



## Company Flash Note

## Reason: Rating change

26 July 2018

### Buy

from Accumulate

**Share price: EUR 21.60**

closing price as of 25/07/2018

**Target price: EUR 27.30**

from Target Price: EUR 27.00

**Upside/Downside Potential 26.4%**

Reuters/Bloomberg SIGS.DE/SIS GR

**Market capitalisation (EURm) 221**

Current N° of shares (m) 10

**Free float 53%**

Daily avg. no. trad. sh. 12 mth 30

Daily avg. trad. vol. 12 mth (m) 243.93

Price high/low 12 months 12.87 / 30.50

Abs Perfs 1/3/12 mths (%) 13.09/-7.69/54.51

**Key financials (EUR) 12/17 12/18e 12/19e**

Sales (m) 148 157 168

EBITDA (m) 20 23 23

EBITDA margin 13.3% 14.4% 13.9%

EBIT (m) 11 12 14

EBIT margin 7.2% 7.9% 8.0%

Net Profit (adj.)(m) 4 7 8

ROCE 6.0% 7.0% 7.6%

Net debt/(cash) (m) 23 20 15

Net Debt Equity 0.3 0.2 0.2

Net Debt/EBITDA 1.2 0.9 0.6

Int. cover(EBITDA/Fin.int) 10.6 10.5 10.8

EV/Sales 1.7 1.5 1.4

EV/EBITDA 12.6 10.7 10.2

EV/EBITDA (adj.) 12.6 10.7 10.2

EV/EBIT 23.4 19.5 17.5

P/E (adj.) nm 32.1 28.8

P/BV 2.8 2.6 2.4

OpFCF yield 1.2% 2.1% 3.2%

Dividend yield 0.7% 0.8% 0.9%

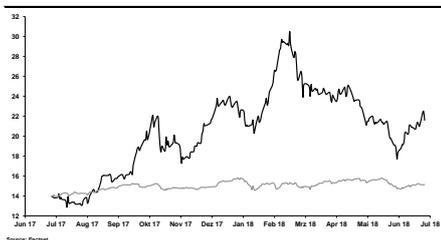
EPS (adj.) 0.40 0.67 0.75

BVPS 7.91 8.42 8.99

DPS 0.16 0.18 0.20

### Shareholders

FS Technology Holding S.à.r.l. 36%; Midlin NV 6%; Gerlin NV 5%;



### Analyst(s)

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## Upgrade to Buy

The recent strong share price decline of 42% between mid of March and end of June 2018 is not justified in our view. We expect the latest rebound to continue. For Q2 '18e we expect an improvement of the EBIT-margin to 5.9% compared to 3.1% in the first quarter. As a reminder, Q1 results were negatively affected by the introduction of a new ERP-system. We expect a confirmation of the existing full-year financial guidance. Mid-term we confirm our view that the group will benefit from various megatrends related to FIS target markets. Having made some "fine-tuning" in our model we increase our TP to EUR 27.30 from EUR 27.00. Given an upside potential for the shares of currently 26.4% we upgrade the shares to Buy from Accumulate.

- ✓ **Benefitting from some megatrends:** FIS serves three strategic target markets which are Industrial, Medical and Mobility. Industry 4.0 will change the philosophy of production and sensors, and sensor systems definitely will play an important role. In Medical E-health applications are on the rise, while in Mobility autonomous driving, among other factors, is in the centre of First Sensor's interest.
- ✓ **Confirmation of the 2018 financial guidance expected:** Having in mind the negative profit impact coming from the introduction of a new ERP systems in January 2018 we expect a trend towards "normalisation" in the second quarter. The EBIT-margin is expected to reach 5.9% compared to 4.6% a year ago and 3.1% in the first quarter. By segment we expect a positive sales development for all three segments Industrial, Medical and Mobility. Looking forward it is our assumption that the full-year guidance will be confirmed: Group revenues of EUR 150-160m and an EBIT-margin of 7-9%.
- ✓ **New large contracts:** 1) In May FIS announced the strengthening of the collaboration with the Canadian technology leader for machine vision technology with an additional contract for image sensor boards until 2019. Sales volume is around EUR 4m. 2) Extended collaboration with a Chinese process automation company, announced during the German-Chinese governmental consultations in July in Berlin. This contract covers the development and production of customer-specific pressure sensor components.
- ✓ **Key risks** comprise among other factors: 1) FIS might not keep the speed with regard to new, innovative products and as a result could lose market share over time. 2) FIS will not meet timely all defined milestones of their overall strategy plan what can result in a lower than expected profitability. 3) Hiring of new and skilled employees could become more challenging.
- ✓ **H1/Q2 2018e results publication:** 13 August 2018

**Exhibit 1: First Sensor at a glance**

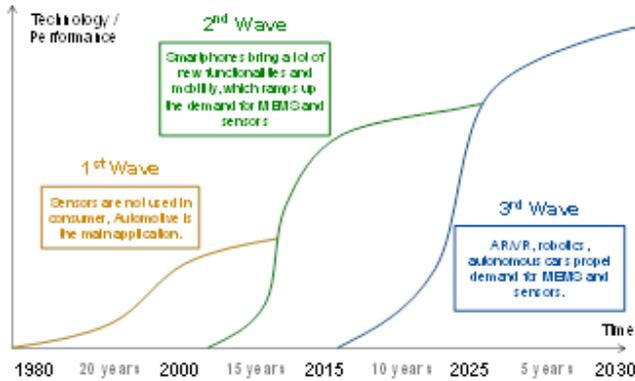
Business Units	Industrial	Medical	Mobility		
Products/ applications	A wide range of standardized and customized sensors in such applications as length measurement, radiation and security, Smart Building, industrial process control and aerospace	First Sensor offers solutions measuring pressure, flow, liquid level, oxygen, light, radiation and acceleration for such areas as breathing and respiration, dialysis, endoscopy, and diagnostics.	In the segment Mobility, First Sensor develops and manufactures sensor devices in such applications as advanced driver assistance systems (ADAS) and OEM pressure sensors and camera solutions		
Customers	A broad range of industrial end-markets	OEMs for medical devices	Automotive OEMs and large suppliers, retrofitters		
	A broad customer base of c. 2.000 business clients	Roche, Fresenius, Siemens, Draegerwerke	Daimler Trucks, VW, FUSO, Volvo, Renault, Paccar, Hella, Delphi, Velodyne, Autoliv, Kenworth, DAF, Navistar, Western Star		
Market share/ positioning	No concrete figures disclosed; most likely strong position in industrial pressure sensors and optical sensor solutions	Most likely strong position in pressure and flow	No concrete figures disclosed; most likely above average position pressure sensors; optical sensors (e.g. LIDAR systems) with strong growth in upcoming years		
Drivers	A) Development of Industry 4.0, B) Demand for process automation	A) Miniaturization of medical technology, B) increasing demand for intelligent solutions, which analyse and communicate the measured data, C) general e-health trend	A) Autonomous driving, B) Green mobility		
Main competitors	Hamamatsu, Amphenol Advanced Sensors, Excelitas, Detection Technology, Smi Pressure Sensors	Honeywell, all sensors, Merit Sensor, OSI Systems, Sensirion	Bosch, Hamamatsu, Excelitas, Sensata Technologies		
Entry barriers/ competitive advantage	Positioned in strategic target markets which are of limited interest for large players; FIS covers the entire value chain for sensor solution systems; focus on individual solutions for specific customer needs; higher pricing power for sensor system solutions due to high complexity; lower pricing power in the direction of suppliers;				
Strategy & Guidance	<b>Strategy: Higher profitability</b> (I) Targets and Markets (II) Key Customer & Products (III) Forward integration (IV) Internationalization				
	Guidance 2018e (First Sensor): Revenue: EUR 150-160m y/y 1.7% - 8.5% EBIT 7.0% - 9.0%		equinet Estimates Revenue: EUR 157m 6.4% EBIT 7.9% Consensus n.a. n.a.		
2017	Sales (EURm) 147.5	EBITDA (EURm) 19.6 Margin 13.3%	EBIT adj. (EURm) 10.6 Margin 7.2%	Sales 5Y hist. CAGR 5.7% Organic growth y/y n.a.	
Sales & EBIT Split	<b>Sales split by region</b> 		<b>Sales split by division</b> 		<b>Group sales development</b> 
Shareholder structure & management	<b>CEO</b>  <b>Dr. Dirk Rothweiler</b> CEO (appointed until end of 2019) <ul style="list-style-type: none"> <li>• Background in physics</li> <li>• EVP Optical Systems at Jenoptik</li> <li>• Vice President Sales &amp; Service at TCZ</li> <li>• MD Asia-Pacific for Süss Microtec AG</li> </ul>		<b>CFO</b>  <b>Dr. Mathias Gollwitzer</b> CFO (appointed until 2022) <ul style="list-style-type: none"> <li>• Head of group controlling, EnBW</li> <li>• CFO Mercedes-Benz France SAS</li> <li>• Head of Corporate Controlling, DaimlerChrysler AG</li> </ul>		
	<b>Shareholder structure</b> 				
# of employees FY 2017	798 (FTE)				

\* managed by Teslin Capital Management BV

Source: First Sensor, equinet research, customers: solely equinet research

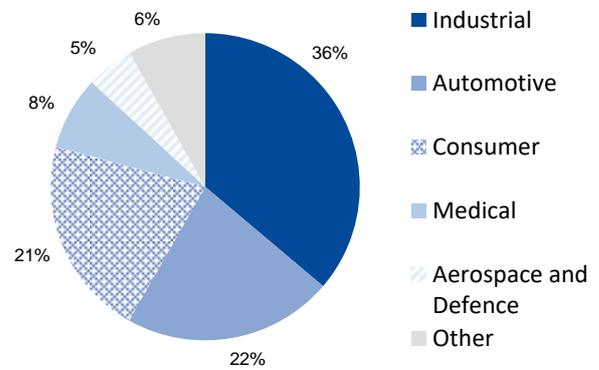
## Investment Case in Charts

**Exhibit 2: Long-term perspectives for sensors**



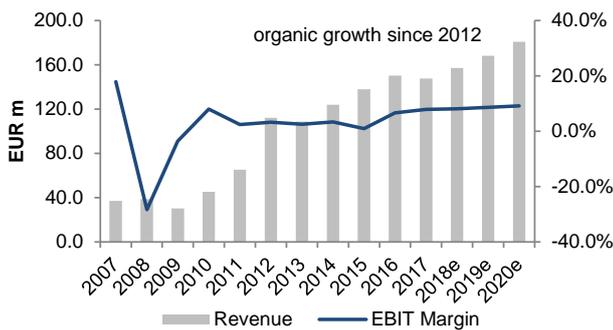
Source: Yole Développement

**Exhibit 3: FIS active in 4-5 sensor market segments**



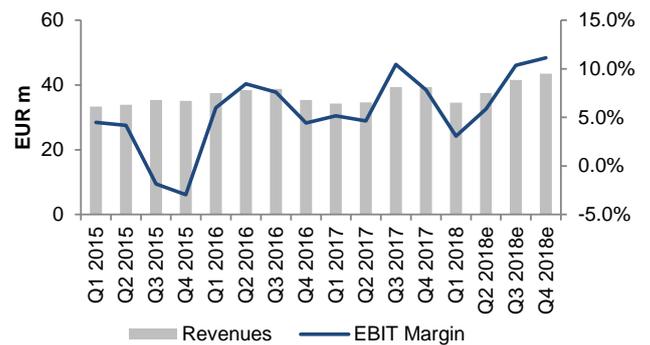
Source: AMR, BCC, R&M, equinet research

**Exhibit 4: EBIT-margin improvement long-term...**



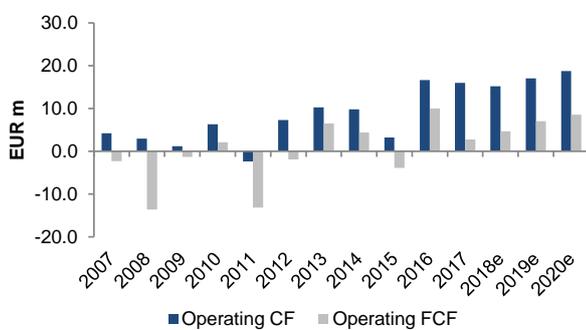
Source: First Sensor, equinet research

**Exhibit 5: ...and short-term**



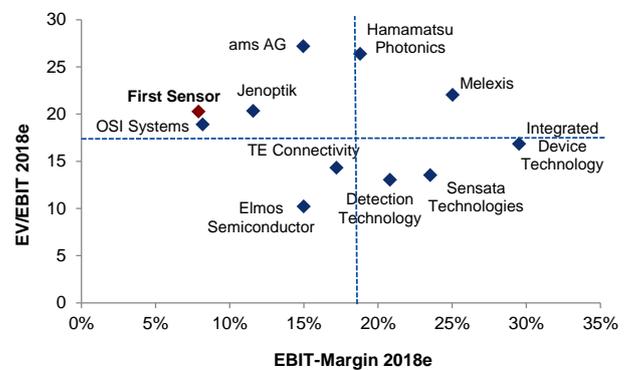
Source: First Sensor, equinet research

**Exhibit 6: FIS a strong cash flow generator**



Source: First Sensor, equinet research

**Exhibit 7: EBIT-margin and multiple landscape**



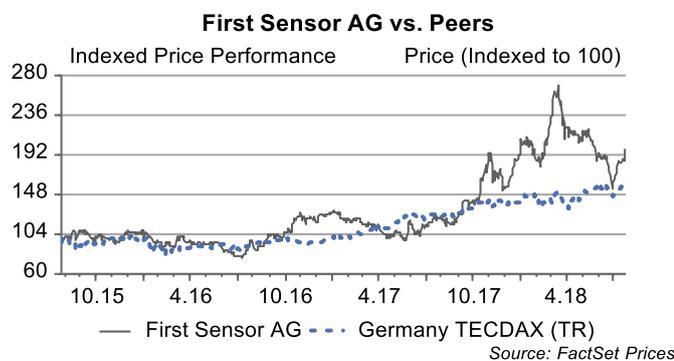
Source: FactSet, equinet research

## Investment case

The First Sensor group currently holds leading market positions in its defined strategic end-markets. These markets have high entry barriers for other medium-sized companies and volumes most likely are too small for the large players in our view.

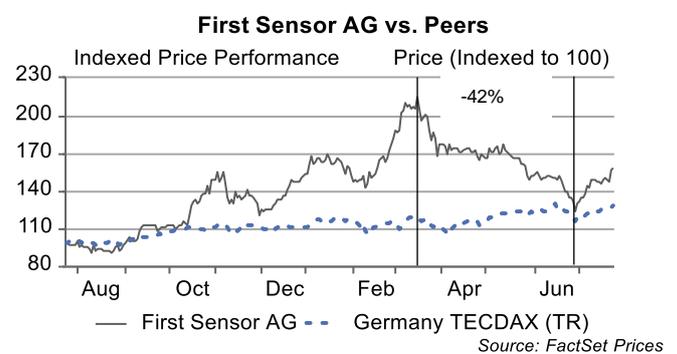
The company covers the entire value chain for sensors and related systems. Looking forward, First Sensor is well positioned to benefit from some megatrends like for example autonomous driving or Industry 4.0. By benefitting from these trends the current strategy is directed to a higher margin level and in 2016 and 2017 the group could harvest the first fruits of this program. Nevertheless the margin level is still behind to some of its listed peer group companies.

**Exhibit 8: First Sensor: Three years performance**



Source: Prices as of 25.07.2018

**Exhibit 9: First Sensor: One year performance**



Source: Prices as of 25.07.2018

The latest share price decline of 42%, measured from the last peak in mid-March at EUR 30.50 to end of June 2018, is not justified in our view. Looking back, Q1 2018 results were burdened by the group-wide introduction of an ERP-system, but according to our assessment this was mainly a problem in January and eased during the following months. Q1 '18 EBIT-margin of 3.1% (Q1 '17: 5.2%; Q4 '17: 7.8%) may be has disappointed some market participants. For the second quarter we expect a margin increase again.

Further triggers for the share price in our view are any signs for a further sustainable margin improvement. These signs can be for example the winning of new high volume OEM customers (signing an extension of an existing contract with a Chinese process automation company in July is a good example), new product innovations, internal cost savings measures or entering new markets.

According to the company, FIS is not directly affected by an escalation of the global trade war. There are no product shipments from the US to China or vice versa. If US import duties will be extended to European car makers, this could have a negative impact to First Sensor's Mobility segment (2017 sales share of 30.1%) in our view. According to the meeting between US president D. Trump and EU representative J.C. Juncker at 25 July 2018 it seems at first glance, that there will be no escalation and import duties to the US for cars can be avoided. But the final outcome of the negotiations is still unclear in our view.

## Valuation update

- Upgrade to Buy from Accumulate
- TP updated to EUR 27.30 from EUR 27.00 per share – more “fine-tuning” and no change in our general outlook for the group
- Base parameters have not changed: Beta at 1.1; perpetual growth rate at 2.5% and sustainable margin at 9.5%
- Current upside potential for the shares of 26%

Exhibit 10: First Sensor: DCF model – base case

EUR m	Phase I					Phase II					Phase III	
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e		
<b>Revenues</b>	<b>157.0</b>	<b>168.0</b>	<b>180.8</b>	<b>194.9</b>	<b>210.0</b>	<b>224.4</b>	<b>237.9</b>	<b>250.1</b>	<b>260.7</b>	<b>269.5</b>		
<i>growth rate</i>	6.4%	7.0%	7.6%	7.8%	7.7%	6.9%	6.0%	5.1%	4.2%	3.4%		
<b>EBIT</b>	<b>12.4</b>	<b>13.5</b>	<b>15.6</b>	<b>17.8</b>	<b>19.8</b>	<b>21.2</b>	<b>22.5</b>	<b>23.7</b>	<b>24.7</b>	<b>25.6</b>		
<i>EBIT margin</i>	7.9%	8.0%	8.6%	9.1%	9.4%	9.5%	9.5%	9.5%	9.5%	9.5%		
<b>Tax</b>	<b>-3.7</b>	<b>-4.1</b>	<b>-4.7</b>	<b>-5.3</b>	<b>-5.9</b>	<b>-6.4</b>	<b>-6.8</b>	<b>-7.1</b>	<b>-7.4</b>	<b>-7.7</b>		
<i>Tax rate</i>	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%		
<b>Depr. &amp; Amort.</b>	<b>10.2</b>	<b>9.8</b>	<b>9.9</b>	<b>10.2</b>	<b>10.3</b>	<b>11.2</b>	<b>11.9</b>	<b>12.5</b>	<b>13.1</b>	<b>13.6</b>		
<i>% of sales</i>	6.5%	5.8%	5.5%	5.2%	4.9%	5.0%	5.0%	5.0%	5.0%	5.0%		
<b>Capex</b>	<b>-10.5</b>	<b>-10.0</b>	<b>-10.2</b>	<b>-11.0</b>	<b>-11.1</b>	<b>-11.9</b>	<b>-12.6</b>	<b>-13.2</b>	<b>-13.8</b>	<b>-14.2</b>		
<i>% of sales</i>	6.7%	6.0%	5.6%	5.6%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%		
<b>Change in WC &amp; P</b>	<b>-0.7</b>	<b>-0.5</b>	<b>-0.4</b>	<b>-0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>		
<i>% of sales</i>	0.4%	0.3%	0.2%	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%		
<b>Free Cash Flow</b>	<b>7.7</b>	<b>8.8</b>	<b>10.2</b>	<b>11.5</b>	<b>13.3</b>	<b>14.4</b>	<b>15.3</b>	<b>16.1</b>	<b>16.8</b>	<b>17.4</b>	<b>401.4</b>	
<i>growth rate</i>	nm	13.7%	16.9%	2.3%	15.9%	7.9%	6.5%	5.3%	4.3%	3.4%	2.5%	
<b>Present Value FCF</b>	<b>7.5</b>	<b>8.0</b>	<b>8.7</b>	<b>9.1</b>	<b>9.9</b>	<b>10.0</b>	<b>9.9</b>	<b>9.8</b>	<b>9.5</b>	<b>9.2</b>	<b>213.2</b>	
<b>PV Phase I</b>		<b>43.2</b>				<b>Risk free rate</b>	3.5%	<b>Targ. equity ratio</b>			60%	
<b>PV Phase II</b>		<b>48.5</b>				<b>Premium Equity</b>	5.0%	<b>Beta</b>			1.1	
<b>PV Phase III</b>		<b>213.2</b>				<b>Premium Debt</b>	2.0%	<b>WACC</b>			6.9%	
<b>Enterprise value</b>		<b>304.9</b>				<b>Sensitivity</b>		<b>Growth in phase III</b>				
- Net Debt (Cash)		<b>22.8</b>						<b>1.5%</b>	<b>2.0%</b>	<b>2.5%</b>	<b>3.0%</b>	<b>3.5%</b>
- Pension Provisions		<b>0.3</b>				<b>6.25%</b>	27.3	29.8	33.0	37.2	43.0	
- Minorities & Peripherals		<b>1.2</b>				<b>6.59%</b>	25.2	27.3	29.9	33.3	37.8	
+ MV of financial assets						<b>WACC 6.94%</b>	23.3	25.1	<b>27.3</b>	30.1	33.6	
- Paid-out dividends for last FY		<b>1.6</b>				<b>7.29%</b>	21.7	23.2	25.1	27.4	30.2	
+/- Other EV items						<b>7.63%</b>	20.2	21.5	23.1	25.0	27.4	
<b>Equity value</b>		<b>278.9</b>										
Number of shares		<b>10.2</b>										
<b>Value per share (€)</b>		<b>27.3</b>										
<b>Current Price (€)</b>		<b>21.6</b>										
<b>Upside</b>		<b>26%</b>										

Source: equinet research

## Preview for H1/Q2 2018e

H1/Q2 2018e results will be published 13 August 2018. Having talked to the company it is our impression that Q2 2018e probably performed according to internal planning. By making progress with regard to the introduction of the ERP-system and based on a solid order intake we expect revenues to increase by 8.4% yoy. By segment we expect a sales growth in all three segments Industrial, Medical and Mobility. While volumes in Q2 2018e are up again, we believe that better economies of scale have materialized and led to an increase of the EBIT-margin to 5.9% (Q1 2017: 4.6%; Q1 2018: 3.1%). On this basis most likely we expect a confirmation of the full-year 2018 financial targets. Group sales should reach a level of EUR 150-160m and compare with our full-year estimate of EUR 157m. The EBIT-margin should make further progress to 7-9%, while we are expecting 7.9%.

### Exhibit 11: First Sensor: Improved Q2 2018e expected

EUR m	Q2 2018e (eq)	Q2 2017	yoy	H1 2018e (eq)	H1 2017	yoy
<b>Order intake</b>	<b>46.0</b>	<b>44.4</b>	<b>3.5%</b>	<b>85.3</b>	<b>79.5</b>	<b>7.3%</b>
<b>Revenues</b>	<b>37.5</b>	<b>34.6</b>	<b>8.4%</b>	<b>72.0</b>	<b>68.9</b>	<b>4.5%</b>
<i>of which: Industrial</i>	20.3	18.3	10.9%	36.6	36.1	1.4%
<i>of which: Medical</i>	7.0	6.4	9.4%	14.4	12.8	12.5%
<i>of which: Mobility</i>	10.2	9.9	3.0%	21.0	20.0	5.0%
<b>Book-to-bill ratio group</b>	<b>1.23</b>	<b>1.28</b>	<b>-4.5%</b>	<b>1.18</b>	<b>1.15</b>	
<b>EBIT</b>	<b>2.2</b>	<b>1.6</b>	<b>37.2%</b>	<b>3.3</b>	<b>3.4</b>	<b>-3.4%</b>
EBIT Margin	5.9%	4.6%	123 BP	4.5%	4.9%	
<b>Net income</b>	<b>1.5</b>	<b>0.8</b>	<b>82.4%</b>	<b>1.8</b>	<b>2.1</b>	<b>-15.9%</b>
<b>EPS, EUR</b>	<b>0.15</b>	<b>0.06</b>	<b>159.3%</b>	<b>0.18</b>	<b>0.19</b>	<b>-5.6%</b>

Source: First Sensor, equinet research

One pillar of the overall strategy is to have more focus on key customers and key products. At this front FIS is making progress in our view. In May FIS announced the strengthening of the collaboration with the Canadian technology leader for machine vision technology with an additional contract for image sensor boards until 2019. The expected sales volume for 2018 will be in the range of EUR 4m according to the company.

Another example is the extended collaboration with a Chinese process automation company, announced during the German-Chinese governmental consultations in July. This contract covers the development and production of customer-specific pressure sensor components. The medium-term target is to generate annual sales of several million Euro per year.

**First Sensor AG : Summary tables**

<b>PROFIT &amp; LOSS (EURm)</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
<b>Sales</b>	<b>124</b>	<b>138</b>	<b>150</b>	<b>148</b>	<b>157</b>	<b>168</b>
Cost of Sales & Operating Costs	-111	-126	-128	-128	-134	-145
Non Recurrent Expenses/Income	0.0	0.0	-2.2	0.0	0.0	0.0
<b>EBITDA</b>	<b>13.1</b>	<b>11.5</b>	<b>19.4</b>	<b>19.6</b>	<b>22.6</b>	<b>23.3</b>
<b>EBITDA (adj.)*</b>	<b>13.1</b>	<b>11.5</b>	<b>21.6</b>	<b>19.6</b>	<b>22.6</b>	<b>23.3</b>
Depreciation	-9.0	-10.3	-9.4	-9.1	-10.2	-9.8
<b>EBITA</b>	<b>4.1</b>	<b>1.2</b>	<b>10.0</b>	<b>10.6</b>	<b>12.4</b>	<b>13.5</b>
<b>EBITA (adj)*</b>	<b>4.1</b>	<b>1.2</b>	<b>12.2</b>	<b>10.6</b>	<b>12.4</b>	<b>13.5</b>
Amortisations and Write Downs <i>of which PPA amortisation</i>	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
<b>EBIT</b>	<b>4.1</b>	<b>1.2</b>	<b>10.0</b>	<b>10.6</b>	<b>12.4</b>	<b>13.5</b>
<b>EBIT (adj.)*</b>	<b>4.1</b>	<b>1.2</b>	<b>12.2</b>	<b>10.6</b>	<b>12.4</b>	<b>13.5</b>
Net Financial Interest	-2.4	-2.4	-1.8	-1.9	-2.1	-2.2
Other Financials	0.0	0.0	0.0	0.0	0.0	0.0
Associates	0.0	0.0	0.5	-1.5	0.0	0.0
Other Non Recurrent Items	0.0	0.0	0.0	0.0	0.0	0.0
<b>Earnings Before Tax (EBT)</b>	<b>1.7</b>	<b>-1.2</b>	<b>8.7</b>	<b>7.2</b>	<b>10.2</b>	<b>11.4</b>
Tax	-1.3	-0.4	-2.6	-2.8	-3.1	-3.4
<i>Tax rate</i>	<i>76.3%</i>	<i>n.m.</i>	<i>30.2%</i>	<i>38.9%</i>	<i>30.0%</i>	<i>30.0%</i>
Discontinued Operations	0.0	0.0	0.0	0.0	0.0	0.0
Minorities	-0.2	-0.2	-0.3	-0.2	-0.3	-0.3
<b>Net Profit (reported)</b>	<b>0.2</b>	<b>-1.7</b>	<b>5.7</b>	<b>4.1</b>	<b>6.9</b>	<b>7.7</b>
<b>Net Profit (adj.)</b>	<b>0.2</b>	<b>-1.7</b>	<b>5.8</b>	<b>4.1</b>	<b>6.9</b>	<b>7.7</b>
<b>CASH FLOW (EURm)</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Cash Flow from Operations before change in NWC	11.4	9.5	15.8	17.8	15.8	17.5
Change in Net Working Capital	-1.6	-6.3	0.8	-1.8	-0.7	-0.5
<b>Cash Flow from Operations</b>	<b>9.8</b>	<b>3.2</b>	<b>16.6</b>	<b>16.0</b>	<b>15.2</b>	<b>17.0</b>
Capex	-5.4	-7.1	-6.6	-13.2	-10.5	-10.0
Net Financial Investments	1.1	2.0	0.1	0.7	0.0	0.0
<b>Free Cash Flow</b>	<b>5.5</b>	<b>-1.9</b>	<b>10.1</b>	<b>3.5</b>	<b>4.7</b>	<b>7.0</b>
Dividends	0.0	0.0	0.0	0.0	-1.6	-1.8
Other (incl. Capital Increase & share buy backs)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Change in Net Debt</b>	<b>5.5</b>	<b>-1.9</b>	<b>10.1</b>	<b>3.5</b>	<b>3.0</b>	<b>5.2</b>
NOPLAT	2.9	0.8	8.5	7.4	8.7	9.5
<b>BALANCE SHEET &amp; OTHER ITEMS (EURm)</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Net Tangible Assets	36.4	35.0	33.0	36.4	37.2	36.9
Net Intangible Assets (incl. Goodwill)	52.2	49.6	49.1	48.9	48.4	48.9
Net Financial Assets & Other	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Fixed Assets</b>	<b>88.7</b>	<b>84.6</b>	<b>82.1</b>	<b>85.3</b>	<b>85.6</b>	<b>85.8</b>
Inventories	29.9	27.1	25.9	24.6	25.1	25.6
Trade receivables	8.6	17.0	18.4	20.8	21.2	21.4
Other current assets	4.8	4.7	3.8	3.4	3.7	3.8
Cash (-)	-14.5	-21.5	-23.8	-25.5	-29.5	-35.0
<b>Total Current Assets</b>	<b>57.8</b>	<b>70.4</b>	<b>71.9</b>	<b>74.3</b>	<b>79.5</b>	<b>85.8</b>
<b>Total Assets</b>	<b>146</b>	<b>155</b>	<b>154</b>	<b>160</b>	<b>165</b>	<b>172</b>
Shareholders Equity	71.6	70.7	76.5	80.8	86.0	91.8
Minority	0.4	0.6	0.9	1.2	1.2	1.2
Total Equity	72.0	71.3	77.4	82.0	87.2	93.0
Long term interest bearing debt	35.3	44.5	37.2	36.3	36.3	35.6
Provisions	0.5	0.7	0.3	0.3	0.3	0.3
Other long term liabilities	13.0	11.8	8.1	7.4	7.5	7.6
<b>Total Long Term Liabilities</b>	<b>48.8</b>	<b>57.0</b>	<b>45.6</b>	<b>44.0</b>	<b>44.1</b>	<b>43.5</b>
Short term interest bearing debt	9.0	10.0	11.0	12.0	13.0	14.0
Trade payables	8.2	7.6	8.6	7.9	8.1	8.3
Other current liabilities	8.5	9.1	11.4	13.7	12.7	12.7
<b>Total Current Liabilities</b>	<b>25.7</b>	<b>26.7</b>	<b>31.0</b>	<b>33.6</b>	<b>33.8</b>	<b>35.0</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>146</b>	<b>155</b>	<b>154</b>	<b>160</b>	<b>165</b>	<b>172</b>
<b>Net Capital Employed</b>	<b>115</b>	<b>117</b>	<b>110</b>	<b>113</b>	<b>115</b>	<b>116</b>
<b>Net Working Capital</b>	<b>30.3</b>	<b>36.5</b>	<b>35.7</b>	<b>37.5</b>	<b>38.2</b>	<b>38.7</b>
<b>GROWTH &amp; MARGINS</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
<i>Sales growth</i>	<i>14.2%</i>	<i>11.1%</i>	<i>9.0%</i>	<i>-1.7%</i>	<i>6.4%</i>	<i>7.0%</i>
<b>EBITDA (adj.)* growth</b>	<b>-16.4%</b>	<b>-11.9%</b>	<b>87.3%</b>	<b>-9.2%</b>	<b>15.1%</b>	<b>3.3%</b>
<i>EBITA (adj.)* growth</i>	<i>-43.8%</i>	<i>-70.7%</i>	<i>916.7%</i>	<i>-13.5%</i>	<i>17.4%</i>	<i>9.2%</i>
<i>EBIT (adj)* growth</i>	<i>-43.8%</i>	<i>-70.7%</i>	<i>916.7%</i>	<i>-13.5%</i>	<i>17.4%</i>	<i>9.2%</i>

**First Sensor AG : Summary tables**

<b>GROWTH &amp; MARGINS</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Net Profit growth	-93.5%	n.m.	n.m.	-28.2%	66.3%	11.4%
EPS adj. growth	-93.6%	n.m.	n.m.	-28.3%	66.3%	11.4%
DPS adj. growth				n.m.	12.5%	11.1%
EBITDA (adj)* margin	10.6%	8.4%	14.4%	13.3%	14.4%	13.9%
EBITA (adj)* margin	3.3%	0.9%	8.1%	7.2%	7.9%	8.0%
EBIT (adj)* margin	3.3%	0.9%	8.1%	7.2%	7.9%	8.0%
<b>RATIOS</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Net Debt/Equity	0.4	0.5	0.3	0.3	0.2	0.2
Net Debt/EBITDA	2.3	2.9	1.3	1.2	0.9	0.6
Interest cover (EBITDA/Fin.interest)	5.4	4.9	10.8	10.6	10.5	10.8
Capex/D&A	60.2%	68.5%	70.1%	145.4%	102.9%	102.0%
Capex/Sales	4.4%	5.1%	4.4%	8.9%	6.7%	6.0%
NWC/Sales	24.4%	26.5%	23.8%	25.4%	24.3%	23.0%
ROE (average)	0.2%	-2.4%	7.8%	5.3%	8.2%	8.6%
ROCE (adj.)	2.4%	0.7%	7.2%	6.0%	7.0%	7.6%
WACC	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
ROCE (adj.)/WACC	0.3	0.1	1.0	0.9	1.0	1.1
<b>PER SHARE DATA (EUR)***</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Average diluted number of shares	10.0	10.2	10.2	10.2	10.2	10.2
EPS (reported)	0.02	-0.17	0.56	0.40	0.67	0.75
EPS (adj.)	0.02	-0.17	0.56	0.40	0.67	0.75
BVPS	7.12	6.96	7.49	7.91	8.42	8.99
DPS	0.00	0.00	0.00	0.16	0.18	0.20
<b>VALUATION</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
EV/Sales	1.0	1.2	1.2	1.7	1.5	1.4
EV/EBITDA	9.8	13.9	8.9	12.6	10.7	10.2
<b>EV/EBITDA (adj.)*</b>	<b>9.8</b>	<b>13.9</b>	<b>8.0</b>	<b>12.6</b>	<b>10.7</b>	<b>10.2</b>
EV/EBITA	31.3	133.5	17.4	23.4	19.5	17.5
<b>EV/EBITA (adj.)*</b>	<b>31.3</b>	<b>133.5</b>	<b>14.2</b>	<b>23.4</b>	<b>19.5</b>	<b>17.5</b>
EV/EBIT	31.3	n.m.	17.4	23.4	19.5	17.5
<b>EV/EBIT (adj.)*</b>	<b>31.3</b>	<b>n.m.</b>	<b>14.2</b>	<b>23.4</b>	<b>19.5</b>	<b>17.5</b>
<b>P/E (adj.)</b>	<b>n.m.</b>	<b>n.m.</b>	<b>25.7</b>	<b>n.m.</b>	<b>32.1</b>	<b>28.8</b>
P/BV	1.4	1.8	1.9	2.8	2.6	2.4
Total Yield Ratio	0.0%	0.0%	0.0%	0.7%	0.8%	0.9%
EV/CE	1.1	1.3	1.5	2.0	2.0	1.9
OpFCF yield	4.5%	-3.1%	6.8%	1.2%	2.1%	3.2%
OpFCF/EV	3.4%	-2.4%	5.8%	1.1%	1.9%	3.0%
Payout ratio	0.0%	0.0%	0.0%	39.6%	26.8%	26.7%
Dividend yield (gross)	0.0%	0.0%	0.0%	0.7%	0.8%	0.9%
<b>EV AND MKT CAP (EURm)</b>	<b>12/2014</b>	<b>12/2015</b>	<b>12/2016</b>	<b>12/2017</b>	<b>12/2018e</b>	<b>12/2019e</b>
Price** (EUR)	9.75	12.44	14.50	21.76	21.60	21.60
Outstanding number of shares for main stock	10.0	10.2	10.2	10.2	10.2	10.2
<b>Total Market Cap</b>	<b>98</b>	<b>126</b>	<b>148</b>	<b>222</b>	<b>221</b>	<b>221</b>
<b>Net Debt</b>	<b>30</b>	<b>33</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>15</b>
<i>o/w Cash &amp; Marketable Securities (-)</i>	<i>-15</i>	<i>-22</i>	<i>-24</i>	<i>-26</i>	<i>-29</i>	<i>-35</i>
<i>o/w Gross Debt (+)</i>	<i>44</i>	<i>55</i>	<i>48</i>	<i>48</i>	<i>49</i>	<i>50</i>
<b>Other EV components</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Enterprise Value (EV adj.)</b>	<b>128</b>	<b>160</b>	<b>174</b>	<b>247</b>	<b>242</b>	<b>237</b>

Source: Company, equinet Bank estimates.

**Notes**

\* Where EBITDA (adj.) or EBITA (adj.) = EBITDA (or EBITA) -/+ Non Recurrent Expenses/Income and where EBIT (adj.) = EBIT -/+ Non Recurrent Expenses/Income - PPA amortisation

\*\*Price (in local currency): Fiscal year end price for Historical Years and Current Price for current and forecasted years

Sector: Technology Hardware & Equipment/Technology Hardware & Equipment

Company Description: First Sensor engages in the development and manufacture of sensors, components and sensor solutions. The company serves the target markets Industrial, Medical and Mobility. The product portfolio include, among others, pressure, optical, radiation, flow, level and inertial sensors, cameras and power semiconductors. The company was founded in 1991 and is located in Berlin, Germany.

## Recommendation and Disclosures

Coverage	Analyst	Target	Rating	Disc.	Coverage	Analyst	Target	Rating	Disc.
1&1DRILLISCHAG	Sen	66.00	Buy		Manz AG	Rüzgar	37.00	Neutral	2/3
2GEnergy	Rüzgar	23.50	Accumulate	2/3/5	MAXAutomationSE	Becker	6.70	Buy	2/3
Aareal Bank	Häßler	42.00	Neutral		Merck	Berzhanin	112.00	Buy	
adidas	Josefson	228.00	Accumulate		Merkur Bank	Häßler	10.00	Buy	2/7
Adler Modemaerkte	Josefson	6.35	Buy	7	Metro AG	Bruns	17.00	Buy	2
ADLER Real Estate	Mayer	18.00	Buy		MLP	Häßler	7.50	Buy	2/3
Aixtron	Sen	14.00	Buy	2/3	MTU Aero Engines	Rüzgar	148.00	Reduce	2
Allianz	Häßler	200.00	Neutral		MunichRe	Häßler	210.00	Accumulate	
Axel Springer	Josefson	67.00	Accumulate		Nemetschek SE	Mildner	47.00	Reduce	5
Bayer	Berzhanin	118.00	Buy		Norma Group	Schuldt	62.00	Neutral	
Baywa	Bruns	33.00	Buy	2/7	OHB SE	Rüzgar	40.00	Neutral	7
BB Biotech	Berzhanin	73.00	Buy	7	OVH Holding AG	Häßler	20.00	Neutral	2/5/7
Biotest	Berzhanin	25.00	Neutral	2/3	Patrizia	Mayer	18.00	Neutral	
BMW	Schuldt	95.00	Buy		Pfeiffer Vacuum	Sen	162.00	Buy	5
Brenntag	Hinkel	59.80	Buy	2	Procredit Holding	Häßler	15.00	Buy	2/3/5
Ceconomy AG	Bruns	8.00	Neutral		PSI SOFTWAREAG	Mildner	20.00	Buy	2/3
comdirect	Häßler	11.20	Neutral		Puma	Josefson	565.00	Buy	
Commerzbank	Häßler	13.00	Neutral		PWO	Schuldt	52.00	Buy	2/3
Continental	Schuldt	250.00	Buy		Rheinmetall	Rüzgar	103.00	Neutral	
CORESTATE Capital Holding S.A.	Mayer	72.00	Buy	2/5	RIB Software	Mildner	25.00	Buy	2/3
CTS Eventim	Heilmann	37.50	Reduce		RTL Group	Josefson	72.00	Accumulate	
Daimler AG	Schuldt	71.00	Buy		S&TAG	Sen	27.00	Buy	2/3
Daldrup & Soehne	Becker	13.50	Buy	2/3/5	SAF-Holland	Schuldt	17.00	Neutral	
Demire	Mayer	4.55	Buy	2/5	Schaeffler	Tanzer	14.30	Buy	
Deutsche Bank	Häßler	14.00	Buy		Schaltbau Holding AG	Becker	32.70	Buy	2/7
Deutsche EuroShop	Mayer	30.00	Neutral		SCOUT24	Heilmann	31.00	Reduce	2
Deutsche Pfandbriefbank	Häßler	14.50	Accumulate		Siegfried Holding AG	Berzhanin	338.00	Neutral	7
Deutsche Telekom	Sen	13.30	Neutral		Siemens Healthineers AG	Rüzgar	39.00	Neutral	2
Duerr	Augustin	43.00	Accumulate		SLM Solutions	Sen	24.00	Sell	
DWS	Häßler	34.00	Buy		SMT Scharf AG	Rüzgar	17.50	Neutral	2/3
Ernst & Young	Schuldt	7.00	Sell		Software AG	Mildner	30.00	Sell	
elumeo SE	Josefson	10.90	Accumulate		Stabilus	Tanzer	91.00	Buy	
Epigenomics AG	Berzhanin	3.70	Buy	2/3	Suedzucker	Bruns	11.70	Reduce	
Euromicron AG	Becker	11.40	Buy	2/3/5	SuessMicroTec	Sen	13.80	Accumulate	2/3
Evonik	Hinkel	39.00	Buy		Surteco	Mildner	30.50	Buy	2/3
Eyemaxx Real Estate	Mayer	18.00	Buy	2/5/7	Symrise AG	Hinkel	67.00	Neutral	
Ferratum	Häßler	23.00	Buy		Syzygy AG	Heilmann	11.50	Accumulate	2/3
Fielmann	Heilmann	55.00	Reduce		TAKKT AG	Bruns	18.50	Neutral	2
First Sensor AG	Becker	27.30	Buy	7	Talanx Group	Häßler	39.00	Buy	
Freenet	Sen	36.00	Buy	2	Technotrans	Becker	45.20	Accumulate	2/3
FuchsPetrolub	Hinkel	48.00	Neutral		TELECOLUMBUS	Sen	9.70	Buy	
Gea Group	Augustin	33.00	Neutral		Telefonica Deutschland	Sen	3.40	Sell	
Gerrheimer AG	Rüzgar	69.00	Neutral		United Internet	Sen	63.00	Buy	
Gerry Weber	Josefson	5.75	Reduce		Vapiano	Bruns	26.50	Buy	2/7
Gesco	Becker	34.80	Buy	2/3	va-Q-tec	Sen	17.00	Neutral	2/3
GFT Technologies	Mildner	15.50	Buy	2/3	Viscom	Rüzgar	28.00	Buy	2/3
Gigaset	Sen	0.85	Accumulate	2/3	Volkswagen	Schuldt	162.00	Neutral	
Grenke	Häßler	90.00	Neutral		Wacker Neuson SE	Becker	27.20	Neutral	
Hannover Re	Häßler	110.00	Neutral		windeln.de	Josefson	3.10	Buy	2
Heidelberg Pharma	Berzhanin	3.50	Accumulate	2/3	XINGSE	Heilmann	305.00	Buy	
Heidelberger Druck	Augustin	3.60	Buy		Zalando	Josefson	44.50	Neutral	
HELLA GmbH & Co. KGaA	Tanzer	55.00	Accumulate						
Hornbach Holding	Bruns	89.00	Buy						
Hugo Boss	Josefson	81.00	Buy						
Hypoport AG	Häßler	176.00	Accumulate	2/7					
INDUS Holding AG	Becker	64.50	Neutral						
Intershop Communications AG	Mildner	1.85	Accumulate	2/7					
K+S AG	Hinkel	24.40	Neutral						
Koenig & Bauer	Augustin	72.00	Neutral						
Krones AG	Augustin	123.00	Accumulate						
KWS SAAT	Hinkel	348.00	Buy						
Lanxess	Hinkel	83.00	Buy						
Leoni	Schuldt	57.00	Neutral						
Linde	Hinkel	176.00	Neutral						
Logwin	Mildner	148.00	Neutral	2/3					

\*=Coverage suspended

Source: equinet Recommendations

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Buy - The stock is expected to generate a total return of over 20% during the next 12 months time horizon.

Accumulate - The stock is expected to generate a total return of 10% to 20% during the next 12 months time horizon.

Hold - The stock is expected to generate a total return of 0% to 10% during the next 12 months time horizon

Reduce - The stock is expected to generate a total return of 0 to -10% during the next 12 months time horizon

Sell - The stock is expected to generate a total return below -10% during the next 12 months time horizon

#### Basis of Valuation

Equinet Bank uses for valuation purposes primarily DCF-Valuations and Sum-Of-The-Parts-Valuations as well as peer group comparisons.

#### Share prices

Share prices in this analysis are the German closing prices of the last trading day before the publication.

#### Sources

Equinet Bank has made any effort to carefully research all information contained in the analysis. The information on which the analysis is based has been obtained from sources which we believe to be reliable such as, for example, Reuters, Bloomberg and the relevant press as well as the company which is the subject of the analysis. Only that part of the research note is made available to the issuer, who is the subject of the analysis, which is necessary to properly reconcile with the facts. Should this result in considerable changes a reference is made in the research note.

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-BaFin- (Federal Financial Supervisory Authority)  
Graurheindorfer Straße 108, 53117 Bonn and  
Marie-Curie-Str. 24-28, 60439 Frankfurt am Main



Recommendation history for FIRST SENSOR AG

Date	Recommendation	Target price	Price at change date
26. Jul 18	Buy	27.30	21.60
17. Mai 18	Accumulate	27.00	23.50

Source: Factset & ESN, price data adjusted for stock splits.

This chart shows equinet Bank continuing coverage of this stock; the current analyst may or may not have covered it over the entire period. Current analyst: Winfried Becker (since 25/04/2018)



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The ESN Recommendation System is **Absolute**. It means that each stock is rated on the basis of a **total return**, measured by the upside potential (including dividends and capital reimbursement) over a **12 month time horizon**.



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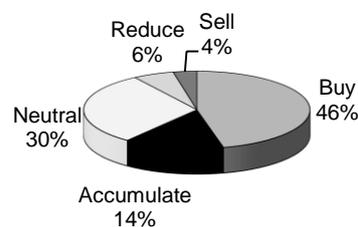
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- **Accumulate:** the stock is expected to generate total return of **5% to 15%** during the next 12 months time horizon
- **Neutral:** the stock is expected to generate total return of **-5% to +5%** during the next 12 months time horizon
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### Equinet Bank Ratings Breakdown



For full ESN Recommendation and Target price history (in the last 12 months) please see ESN Website [Link](#)

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