

Telecommunication

A Research Publication by DZ BANK AG

ecotel communication⁵⁾⁷⁾⁸⁾⁹⁾¹⁰⁾¹¹⁾¹²⁾

Reuters: E4CG.DE

Bloomberg: E4C GY

Year *	Sales		Adj. IFRS-Earnings per sh.		PER	Free cash flow per share		Free cash flow yield %	Dividend per share EUR
	EUR m	(EUR m)	EUR	(EUR)		EUR	(EUR)		
2016	116.6	(116.6)	0.24	(0.24)	33.9	0.67	(0.67)	8.3	0.23
2017e	113.0	(113.0)	0.31	(0.22)	25.7	0.44	(0.35)	5.5	0.23
2018e	115.5	(115.5)	0.41	(0.29)	19.7	0.66	(0.54)	8.2	0.23
2019e	118.0	(118.0)	0.48	(0.40)	16.7	0.85	(0.77)	10.5	0.27

* Fiscal year end December – In brackets: Figures from the last publication

The Q1 2016 report includes upgrade to full-year outlook

- » **Q1 2017:** ecotel began financial year 2017 successfully. In the core segment B2B, sales could be increased year-over-year from EUR 10.4m to EUR 10.6m, whilst sales in the New Business segment remained steady at EUR 4.3m. At the group level, sales contracted from EUR 29.9m to EUR 26.9m, which is exclusively due to the extremely low-margin reselling business. Group EBITDA came in at EUR 1.8m, slightly below the prior-year value of EUR 1.9m. The slight contraction is explained with reference to the fact that the group reported key advance investment and expenses for major projects in Q1 2017 which did not yet generate sales. This also explained why free cash flow was negative at EUR -0.7m. The net result stood at EUR 0.3m at the prior-year level.
- » **Outlook 2017:** Management has raised the full-year outlook for 2017 and sees consolidated sales unchanged at EUR 95-115m but with EBITDA of EUR 7.0-8.0m (previously: EUR 6.5-7.5m / DZe currently: EUR 7.5m).
- » **Customers/projects:** ecotel was able to acquire various major orders over recent quarters. These include, amongst others, a bank, a larger German clothing retailer and the drugstore chain ROSSMANN.
- » **Model/Valuation:** We have raised our earnings forecasts for 2017 and subsequent years and on this basis now see Fair Value at EUR 10.5, previously EUR 9.5.

ecotel began financial year 2017 successfully and management has upgraded its full-year outlook for 2017 on presentation of the quarterly report. As we see it, the successful acquisition of various major projects over recent quarters is worth positive mention. We confirm our BUY recommendation and see fair value increased to EUR 10.50 (previously EUR 9.50).

Selected Companies	Price on 10 May 2017	PER		EV / EBITDA		EV / Sales 17e	Re-com.
		17e	18e	17e	18e		
ecotel communication	8.08 EUR	25.7	19.7	4.1	3.6	0.27	↑
Deutsche Telekom	16.86 EUR	25.0	17.5	7.4	7.0	2.04	↑
United Internet	43.21 EUR	23.6	17.1	11.7	10.3	2.60	↑
QSC	1.86 EUR	–	46.5	8.3	7.4	0.90	–
Telefónica Deutschland	4.11 EUR	–	–	7.4	7.1	1.85	↓
Median for all peer group companies		24.3	17.5	7.9	7.3	1.95	–

↑ = Buy, → = Hold, ↓ = Sell, ● = not rated, n/a = not appropriate
Source: DZ BANK, I/B/E/S, FactSet

EQUITIES

Flash

Completed: 11 May 2017, 15:21

Buy (prev. Buy)

Closing price 10 May 2017

(in EUR): 8.08

Fair value: 10.50 (prev. 9.50)

Financial ratios 2017e:

Book value per share (in EUR):	5.56
Equity ratio (in %):	57.3
Net margin (in %):	1.8
ROE (in %):	8.5
Dividend yield (in %):	2.8
Free cash flow (EUR m):	1.6
Net debt (EUR m):	-1.6

Number of shares

(million units): 3.5

Market cap

(in EUR m): 28.62

Free float (in %): 26.1

SIN: 585434

ISIN: DE0005854343

Datastream: D:E4CX

Next Newsflow:

28.07.2017: Annual General Meeting

10.08.2017: Q2 2017



Author: Karsten Oblinger, Analyst

AT A GLANCE

Company profile

ecotel communications is a telecoms company operating nationwide and with the focus on corporate customers. On top of this core business, ecotel also runs a wholesale segment as well as a "New business" segment, where strongly growing business units are consolidated.

Basis for investment recommendation

In general we expect a positive business development. Key drivers are large projects of the B2B segment. However, these include also some cost ramp ups at the beginning. We expect the profit contributions from Wholesale and New Business more or less flat compared to last years levels.

Price sensitive current issues

- » Profitable growth
- » Margin expansion
- » Further large scale orders (B2B segment)
- » Further share buybacks
- » Further market share gains of Easybell

Opportunities and risks

Opportunities	Risks
Very moderate valuation	Delays or other problems regarding larger projects
Consolidation	Rising competition
Better than expected business development (e.g. market share gains easybell)	Weaker than expected business development
Further large scale orders	

Topical share price-sensitive issues along with risks and opportunities have been factored into our recommendation as far as possible. Taking into account the current share price, we believe that price-sensitive opportunities currently outweigh other factors.

PROFIT AND LOSS ACCOUNT

Euro m	2016	2017e	2018e	2019e
Sales	116.6	113.0	115.5	118.0
Change in inventory/Own work	1.2	1.0	1.0	1.0
Total output	117.8	114.0	116.5	119.0
% against prev. year	8%	-3%	2%	2%
Cost of materials	-88.2	-83.1	-84.4	-85.7
Personnel expenses	-13.1	-13.3	-13.5	-13.7
Other operating income	0.0	0.0	0.0	0.0
Other operating expenses	-9.9	-10.1	-10.3	-10.5
Extraordinary income/expenses	0.0	0.0	0.0	0.0
EBITDA	6.6	7.5	8.3	9.1
For information: EBITDA adjusted	5.3	7.5	8.3	9.1
Depreciation	-4.3	-4.6	-4.8	-5.2
thereof on goodwill	0.0	0.0	0.0	0.0
Operating profit (EBIT)	2.3	3.0	3.5	3.9
For information: EBIT adjusted	2.3	3.0	3.5	3.9
% against prev. year	-36%	26%	19%	12%
Interest paid / received	-0.1	-0.1	-0.1	-0.1
Profit before tax	2.3	2.9	3.4	3.9
For information: EBT adjusted	2.3	2.9	3.4	3.9
% against prev. year	-35%	26%	20%	13%
Income taxes from continuing operations	-0.5	-0.9	-1.0	-1.2
Tax rate	24%	30%	30%	30%
Net profit from continuing operations	1.7	2.0	2.4	2.7
Net profit from discontinued operations	0.0	0.0	0.0	0.0
Net profit	1.7	2.0	2.4	2.7
Profit or loss attributable to minority interest	-0.9	-0.9	-1.0	-1.0
Profit or loss attributable to shareholders	0.8	1.1	1.5	1.7
thereof from continuing operations	0.8	1.1	1.5	1.7
thereof from discontinued operations	0.0	0.0	0.0	0.0
Weighted average number of shares, diluted (m)	3.542	3.542	3.542	3.542
IFRS earnings per share, diluted	0.24	0.31	0.41	0.48
Adjusted earnings per share, diluted (contin.)	0.24	0.31	0.41	0.48

Fiscal year end December

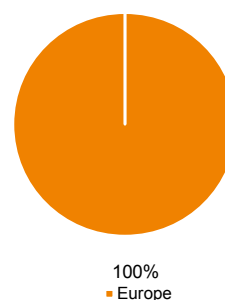
Source: ecotel communication and DZ BANK estimates

RATIOS

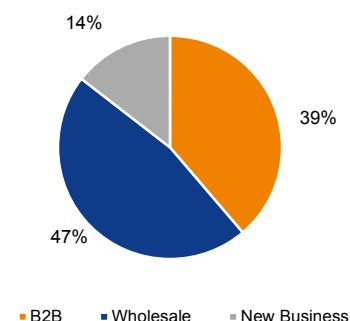
Euro	2016	2017e	2018e	2019e
Profit and loss ratios				
Total output (m)	117.8	114.0	116.5	119.0
EBITDA margin	4.5%	6.6%	7.1%	7.6%
EBIT margin	2.0%	2.6%	3.0%	3.3%
Net margin	1.5%	1.8%	2.1%	2.3%
Investment ratio	3.4%	4.4%	4.3%	4.2%
R&D as % of total output				
Net other operating costs as % of total output	8.4%	8.9%	8.8%	8.8%
Net financial income as % of total output	-0.1%	-0.1%	-0.1%	-0.1%
Interest cover	8.2	33.2	50.1	64.0
Average sales growth next five years	2.3%			
Average earnings growth next five years				
Profitability ratios				
ROE	7.7%	8.5%	9.5%	10.0%
ROCE	12.8%	15.6%	18.4%	20.9%
Productivity ratios				
Sales per employee ('000)	520.16	464.36	456.86	449.06
EBIT per employee ('000)	10.36	12.02	13.73	14.84
Balance sheet ratios				
Equity ratio	54.1%	57.3%	58.7%	60.1%
Long term debt and equity / Fixed assets	116.6%	115.1%	121.2%	130.6%
Liquidity (quick ratio)	118.7%	117.6%	126.2%	138.5%
Receivables as % of total output	7.9%	7.9%	7.9%	7.9%
Investment (net of GW) / Depreciation		109.9%	104.2%	96.8%
Working capital as % of total output	-2.3%	-2.3%	-2.3%	-2.3%
Net debt (m)	-3.5	-1.6	-3.1	-5.2
Net debt complete (m)	-3.9	-4.5	-6.0	-8.1
Figures per share				
Earnings per share, diluted	0.24	0.31	0.41	0.48
Free cash flow per share, diluted	0.67	0.44	0.66	0.85
Dividend per common share	0.23	0.23	0.23	0.27
Cash per share, diluted	2.10	1.96	2.33	2.92
Net debt per share, diluted	-0.98	-0.45	-0.85	-1.45
Valuation ratios				
Enterprise value / Sales	0.2	0.3	0.3	0.2
Enterprise value / EBITDA	5.2	4.1	3.6	3.2
Enterprise value / EBIT	11.8	10.4	8.6	7.4
EV/Sales to sales growth	0.10	0.12	0.11	0.11
PEG ratio - common shares	16.72			
Fiscal year end December				

Source: ecotel communication, DZ BANK estimates

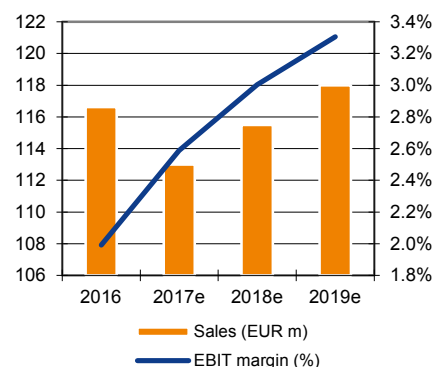
SALES BY REGION 2016



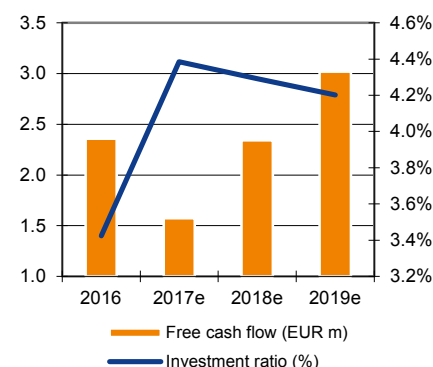
SALES BY BUSINESS SEGMENT 2016



SALES AND MARGIN DEVELOPMENT



FREE CASH FLOW AND INVESTMENT RATIO



¹⁾ - ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

BALANCE SHEET

IFRS - Euro m	2016	2017e	2018e	2019e
ASSETS				
Non current assets	21.7	22.2	22.4	22.2
Intangible assets	12.5	12.2	11.8	11.3
thereof goodwill	8.9	8.9	8.9	8.9
Tangible assets	8.5	9.2	9.9	10.2
Financial assets	0.6	0.6	0.6	0.6
Other long-term assets	0.2	0.2	0.2	0.2
Current assets	19.8	19.0	20.6	22.9
Inventories	0.0	0.0	0.0	0.0
Trade receivables	9.3	9.0	9.2	9.4
Financial assets	1.8	1.8	1.8	1.8
Other receivables and short-term assets	1.3	1.3	1.3	1.3
Liquid assets	7.5	7.0	8.4	10.5
Assets available for sale	0.0	0.0	0.0	0.0
Total assets	41.5	41.2	43.0	45.1
LIABILITIES				
Shareholders' equity	22.4	23.6	25.2	27.1
Share capital	3.5	3.5	3.5	3.5
Reserves	16.1	16.4	17.0	17.9
Other equity	0.0	0.0	0.0	0.0
Minority interest	2.8	3.7	4.7	5.7
Treasury stock	0.0	0.0	0.0	0.0
Non current liabilities	2.9	1.9	1.9	1.9
Provisions for pensions	0.0	0.0	0.0	0.0
Other provisions	0.0	0.0	0.0	0.0
Financial liabilities	2.2	1.2	1.2	1.2
Other payables	0.7	0.7	0.7	0.7
Current liabilities	16.2	15.7	15.8	16.1
Trade payables	11.7	11.3	11.6	11.8
Other provisions	0.0	0.0	0.0	0.0
Financial liabilities	3.1	3.0	2.9	2.9
Other liabilities	1.4	1.3	1.4	1.4
Liabilities assoc. with assets held for sale	0.0	0.0	0.0	0.0
Shareholders' equity and liabilities	41.5	41.2	43.0	45.1
Fiscal year end December				

Source: ecotel communication and DZ BANK estimates

SUMMARY

Euro m	2016	2017e	2018e	2019e
Profit and loss account				
Total output	117.8	114.0	116.5	119.0
Cost of materials	-88.2	-83.1	-84.4	-85.7
Personnel expenses	-13.1	-13.3	-13.5	-13.7
Other operating income/expenses	-9.9	-10.1	-10.3	-10.5
EBITDA	6.6	7.5	8.3	9.1
Depreciation	-4.3	-4.6	-4.8	-5.2
thereof on goodwill	0.0	0.0	0.0	0.0
Operating profit (EBIT)	2.3	3.0	3.5	3.9
Interest paid / received	-0.1	-0.1	-0.1	-0.1
Profit before tax	2.3	2.9	3.4	3.9
Income taxes from continuing operations	-0.5	-0.9	-1.0	-1.2
Net profit from continuing operations	1.7	2.0	2.4	2.7
Net profit from discontinued operations	0.0	0.0	0.0	0.0
Net profit	1.7	2.0	2.4	2.7
Profit or loss attributable to minority interest	-0.9	-0.9	-1.0	-1.0
Profit or loss attributable to shareholders	0.8	1.1	1.5	1.7
Balance sheet				
Non current assets	21.7	22.2	22.4	22.2
thereof goodwill	8.9	8.9	8.9	8.9
Current assets	19.8	19.0	20.6	22.9
thereof liquid assets	7.5	7.0	8.4	10.5
Shareholders' equity	22.4	23.6	25.2	27.1
Non current liabilities	2.9	1.9	1.9	1.9
Current liabilities	16.2	15.7	15.8	16.1
Shareholders' equity and liabilities	41.5	41.2	43.0	45.1
Cash flow statement				
Operating CF (cont.)	6.0	6.6	7.3	8.0
Operating CF (discont.)	0.0			
Investing CF (cont.)	-3.6	-5.0	-5.0	-5.0
Investing CF (discont.)	0.0			
Free cash flow (cont.)	2.4	1.6	2.3	3.0
Free cash flow (discont.)	0.0			
Financing CF (cont.)	-2.6	-2.0	-1.0	-0.9
Financing CF (discont.)	0.0			
Increase/decrease of cash	-0.3	-0.4	1.3	2.1
Fiscal year end December				

Source: ecotel communication and DZ BANK estimates

I. IMPRINT

Published by:

DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main,
Platz der Republik, 60265 Frankfurt am Main

Telephone: + 49 69 7447 - 01

Telefax: + 49 69 7447 - 1685

Homepage: www.dzbank.de

E-mail: mail@dzbank.de

Represented by the Board of Managing Directors:

Wolfgang Kirsch (Chief Executive Officer),

Hans-Bernd Wolberg (Deputy Chief Executive Officer), Uwe Berghaus,

Dr. Christian Brauckmann, Lars Hille, Wolfgang Köhler, Karl-Heinz Moll,

Dr. Cornelius Riese, Michael Speth, Thomas Ullrich, Stefan Zeidler

Chairman of the Supervisory Board: Helmut Gottschalk

Head office of the company: Registered as public limited company in Frankfurt am Main, Local Court (Amtsgericht) Frankfurt am Main, Commercial Register HRB 45651

Competent supervisory authorities:

DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main is subject to the supervision of the Federal Financial Supervisory Authority (BaFin) and the European Central Bank (ECB).

VAT ident. no.: DE114103491

Protection schemes: DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main is a member of the officially recognised BVR Institutssicherung GmbH and the additional voluntary Sicherungseinrichtung des Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e.V. (Protection Scheme of the National Association of German Cooperative Banks):

www.bvr-institutssicherung.de

www.bvr.de/SE

Responsible for the contents: Stefan Bielmeier, Head of Research and Economics

© DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, 2017

This document may only be reprinted, copied or used in any other way with the prior consent of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main

II. MANDATORY DISCLOSURES FOR FINANCIAL ANALYSES AND FURTHER REMARKS

1. Mandatory Disclosures for Financial Analyses and further Remarks

1. Responsible Company

1.1 This **Financial Analysis** has been prepared by **DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (DZ BANK)** as an investment firm.

Financial analyses are independent client information containing **generic investment recommendations** regarding **specific issuers** or **specific financial instruments**, but they do not make allowance for any individual investment criteria.

1.2 The **mandatory disclosures for Research Publications** (Financial Analyses and Other Research Information) as well as **further remarks, especially the Conflicts of Interest Policy of DZ BANK Research**, regarding **used methods, procedures, and statistics**, can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures.

2. Competent Supervisory Authorities

DZ BANK is supervised as a credit institution and as an investment firm by:

– **European Central Bank** - www.ecb.europa.eu

Sonnemannstraße 20 in 60314 Frankfurt / Main and

– **Federal Financial Supervisory Authority (BaFin)** - www.bafin.de

Marie-Curie-Straße 24 - 28 in 60349 Frankfurt / Main

Regarding Research Publications (Financial Analyses and Other Research Information) the DZ BANK linked **local cooperative banks are supervised by:**

– **Federal Financial Supervisory Authority (BaFin)** - www.bafin.de

Marie-Curie-Straße 24 - 28 in 60349 Frankfurt / Main

3. Independent Analysts

3.1 The **Research Publications** (Financial Analyses and Other Research Information) of DZ BANK are independently prepared by its employed analysts

or by competent analysts commissioned in a given case on the basis of the binding **Conflicts of Interest Policy**.

- 3.2** Each analyst involved in the preparation of the contents of this Research Publication confirms that
- this Research Publication represents his independent specialist evaluation of the analysed object in compliance with the Conflicts of Interest Policy of DZ BANK and
 - his compensation depends neither in full nor in part, neither directly nor indirectly, on an opinion expressed in this Research Publication.

4. Definitions of the Categories for Investment Recommendations in Financial Analyses

The **categories for investment recommendations** in **Financial Analyses** of DZ BANK are defined as follows:

4.1 Shares:

- Fundamental Analysis:

"Buy" means that the absolute appreciation expected in the next twelve months is greater than 10%.

"Sell" means that the absolute depreciation expected in the next twelve months is greater than 10%.

"Hold" means that the absolute *price* volatility expected in the next twelve months lies between +10% and -10%.

- Technical (Chart) Analysis (tertiary trend):

The short term technical estimate refers to the short tertiary move of the share:

„Positive“ means that an absolute appreciation could be expected during the next week.

“Negative“ means that an absolute depreciation could be expected during the next week.

“Neutral“ means that no absolute change of price could be expected during the next week.

- Technical (chart) Analysis (secondary trend):

The longer term technical estimate refers to the shorter secondary move of the share:

„Positive“ means that an absolute appreciation greater than 10% could be expected during the next six months.

“Negative“ means that an absolute depreciation greater than 10% could be expected during the six months.

“Neutral“ means that an absolute change of price between +10% to -10% could be expected during the next six months.

4.2 Fixed Income Instruments:

The prevailing factor for an investment recommendation regarding an **issuer** is whether, according to the estimate of DZ BANK, this issuer's bonds are able to perform better, worse or in tandem with the bonds of comparable issuers in the next six months. The below defined recommendation categories apply to 'senior unsecured bonds' denominated in Euro and in case of Emerging Markets issuers in individual cases also in US-Dollar as well as to 'covered bonds issued by credit institutions' in Euro:

"Outperformer" means that a better performance is expected for the issuer's bonds than for the bonds of comparable issuers.

"Underperformer" means that a worse performance is expected for the issuer's bonds than for the bonds of comparable issuers.

"Market performer" means that the performance of the issuer's bonds is not expected to materially differ from the bonds of comparable issuers.

- 4.3 Categories for isolated statements without investment recommendation** Statements on the **isolated evaluation of specific aspects that precede an investment recommendation** on a financial instrument and / or an issuer - **especially** according to the **sustainability criteria** defined by DZ BANK, its defined **value approach**, its defined **asset allocation** (DZ BANK Sample Portfolio), its defined sector strategy Euro-Stoxx (**DZ BANK Sector Favorites**), its defined valuation of payments to beneficiaries (**DZ BANK Dividend Aristocrats**), its **country weightings for covered bonds** and its **CRESTA-SCORE MODEL** - are **not investment categories** and therefore **do not contain any investment recommendations**.

These isolated statements **alone** are **not sufficient** to form the basis of an investment decision. Reference is made to the explanation of the used relevant methods.

5. Scheduled Updates and Validity Periods of Investment Recommendations

- 5.1** The frequency of **updates of Financial Analyses** depends in particular on the underlying macroeconomic conditions, current developments on the relevant

^{1) – 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

- markets, the current development of the analyzed companies, measures undertaken by the issuers, the behavior of trading participants, the competent supervisory authorities and the competent central banks as well as a wide range of other parameters. The periods of time named below therefore merely provide a **non-binding indication** of when an updated investment recommendation may be expected.
- 5.2 No obligation exists to update an investment recommendation.** If an investment recommendation is updated, this update **replaces** the previous **investment recommendation with immediate effect**. If no update is made, investment recommendations **end / lapse on expiry of the validity periods** named below. These periods **begin** on the **day** and at the **time** the investment recommendation is **completed**.
- 5.3 The validity periods for investment recommendations (financial analyses)** are as follows:
- Shares:**
- | | |
|---|------------|
| Fundamental analysis | six months |
| Technical (chart) analysis (tertiary trend) | one week |
| Technical (chart) analysis (secondary term) | six months |
- Fixed income instruments:**
- | | |
|----------------------------------|-----------------|
| Issuers (senior unsecured bonds) | six months |
| Issuers (covered bonds) | one trading day |
- 5.4 Evaluations of isolated aspects without investment recommendation** have the following validity periods:
- Sustainability analyses:** one month
- Analyses according to the **value approach**: one month
- Asset allocation analyses (**DZ BANK Sample Portfolio**): one month
- Euro Stoxx sector strategy (**DZ BANK Sector Favorites**): one month
- Dividends (**DZ BANK Dividend Aristocrats**): three months
- Credit trend issuers** twelve months
- Share indices (fundamental):** three months
- Share indices (technical / chart analysis):** one week
- Share indices (technical daily):** publication day
- Currency areas:** six to twelve months
- Allocation of market segments** one month
- Country weightings for covered bonds:** six months
- Derivatives:**
- (Bund futures, Bobl futures, treasury futures, Buxl futures): one month
- Commodities:** one month
- 5.5** In a given case, updates of analyses may also be **temporarily suspended without prior announcement** on account of compliance with supervisory regulations.
- 5.6** If **no updates are to be made in the future** because the analysis of an object is to be discontinued, notification of this shall be made in the final publication or, if no final publication is made, the close of the analysis shall be given in a separate note.
- 6. General Overview of Investment Recommendations on Financial Instruments and Issuers**
- Each working day DZ BANK prepares a **general overview of all investment recommendations** on financial instruments and / or issuers disseminated in the last **twelve months**, containing all details specified by the supervisor. This list can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures.
- 7. Avoiding and Managing Conflicts of Interest**
- 7.1** DZ BANK Research has a binding **Conflicts of Interest Policy** which ensures that the relevant conflicts of interest of DZ BANK, the DZ BANK Group, the analysts and employees of the Research and Economics Division and persons closely associated with them are avoided, or - if such interests are effectively unavoidable - are appropriately identified, managed, disclosed and monitored. Material aspects of this policy, which can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures are summarized as follows.
- 7.2** DZ BANK organizes its Research and Economics Division as a confidentiality area and protects it against all other organizational units of DZ BANK and the DZ BANK Group by means of Chinese walls. The departments and teams of the Division that produce Financial Analyses are also protected by Chinese walls and by spatial separation, a closed doors and clean desk policy. Beyond the limits of these confidentiality areas, communication may only take place in both directions according to the need-to-know principle.
- 7.3** The Research and Economics Division does not disseminate Research Publications on issues of DZ BANK or on financial instruments issued by companies of the DZ BANK Group.
- 7.4** **In principle, employees of the Research and Economics Division and persons closely associated with them may not unrestrictedly invest in financial instruments covered by them in the form of Financial Analyses. For commodities and currencies, DZ BANK has also defined an upper limit based on the annual gross salary of each employee which, in the opinion of DZ BANK, also excludes the possibility of personal conflicts of interest among employees in the preparation of Other Research Publications.**
- 7.5** Other theoretically feasible, information-based personal conflicts of interest among employees of the Research and Economics Division and persons closely associated with them are avoided in particular by the measures explained in **sub-paragraph 7.2** and the other measures described in the policy.
- 7.6** The remuneration of employees of the Research and Economics Division depends neither in whole nor in the variable part directly or materially on the earnings from investment banking, trade in financial instruments, other securities related services and / or trade in commodities, merchandise, currencies and / or on indices of DZ BANK or the companies of the DZ BANK Group.
- 7.7** DZ BANK and companies of the DZ BANK Group issue financial instruments for trading, hedging and other investment purposes which, as underlying instruments, may refer to financial instruments, commodities, merchandise, currencies, benchmarks, indices and / or other financial ratios also covered by DZ BANK Research. Respective conflicts of interest are primarily avoided in the Research and Economics Division by means of the aforementioned organizational measures.
- 7.8** **Investment recommendations for the same financial instrument / issuer that have deviated in the last 12 months are stated in the respective current Financial Analysis together with the relevant investment recommendation category and date.**
- 7.9** The **quarterly information** on the share of the investment categories stated in **sub-paragraph 4.1 and 4.2 for shares and fixed income instruments** in the total number of investment recommendations of DZ BANK and the **information** on the share of these categories relating to the issuers to whom DZ BANK has rendered services in the **past twelve months** in accordance with Appendix I Sections A and B of Directive 2014/65/EU, can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures.
- 7.10** The following **definitions** explain the potential conflicts of interest (so-called **'keys'**) of DZ BANK and / or the companies of the DZ BANK Group that must be stated in accordance with supervisory regulations in respect of the issuers and / or financial instruments analyzed in a Financial Analysis:
- 1) DZ BANK owns a **net long position** exceeding 0,5% of the total issued share capital of the issuer, calculated according to Article 3 of Regulation (EU) No. 236/2012 and Chapter III and IV of Commission Delegated Regulation (EU) No. 918/2012.
 - 2) DZ BANK owns a **net short position** exceeding 0,5% of the total issued share capital of the issuer, calculated according to Article 3 of Regulation (EU) No. 236/2012 and Chapter III and IV of Commission Delegated Regulation (EU) No. 918/2012
 - 3) DZ BANK or any of its affiliates beneficially **owns 1 % or more** of any class of common equity securities of the issuer.
 - 4) The issuer holds shares of DZ BANK exceeding 5 % of its total issued share capital.
 - 5) DZ BANK, any of its affiliates or a natural or legal person involved in the preparation of the investment recommendation acting under contract, is a **market maker, designated sponsor** and / or **liquidity provider** in financial instruments of the issuer at the time of publication of this research report.
 - 6) DZ BANK, any of its affiliates or a natural or legal person involved in the preparation of the investment recommendation acting under contract, has **managed or co-managed a private and / or publicly disclosed offering** of financial instruments of the issuer in the past 12 months.
 - 7) The issuer is or has been a **client** to DZ BANK regarding **investment banking services** over the 12-month period preceding the date of publication of this research report.
 - 8) DZ BANK or any of its affiliates received **compensation for investment banking services** from the issuer in the past 12 months.

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

- 9) DZ BANK or any of its affiliates expects to receive or intends to seek **compensation for investment banking services** from the issuer in the next 3 months.
- 10) The issuer is or has been a **client** to DZ BANK, to any of its affiliates or a natural or legal person involved in the production of the investment recommendation acting under contract regarding **securities-related services** as set out in Sections A and B of Annex I of Directive 2014/65/EU, which agreement has been in effect or has given rise to the obligation to pay or receive compensation during the 12-months period preceding the date of publication of this research report.
- 11) The issuer is or has been a **client** to DZ BANK regarding **non-securities services** over the 12-month period preceding the date of publication of this research report.
- 12) DZ BANK and / or any of its affiliates have been a party to an **agreement** with the issuer relating to the **preparation of investment recommendations** concerning financial Instruments issued by him.

8. Recipients and Use of Financial Analyses

8.1 Recipients

Financial Analyses of DZ BANK are directed at **eligible counterparties** as well as **professional clients**. They are therefore **not** suitable for dissemination to **retail clients** unless (i) a financial analysis has been **explicitly** labelled by DZ BANK as suitable also for retail clients or (ii) is disseminated by an investment firm properly authorized in the European Economic Area (EEA) or Switzerland to retail clients, who evidently have the necessary knowledge and sufficient experience in order to understand and evaluate the relevant risks of the relevant investment recommendations.

Financial Analyses are authorized by DZ BANK for dissemination to the aforementioned recipients in in **Member States of the European Economic Area and Switzerland** as well as in accordance with the **provisions set forth in sub-paragraphs 8.4 and 8.5** in the therein named additional **countries**.

8.2 Main Sources of Information

For the preparation of its Research Publications, DZ BANK uses only information sources which it considers itself to be reliable. However, it is not feasible to make own checks of all the facts and other information taken from these sources in every case. If in a specific case, however, DZ BANK has doubts over the reliability of a source or the correctness of facts and other information, it shall make specific reference to this in the Research Publication. The main sources of information for Research Publications are: Information and data services (e.g. Reuters, Bloomberg, VWD, FactSet, Markit), licensed rating agencies (e.g. Standard & Poors, Moody's, Fitch, DBRS), specialist publications of the sectors, the business press, the competent supervisory authorities, information of the issuers (e.g. annual reports, securities prospectuses, ad-hoc disclosures, press and analyst conferences and other publications) as well as its own specialist, micro and macro-economic research, examinations and evaluations.

8.3 No securities prospectus | no individual investment recommendation

Under no circumstances can or should a Research Publication replace a securities prospectus and / or specialist investment advice necessary for a specific investment. For this reason a Research Publication cannot be used as sole basis for an investment decision.

8.4 International Restrictions of Use outside the EEA and Switzerland

This Financial Analysis may **only** be brought into the **United States of America (USA)** and the **Republic of Singapore** by the respective company set forth in **sub-paragraph 8.5** and be used in these countries in accordance with the regulations applicable to them there.

United States of America (USA)

In the USA, DZ BANK makes use of an exemption from the registration obligation for specific foreign brokers or traders under *Part 240 - General Rules and Regulations, Rule 15a-6 of the Securities Exchange Act 1934*. According to this rule it may, depending on **certain** pre-conditions, provide Research Publications on equity instruments **exclusively to 'major U.S. institutional investors'** and may conclude transactions with them on the securities named therein.

To this end, DZ BANK has signed a cooperation agreement with Auerbach Grayson and Company LLC, 25 West 45th Street, New York, NY 10036 (Auerbach Grayson) concerning equity instruments. The aforementioned securities transactions on equity instruments shall be concluded exclusively between **Auerbach Grayson** and the **'major U.S. institutional investors'** in

accordance with Rule 15a-6 (a) (3). In particular, DZ BANK is **not** permitted to initiate or conclude transactions in equity instruments with these investors in any other way; in particular it is not permitted to contact the aforementioned or other investors in the USA or to recommend Auerbach Grayson to them in the Research Publications as partner for concluding transactions. Furthermore DZ BANK is neither allowed to provide Research Publications on debt instruments to US customers nor to conclude transactions in debt instruments with them. Thus, these Research Publications on equity instruments may only be brought into the USA by DZ BANK via Auerbach Grayson **and not by other persons**, and may only be disseminated to **'major U.S. institutional investors'** there and may only be used by them within the described limits. Research Publications on debt instruments must in no case be supplied to the USA. This Research Publication was prepared in the Federal Republic of Germany in accordance with the law applicable there. Hence, it is possible that not all regulations regarding the preparation of research reports applicable in the USA have been observed.

Republic of Singapore

DZ BANK Singapore Branch is exempt from holding a financial advisor's license to act as a financial advisor in Singapore under section 23(1)(a) of the Financial Advisors Act (Cap.110) (FAA).

DZ BANK makes use of the exemption for 'Foreign Research Houses' under Regulation 32C (1) of the Financial Advisors Regulations (FAR) from licensing under section 23(1)(f) of the FAA in respect of the activity of advising others by issuing or promulgating research analyses or research reports, whether in electronic, print or other form, concerning any investment.

Its Research Publications must exclusively be distributed by DZ BANK Singapore Branch. They are intended for general circulation, but **solely to 'accredited investors'** and / or **'expert investors'**.

Dealing with **'accredited investors'** or **'expert investors'** DZ BANK is relying on the following exemptions to the Financial Advisors Act, Cap 110:

- (1) the exemption in Regulation 33 of the FAR, which exempts DZ BANK from complying with Section 25 of the FAA on disclosure of product information to clients,
- (2) the exemption set out in Regulation 34 of the FAR, which exempts DZ BANK from complying with Section 27 of the FAA on recommendations, and
- (3) the exemption set out in Regulation 35 of the FAR, which exempts DZ BANK from complying with Section 36 of the FAA on disclosure of certain interests in securities.

This Research Publication **does not take into account the specific investment objectives, financial situation or particular needs** of any particular recipient.

A financial advisor should be consulted if there are any questions regarding the contents of this Research Publication.

Any recipient should **seek investment advice** regarding the **suitability** of any product referred to in this Research Publication, taking into account his specific financial objectives, financial situation or particular needs, before making a commitment to purchase any such product.

8.5 Contacts of DZ BANK outside the EEA and Switzerland

None of these contacts are obliged to update the Research Publication.

Investors must inform themselves about the current development of business as well as of any changes affecting the issuers.

In the United States of America (USA) for equity instruments only:

Auerbach Grayson and Company LLC., 25 West 45th Street, New York, NY 10036

Auerbach Grayson and Company LLC. is a broker and dealer registered in the USA and is an independent business partner of DZ BANK that fulfills the requirements under Part 240 - General Rules and Regulations, Rule 15a-6 (a) (3) of the Securities Exchange Act 1934.

In the Republic of Singapore:

DZ BANK AG Singapore Branch, 50 Raffles Place #43-01, Singapore Land Tower, Singapore 048623

The DZ BANK AG Singapore Branch is a legally dependent branch of DZ BANK.

9. Summary of used Methods and Procedures

Detailed information on generally recognized as well as proprietary methods and procedures used by DZ BANK Research can be read and downloaded free-of-charge under www.dzbank.com/disclosures.

III. DISCLAIMER

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

1. This document is directed at **eligible counterparties** and **professional clients**. Therefore, it is not suitable for **retail clients unless** (a) it has been explicitly labelled as appropriate for retail clients or (b) is properly disseminated by an investment firm authorized in the European Economic Area (EEA) or Switzerland to retail clients, who evidently have the necessary knowledge and sufficient experience in order to understand and evaluate the relevant risks of the relevant evaluation and / or recommendations.
It was prepared by DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, Germany ('DZ BANK') and has been approved by DZ BANK only for dissemination to the aforementioned recipients in **Member States of the EEA and Switzerland**.
If this document is expressly marked as '**Financial Analysis**' in **sub-section 1.1** of the Mandatory Disclosures, its distribution to recipients is subject to the section International Restrictions of Use and these additional rules:
This document may only be brought into the **Republic of Singapore** by DZ BANK via the DZ BANK Singapore Branch, but not by other persons, and may only be disseminated there to 'accredited investors' and / or 'expert investors' and used by them.
This document may only be brought into the **United States of America (USA)** by DZ BANK and via Auerbach Grayson, but not by other persons, and may only be disseminated there to 'major U.S. institutional investors' and used by them, if it solely comprises equity research. DZ BANK is neither allowed to bring documents on debt instruments into the USA nor to conclude transactions in debt instruments.
If this document is expressly marked as '**Other Research Information**' in **sub-section 1.1** of the Mandatory Disclosures, its dissemination to recipients is subject to these additional rules:
It is neither allowed to provide Other Research Information to customers in the **United States of America (USA)** nor to conclude corresponding transactions with them.
The dissemination of Other Research Information in the **Republic of Singapore** is in any case restricted to DZ BANK AG Singapore Branch.
In all before named countries, this document may only be distributed in accordance with the respective applicable laws and rules, and persons obtaining possession of this document should inform themselves about and observe such laws and rules.
2. This document is being handed over solely for information purposes and may not be reproduced, redistributed to other persons or be otherwise published in whole or in part. All copyrights and user rights to this document, also with regard to electronic and online media, remain with DZ BANK.
Whilst DZ BANK may provide hyperlinks to web sites of companies mentioned in this document, the inclusion of a link does not imply that DZ BANK endorses, recommends or guarantees any data on the linked page or accessible therefrom. DZ BANK accepts no responsibility whatsoever for any such links or data, nor for the consequences of its use.
3. This document is not to be construed as and does not constitute an offer, or an invitation to make an offer, to buy securities, other financial instruments or other investment objects.
Estimates, especially forecasts, fair value and / or price expectations made for the investment objects analyzed in this document may prove incorrect. This may occur especially as a result of unpredictable risk factors.
Such risk factors are in particular, but not exclusively: market volatility, sector volatility, measures undertaken by the issuer or owner, the general state of the economy, the non-realizability of earnings and / or sales targets, the non-availability of complete and / or precise information and / or later occurrence of another event that could lastingly affect the underlying assumptions or other forecasts on which DZ BANK relies.
The estimates made should always be considered and evaluated in connection with all previously published relevant documents and developments relating to the investment object and to the relevant sectors and, in particular, capital and financial markets.
DZ BANK is under no obligation to update this document. Investors must inform themselves about the current development of business as well as of any changes in the business development of the companies.
During the validity period of an investment recommendation, DZ BANK is entitled to publish a further or other analysis based on other, factually-warranted or even missing criteria on the investment object.
4. DZ BANK has obtained the information on which this document is based from sources believed to be essentially reliable, but has not verified all of such information. Consequently, DZ BANK does not make or provide any representations or warranties regarding the preciseness, completeness or accuracy of the information or the opinions contained in this document. Neither DZ BANK nor its affiliated companies accept any liability for disadvantages or losses incurred as a result of the distribution and / or use of this document and / or which are connected with the use of this document.
5. DZ BANK and its affiliated companies are entitled to maintain investment banking and business relationships with the company or companies that are the subject of the analysis contained in this document. Within the limits of applicable supervisory law, DZ BANK's research analysts also provide information regarding securities-related services and ancillary securities-related services. Investors should assume that (a) DZ BANK and its affiliated companies are or will be entitled to engage in investment banking operations, security operations or other business transactions from or with the companies that are the subject of the analysis contained in this document, and that (b) analysts involved in the preparation of this document can generally be indirectly involved in the conclusion of such business transactions to the extent permitted by supervisory law.
DZ BANK and its affiliated companies and their employees may have positions in securities of the analyzed companies or investment objects or effect transactions with these securities or investment objects.
6. The information and recommendations of DZ BANK contained in this document do not constitute any individual investment advice and, depending on the specific investment targets, the investment horizon or the individual financial situation, may therefore be unsuitable or only partially suitable for certain investors. In preparing this document DZ BANK has not and does not act in the capacity of an investment advisor to, or asset manager for, any person.
The recommendations and opinions contained in this document constitute the best judgment of DZ BANK's research analysts at the date and time of preparation of this document and are subject to change without notice as a result of future events or developments. This document constitutes an independent appraisal of the relevant issuer or investment objects by DZ BANK; all evaluations, opinions or explanations contained herein are those of the author of this document and do not necessarily correspond with those of the issuer or third parties.
Any decision to effect an investment in securities, other financial instruments, commodities, merchandise or other investment objects should not be made on the basis of this document, but on the basis of independent investment analyses and methods as well as other analyses, including but not limited to information memoranda, sales or other prospectuses. This document can be no replacement for individual investment advice.
7. By using this document, in any form or manner whatsoever, or referring to it in your considerations and / or decisions, you accept the restrictions, specifications and regulations contained in this document as being exclusively and legally binding for you.

Additional Information of Markit Indices Limited

Neither Markit, its affiliates or any third party data provider makes any warranty, express or implied, as to the accuracy, completeness or timeliness of the data contained herewith nor as to the results to be obtained by recipients of the data. Neither Markit, its affiliates nor any data provider shall in any way be liable to any recipient of the data for any inaccuracies, errors or omissions in the Markit data, regardless of cause, or for any damages (whether direct or indirect) resulting therefrom.

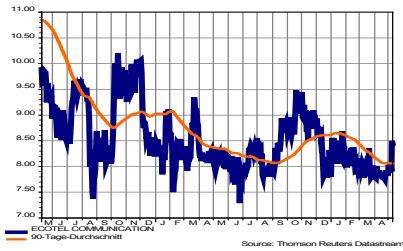
Markit has no obligation to update, modify or amend the data or to otherwise notify a recipient thereof in the event that any matter stated herein changes or subsequently becomes inaccurate.

Without limiting the foregoing, Markit, its affiliates, or any third party data provider shall have no liability whatsoever to you, whether in contract (including under an indemnity), in tort (including negligence), under a warranty, under statute or otherwise, in respect of any loss or damage suffered by you as a result of or in connection with any opinions, recommendations, forecasts, judgments, or any

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

other conclusions, or any course of action determined, by you or any third party, whether or not based on the content, information or materials contained herein.

Copyright © 2016, Markit Indices Limited.



RATING HISTORY

Recommendation	Date	Price
Buy	28 Sep 2011	5.00 EUR

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

EQUITY SALES	Kai Böckel	+49 – (0)69 – 74 47 – 12 28	kai.boeckel@dzbank.de
Germany	Kai Böckel	+49 – (0)69 – 74 47 – 12 28	kai.boeckel@dzbank.de
Benelux	Lars Wohlers	+49 – (0)69 – 74 47 – 68 34	lars.wohlers@dzbank.de
Switzerland	Petra Bukan	+49 – (0)69 – 74 47 – 49 92	petra.bukan@dzbank.de
Austria	Thomas Reichelt	+49 – (0)69 – 74 47 – 67 09	thomas.reichelt@dzbank.de
UK	Lars Wohlers	+49 – (0)69 – 74 47 – 68 34	lars.wohlers@dzbank.de
SALES TRADING	Marina Semmler	+49 – (0)69 – 74 47 – 13 81	marina.semmler@dzbank.de
DERIVATIVES SALES	Berthold Grünebaum	+49 – (0)69 – 74 47 – 9 91 95	berthold.gruenebaum@dzbank.de

ACCESS TO DZ BANK RESEARCH (CONTACT LARS.WOHLERS@DZBANK.DE)

Bloomberg	DZBR <GO>
Reuters	"DZ Bank" & RCH <NEWS>