## EVLI

## SSH COMMUNICATIONS SECURITY

Software/Finland, June 11, 2019 Company update

## CMD notes: High ambitions

SSH held a CMD yesterday, where the company offered insight into its business and outlined its long-term ambitions. The recently announced SSH200 Growth Vision aims at EUR 200m net sales during the 2020's, with primary growth engines being UKM and PrivX. We do not make any changes to our estimates or recommendation at this moment.

#### Addressable market not lacking in size or growth potential

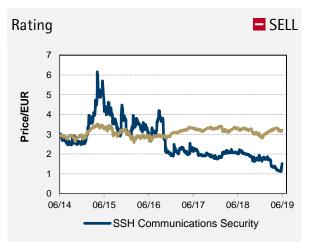
To reach EUR 200M in sales by 2029, SSH would need to grow around 24% annually. From the underlying market's perspective this is achievable, given the strong growth profiles in the markets. According to SSH, the Enterprise Key Management market is estimated to be USD 3.5 bln and expected to grow annually 21% by 2024. Looking at PrivX's market, the Privileged Access Management is estimated to be USD 6 bln, with 30% annual growth expectations by 2023.

#### The SSH200 Growth Vision

The growth engines for the vision are UKM and PrivX. SSH estimates that there are thousands of potential customers for UKM, with deal sizes ranging from a hundred thousand up to millions of euros. PrivX poses an even bigger opportunity, but currently the number of customers is small, and sales ramp up is still very much on-going. SSH does not expect any material revenue impact from PrivX this year, nor was the company ready to give any estimate on the number of customers or ARR it expects to have from PrivX in the coming years.

#### No changes to estimates and recommendation

SSH maintained its 2019 guidance (>10% growth from software business) and mid-term target (similar or faster growth than market). Apart from previously announced partnerships and alliances, SSH did not specify what concrete new measures it would take to accelerate growth or what investments it requires. Based on yesterday's CMD, we note that the vision is bold, but we'd like to see growth materializing in the figures. Thus, we have not made any changes to our estimates or recommendation. Our estimates reflect the company's current short and mid-term quidance.



Share price, EUR (Last trading day's closing price)	1.52
Target price, EUR	1.1
Latest change in recommendation	12-Feb-19
Latest report on company	18-Apr-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	59
Free float, %	na
Exchange rate EUR/USD	1.110
Reuters code	SSH1C.HE
Bloomberg code	SS1V FH
Average daily volume, EURm	-
Next interim report	17-Jul-19
Web site	www.ssh.com
Analyst	Jonas Forslund
E-mail	jonas.forslund@evli.com
Telephone	, 0

BUY HOLD SELL

KEY FIGU	RES									
	Sales EURm	EBIT EURm	EBIT %	Ptx profit EURm	EPS EUR	P/E (x)	EV/Sales (x)	P/CF (x)	EV/EBIT (x)	DPS EUR
2017	16	-2	-10.5%	-2	-0.08	-21.9	4.1	93.2	-39.1	0.00
2018	18	1	2.7%	1	-0.01	-163.0	5.5	68.3	202.5	0.00
2019E	17	0	1.2%	0	-0.02	-65.6	3.5	39.0	295.7	0.00
2020E	19	0	2.1%	0	0.00	-898.4	3.0	23.6	145.3	0.00
2021E	21	2	7.0%	1	0.03	51.4	2.6	18.1	37.3	0.00
Market cap	Market cap, EURm 59 BV per share 2019E, EUR				9E, EUR		21, %	0.0		
Net debt 20	019E, EURm		-1 F	rice/book 2019	Ξ		42.1 CAGR	sales 2018-	21, %	5.4
Enterprise	value, EURm		59 E	0 ividend yield 20	019E, %		0.0 ROE 20	019E, %		-64.2
Total assets	s 2019E, EURn	า	23 T	ax rate 2019E, o	/o		0.0 ROCE 2	2019E, %		1.4
Goodwill 2	019E, EURm		0 E	quity ratio 2019	9E, %		9.4 PEG, P	/E 19/CAGR		0.0

### EVLI EQUITY RESEARCH

## SSH COMMUNICATIONS SECURITY

### Software/Finland, June 11, 2019 Company update

#### SSH200 Growth Vision

EUR 200m net sales during 2020's

Big enough and growing

market opportunity

In conjunction with the CMD, SSH announced its SSH200 Growth Vision, which aims at EUR 200m net sales in the identity and access management market during the 2020's, with primary growth engines being UKM and PrivX. The company stated that the SSH200 vision describes SSH.COM's long-term growth ambitions. The growth vision is based on systematic long-term activities, and results will start showing over time.

Underlying the SSH200 vision is the digital transformation, adoption of cloud services, the erosion of digital borders, and growing cybersecurity threats that are driving the growth of the cybersecurity market and the need for major enterprises to integrate identity management, access management, cloud security, and underlying platform security to be more agile and resilient.

To reach EUR 200M in sales by 2029, SSH would need to grow around 24% annually. From the underlying market's perspective this is achievable, given that the cloud security is expected to exhibit 46% annual growth. According to SSH, the Enterprise Key Management market is estimated to be USD 3.5 bln and expected to grow annually 21% by 2024. Looking at PrivX's market, the Privileged Access Management is estimated to be USD 6 bln, with 30% annual growth expectations by 2023.

#### Figure 1: Cybersecurity market segments, source: SSH



SSH estimates that there are some 6-10 PAM "legacy players" and in total around 30 companies worldwide offering PAM solutions. According to Gartner, the PAM space is highly competitive with over 40 vendors serving the market, but five vendors accounting for two-thirds the revenue. CyberArk is currently the market leader.

SSH estimates that there are only 10-15 new "zero trust" cloud access players, with products similar to PrivX. Even if these estimates would turn out to be low, it highlights the fact that the number of PAM or cloud access players is still quite limited.

#### PrivX

PrivX is an administrative access management solution for servers and applications that is agnostic to the data environment, which means it works on-premise, and in hybrid and multi cloud environments. The product is intended for companies of all sizes; from startups to large corporations, as well as teams within enterprises.

Fierce competition, but number of vendors relatively low, especially in privileged cloud access

PrivX is designed to help corporations easily manage priveleged access in cloud environments and DevOps processes.

Software/Finland, June 11, 2019 Company update

Figure 2: Illustration of PrivX, source: SSH



Where traditional SSH-key solutions and managament systems are typically on-premise solutions and require deployment, the PrivX product is a light deployment "key-less" solution designed for cloud environments. In short, PrivX eliminates the need for passwords or keys from servers by using only short-term temporary credentials, that are created on demand, based on roles and entitlements. This eliminates the traditional need for issuing private keys that have to be safely stored (vaulted) and continously monitored and rotated. The advantages of PrivX is that it requires significantly less deployment, its TCO (total cost of ownership) is low, and it can rapidly scale according to the needs of the customer, which is highly important in today's cloudifying world.

Sales ramp up of PrivX has been slow Despite the apparent market opportunity and strong technology behind PrivX, the current customer base is still small (around 10), which is concerning given that the product has been live for well over a year and a half. According to SSH, slow sales has been due to the product not being completely ready and additional feature rollouts. According to SSH, now that sessions recording feature has been added, the product is now readier to be commercialized. SSH does not however expect any material revenue impact from PrivX this year, nor was the company ready to give any estimate on the number of customers or ARR it expects to have from PrivX in the coming years. To speed up the rate of new customers, SSH recently launched PrivX Free for small technology startups with less than 20 servers.

Cloud Access M&A activity Looking at PrivX's market, SSH estimates the Privileged Access Management to be USD 6 bln, with 30% annual growth expectations by 2023. Given the growth potential in privileged cloud access, there has been a number of recent M&A deals. Last summer, Okta acquired ScaleFT, which offered a similar solution to PrivX, in order to integrate it to its Identity Access Management solution. ScaleFT's Scale Access product was partly similar to SSH's PrivX product in that it also used fast-expiring credentials that are only valid for short periods. Most recently Symantec acquired an Israeli cloud access solutions startup called Luminate. Deal terms were not disclosed.

### Universal SSH Key Manager

Universal SSH Key Manager (UKM) is a solution for managing public SSH keys within mainly large organizations. With UKM, large enterprises can handle the provisioning and monitoring of keys, periodic key rotation, and proper access termination all from a centralized management platform. According to SSH, the Enterprise Key Management market is estimated to be USD 3.5 bln and expected to grow 21% annually by 2024.

### Software/Finland, June 11, 2019 Company update

### No changes to estimates and recommendation

SSH maintained its 2019 guidance (>10% growth from software business) and mid-term target (similar or faster growth than market). Apart from building sales channels through partnerships and alliances, such as previously announced Fujitsu, ForgeRock, and Ubisecure, SSH did not specify what concrete new measures it would take to accelerate growth or what investments it requires. Based on yesterday's CMD, we note that the vision is bold, but we'd like to see growth materializing in the figures. Thus, we have not made any changes to our estimates or recommendation. Our estimates reflect the company's current short and mid-term guidance.

### EVLI EQUITY RESEARCH

## SSH COMMUNICATIONS SECURITY

## Software/Finland, June 11, 2019 Company update

INTERIM FIGURES												
EVLI ESTIMATES, EURm	2018Q1	2018Q2	2018Q3	2018Q4	2018	2019Q1	2019Q2E	2019Q3E	2019Q4E	2019E	2020E	2021E
Net sales	5	4	3	6	18	3	4	5	5	17	19	21
EBITDA	0	0	0	2	2	-1	1	1	1	2	2	3
EBITDA margin (%)	10.3	8.0	-11.9	26.5	11.3	-33.3	18.2	15.2	22.2	10.5	11.0	14.1
EBIT	0	0	-1	1	1	- 1	0	0	1	0	0	2
EBIT margin (%)	2.1	-2.7	-23.5	20.3	2.7	-48.1	9.1	6.5	14.8	1.2	2.1	7.0
Net financial items	0	0	0	0	0	0	0	0	0	0	0	0
Pre-tax profit	0	0	-1	1	1	- 1	0	0	1	0	0	1
Tax	0	0	0	0	0	0	0	0	0	0	0	0
Tax rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	20.0	0.0	20.0	20.0
Net profit	0	0	-1	1	0	-1	0	0	0	-1	0	1
EPS	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	0.00	0.01	-0.02	0.00	0.03
EPS adjusted (diluted no. of shares)	-0.01	-0.01	-0.03	0.03	-0.01	-0.04	0.00	0.00	0.01	-0.02	0.00	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	2	1	1	2	6	1	2	2	3	7	8	10
Professional services	1	1	0	2	4	0	0	0	0	1	2	2
Recurring revenue	2	2	2	2	9	2	2	2	2	9	9	9
Total	5	4	3	6	18	3	4	5	5	17	19	21
SALES GROWTH, Y/Y %												
Software fees	183.3	-30.0	42.9	23.5	37.5	-70.6	171.4	110.0	33.3	32.7	13.7	22.9
Professional services	150.0	50.0	-50.0	-16.0	7.7	-90.0	-66.7	50.0	-85.7	-76.2	60.0	12.5
Recurring revenue	0.0	0.0	10.0	4.8	3.6	0.0	4.8	0.0	4.5	2.3	4.5	2.2
Total	54.8	0.0	9.7	1.6	13.0	-43.7	18.9	35.3	-15.6	-6.6	11.7	12.0
EBIT, EURm												
	0	0	-1	1	1	- 1	0	0	1	0	0	2
	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	-1	1	1	-1	0	0	1	0	0	2
EBIT margin, %												
Total	2.1	-2.7	-23.5	20.3	2.7	-48.1	9.1	6.5	14.8	1.2	2.1	7.0

## EVLI EQUITY RESEARCH

## SSH COMMUNICATIONS SECURITY

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INCOME STATEMENT, EURm	2014	2015	2016	2017	2018	2019E	2020E	2021E
Sales	16	19	15	16	18	17	19	21
Sales growth (%)	22.7	16.6	-20.1	7.3	13.0	-6.6	11.7	12.0
Costs	-15	-22	-24	-16	-16	-15	-17	-18
Reported EBITDA	1	-3	-9	0	2	2	2	3
Extraordinary items in EBITDA	0	0	0	0	0	0	0	0
EBITDA margin (%)	8.7	-14.7	-58.8	1.8	11.3	10.5	11.0	14.1
Depreciation	-1	-2	-2	-2	-2	-2	-2	-2
EBITA	0	-4	-11	-2	1	0	0	2
Goodwill amortization / writedown	0	0	0	0	0	0	0	0
Reported EBIT	0	-4	-11	-2	1	0	0	2
EBIT margin (%)	1.2	-23.3	-71.5	-10.5	2.7	1.2	2.1	7.0
Net financials	0	1	0	0	0	0	0	0
Pre-tax profit	0	-4	-11	-2	1	0	0	1
Extraordinary items	0	0	0	0	0	0	0	0
Taxes	0	0	0	0	0	0	0	0
Minority shares	0	0	0	0	0	0	0	0
Net profit	0	-4	-12	-3	0	-1	0	1
BALANCE SHEET, EURm								
Assets								
Fixed assets	4	5	5	5	5	6	5	5
% of sales	25	26	36	30	30	33	26	22
Goodwill	0	20	0	0	0	0	20	0
% of sales	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Inventory								
% of sales Receivables	0	0	0	0	0	0	0	0
	8	6	9	5	5	5	6	6
% of sales	46	29	57	30	30	30	30	30
Liquid funds	6	11	8	14	14	13	6	6
% of sales	38	60	52	83	74	74	30	30
Total assets Liabilities	18	22	22	23	24	23	16	17
Equity	8	-1	-4	1	2	2	2	3
% of sales	48	-3	-25	6	12	13	11	15
Deferred taxes	0	0	0	0	0	0	0	0
% of sales	0	0	0	0	0	0	0	0
Interest bearing debt	0	12	12	12	12	12	4	3
% of sales	0	64	79	74	67	70	21	12
Non-interest bearing current liabilities	10	10	14	10	10	9	10	11
% of sales	60	55	90	64	54	54	54	54
Other interest free debt	0	0	0	0	0	0	0	0
% of sales	0	0	0	0	0	0	0	0
Total liabilities	18	22	22	23	24	23	16	17
CASH FLOW, EURm	10			20	2.	20	10	
+ EBITDA	1	-3	-9	0	2	2	2	3
- Net financial items	0	1	-5	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	-1	-1	2	3
- Capex - Acquisitions	-2 0	-3 0	-2 0	-1 0	-2 0	-2 0	-1 0	-1
								0
+ Divestments	0	0	0	0	0	0	0	0
= Net cash flow	0	-2	-12	-2	-2	-1	1	2
+/- Change in interest-bearing debt	-4	12	0	0	0	0	-8	-1
+/- New issues/buybacks	4	-5	9	8	2	1	0	0
- Paid dividend	0	0	0	0	0	0	0	0
+/- Change in loan receivables	0	0	0	0	0	0	0	0
Change in cash	0	5	-3	6	0	-1	-7	1

## Software/Finland, June 11, 2019 Company update

95 1 95 -3 -4 -4 -4 -4 -1	67 4 71 15 -9 -11 -11	68 -1 67 16 0 -2	65 -1 101 18 2	59 -1 59 17	59 -2 58 19	59 -4 56
95 19 -3 -4 -4 -4	71 15 -9 -11 -11	67 16 0	101 18	59 17	58	56
19 -3 -4 -4 -4	15 -9 -11 -11	16 0	18	17		
-3 -4 -4 -4	-9 -11 -11	0			19	-
-4 -4 -4	-11 -11		2	~	13	21
-4 -4	-11	-2		2	2	3
-4		-	1	0	0	2
		-2	1	0	0	1
-1	-12	-3	0	-1	0	1
	-4	1	1	1	1	2
5.1	4.7	4.1	5.5	3.5	3.0	2.6
-34.3	-8.0	229.5	48.8	32.9	27.7	18.6
-21.7	-6.6	-39.1	202.5	295.7	145.3	37.3
-21.7	-6.6	-39.1	202.5	295.7	145.3	37.3
-422.7	-8.2	91.2	106.1	39.1	23.3	17.2
-41.3	-7.8	-316.9	48.8	36.9	31.3	21.1
-24.1	-5.6	-21.9	-163.0	-65.6	-898.4	51.4
-24.1	-5.6	-21.9	-163.0	-65.6	-898.4	51.4
-160.6	-17.6	75.6	46.6	42.1	44.2	23.8
5.0	4.4	4.2	3.6	3.4	3.1	2.8
-419.7	-7.7	93.2	68.3	39.0	23.6	18.1
0.0	0.0	0.0	0.0	214.2	104.5	26.5
-126.4	0.0	0.0	-1,983.6	-47.5	-650.2	37.2
0.0	0.0	0.0	0.0	30.5	32.0	17.2
31,370	34,561	38,441	38,802	38,802	38,802	38,802
31,370	34,561	38,441	38,802	38,802	38,802	38,802
-0.13	-0.35	-0.08	-0.01	-0.02	0.00	0.03
-0.13	-0.35	-0.08	-0.01	-0.02	0.00	0.03
-0.07	-0.27	-0.01	0.05	0.04	0.05	0.07
-0.01	-0.25	0.02	0.02	0.04	0.06	0.08
0.00	0.01	-0.02	0.03	0.04	0.01	-0.01
-0.02	-0.11	0.02	0.04	0.04	0.03	0.06
-0.02	-0.11	0.02	0.04	0.04	0.03	0.06
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	-34.8	-64.2	-4.8	60.1
-45.7	-110.1	-16.1	3.6	1.4	3.9	24.8
13.7	15.8	9.2	11.3	10.9	5.6	5.1
						72.0
						-1.3
0.1						0.0
						18.9
						-1.15
						0
						0
						0
	-21.7 -21.7 -422.7 -41.3 -24.1 -24.1 -160.6 5.0 -419.7 <i>0.0</i> -126.4 0.0 -126.4 0.0 31,370 -0.13 -0.13 -0.13 -0.13 -0.07 -0.01 0.00 -0.02 -0.02 -0.02 0.00 0.0 0.0 0.0 0.0 0.0 -125.7 -2 -2 -2 -2 -2 -2 -2 -0.2	$\begin{array}{ccccc} -21.7 & -6.6 \\ -21.7 & -6.6 \\ -422.7 & -8.2 \\ -41.3 & -7.8 \\ -24.1 & -5.6 \\ -24.1 & -5.6 \\ -24.1 & -5.6 \\ -160.6 & -17.6 \\ 5.0 & 4.4 \\ -419.7 & -7.7 \\ 0.0 & 0.0 \\ -126.4 & 0.0 \\ 0.0 & 0.0 \\ \hline \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

## Software/Finland, June 11, 2019 Company update

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	0/0
Ylonen Tatu	14,508,473	22.053	37.4%
Clausal Computing Oy	3,808,650	5.789	9.8%
Mikkonen Juha Taneli	2,100,000	3.192	5.4%
Elo Mutual Pension Insurance Company	1,500,000	2.280	3.9%
Gaselli Capital Oy	1,200,000	1.824	3.1%
Ilmarinen Mutual Pension Insurance Company	1,165,300	1.771	3.0%
Syrjala Timo Kalevi	835,011	1.269	2.2%
Varma Mutual Pension Insurance Company	755,300	1.148	1.9%
Taaleritehdas Mikro Markka Fund	623,000	0.947	1.6%
AC Invest Oy	400,000	0.608	1.0%
Ten largest	26,895,734	40.882	69%
Residual	11,906,266	18.098	31%
Total	38,802,000	58.979	100%

EARNINGS CALENDAR	
July 17, 2019 October 23, 2019	Q2 report
October 23, 2019	Q3 report
OTHER EVENTS	

COMPANY MISCELLANEOUS
CEO: Kaisa Olkkonen
CFO: Niklas Nordstrom
IR:

Kornetintie 3, FIN-00380 Helsinki Tel: +358 20 500 7000

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### DEFINITIONS

	T
P/E	EPS
Price per share	Profit before extraordinary items and taxes
Earnings per share	– income taxes + minority interest
	Number of shares
P/Sales	DPS
Market cap	Dividend for the financial period per share
Sales	
P/BV	CEPS
Price per share	Gross cash flow from operations
Shareholders' equity + taxed provisions per share	Number of shares
P/CF	EV/Share
Price per share	Enterprise value
Operating cash flow per share	Number of shares
EV (Enterprise value)	Sales/Share
Market cap + net debt + minority interest at market value	Sales
<ul> <li>– share of associated companies at market value</li> </ul>	Number of shares
Net debt	EBITDA/Share
Interest bearing debt – financial assets	Earnings before interest, tax, depreciation and a mortisation
	Number of shares
EV/Sales	EBIT/Share
Enterprise value	Operatingprofit
Sales	Number of shares
EV/EBITDA	EAFI/Share
Enterprise value	Pretax profit
Earnings before interest, tax, depreciation and amortisation	Number of shares
EV/EBIT	Capital employed/Share
Enterprise value	Totalassets – non interest bearingdebt
Operating profit	Number of shares
Div yield, %	Total assets
Dividend per share	Balancesheet total
Price per share	
Payout ratio, %	Interest coverage (x)
Totaldividends	Operatingprofit
${\sf Earnings} before \ extra ordinary \ items \ and \ taxes - income \ taxes + minority interest$	Financialitems
Net cash/Share	Asset turnover (x)
Financial assets – interest bearing debt	Turnover
Number of shares	Balancesheet total(average)
ROA, %	Debt/Equity, %
Operatingprofit + financial income + extraordinary items	Interest bearing debt
Balancesheet total – interest free short term debt	Shareholders' equity + minority interest + taxed provisions
<ul> <li>long term advances received and accounts payable (average)</li> </ul>	
ROCE, %	Equity ratio, %
Profit before extraordinary items + interest expenses + other financial costs	Shareholders' equity + minority interest + taxed provisions
Balancesheet total – noninterest bearing debt (average)	Total assets – interest free loans
ROE, %	CAGR, %
Profit before extraordinary items and taxes – income taxes	Cumulative annual growth rate = Average growth per year
Shareholders' equity + minority interest + taxed provisions (average)	

### Software/Finland, June 11, 2019 Company update

#### Important Disclosures

Evli Research Partners Plc ("ERP") uses 12-month target prices. Target prices are defined by utilizing analytical techniques based on financial theory including (but not limited to) discounted cash flow analysis and comparative valuation. The selection of valuation methods depends on different circumstances. Target prices may be altered on the basis of new information coming to light in the underlying company or changes in interest rates, changes in foreign exchange rates, other securities prices or market indices or outlook for the aforementioned factors or other factors that may change the conditions of financial markets. Recommendations and changes by analysts are available at https://research.evli.com/JasperAllModels.action?authParam=key;461&authParam=x;G3rNagWrtf7K&authType=3 Investment recommendations are defined as follows: Target price compared to share price Recommendation < -10 % SELL HOLD -10 - (+10) % > 10 % BUY ERP's investment recommendation of the analyzed company is updated at least 2 timer per year. 60% 53% 50% 39% 40% 30% 20% 8% 10% 0% Sell Hold Buy

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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#### Contact information SALES, TRADING AND RESEARCH

+358 9 4766 9205 +358 9 4766 9669

Equity Sales		Trading		ETFs and Derivatives	
Ari Laine Lauri Ahokanto Niclas Henelius	+358 9 4766 9115 +358 9 4766 9117 +358 9 4766 9116	Lauri Vehkaluoto (Head) Pasi Väisänen Antti Kässi	+358 9 4766 9130 +358 9 4766 9120 +358 9 4766 9120	Tobias Björk (Head) Joachim Dannberg Kimmo Lilja Sami Järvinen	+358 9 4766 9130 +358 9 4766 9123 +358 9 4766 9130 +358 9 4766 9110
Structured Investments		Equity Research			
Heikki Savijoki Aki Lakkisto	+358 9 4766 9726 +358 9 4766 9123	Jonas Forslund Joonas Ilvonen Jerker Salokivi Anna-Liisa Rissanen	+358 9 4766 9314 +358 44 430 9071 +358 9 4766 9149 +358 40 157 9919		
Evli Investment Solutions					

# EVLI

EVLI BANK PLC Aleksanterinkatu 19 A P.O. Box 1081 FIN-00101 Helsinki, FINLAND Phone +358 9 476 690 Fax +358 9 634 382 Internet www.evli.com E-mail firstname.lastname@evli.com

EVLI BANK PLC, STOCKHOLMSFILIAL Regeringsgatan 67 P.O. Box 16354 SE-103 26 Stockholm Sverige stockholm@evli.com Tel +46 (0)8 407 8000 Fax +46 (0)8 407 8001