*	*2.6 %*	*2.6 %*	*2.6 %*	*2.6 %*	*2.6 %*	*2.6 %*	*2.5 %*	*2.0 %*	*1.5 %*	
Changes in provisions	-2	0	0	4	-4	0	0	0	0	0	0	0	0	
Change in Liquidity from														
- Working Capital	-65	60	12	3	3	2	1	1	1	1	1	1	1	
- Capex	26	45	45	40	42	43	44	45	55	61	67	72	74	
Capex in % of Sales	*0.9 %*	*1.3 %*	*1.2 %*	*1.0 %*	*1.0 %*	*1.0 %*	*1.0 %*	*1.0 %*	*1.2 %*	*1.3 %*	*1.4 %*	*1.5 %*	*1.5 %*	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC Model)	409	412	581	690	750	807	839	886	925	939	944	929	935	949
PV of FCF	409	386	510	567	578	583	568	562	550	523	493	454	428	8,329
share of PVs	8.73 %			35.52 %										55.75 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	5.00 %	Financial Strength	1.00
Cost of debt (after tax)	1.4 %	Liquidity (share)	1.00
Market return	7.00 %	Cyclicality	1.00
Risk free rate	1.50 %	Transparency	1.00
		Others	1.00
WACC	**6.72 %**	**Beta**	**1.00**

Valuation (m)

Present values 2029e	6,611		
Terminal Value	8,329		
Financial liabilities	0		
Pension liabilities	2		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	0	No. of shares (m)	176.8
Equity Value	**14,938**	**Value per share (EUR)**	**84.51**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	0.75 %	1.00 %	1.25 %	**1.50 %**	1.75 %	2.00 %	2.25 %
1.19	7.7 %	66.92	68.09	69.35	70.72	72.20	73.81	75.57
1.10	7.2 %	72.30	73.74	75.31	77.01	78.87	80.90	83.15
1.05	7.0 %	75.32	76.93	78.68	80.59	82.68	84.99	87.54
1.00	6.7 %	78.59	80.39	82.36	**84.51**	86.88	89.50	92.41
0.95	6.5 %	82.15	84.17	86.39	88.83	91.52	94.52	97.87
0.90	6.2 %	86.04	88.32	90.83	93.60	96.68	100.13	104.02
0.81	5.7 %	95.00	97.94	101.20	104.85	108.96	113.62	118.96

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.19	7.7 %	66.86	68.14	69.43	70.72	72.01	73.30	74.59
1.10	7.2 %	72.81	74.21	75.61	77.01	78.41	79.81	81.21
1.05	7.0 %	76.20	77.66	79.13	80.59	82.05	83.51	84.97
1.00	6.7 %	79.92	81.45	82.98	**84.51**	86.04	87.57	89.10
0.95	6.5 %	84.01	85.61	87.22	88.83	90.43	92.04	93.64
0.90	6.2 %	88.53	90.22	91.91	93.60	95.29	96.98	98.67
0.81	5.7 %	99.19	101.08	102.96	104.85	106.74	108.63	110.52

- Base case scenario: Drillisch remains positioned in its Capex-lean business model and does not invest in infrastructure
- Base case assumption: Absence of irrational movements from competitors by initiating price wars.

Valuation

	2014	2015	2016	2017e	2018e	2019e	2020e
Price / Book	4.4 x	6.2 x	7.4 x	3.2 x	3.1 x	3.0 x	2.9 x
Book value per share ex intangibles	4.25	-0.46	-1.29	0.23	1.72	3.05	4.17
EV / Sales	3.3 x	3.1 x	2.7 x	4.5 x	3.7 x	3.2 x	2.9 x
EV / EBITDA	11.3 x	18.6 x	15.7 x	23.5 x	16.9 x	13.3 x	11.3 x
EV / EBIT	12.8 x	28.3 x	32.2 x	26.8 x	19.6 x	15.0 x	12.5 x
EV / EBIT adj.*	12.8 x	28.3 x	32.2 x	26.8 x	19.6 x	15.0 x	12.5 x
P / FCF	24.1 x	n.a.	31.3 x	31.8 x	30.2 x	21.4 x	18.1 x
P / E	29.4 x	47.7 x	79.3 x	41.3 x	29.9 x	23.2 x	19.3 x
P / E adj.*	29.4 x	47.7 x	79.3 x	41.3 x	29.9 x	23.2 x	19.3 x
Dividend Yield	6.4 %	4.2 %	4.5 %	2.6 %	3.0 %	4.1 %	5.0 %
FCF Potential Yield (on market EV)	5.4 %	3.8 %	4.1 %	2.9 %	4.1 %	5.2 %	6.1 %

*Adjustments made for: -

Consolidated profit and loss

In EUR m	2014	2015	2016	2017e	2018e	2019e	2020e
Sales	**290**	**630**	**710**	**2,745**	**3,340**	**3,739**	**4,049**
Change Sales yoy	-0.3 %	117.3 %	12.8 %	286.6 %	21.7 %	12.0 %	8.3 %
COGS	0	0	0	1,861	2,254	2,464	2,611
Gross profit	**290**	**630**	**710**	**884**	**1,085**	**1,275**	**1,437**
Gross margin	*100.0 %*	*100.0 %*	*100.0 %*	*32.2 %*	*32.5 %*	*34.1 %*	*35.5 %*
Research and development	0	0	0	0	0	0	0
Sales and marketing	0	0	0	349	374	381	393
Administration expenses	0	0	0	74	87	90	97
Other operating expenses	0	0	0	23	27	30	32
Other operating income	0	0	0	22	23	26	28
Unfrequent items	0	0	0	0	0	0	0
EBITDA	**85**	**105**	**120**	**525**	**721**	**902**	**1,045**
Margin	*29.4 %*	*16.7 %*	*16.9 %*	*19.1 %*	*21.6 %*	*24.1 %*	*25.8 %*
Depreciation of fixed assets	1	5	4	7	9	11	11
EBITA	**84**	**101**	**117**	**518**	**712**	**891**	**1,034**
Amortisation of intangible assets	9	32	58	58	91	91	91
Goodwill amortisation	0	0	0	0	0	0	0
EBIT	**75**	**69**	**59**	**460**	**621**	**800**	**943**
Margin	*26.0 %*	*11.0 %*	*8.3 %*	*16.8 %*	*18.6 %*	*21.4 %*	*23.3 %*
EBIT adj.	**75**	**69**	**59**	**460**	**621**	**800**	**943**
Interest income	1	1	1	0	0	0	0
Interest expenses	4	4	4	4	1	1	1
Other financial income (loss)	0	0	0	-6	0	0	0
EBT	**73**	**66**	**56**	**450**	**620**	**799**	**942**
Margin	*25.1 %*	*10.5 %*	*7.8 %*	*16.4 %*	*18.6 %*	*21.4 %*	*23.3 %*
Total taxes	23	20	29	150	205	264	302
Net income from continuing operations	**50**	**46**	**26**	**300**	**415**	**535**	**641**
Income from discontinued operations (net of tax)	0	0	0	0	0	0	0
Net income before minorities	**50**	**46**	**26**	**300**	**415**	**535**	**641**
Minority interest	0	0	0	0	0	0	0
Net income	**50**	**46**	**26**	**300**	**415**	**535**	**641**
Margin	*17.2 %*	*7.3 %*	*3.7 %*	*10.9 %*	*12.4 %*	*14.3 %*	*15.8 %*
Number of shares, average	55	55	55	177	177	177	177
EPS	**0.91**	**0.84**	**0.48**	**1.70**	**2.35**	**3.03**	**3.63**
EPS adj.	0.91	0.84	0.48	1.70	2.35	3.03	3.63

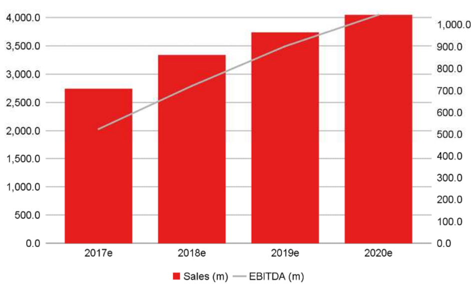
*Adjustments made for:

Guidance: n.a.

Financial Ratios

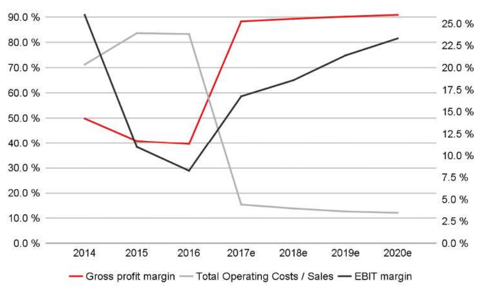
	2014	2015	2016	2017e	2018e	2019e	2020e
Total Operating Costs / Sales	71.2 %	83.6 %	83.3 %	15.4 %	13.9 %	12.7 %	12.2 %
Operating Leverage	-81.7 x	-0.1 x	-1.2 x	2.4 x	1.6 x	2.4 x	2.2 x
EBITDA / Interest expenses	23.8 x	26.1 x	27.8 x	131.3 x	721.1 x	902.1 x	1045.3 x
Tax rate (EBT)	31.0 %	30.4 %	52.4 %	33.3 %	33.0 %	33.0 %	32.0 %
Dividend Payout Ratio	185.9 %	203.2 %	352.2 %	106.0 %	89.3 %	95.7 %	96.6 %
Sales per Employee	827,566	1,798,703	2,028,606	7,842,857	9,541,429	10,682,571	11,567,429

Sales, EBITDA
in EUR m



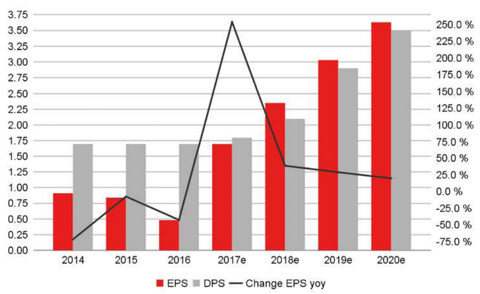
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

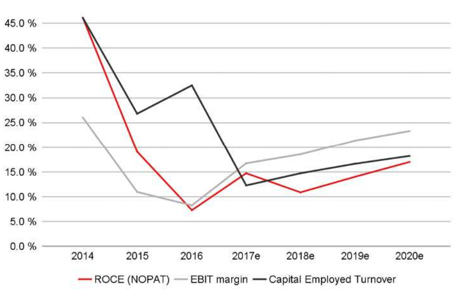
Consolidated balance sheet

In EUR m	2014	2015	2016	2017e	2018e	2019e	2020e
Assets							
Goodwill and other intangible assets	99	378	354	3,803	3,732	3,661	3,592
thereof other intangible assets	31	271	255	829	758	687	618
thereof Goodwill	67	107	99	2,974	2,974	2,974	2,974
Property, plant and equipment	3	11	11	23	39	53	67
Financial assets	0	0	1	6	6	6	6
Other long-term assets	0	0	0	0	0	0	0
Fixed assets	**101**	**390**	**365**	**3,832**	**3,777**	**3,720**	**3,665**
Inventories	5	32	10	51	58	60	74
Accounts receivable	48	89	93	225	275	297	311
Liquid assets	317	123	93	100	245	405	576
Other short-term assets	4	55	35	684	692	695	700
Current assets	**374**	**299**	**230**	**1,060**	**1,269**	**1,457**	**1,660**
Total Assets	**476**	**689**	**595**	**4,892**	**5,047**	**5,177**	**5,325**
Liabilities and shareholders' equity							
Subscribed capital	59	60	60	194	194	194	194
Capital reserve	231	296	296	2,449	2,544	2,544	2,544
Retained earnings	31	31	31	1,101	883	927	950
Other equity components	10	-34	-104	100	415	535	641
Shareholders' equity	331	353	283	3,844	4,037	4,201	4,329
Minority interest	0	0	0	0	0	0	0
Total equity	**331**	**353**	**283**	**3,844**	**4,037**	**4,201**	**4,329**
Provisions	9	19	24	111	114	117	120
thereof provisions for pensions and similar obligations	2	1	2	0	0	0	0
Financial liabilities (total)	91	167	178	50	50	0	0
thereof short-term financial liabilities	0	0	50	50	50	0	0
Accounts payable	22	81	45	280	275	287	300
Other liabilities	23	69	66	607	571	572	577
Liabilities	**144**	**336**	**312**	**1,048**	**1,010**	**976**	**996**
Total liabilities and shareholders' equity	**476**	**689**	**595**	**4,892**	**5,047**	**5,177**	**5,325**

Financial Ratios

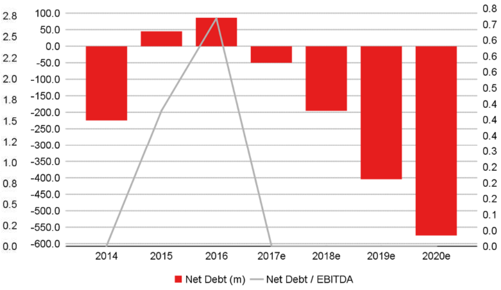
	2014	2015	2016	2017e	2018e	2019e	2020e
Efficiency of Capital Employment							
Operating Assets Turnover	10.4 x	13.7 x	11.1 x	228.8 x	38.1 x	32.9 x	29.0 x
Capital Employed Turnover	2.7 x	1.6 x	1.9 x	0.7 x	0.9 x	1.0 x	1.1 x
ROA	49.1 %	11.9 %	7.2 %	7.8 %	11.0 %	14.4 %	17.5 %
Return on Capital							
ROCE (NOPAT)	46.1 %	19.1 %	7.3 %	14.7 %	10.9 %	14.0 %	17.0 %
ROE	18.1 %	13.5 %	8.3 %	14.5 %	10.5 %	13.0 %	15.0 %
Adj. ROE	18.1 %	13.5 %	8.3 %	14.5 %	10.5 %	13.0 %	15.0 %
Balance sheet quality							
Net Debt	-225	45	86	-50	-195	-405	-576
Net Financial Debt	-226	44	85	-50	-195	-405	-576
Net Gearing	-67.9 %	12.8 %	30.5 %	-1.3 %	-4.8 %	-9.6 %	-13.3 %
Net Fin. Debt / EBITDA	n.a.	41.6 %	70.5 %	n.a.	n.a.	n.a.	n.a.
Book Value / Share	6.0	6.4	5.2	21.7	22.8	23.8	24.5
Book value per share ex intangibles	4.2	-0.5	-1.3	0.2	1.7	3.1	4.2

ROCE Development



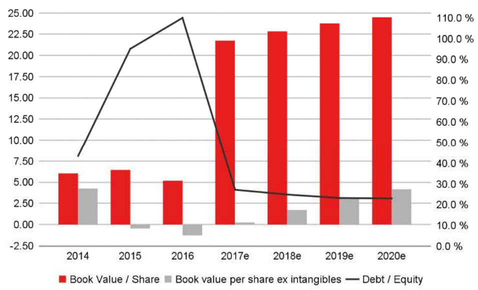
Source: Warburg Research

Net debt
in EUR m



Source: Warburg Research

Book Value per Share
in EUR



Source: Warburg Research

Consolidated cash flow statement

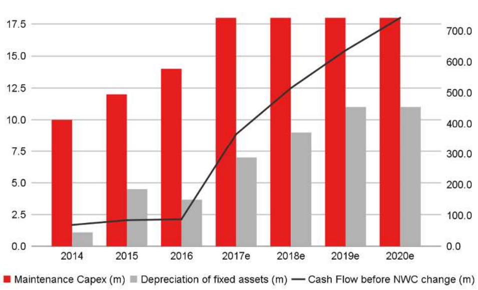
In EUR m	2014	2015	2016	2017e	2018e	2019e	2020e
Net income	50	46	26	300	415	535	641
Depreciation of fixed assets	1	5	4	7	9	11	11
Amortisation of goodwill	0	0	0	0	0	0	0
Amortisation of intangible assets	9	32	58	58	91	91	91
Increase/decrease in long-term provisions	1	0	0	0	0	0	0
Other non-cash income and expenses	9	4	0	0	0	0	0
Cash Flow before NWC change	**69**	**86**	**88**	**365**	**515**	**637**	**743**
Increase / decrease in inventory	1	-27	22	-5	-7	-3	-13
Increase / decrease in accounts receivable	-2	-41	-4	10	-50	-23	-14
Increase / decrease in accounts payable	4	58	-37	43	-4	13	15
Increase / decrease in other working capital positions	0	0	11	3	0	0	0
Increase / decrease in working capital (total)	3	-9	-8	51	-60	-12	-12
Net cash provided by operating activities [1]	**72**	**76**	**81**	**416**	**456**	**625**	**731**
Investments in intangible assets	-9	-160	-9	-10	-20	-20	-22
Investments in property, plant and equipment	-2	-4	-5	-16	-25	-25	-25
Payments for acquisitions	0	-7	-20	0	0	0	0
Financial investments	0	1	0	0	0	0	0
Income from asset disposals	1	0	1	0	0	0	0
Net cash provided by investing activities [2]	**-5**	**-169**	**-25**	**-26**	**-45**	**-45**	**-47**
Change in financial liabilities	0	0	10	-128	0	-50	0
Dividends paid	-77	-90	-93	-300	-318	-371	-513
Purchase of own shares	0	0	0	0	0	0	0
Capital measures	0	0	0	0	0	0	0
Other	140	-10	-4	0	98	0	0
Net cash provided by financing activities [3]	**63**	**-101**	**-86**	**-428**	**-221**	**-421**	**-513**
Change in liquid funds [1]+[2]+[3]	**130**	**-194**	**-30**	**-38**	**190**	**159**	**171**
Effects of exchange-rate changes on cash	0	0	0	0	0	0	0
Cash and cash equivalent at end of period	**317**	**123**	**93**	**55**	**245**	**405**	**576**

Financial Ratios

	2014	2015	2016	2017e	2018e	2019e	2020e
Cash Flow							
FCF	66	-87	75	390	411	580	684
Free Cash Flow / Sales	21.0 %	-13.9 %	9.4 %	14.2 %	12.3 %	15.5 %	16.9 %
Free Cash Flow Potential	52	74	77	357	498	620	726
Free Cash Flow / Net Profit	122.2 %	-189.9 %	251.7 %	130.1 %	98.9 %	108.4 %	106.7 %
Interest Received / Avg. Cash	0.4 %	0.3 %	1.1 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	4.0 %	3.1 %	2.5 %	3.5 %	2.0 %	4.0 %	n.a.
Management of Funds							
Investment ratio	3.8 %	26.1 %	2.0 %	0.9 %	1.3 %	1.2 %	1.2 %
Maint. Capex / Sales	3.5 %	1.9 %	2.0 %	0.7 %	0.5 %	0.5 %	0.4 %
Capex / Dep	110.9 %	454.7 %	22.8 %	40.0 %	45.0 %	44.1 %	46.1 %
Avg. Working Capital / Sales	9.2 %	4.8 %	6.2 %	0.8 %	0.6 %	1.5 %	1.6 %
Trade Debtors / Trade Creditors	218.1 %	109.4 %	206.2 %	80.4 %	100.0 %	103.6 %	103.7 %
Inventory Turnover	0.0 x	0.0 x	0.0 x	36.5 x	39.1 x	40.9 x	35.5 x
Receivables collection period (days)	60	51	48	30	30	29	28
Payables payment period (days)	n.a.	n.a.	n.a.	55	44	42	42
Cash conversion cycle (Days)	n.a.	n.a.	n.a.	-45	-36	-34	-32

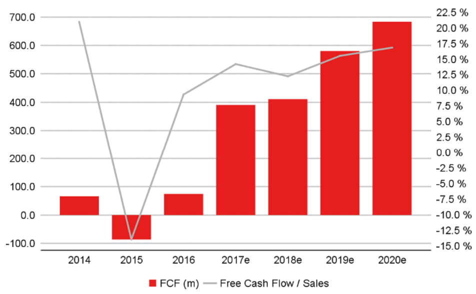
CAPEX and Cash Flow

in EUR m



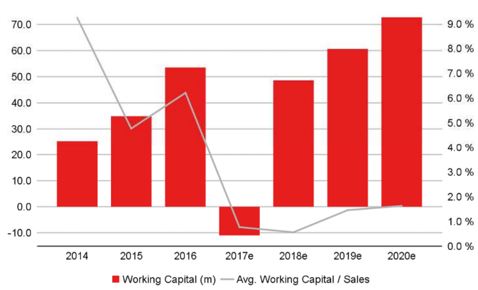
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Drillisch	6	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0005545503.htm

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-B-	**Buy:**	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	**Hold:**	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	**Sell:**	The price of the analysed financial instrument is expected to fall over the next 12 months.
"-"	**Rating suspended:**	The available information currently does not permit an evaluation of the company.

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Rating	Number of stocks	% of Universe
Buy	108	53
Hold	88	43
Sell	7	3
Rating suspended	0	0
Total	**203**	**100**

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING …

… taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	34	79
Hold	8	19
Sell	1	2
Rating suspended	0	0
Total	**43**	**100**

PRICE AND RATING HISTORY DRILLISCH AS OF 08.01.2018

Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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