

High expectations for Q4

SSH's Q3 result missed our expectations and the company now needs a stellar Q4 in order to reach its guidance. SSH is progressing in the right direction, but the pace is slow due to limited growth investment capacity. We maintain our estimates and SELL recommendation with TP of 1.10 euros.

Result miss puts pressure on nailing Q4 to reach guidance

The Q3 result missed our expectations with sales being 3.6m vs our 5.0m estimate. SSH's prudent cost control led to lower opex than we had anticipated. Despite this, EBIT missed our expectations due to lower sales, with Q3 EBIT being -0.2m vs. 0.7m our estimate. Software fees were 1.3m (2.4m Evli), professional services were 0.1m (0.3m Evli), and recurring revenue was 2.3m (2.3m Evli). In order to reach FY'19 guidance, SSH needs some 7m sales in Q4, which would be an all-time best quarterly result. According to management, sales pipeline for Q4 is strong and they seem confident that the necessary key deals will be closed in Q4.

Secures €2M EU Horizon 2020 funding for PrivX program

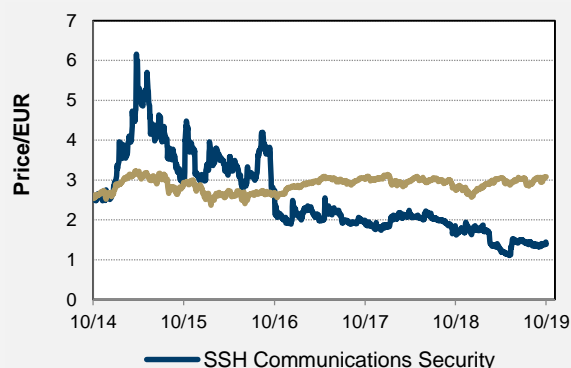
SSH successfully attained a €2m SME grant from the EU for development and marketing of PrivX over the next 24 months. Based on our discussion with management, we note that PrivX is still in a development phase and the new funding will be instrumental to accelerating PrivX's roadmap, with most of the funding going towards R&D. The funding supports our estimates for the coming years, but we do not make any estimate changes at this point. Management sees critical applications even in sensitive fields, such as banks and financial institutions which are important clients to SSH, eventually transitioning to cloud or private cloud environments, but the transition will be over time and gradual. Therefore, PrivX is adapted for on-premise, with full SaaS version being part of the roadmap.

Maintain SELL recommendation with target price of €1.10

Post Q3 result, we have not made any changes to our estimates. Regardless of the profit warning risk, the underlying question in the investment case is still regarding growth. We note that, SSH is making progress, but the speed of the transition is slow due to limited growth investment capacity. We maintain our SELL recommendation and target price of 1.10 euros.

Rating

SELL



Share price, EUR (Last trading day's closing price) 1.39

Target price, EUR 1.1

Latest change in recommendation 12-Feb-19

Latest report on company 18-Jul-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 54

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	5.5	202.5	-3.1	0.00
2019E	17.1	0.9	5.4%	-0.8	-0.01	-215.7	3.1	57.5	-1.5	0.00
2020E	19.1	1.2	6.3%	1.7	0.02	91.8	2.7	43.1	3.1	0.00
2021E	21.4	1.5	7.0%	2.1	0.03	46.2	2.3	33.1	4.0	0.00
Market cap, EURm			54	Gearing 2019E, %		-89.4	CAGR EPS 2018-21, %			0.0
Net debt* 2019E, EURm			-1	Price/book* 2019E		26.3	CAGR sales 2018-21, %			5.4
Enterprise value, EURm			53	Dividend yield 2019E, %		0.0	ROE 2019E, %			-14.5
Total assets 2019E, EURm			24	Tax rate 2019E, %		36.9	ROCE 2019E, %			6.3
Goodwill 2019E, EURm			0	Equity ratio 2019E, %		61.9	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.

We maintain our SELL recommendation and target price of 1.10 euros.

On our '19-20E estimates, SSH is trading at EV/Sales of 3.1x and 2.7x, which is below the sector and could prompt SSH to become an acquisition target of larger players wanting to enter the space or a consolidation play. However, as a standalone business, we'd like to see stronger growth coming through in the numbers to justify higher valuation. Our target price implies an EV/Sales multiple of 2.2x on our '20E estimate, broadly in line with Nordic software peers.

Table 1: Peer groups

Cybersecurity	MCAP MEUR	EV/EBIT			EV/SALES			P/E		
		19	20	21	19	20	21	19	20	21
Check Point Software Tech	14585	12,0x	10,8x	9,6x	6,0x	5,5x	4,9x	17,6x	16,6x	15,1x
F-Secure	434	55,3x	25,4x	16,8x	2,0x	1,8x	1,6x	9,1,7x	34,4x	23,9x
Palo Alto Networks	18596	29,3x	24,4x	17,6x	5,9x	4,6x	3,6x	40,3x	38,2x	31,2x
Sophos Group	3207	55,2x	46,3x	34,8x	4,9x	4,4x	3,9x	48,4x	42,3x	37,0x
Symantec	12854	11,0x	10,1x	9,3x	3,5x	3,3x	3,1x	13,7x	12,6x	12,1x
Fortinet Inc	11835	22,2x	17,8x	13,9x	5,2x	4,3x	3,4x	34,2x	31,1x	28,1x
Peer Group Average	9935	30,9x	22,5x	17,0x	4,6x	4,0x	3,4x	41,0x	29,2x	24,6x
Peer Group Median	12854	25,8x	21,1x	15,3x	5,0x	4,3x	3,5x	37,2x	32,7x	26,0x
SSH (Evli est.)	54	57,5x	43,1x	33,1x	3,1x	2,7x	2,3x	-215,7x	91,8x	46,2x

SSH prem./disc. to peer median

-38 % -37 % -34 %

Source FactSet, Evli Research

Cybersecurity	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
Check Point Software Tech	1677	7 %	4 %	4 %	50,1 %	50,3 %	50,9 %
F-Secure	191	16 %	9 %	9 %	3,7 %	7,2 %	9,5 %
Palo Alto Networks	1962	44 %	19 %	19 %	20,3 %	19,0 %	20,4 %
Sophos Group	636	5 %	9 %	9 %	8,8 %	9,4 %	11,2 %
Symantec	4235	2 %	2 %	0 %	31,6 %	32,8 %	33,2 %
Fortinet Inc	1586	20 %	13 %	12 %	23,3 %	23,9 %	24,5 %
Peer Group Average	1715	16 %	9 %	9 %	23,0 %	23,8 %	25,0 %
Peer Group Median	1632	11 %	9 %	9 %	21,8 %	21,5 %	22,5 %
SSH (Evli est.)	18	-7 %	12 %	12 %	5,4 %	6,3 %	7,0 %

Source FactSet, Evli Research

PAM vendors	MCAP MEUR	EV/EBIT			EV/SALES			P/E		
		19	20	21	19	20	21	19	20	21
CyberArk Software	3289	28,8x	23,0x	17,3x	7,3x	5,8x	4,6x	42,2x	37,2x	31,0x
Wallix Group	72			12,9x	2,3x	1,5x	1,0x			30,4x
Peer Group Average	1680	28,8x	23,0x	15,1x	4,8x	3,7x	2,8x	42,2x	37,2x	30,7x
Peer Group Median	1680	28,8x	23,0x	15,1x	4,8x	3,7x	2,8x	42,2x	37,2x	30,7x
SSH (Evli est.)	54	57,5x	43,1x	33,1x	3,1x	2,7x	2,3x	-215,7x	91,8x	46,2x

SSH prem./disc. to peer median

-35 % -26 % -18 %

Source FactSet, Evli Research

PAM vendors	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
CyberArk Software	304	25 %	19 %	18 %	25,4 %	25,3 %	26,7 %
Wallix Group	13	52 %	55 %	38 %	-26,8 %	-1,4 %	8,1 %
Peer Group Average	158	38 %	37 %	28 %	-0,7 %	12,0 %	17,4 %
Peer Group Median	158	38 %	37 %	28 %	-0,7 %	12,0 %	17,4 %
SSH (Evli est.)	18	-7 %	12 %	12 %	5,4 %	6 %	7 %

Source FactSet, Evli Research

Nordic software companies	MCAP MEUR	EV/EBIT			EV/SALES			P/E		
		19	20	21	19	20	21	19	20	21
Basware	291		292,2x	35,9x	2,3x	2,2x	2,0x			
Efecte	28				1,8x	1,6x				
Enea	318	14,2x	12,9x	11,2x	3,6x	3,2x	2,9x	18,9x	15,9x	14,9x
Infront	93	25,2x	12,8x	11,1x	2,8x	1,8x	1,6x	19,0x	12,6x	11,1x
Qt Group	345	1439,8x	42,2x		6,1x	4,6x		30504,5x	57,4x	25,6x
Peer Group Average	215	493,1x	90,0x	19,4x	3,3x	2,7x	2,2x	10180,8x	28,7x	17,2x
Peer Group Median	291	25,2x	27,6x	11,2x	2,8x	2,2x	2,0x	19,0x	15,9x	14,9x
SSH (Evli est.)	54	57,5x	43,1x	33,1x	3,1x	2,7x	2,3x	-215,7x	91,8x	46,2x

SSH prem./disc. to peer median

13 % 24 % 17 %

Source FactSet, Evli Research

Nordic software companies	Sales		Sales growth		EBIT-%		
	18	19	20	21	19	20	21
Basware	141	4 %	8 %	10 %	-9,7 %	0,7 %	5,5 %
Efecte	12	15 %	16 %	18 %	-11,4 %	-6,7 %	-0,5 %
Enea	80	20 %	5 %	7 %	25,1 %	25,0 %	25,7 %
Infront	28	155 %	51 %	4 %	11,0 %	13,8 %	14,6 %
Qt Group	46	21 %	25 %	24 %	0,4 %	10,9 %	20,0 %
Peer Group Average	62	43 %	21 %	12 %	3,1 %	8,7 %	13,1 %
Peer Group Median	46	20 %	16 %	10 %	0,4 %	10,9 %	14,6 %
SSH (Evli est.)	18	-7 %	12 %	12 %	5,4 %	6,3 %	7,0 %

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	6.8	17.1	19.1	21.4
EBITDA	0.5	0.3	-0.4	1.7	2.1	-0.9	0.7	0.2	2.4	2.4	2.9	3.0
<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>-33.3</i>	<i>18.3</i>	<i>5.6</i>	<i>35.3</i>	<i>14.2</i>	<i>15.2</i>	<i>14.1</i>
EBIT	0.1	-0.1	-0.8	1.3	0.5	-1.3	0.4	-0.2	2.0	0.9	1.2	1.5
<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>29.4</i>	<i>5.4</i>	<i>6.3</i>	<i>7.0</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	0.0
Pre-tax profit	0.0	0.0	-0.8	1.3	0.5	-1.2	0.3	0.0	1.9	1.0	1.0	1.5
Tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.2	-0.3
<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>36.9</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	1.3	-0.2	0.6	1.2
EPS	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	-0.01	0.03	-0.01	0.02	0.03
EPS adjusted (diluted no. of shares)	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	-0.01	0.03	-0.01	0.02	0.03
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	4.2	7.7	8.3	10.2
Professional services	1.0	0.9	0.2	2.1	4.2	0.1	0.1	0.1	0.3	0.6	1.6	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	9.4
Total	4.8	3.7	3.4	6.4	18.3	2.7	4.0	3.6	6.8	17.1	19.1	21.4
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>100.0</i>	<i>39.1</i>	<i>8.5</i>	<i>22.9</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>-85.7</i>	<i>-85.7</i>	<i>166.7</i>	<i>12.5</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>2.2</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>6.3</i>	<i>-6.6</i>	<i>11.7</i>	<i>12.0</i>
EBIT, EURm												
	0.1	-0.1	-0.8	1.3	0.5	-1.3	0.4	-0.2	2.0	0.9	0.0	1.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0
Total	0.1	-0.1	-0.8	1.3	0.5	-1.3	0.4	-0.2	2.0	0.9	1.2	1.5
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>29.4</i>	<i>5.4</i>	<i>6.3</i>	<i>7.0</i>

INCOME STATEMENT, EURm	2014	2015	2016	2017	2018	2019E	2020E	2021E
Sales	16.2	18.9	15.1	16.2	18.3	17.1	19.1	21.4
<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>-6.6</i>	<i>11.7</i>	<i>12.0</i>
EBITDA	1.4	-2.8	-8.9	0.3	2.1	2.4	2.9	3.0
<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>14.2</i>	<i>15.2</i>	<i>14.1</i>
Depreciation	-1.2	-1.6	-1.9	-2.0	-1.6	-1.5	-1.7	-1.5
EBITA	0.2	-4.4	-10.8	-1.7	0.5	0.9	1.2	1.5
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	1.2	1.5
<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>5.4</i>	<i>6.3</i>	<i>7.0</i>
Reported EBIT	0.2	-4.4	-10.8	-1.7	0.5	0.9	1.2	1.5
<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>5.4</i>	<i>6.3</i>	<i>7.0</i>
Net financials	0.2	0.5	-0.3	-0.5	0.0	0.1	-0.2	0.0
Pre-tax profit	0.4	-3.9	-11.1	-2.2	0.5	1.0	1.0	1.5
Taxes	-0.1	0.0	0.0	0.0	0.0	-0.4	-0.2	-0.3
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	-0.2	0.6	1.2
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	6	5	5
Goodwill	0	0	0	0	0	0	0	0
Right of use assets	0	0	0	0	0	0	0	0
Inventory	0	0	0	0	0	0	0	0
Receivables	8	6	9	5	5	5	6	6
Liquid funds	6	11	8	14	14	13	6	6
Total assets	18	22	22	23	24	24	16	17
Liabilities								
Shareholder's equity	8	-1	-4	1	1	2	3	4
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	0	0	0	0
Deferred taxes	0	0	0	0	0	0	0	0
Interest bearing debt	0	0	0	0	0	0	3	1
Non-interest bearing current liabilities	10	10	14	10	10	9	10	11
Other interest-free debt	0	0	0	0	0	0	0	0
Total liabilities	18	22	22	23	24	24	16	17
CASH FLOW, EURm								
+ EBITDA	1	-3	-9	0	2	2	3	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	0	0	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	-2	-1	-1
- 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	-1	2	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	-9	-1
Change in cash	0	5	-3	6	0	0	-8	1

KEY FIGURES	2015	2016	2017	2018	2019E	2020E	2021E
M-cap	95	67	68	65	54	54	54
Net debt (excl. convertibles)	-11	-8	-13	-13	-13	-3	-5
Enterprise value	95	71	67	101	53	52	50
Sales	19	15	16	18	17	19	21
EBITDA	-3	-9	0	2	2	3	3
EBIT	-4	-11	-2	1	1	1	2
Pre-tax	-4	-11	-2	1	1	1	1
Earnings	-4	-12	-3	0	0	1	1
Equity book value (excl. minorities)	-1	-4	1	1	2	3	4
Valuation multiples							
EV/sales	5.1	4.7	4.1	5.5	3.1	2.7	2.3
EV/EBITDA	-34.3	-8.0	229.5	48.8	22.0	17.9	16.5
EV/EBITA	-21.7	-6.6	-39.1	202.5	57.5	43.1	33.1
EV/EBIT	-21.7	-6.6	-39.1	202.5	57.5	43.1	33.1
EV/OCF	317.0	-7.2	-99.3	1,851.1	55.5	18.7	15.4
EV/FCFF	-34.0	-6.0	-40.1	-50.1	-61.0	28.2	22.8
P/FCFE	-41.6	-5.5	-31.5	-32.2	-67.8	32.0	25.2
P/E	-24.1	-5.6	-21.9	-163.0	-215.7	91.8	46.2
P/B	-160.6	-17.6	75.6	46.6	26.3	20.5	14.2
Target EV/EBITDA	0.0	0.0	0.0	0.0	17.4	14.0	12.7
Target EV/EBIT	0.0	0.0	0.0	0.0	45.4	33.8	25.6
Target EV/FCF	0.0	0.0	0.0	0.0	-53.0	24.0	17.9
Target P/B	0.0	0.0	0.0	0.0	20.8	16.2	11.2
Target P/E	0.0	0.0	0.0	0.0	-170.7	72.7	36.6
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	-0.01	0.02	0.03
Operating cash flow per share	0.01	-0.28	-0.02	0.00	0.02	0.07	0.08
Free cash flow per share	-0.07	-0.35	-0.06	-0.05	-0.02	0.04	0.06
Book value per share	-0.02	-0.11	0.02	0.04	0.05	0.07	0.10
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	-1.5	3.1	4.0
Efficiency measures							
ROE	0.0	0.0	0.0	-34.8	-14.5	25.1	36.2
ROCE	-45.7	-110.1	-16.1	3.6	6.3	11.4	24.8
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	10.3	5.6	5.1
CAPEX/sales (incl. acquisitions), %	13.7	15.8	9.2	11.3	10.3	5.6	5.1
FCFF/EBITDA	1.0	1.3	-5.7	-1.0	-0.4	0.6	0.7
Net debt/EBITDA, book-weighted	4.1	0.9	-46.6	-6.3	-5.5	-1.0	-1.7
Debt/equity, market-weighted	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Equity ratio, book-weighted	66.6	62.7	55.6	58.4	61.9	20.9	26.5
Gearing, %	-99.3	-95.6	-104.7	-92.8	-89.4	-86.3	-110.9

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	20.167	37.4%
Clausal Computing Oy	3,808,650	5.294	9.8%
Mikkonen Juha Taneli	2,100,000	2.919	5.4%
Elo Mutual Pension Insurance Company	1,500,000	2.085	3.9%
Gaselli Capital Oy	1,200,000	1.668	3.1%
Ilmarinen Mutual Pension Insurance Company	1,165,300	1.620	3.0%
Syrjälä Timo Kalevi	835,011	1.161	2.2%
Varma Mutual Pension Insurance Company	755,300	1.050	1.9%
Taalari Tehdas Mikro Markka Fund	623,000	0.866	1.6%
AC Invest Oy	400,000	0.556	1.0%
Ten largest	26,895,734	37.385	69%
Residual	11,906,266	16.550	31%
Total	38,802,000	53.935	100%

EARNINGS CALENDAR

OTHER EVENTS

COMPANY MISCELLANEOUS

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Kornetintie 3, FIN-00380 Helsinki

CFO: Niklas Nordstrom

Tel: +358 20 500 7000

IR:

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, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholder's equity} + \text{minority interest} + \text{taxed provisions (average)}}$		

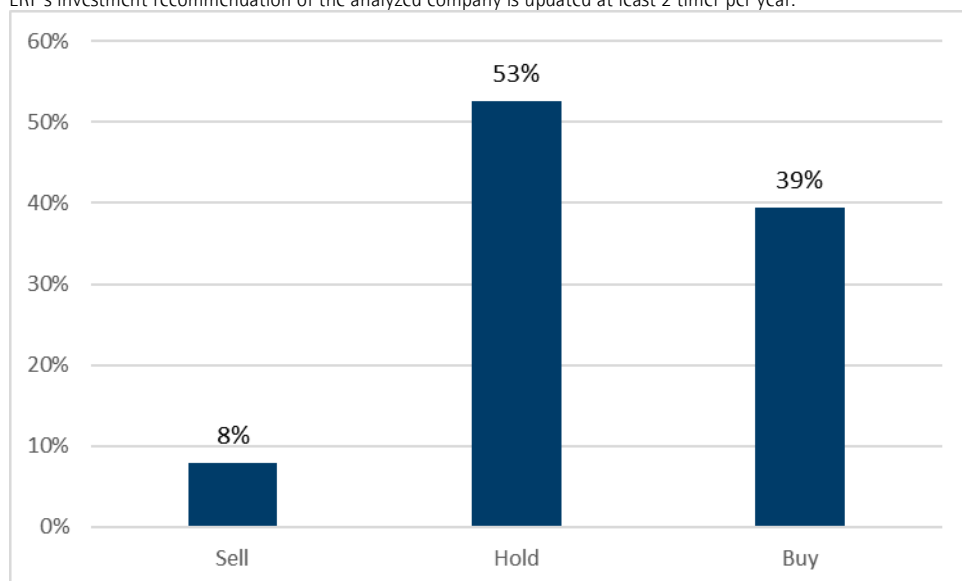
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Investment recommendations are defined as follows:

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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