

Issues profit warning

SSH lowered on Tuesday its revenue estimate for 2019. The lowered outlook did not come as a surprise as the bar was set really high for Q4. We've cut our sales and EBIT estimates for 2019 and coming years. On the back of lowered estimates, our new target price is 1.0 euros (prev. 1.10), our recommendation remains SELL.

Lowering revenue estimate for 2019

SSH now estimates that its revenue from the software business (software fees, professional services, and recurring revenue) will decrease somewhat compared to 2018 level, which was 15.6 MEUR (excluding patent income). The previous guidance was for above 10% revenue growth. Reasons behind the lowered revenue outlook are lower professional services revenue than expected, negative FX impact from weakening euro, and postponement of significant NOX sales due to lengthy procurement processes.

Estimates cut, NOX showing signs of traction

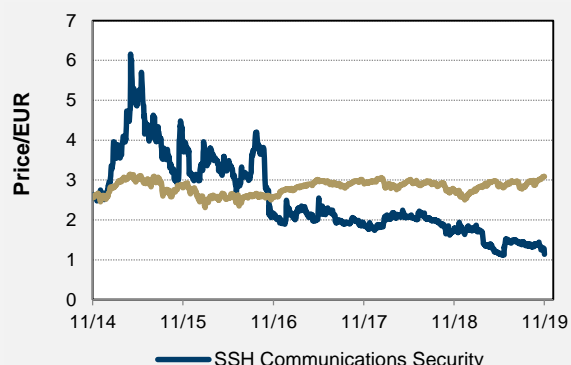
Due to the profit warning we have cut our 2019E net sales estimates from 17.1 MEUR to 15.0 MEUR, and 2019E EBIT from 0.9 MEUR to -0.9 MEUR. Consequently, our net sales estimates for 2020-21E are also cut ~8%, while our EBIT estimates are cut even further. The lowered net sales estimates have a clear negative effect on our profitability estimates, thus postponing profit turnaround into the future. On the positive, the firewall product NOX is showing promising traction, with SSH citing that "significant sales" were now postponed to 2020. Our read is that significant would mean deals in the seven-figure range. In Q3, SSH received a request for information (RFI) by the Finnish Defence Forces Logistics Command regarding NOX.

Target price 1.0 euros, recommendation unchanged

On the back of lowered estimates, our new target price is 1.0 euros (prev. 1.10), and our recommendation remains SELL. Our target price implies an EV/Sales multiple of 2.2x on our '20E estimate, slightly below Nordic software peers.

Rating

■ SELL



Share price, EUR (Last trading day's closing price) 1.14

Target price, EUR 1.0

Latest change in recommendation 12-Feb-19

Latest report on company 24-Oct-19

Research paid by issuer: YES

No. of shares outstanding, '000's 38,802

No. of shares fully diluted, '000's 38,802

Market cap, EURm 44

Free float, % -

Exchange rate EUR/USD -

Reuters code SSH1V.HE

Bloomberg code SSH1V FH

Average daily volume, EURm -

Next interim report

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■ BUY ■ HOLD ■ SELL

KEY FIGURES

	Sales EURm	EBIT EURm	EBIT %	FCF EURm	EPS EUR	P/E (x)	EV/Sales (x)	EV/EBIT (x)	FCF yield %	DPS EUR
2017	16.2	-1.7	-10.5%	-2.2	-0.08	-21.9	4.1	-39.1	-3.2	0.00
2018	18.3	0.5	2.7%	-2.0	-0.01	-163.0	3.6	130.6	-3.1	0.00
2019E	15.0	-0.9	-6.2%	-2.0	-0.04	-25.6	3.0	-49.4	-4.5	0.00
2020E	17.5	0.6	3.4%	1.0	0.00	522.6	2.5	74.0	2.3	0.00
2021E	19.6	1.1	5.6%	1.5	0.02	54.4	2.2	39.0	3.5	0.00
Market cap, EURm	44			Gearing 2019E, %	-86.7		CAGR EPS 2018-21, %	0.0		
Net debt* 2019E, EURm	0			Price/book 2019E	77.6		CAGR sales 2018-21, %	2.3		
Enterprise value, EURm	45			Dividend yield 2019E, %	0.0		ROE 2019E, %	-175.6		
Total assets 2019E, EURm	22			Tax rate 2019E, %	-1.2		ROCE 2019E, %	-6.4		
Goodwill 2019E, EURm	0			Equity ratio 2019E, %	61.4		PEG, P/E 19/CAGR	0.0		

*EUR 12m hybrid included in debt

All the important disclosures can be found on the last pages of this report.

Maintain SELL
recommendation with
target price of 1.10 euros
(prev. 1.10)

On our renewed 2019-20E estimates, SSH is trading at EV/Sales multiples of 3.0x and 2.5x, which is clearly below the sector as noted before. Despite the estimates cut, the big picture remains unchanged in our view, with the underlying question in the investment case still regarding growth. We note that, SSH is making progress, but the speed of the transition is slow due to limited growth investment capacity. On the back of lowered estimates, our new target price is 1.0 euros (prev. 1.10), our recommendation remains SELL. Our target price implies an EV/Sales multiple of 2.2x on our '20E estimate, slightly below Nordic software peers, which we see as warranted given weaker metrics and the uncertainty to our estimates.

Table1: Peer groups

Cybersecurity	MCAP	EV/EBIT			EV/SALES			P/E		
	MEUR	19	20	21	19	20	21	19	20	21
Check Point Software Tech	15995	13,5x	12,5x	11,5x	6,8x	6,2x	5,8x	18,9x	17,9x	16,6x
F-Secure	504	61,4x	32,0x	20,2x	2,4x	2,1x	1,9x	106,5x	45,6x	30,0x
Palo Alto Networks	21238	33,9x	28,5x	20,8x	6,9x	5,4x	4,3x	45,5x	43,1x	35,1x
Sophos Group	3258	50,2x	41,3x	33,0x	4,9x	4,4x	3,9x	50,3x	43,4x	36,5x
NortonLifeLock	13696	16,9x	16,9x	12,9x	4,8x	5,6x	5,5x	24,1x	23,1x	16,5x
Fortinet Inc	15529	29,1x	24,0x	19,7x	7,0x	5,9x	4,9x	41,5x	37,5x	33,5x
Peer Group Average	10938	34,2x	25,9x	19,7x	5,5x	4,9x	4,4x	47,8x	35,1x	28,0x
Peer Group Median	13696	31,5x	26,3x	19,9x	5,8x	5,5x	4,6x	43,5x	40,3x	31,7x
SSH (Evli est.)	44	-49,4x	74,0x	39,0x	3,0x	2,5x	2,2x	-25,6x	522,6x	54,4x

SSH prem./disc. to peer median

-48 % -54 % -52 %

Source FactSet, Evli Research

Cybersecurity	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
Check Point Software Tech	1677	8 %	4 %	4 %	50,2 %	50,0 %	50,5 %
F-Secure	191	15 %	8 %	8 %	3,8 %	6,7 %	9,3 %
Palo Alto Networks	1962	45 %	20 %	19 %	20,3 %	19,0 %	20,5 %
Sophos Group	636	6 %	9 %	8 %	9,7 %	10,6 %	11,8 %
NortonLifeLock	4235	-24 %	-17 %	-2 %	28,3 %	33,1 %	42,8 %
Fortinet Inc	1586	23 %	14 %	12 %	24,2 %	24,5 %	25,1 %
Peer Group Average	1715	12 %	6 %	8 %	22,8 %	24,0 %	26,7 %
Peer Group Median	1632	12 %	9 %	8 %	22,2 %	21,7 %	22,8 %
SSH (Evli est.)	18	-18 %	17 %	12 %	-6,2 %	3,4 %	5,6 %

Source FactSet, Evli Research

PAM vendors	MCAP	EV/EBIT			EV/SALES			P/E		
	MEUR	19	20	21	19	20	21	19	20	21
CyberArk Software	3950	31,2x	26,6x	20,9x	8,7x	7,1x	5,7x	44,2x	41,3x	35,8x
Wallix Group	74			13,6x	2,4x	1,6x	1,1x			31,5x
Peer Group Average	2012	31,2x	26,6x	17,3x	5,6x	4,3x	3,4x	44,2x	41,3x	33,6x
Peer Group Median	2012	31,2x	26,6x	17,3x	5,6x	4,3x	3,4x	44,2x	41,3x	33,6x
SSH (Evli est.)	44	-49,4x	74,0x	39,0x	3,0x	2,5x	2,2x	-25,6x	522,6x	54,4x

SSH prem./disc. to peer median

-46 % -41 % -35 %

Source FactSet, Evli Research

PAM vendors	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
CyberArk Software	304	28 %	19 %	18 %	28,0 %	26,5 %	27,1 %
Wallix Group	13	52 %	55 %	38 %	-26,8 %	-1,4 %	8,1 %
Peer Group Average	158	40 %	37 %	28 %	0,6 %	12,5 %	17,6 %
Peer Group Median	158	40 %	37 %	28 %	0,6 %	12,5 %	17,6 %
SSH (Evli est.)	18	-18 %	17 %	12 %	-6,2 %	3 %	6 %

Source FactSet, Evli Research

Nordic software companies	MCAP	EV/EBIT			EV/SALES			P/E		
	MEUR	19	20	21	19	20	21	19	20	21
Basware	352		343,4x	42,1x	2,7x	2,6x	2,3x			
Efecte	30				1,9x	1,7x				
Enea	344	16,1x	15,0x	12,8x	3,9x	3,6x	3,2x	22,0x	17,9x	16,5x
Infront	115	15,3x	13,4x	11,6x	2,9x	1,8x	1,7x	9,6x	14,4x	12,5x
Qt Group	440	10122,1x	55,5x	24,6x	7,8x	6,0x	4,9x		72,9x	32,2x
Peer Group Average	256	3384,5x	106,8x	22,8x	3,9x	3,2x	3,0x	15,8x	35,1x	20,4x
Peer Group Median	344	16,1x	35,2x	18,7x	2,9x	2,6x	2,8x	15,8x	17,9x	16,5x
SSH (Evli est.)	44	-49,4x	74,0x	39,0x	3,0x	2,5x	2,2x	-25,6x	522,6x	54,4x

SSH prem./disc. to peer median

4 % -1 % -21 %

Source FactSet, Evli Research

Nordic software companies	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
Basware	141	4 %	8 %	10 %	-9,3 %	0,7 %	5,5 %
Efecte	12	15 %	16 %	19 %	-10,0 %	-6,8 %	0,0 %
Enea	80	18 %	6 %	7 %	24,4 %	23,8 %	24,9 %
Infront	28	163 %	51 %	4 %	19,0 %	13,8 %	14,6 %
Qt Group	46	22 %	26 %	24 %	0,1 %	10,9 %	20,0 %
Peer Group Average	62	44 %	21 %	13 %	4,8 %	8,5 %	13,0 %
Peer Group Median	46	18 %	16 %	10 %	0,1 %	10,9 %	14,6 %
SSH (Evli est.)	18	-18 %	17 %	12 %	-6,2 %	3,4 %	5,6 %

Source FactSet, Evli Research

INTERIM FIGURES

EVLI ESTIMATES, EURm	2018Q1	2018Q2	2018Q3	2018Q4	2018	2019Q1	2019Q2	2019Q3	2019Q4E	2019E	2020E	2021E
Net sales	4.8	3.7	3.4	6.4	18.3	2.7	4.0	3.6	4.7	15.0	17.5	19.6
EBITDA	0.5	0.3	-0.4	1.7	2.1	-0.8	0.8	0.3	0.7	1.0	2.4	2.8
<i>EBITDA margin (%)</i>	<i>10.3</i>	<i>8.0</i>	<i>-11.9</i>	<i>26.5</i>	<i>11.3</i>	<i>-29.6</i>	<i>20.8</i>	<i>8.3</i>	<i>14.0</i>	<i>6.6</i>	<i>13.8</i>	<i>14.5</i>
EBIT	0.1	-0.1	-0.8	1.3	0.5	-1.3	0.4	-0.2	0.2	-0.9	0.6	1.1
<i>EBIT margin (%)</i>	<i>2.1</i>	<i>-2.7</i>	<i>-23.5</i>	<i>20.3</i>	<i>2.7</i>	<i>-48.1</i>	<i>10.8</i>	<i>-5.6</i>	<i>3.2</i>	<i>-6.2</i>	<i>3.4</i>	<i>5.6</i>
Net financial items	-0.1	0.1	0.0	0.0	0.0	0.1	-0.1	0.2	-0.1	0.1	-0.2	-0.1
Pre-tax profit	0.0	0.0	-0.8	1.3	0.5	-1.2	0.3	0.0	0.1	-0.8	0.4	1.0
Tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
<i>Tax rate (%)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>20.0</i>	<i>-1.2</i>	<i>20.0</i>	<i>20.0</i>
Net profit	-0.2	-0.2	-1.0	1.1	-0.4	-1.4	0.1	-0.2	-0.2	-1.7	0.1	0.8
EPS	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	-0.01	0.00	-0.04	0.00	0.02
EPS adjusted (diluted no. of shares)	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	-0.01	0.00	-0.04	0.00	0.02
Dividend per share	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SALES, EURm												
Software fees	1.7	0.7	1.0	2.1	5.5	0.5	1.7	1.3	2.2	5.7	6.8	8.2
Professional services	1.0	0.9	0.2	2.1	4.2	0.1	0.1	0.1	0.2	0.5	1.5	1.8
Recurring revenue	2.1	2.1	2.2	2.2	8.6	2.1	2.2	2.3	2.3	8.9	9.2	9.6
Total	4.8	3.7	3.4	6.4	18.3	2.7	4.0	3.6	4.7	15.0	17.5	19.6
SALES GROWTH, Y/Y %												
<i>Software fees</i>	<i>183.3</i>	<i>-30.0</i>	<i>42.9</i>	<i>23.5</i>	<i>37.5</i>	<i>-70.6</i>	<i>142.9</i>	<i>25.0</i>	<i>4.8</i>	<i>2.7</i>	<i>20.4</i>	<i>20.6</i>
<i>Professional services</i>	<i>150.0</i>	<i>50.0</i>	<i>-50.0</i>	<i>-16.0</i>	<i>7.7</i>	<i>-90.0</i>	<i>-88.9</i>	<i>-50.0</i>	<i>-92.9</i>	<i>-89.3</i>	<i>233.3</i>	<i>20.0</i>
<i>Recurring revenue</i>	<i>0.0</i>	<i>0.0</i>	<i>10.0</i>	<i>4.8</i>	<i>3.6</i>	<i>0.0</i>	<i>4.8</i>	<i>2.3</i>	<i>4.5</i>	<i>2.9</i>	<i>4.0</i>	<i>4.3</i>
<i>Total</i>	<i>54.8</i>	<i>0.0</i>	<i>9.7</i>	<i>1.6</i>	<i>13.0</i>	<i>-43.7</i>	<i>8.1</i>	<i>5.9</i>	<i>-27.3</i>	<i>-18.3</i>	<i>17.1</i>	<i>12.0</i>
EBIT, EURm												
Total	0.1	-0.1	-0.8	1.3	0.5	-1.3	0.4	-0.2	0.2	-0.9	0.6	1.1
EBIT margin, %												
<i>Total</i>	<i>2.1</i>	<i>-2.7</i>	<i>-23.5</i>	<i>20.3</i>	<i>2.7</i>	<i>-48.1</i>	<i>10.8</i>	<i>-5.6</i>	<i>3.2</i>	<i>-6.2</i>	<i>3.4</i>	<i>5.6</i>

INCOME STATEMENT, EURm	2014	2015	2016	2017	2018	2019E	2020E	2021E
Sales	16.2	18.9	15.1	16.2	18.3	15.0	17.5	19.6
<i>Sales growth (%)</i>	<i>22.7</i>	<i>16.6</i>	<i>-20.1</i>	<i>7.3</i>	<i>13.0</i>	<i>-18.3</i>	<i>17.1</i>	<i>12.0</i>
EBITDA	1.4	-2.8	-8.9	0.3	2.1	1.0	2.4	2.8
<i>EBITDA margin (%)</i>	<i>8.7</i>	<i>-14.7</i>	<i>-58.8</i>	<i>1.8</i>	<i>11.3</i>	<i>6.6</i>	<i>13.8</i>	<i>14.5</i>
Depreciation	-1.2	-1.6	-1.9	-2.0	-1.6	-1.9	-1.8	-1.7
EBITA	0.2	-4.4	-10.8	-1.7	0.5	-0.9	0.6	1.1
Goodwill amortization / writedown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	0.2	-4.4	-10.8	-1.7	0.5	-0.9	0.6	1.1
<i>EBIT margin (%)</i>	<i>1.2</i>	<i>-23.3</i>	<i>-71.5</i>	<i>-10.5</i>	<i>2.7</i>	<i>-6.2</i>	<i>3.4</i>	<i>5.6</i>
Reported EBIT	0.2	-4.4	-10.8	-1.7	0.5	-0.9	0.6	1.1
<i>EBIT margin (reported) (%)</i>	<i>1.2</i>	<i>-23.3</i>	<i>-71.5</i>	<i>-10.5</i>	<i>2.7</i>	<i>-6.2</i>	<i>3.4</i>	<i>5.6</i>
Net financials	0.2	0.5	-0.3	-0.5	0.0	0.1	-0.2	-0.1
Pre-tax profit	0.4	-3.9	-11.1	-2.2	0.5	-0.8	0.4	1.0
Taxes	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Minority shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	0.3	-3.9	-12.0	-3.1	-0.4	-1.7	0.1	0.8
Cash NRIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-cash NRIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BALANCE SHEET, EURm								
Assets								
Fixed assets	4	5	5	5	5	5	5	4
Goodwill	0	0	0	0	0	0	0	0
Right of use assets	0	0	0	0	1	0	0	1
Inventory	0	0	0	0	0	0	0	0
Receivables	8	6	9	5	5	4	5	6
Liquid funds	6	11	8	14	14	12	5	6
Total assets	18	22	22	23	25	22	15	16
Liabilities								
Shareholder's equity	8	-1	-4	1	1	1	1	1
Minority interest	0	0	0	0	1	1	1	1
Convertibles	0	12	12	12	12	12	0	0
Lease liabilities	0	0	0	0	1	0	0	1
Deferred taxes	0	0	0	0	0	0	0	0
Interest bearing debt	0	0	0	0	0	0	4	3
Non-interest bearing current liabilities	10	10	14	10	10	8	9	10
Other interest-free debt	0	0	0	0	0	0	0	0
Total liabilities	18	22	22	23	25	22	15	16
CASH FLOW, EURm								
+ EBITDA	1	-3	-9	0	2	1	2	3
- Net financial items	0	1	0	0	0	0	0	0
- Taxes	0	0	0	0	0	0	0	0
- Increase in Net Working Capital	0	3	0	0	-1	-1	1	1
+/- Other	0	0	-1	-1	-1	-1	0	0
= Cash flow from operations	2	0	-10	-1	0	-1	3	3
- Capex	-2	-3	-2	-1	-2	-1	-1	-2
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Free cash flow	0	-2	-12	-2	-2	-2	1	2
+/- New issues/buybacks	4	-5	9	8	2	1	0	0
- Paid dividend	0	0	0	0	0	0	0	0
+/- Other	-4	12	0	0	0	0	-8	-1
Change in cash	0	5	-3	6	0	-2	-7	1

KEY FIGURES	2015	2016	2017	2018	2019E	2020E	2021E
M-cap	95	67	68	65	44	44	44
Net debt (excl. convertibles)	-11	-8	-13	-13	-12	-1	-2
Enterprise value	95	71	67	65	45	44	43
Sales	19	15	16	18	15	18	20
EBITDA	-3	-9	0	2	1	2	3
EBIT	-4	-11	-2	1	-1	1	1
Pre-tax	-4	-11	-2	1	-1	0	1
Earnings	-4	-12	-3	0	-2	0	1
Equity book value (excl. minorities)	-1	-4	1	1	1	1	1
Valuation multiples							
EV/sales	5.1	4.7	4.1	3.6	3.0	2.5	2.2
EV/EBITDA	-34.3	-8.0	229.5	31.4	46.4	18.4	15.1
EV/EBITA	-21.7	-6.6	-39.1	130.6	-49.4	74.0	39.0
EV/EBIT	-21.7	-6.6	-39.1	130.6	-49.4	74.0	39.0
EV/OCF	317.0	-7.2	-99.3	1,193.9	-72.0	17.7	14.0
EV/FCFF	-34.0	-6.0	-40.1	-32.3	-25.5	27.8	20.9
P/FCFE	-41.6	-5.5	-31.5	-32.2	-22.3	42.8	28.7
P/E	-24.1	-5.6	-21.9	-163.0	-25.6	522.6	54.4
P/B	-160.6	-17.6	75.6	46.6	77.6	67.6	30.1
Target EV/EBITDA	0.0	0.0	0.0	0.0	40.8	16.2	13.2
Target EV/EBIT	0.0	0.0	0.0	0.0	-43.5	65.0	34.0
Target EV/FCF	0.0	0.0	0.0	0.0	-20.1	37.8	24.3
Target P/B	0.0	0.0	0.0	0.0	68.1	59.3	26.4
Target P/E	0.0	0.0	0.0	0.0	-22.4	458.4	47.7
Per share measures							
Number of shares	31,370	34,561	38,441	38,802	38,802	38,802	38,802
Number of shares (diluted)	31,370	34,561	38,441	38,802	38,802	38,802	38,802
EPS	-0.13	-0.35	-0.08	-0.01	-0.04	0.00	0.02
Operating cash flow per share	0.01	-0.28	-0.02	0.00	-0.02	0.06	0.08
Free cash flow per share	-0.07	-0.35	-0.06	-0.05	-0.05	0.03	0.04
Book value per share	-0.02	-0.11	0.02	0.04	0.01	0.02	0.04
Dividend per share	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend payout ratio, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend yield, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCF yield, %	-2.4	-18.2	-3.2	-3.1	-4.5	2.3	3.5
Efficiency measures							
ROE	0.0	0.0	0.0	-34.8	-175.6	13.8	76.6
ROCE	-45.7	-110.1	-16.1	3.6	-6.4	6.0	18.2
Financial ratios							
Inventories as % of sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Receivables as % of sales	29.3	56.6	29.6	29.6	29.6	29.6	29.6
Non-interest bearing liabilities as % of sales	54.7	90.1	63.6	53.6	53.6	53.6	53.6
NWC/sales, %	-25.5	-33.5	-34.0	-23.9	-23.9	-23.9	-23.9
Operative CAPEX/sales, %	13.7	15.8	9.2	11.3	9.1	8.4	7.8
CAPEX/sales (incl. acquisitions), %	13.7	15.8	9.2	11.3	9.1	8.4	7.8
FCFF/EBITDA	1.0	1.3	-5.7	-1.0	-1.8	0.7	0.7
Net debt/EBITDA, book-weighted	4.1	0.9	-46.6	-6.1	-11.8	-0.3	-0.8
Debt/equity, market-weighted	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Equity ratio, book-weighted	66.6	62.7	55.6	57.2	61.4	9.4	13.8
Gearing, %	-99.3	-95.6	-104.7	-89.3	-86.7	-42.8	-95.4

COMPANY DESCRIPTION: SSH Communications Security Corp (NASDAQ OMX Nordic: SSH1V) is the leading provider of enterprise cybersecurity solutions for securing access to servers and the cloud.

INVESTMENT CASE:

OWNERSHIP STRUCTURE	SHARES	EURm	%
Ylonen Tatu	14,508,473	16.540	37.4%
Clausal Computing Oy	3,808,650	4.342	9.8%
Mikkonen Juha Taneli	2,100,000	2.394	5.4%
Elo Mutual Pension Insurance Company	1,500,000	1.710	3.9%
Gaselli Capital Oy	1,200,000	1.368	3.1%
Ilmarinen Mutual Pension Insurance Company	1,165,300	1.328	3.0%
Syrjälä Timo Kalevi	835,011	0.952	2.2%
Varma Mutual Pension Insurance Company	755,300	0.861	1.9%
Taalariyhdas Mikro Markka Fund	623,000	0.710	1.6%
AC Invest Oy	400,000	0.456	1.0%
Ten largest	26,895,734	30.661	69%
Residual	11,906,266	13.573	31%
Total	38,802,000	44.234	100%

EARNINGS CALENDAR

OTHER EVENTS

COMPANY MISCELLANEOUS

CEO: Kaisa Olkkonen

CFO: Niklas Nordstrom

IR:

Kornetintie 3, FIN-00380 Helsinki

Tel: +358 20 500 7000

DEFINITIONS

P/E	$\frac{\text{Price per share}}{\text{Earnings per share}}$	EPS	$\frac{\text{Profit before extraord. items and taxes} - \text{income taxes} + \text{minority interest}}{\text{Number of shares}}$
P/BV	$\frac{\text{Price per share}}{\text{Shareholders' equity} + \text{taxed provisions per share}}$	DPS	Dividend for the financial period per share
Market cap	Price per share * Number of shares	OCF (Operating cash flow)	EBITDA – Net financial items – Taxes – Increase in working capital – Cash NRIs ± Other adjustments
EV (Enterprise value)	Market cap + net debt + minority interest at market value – share of associated companies at market value	FCF (Free cash flow)	Operating cash flow – operative CAPEX – acquisitions + divestments
EV/Sales	$\frac{\text{Enterprise value}}{\text{Sales}}$	FCF yield, %	$\frac{\text{Free cash flow}}{\text{Market cap}}$
EV/EBITDA	$\frac{\text{Enterprise value}}{\text{Earnings before interest, tax, depreciation and amortization}}$	Operative CAPEX/sales	$\frac{\text{Capital expenditure} - \text{divestments} - \text{acquisitions}}{\text{Sales}}$
EV/EBIT	$\frac{\text{Enterprise value}}{\text{Operating profit}}$	Net working capital	Current assets – current liabilities
Net debt	Interest bearing debt – financial assets	Capital employed/Share	$\frac{\text{Total assets} - \text{non-interest bearing debt}}{\text{Number of shares}}$
Total assets	Balance sheet total	Gearing	$\frac{\text{Net debt}}{\text{Equity}}$
Div yield, %	$\frac{\text{Dividend per share}}{\text{Price per share}}$	Debt/Equity, %	$\frac{\text{Interest bearing debt}}{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}$
Payout ratio, %	$\frac{\text{Total dividends}}{\text{Earnings before extraordinary items and taxes} - \text{income taxes} + \text{minority interest}}$	Equity ratio, %	$\frac{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}{\text{Total assets} - \text{interest-free loans}}$
ROCE, %	$\frac{\text{Profit before extraordinary items} + \text{interest expenses} + \text{other financial costs}}{\text{Balance sheet total} - \text{non-interest bearing debt (average)}}$	CAGR, %	Cumulative annual growth rate = Average growth per year
ROE, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholder's equity} + \text{minority interest} + \text{taxed provisions (average)}}$		

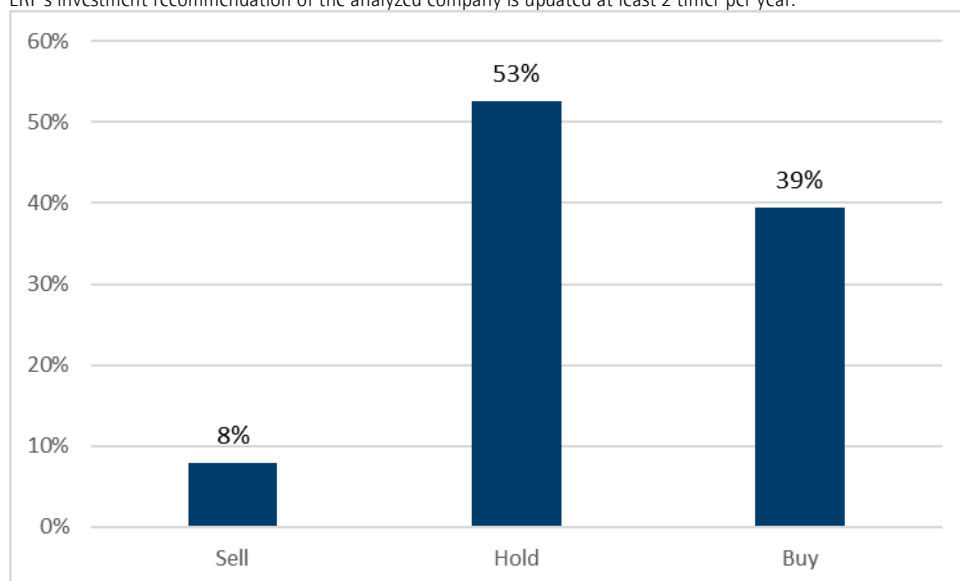
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Investment recommendations are defined as follows:

Target price compared to share price	Recommendation
< -10 %	SELL
-10 – (+10) %	HOLD
> 10 %	BUY

ERP's investment recommendation of the analyzed company is updated at least 2 timer per year.



The graph above shows the distribution of ERP's recommendations of companies under coverage in 1st of February 2019. If recommendation is not given, it is not mentioned here.

Name(s) of the analyst(s): Forslund

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