

ESG insight



# VERISEC

## David and Goliath

From an investment standpoint, the Verisec narrative is all about momentum in: 1) Freja eID adding 'relying' parties; 2) user growth on the Freja eID platform validating the technology; and 3) the company's profitability trajectory. We forecast 2018–2021 sales CAGR of 30%+ and initiate coverage with a fair value of SEK100–140/share.

**eIDs: the cornerstone of a digital society.** Verisec's Identity-as-a-Service (IDaaS) Freja eID is a mobile ID platform that verifies, manages, and controls digital identities in online activities. From its challenger position as no.2 in the world's most mature eID market (Sweden, which we value at SEK1.2bn), our analysis reveals a long runway for growth underpinned by secular digitalisation trends: 1) time and cost savings; 2) a need for greater security online; 3) increased online sales of goods and services; and 4) legislation of electronic identification. We see Freja eID as a worthy competitor to BankID (which holds a monopoly-like position but we note government initiatives to lessen the reliance, benefiting Freja eID).

**Verisec benefits from platform network effects** with two main growth drivers for Freja eID: 1) the number of integrated service providers, extending the value to users; and 2) a growing number of users attracting new service providers. These factors amplify each other, creating competitive advantages that are hard to replicate. Approaching a critical base of relying partners in transaction-intensive target verticals (public sector and gambling) highlights customers' strong incentives to join Freja eID, and we expect it to commence initiatives to attract users by end-2019.

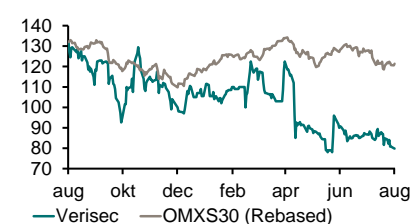
**Positioned for >30% sales CAGR and improving margins by 2021e.** We note solid progress in new adding relying parties over the past few quarters, rapidly extending the value for new users to the Freja eID platform. We expect a 30% sales CAGR by 2021 primarily on growing Freja eID adoption. As revenue growth materialises, we expect margins to improve as Verisec benefits from economies of scale in its IDaaS revenue model, reaching cash break-even by 2021e at a 4% EBIT margin.

**Initiating coverage with a SEK100–140/share fair value** based on a 25–30% discount to 2019–2021e peer multiples, a SOTP, and a DCF. On our estimates Verisec is trading at a 2020e EV/Sales of 3.1x. Our SOTP includes a 2021e EV/Sales of 0.9x for Freja eID, which could rapidly change as the no.2 in a market we value at SEK1.2bn.

Year-end Dec	2015	2016	2017	2018	2019e	2020e	2021e
Revenue (SEKm)	60	61	61	76	102	125	168
EBITDA adj (SEKm)	-7	-15	-18	-22	-15	-3	22
EBIT adj (SEKm)	-10	-19	-22	-28	-25	-15	7
PTP (SEKm)	-10	-18	-23	-29	-26	-15	7
EPS rep (SEK)	-1.95	-4.06	-5.03	-6.03	-5.09	-3.17	1.35
EPS adj (SEK)	-1.95	-4.06	-5.03	-6.03	-5.11	-3.17	1.35
DPS (SEK)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Revenue growth (%)	16.8	0.8	0.6	24.9	34.4	22.2	33.8
EBITDA margin adj (%)	nm	nm	nm	nm	nm	nm	13.4
EV/Sales adj (x)	4.71	5.47	6.46	5.77	3.71	3.06	2.21
EV/EBITDA adj (x)	nm	nm	nm	nm	nm	nm	16.4
EV/EBIT adj (x)	nm	nm	nm	nm	nm	nm	50.0
P/E adj (x)	nm	nm	nm	nm	nm	nm	59.2
ROE (%)	nm	nm	nm	nm	nm	nm	134.0
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCFF yield (%)	-4.6	-7.5	-5.6	-7.4	-6.0	-0.6	3.8

Source: Company (historical figures), DNB Markets (estimates)

VERI versus OMXS30 (12m)



Source: Factset

### SUMMARY

Share price (SEK)	79.8
Tickers	VERI SS, VERI ST

### CAPITAL STRUCTURE

No. of shares (m)	4.9
No. of shares fully dil. (m)	4.9
Market cap. (SEKm)	389
NIBD adj end-2019e (SEKm)	-9
Enterprise value adj (SEKm)	380
Net debt/EBITDA adj (x)	0.61
Free float (%)	44

Source: Company, DNB Markets (estimates)

Note: Unless otherwise stated, the share prices in this note are the last closing price.

### NEXT EVENT

Q3 2019	30/11/2019
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### ESTIMATE CHANGES (SEK)

Year-end Dec	2019e	2020e	2021e
Sales (new)	102.5	125.2	167.5
Change (%)	nm	nm	nm
EPS (new)	-5.11	-3.17	1.35
Change (%)	nm	nm	nm

Source: DNB Markets,

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### ANALYSTS

Joachim Gunell

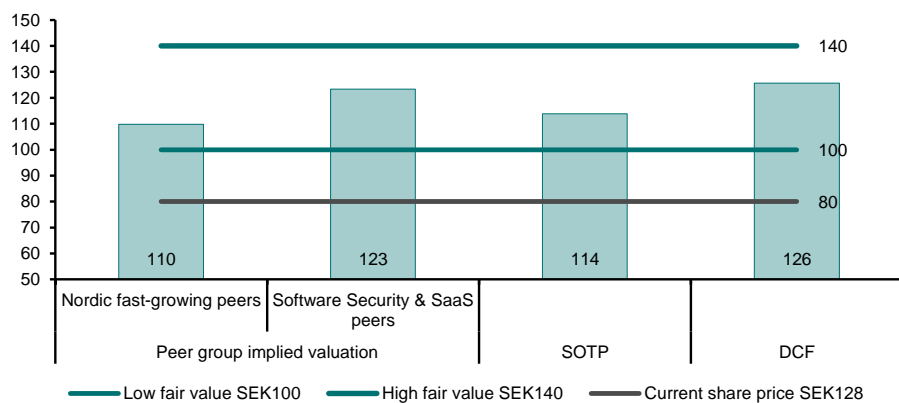
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# Overview

## Valuation (SEK)



Source: DNB Markets

### Downside risks to our fair value

- Lack of user base growth or customer acceptance of Freja eID’s technology could well hit the share price.
- Delayed EBIT break-even would raise the risk of recapitalisation.
- Escalating pricing pressure (per eID transaction) might not be offset by strong volume growth, which could hurt Freja eID’s top-line growth.
- Technology or security breaches could destroy user confidence in the business and create a significant headwind to growth.

Source: DNB Markets

### DNB Markets estimates

- Being loss-making in 2019–2020e is well flagged, near-term we expect the share price to be driven by: 1) Freja eID momentum adding relying parties; 2) user growth on the Freja eID platform validating the technology; and 3) news of profitability improvements.
- We expect a 30% sales CAGR by 2021. As revenue growth materialises, we expect margins to improve as Verisec benefits from economies of scale in its IDaaS model. Our FCF analysis suggests it needs to generate an EBIT margin of c5% by 2021e to reach cash break-even.

Source: DNB Markets

## Valuation methodology

- Our fair value of SEK100–140/share is based on peers’ multiples, a SOTP, and a DCF. On our estimates the stock is trading at a 2020e EV/Sales of 3.1x.
- Our bull-case fair value of SEK250–300/share assumes Freja eID achieves 600 relying parties and adds 800,000 users by end-2021e.
- Our bear-case fair value of SEK50–60/share assumes no Freja eID sales by 2021e (including a rights issue).

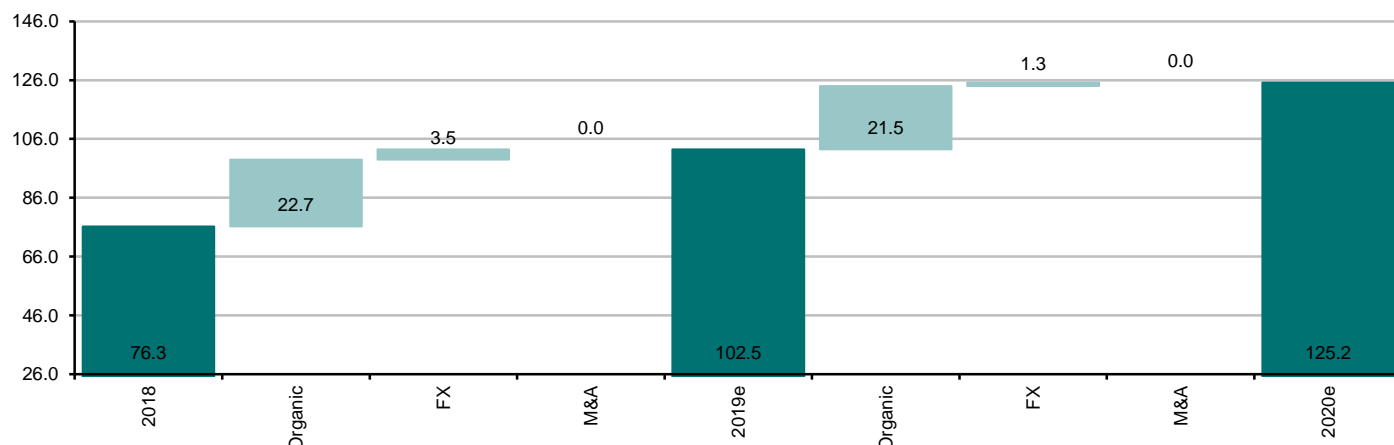
Source: DNB Markets

### Upside risks to our fair value

- Continued reports of new reliant parties and an accelerated user base growth should be good for sentiment, supporting our sales growth forecasts.
- Large framework agreements with a cluster of organisations, service providers, municipalities, banks etc.
- Better cost control, implying higher margins. In a mature state, we note other SaaS peers achieve 30–40% EBIT margins.
- As the only internationally scalable eID solution, the Swedish market could act as a stepping stone into the Nordics and potentially Europe.

Source: DNB Markets

## Sales bridge 2018–2020e (SEKm)



Source: DNB Markets (forecasts), company (historical data)

## ESG overview

### Sustainability assessment

	Positive	Negative
Conclusions	<ul style="list-style-type: none"> <li>■ Digital identities such as Freja eID are imperative for the spread of digitalisation. The ability to prove we are who we say we are is increasingly determining our opportunities to establish trust and carry out meaningful interactions in a digital economy. We have identified several secular ESG drivers and the value proposition is simple: increased security and efficiency, and lower costs.</li> </ul>	<ul style="list-style-type: none"> <li>■ We have identified the following ESG risks: 1) potential misuse without proper control; 2) technical failures or data breaches; and 3) exclusion of individuals.</li> </ul>
Actions being taken by company	<ul style="list-style-type: none"> <li>■ Private and public services alike are struggling to keep up with managing identities seamlessly online, and eID providers such as Freja eID are the foundation of enabling a digital society.</li> </ul>	<ul style="list-style-type: none"> <li>■ Verisec offers the only inclusive mobile eID in Sweden that is not reliant on personal identity numbers. Users can choose what data they share for which service interaction, with whom, and for how long.</li> </ul>

### Key ESG drivers

#### Short-term

- Entering a legally binding agreement with pen and paper takes time, costs money, and has slow turnaround times, whereas usernames and passwords (dominant online solution today) are threatening digitalisation as users are reluctant to utilise digital services that are only password-protected. Managing digital identities is front and centre for many IT administrators as digital IDs are key to how we act online.
- The reasons for this have become evident in recent surveys: 1) Verizon reports that 80% of confirmed breaches resulted from weak or poorly protected passwords; 2) Identity as a Service reduces labour costs by 30–35%, according to Forrester; and 3) McKenzie sees a 90% cost reduction in customer onboarding from eIDs with the time taken for these interactions reduced from weeks to minutes.

#### Long-term

- Improved security in the digital society, as digital IDs can help to reduce fraud, offering a higher degree of confidence in authentication. eIDs are increasingly demanded to replace passwords as c90% of users request eID as an online login over passwords to feel more secure, according to GSMA.
  - Regulation playing into the hands of eIDs: 1) eIDAS regulation gives electronic transactions the same legal standing as paper-based transactions in EU member states; 2) GDPR; and 3) PSD2, which should increase eID adoption.
  - Increased sales of goods and services. Through streamlined digital onboarding, digital channels should increase sale of goods, boosting GDP.
- Potential misuse without proper controls. As eID system administrators (private or government) would gain access to – and control – large-scale population data, it has the potential to be used for fraud, tracking ethnic groups, political manipulation and unauthorised surveillance, and has the possibility to restrict online access such as payments, travel, and social media.
  - Technical failures or data breaches are threats to any digital ecosystem, so ensuring system quality from a reputational point of view is imperative.
  - Processing vital customer data could create privacy risks etc. if Verisec decided to use its user data as a monetisation tool for other services.
  - As digital identities increasingly become the foundation of the digital environment, excluding individuals without sufficient technological access or savviness could drive an aversion to adopting eIDs, which is why alternative conventional ID options should remain.
  - Changes to directives and legislation for eIDs could pose a risk if one communication standard were adopted across the EU for instance.
  - Changing customer behaviour could mean identification via mobile phones becomes obsolete. Yet, Verisec has a dynamic history of adapting its IT security solutions to meet customer demand and transition its offering.

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## Summary of positives

### Challenger position in a market ripe for disruption

Verisec's Identity-as-a-Service (IDaaS) Freja eID is a mobile ID ecosystem that verifies, manages, and controls digital identities in online activities such as log-in, signing, and approval – the cornerstone of a digital society. Freja eID has been launched in the world's most mature eID market (Sweden, which has 75% eID adoption), for which we forecast a 20%+ CAGR by 2021e supported by four key secular digitalisation trends: 1) time and cost savings; 2) a need for greater security online; 3) increased online sales of goods and services; and 4) legislation of electronic identification. Our analysis suggests a long-tailed shift to IDaaS from the number of users and the number of authentications and signings. Freja eID's no.2 position in the Swedish mobile eID market that we value at SEK1.2bn provides a good start, and we estimate the Nordic mobile eID market could be worth SEK3bn in 2019, where we believe Freja eID is the only internationally scalable solution with the potential to become Sweden's independent national eID in eIDAS – the EU regulation on electronic identification.

### Verisec benefits from platform company dynamics – network effects

There are two main growth drivers for Freja eID: 1) integrated service providers extending the value to users; and 2) users attracting new service providers. These factors amplify each other, creating growing competitive advantages that are hard to replicate. Thus, Verisec's focus has been to build a relevant base of service providers with a broad user base and high interaction, now at 99 (86 relying<sup>1</sup> parties, 13 partners). We consider it positive that Freja eID's relying parties have grown to c100 with no existing user base, suggesting that customers see an attractive business case. Among existing ecosystem parties we note a heavy skew towards the public and gambling sectors (target verticals for Verisec). Both are transaction-intensive (often small transaction values), which is why they have strong incentives to join the Freja eID platform, as its flexible pricing model allows more efficient budgeting and cost control as they pay a fixed price instead of a per-transaction cost.

### We believe Freja eID is a worthy complement to competing Swedish mobile BankID

Sweden's eID market is very reliant on BankID, which holds a monopoly-like position. To lessen reliance on it, the Swedish Agency for Digital Government formed a citizens' 'System of Choice' for electronic identification in 2017. Coming out of this, Freja eID was the only government-approved mobile eID compliant with the requirements for the 'Svensk e-legitimation' quality mark. Also, the Swedish Financial Supervisory Authority's investigation of eIDs on August 30 2019 highlighted the potential problems of BankID's dominant market position. In our view, monopoly-like situations seldom benefit users, as: 1) being too reliant on one provider threatens the digital ecosystem; 2) increased competition sparks innovation and improved product quality; and 3) there is no price competition. We believe Freja eID is as competitive on technology and ease-of-use as BankID's mobile app. We consider BankID's drawbacks to be: 1) its reliance on Swedish social security numbers (could be seen as a discriminatory based on users' identity related data); and 2) it does not have the 'Svensk e-legitimation' quality mark.

### Positioned for >30% sales CAGR and improving margins

Business model transition has allowed for revenues stable but elevated opex, yet in recent quarters Verisec has started to deliver on its path to profitability. We note solid progress in new adding relying parties in recent quarters, rapidly expanding the value for new users to the Freja eID platform. We expect a >30% 2018–2021 sales CAGR primarily on growing Freja eID adoption. As revenue growth materialises, we expect margins to improve as Verisec benefits from economies of scale in its IDaaS revenue model. Our FCF analysis suggests it needs to generate an EBIT margin of c5% in 2021e to reach cash breakeven.

### At c60% ownership, management's interests are aligned with those of shareholders

Management has 20+ years' experience in IT security, originating from high-growth company Protect Data that was acquired by cyber security global leader Check Point in 2007 for cSEK4bn (5x NTM EV/sales). We believe management's background evidences key digital identity knowledge and building scalable high-growth companies.

Swedish market (which we value at SEK1.2bn) could act as a stepping stone to a Nordic total addressable market of SEK3bn where secular growth drivers provide a long runway for growth

Network effects drive growth for Freja eID, where the number of users and services amplify each other and the value of the platform

Competing BankID launched its mobile eID solution in 2010, giving it a headstart to Freja eID. Yet, we see Freja eID as a worthy complement and potential disruptor to incumbents

Verisec has invested heavily in Freja eID, which has held back margins...

...but we forecast a >30% 2018–2021 sales CAGR and healthy operational leverage will allow for EBIT breakeven by 2021

Proven management ability to exploit potential in high-growth IT security companies and retain c60% ownership

<sup>1</sup> So-called 'relying' parties are system integrators and integrated service providers on the Freja eID platform.

## Summary of negatives

### No evidence that 'network effects' for Freja eID are gaining ground yet

As discussed, the number of users on the Freja eID platform will be the swing factor on our assessment of its growth prospects and Verisec's valuation, as the number of users determines the number of services (Verisec's customers) attracted to the platform. We expect Verisec to reach critical mass of relying parties by end-2019; this should prompt it to intensify its efforts to drive platform user growth. Yet, if by end-2019 and into H1 2020 it does not report of user base growth in Freja eID, it would raise concerns about the attractiveness of its product offering, in our view. In such a scenario we see little evidence that Verisec's sales growth could be at a turning point, and we would have to revisit our forecasts for Freja eID.

Bears could claim Freja eID provides little evidence that growth is at a turning point near-term

### Large eID market potential could mean intensified competition

While we view Freja eID as an up-and-coming potential disruptor in the Nordic eID market, we conclude its offering is fairly similar to that of no.1 player in Sweden, Bank ID, in terms of ease-of-use, capabilities, deployment, and to some extent pricing. This indicates the space could become highly competitive as BankID would likely want to defend its monopoly-like position in Sweden. In a scenario with escalating pricing pressure (per eID transaction), this might not be offset by strong volume growth, which could hurt Freja eID's top-line growth. Banks are still the most trusted provider of eIDs in Europe according to our analysis, while the rapid growth of the mobile eID market means we cannot rule out that large technology companies could make inroads too.

Competition is already strong, and might toughen

### Lacklustre profitability and FCF generation increases the risk of recapitalisation

As of end-Q2 2019, Verisec's cash position was SEK8m (net cash of SEK38m including the SEK30m credit facility) and with an annual FCF burn rate of cSEK25m–30m on average in 2016–2018, investor concerns about the balance sheet could increase. We estimate Verisec is adequately capitalised for the operational business EBIT and cash flow breakeven by 2021. Yet, as we forecast negative cumulative FCF of SEK26m for 2019–2020, a delay would likely mean more funding is needed. That said, Verisec's track record of being a profitable high-growth company offers some relief (30%+ sales growth, 15–20% EBIT margin before entering the investment phase for Freja eID).

Delayed EBIT breakeven would raise the risk of additional funding requirements

### If Freja eID does not take off, valuation would look rich

If Freja eID sales do not materialise, we see little evidence that group organic growth could grow strongly near-term driven by the legacy business and do not believe it would deserve a 12-month forward EV/Sales of 3.7x. In such a scenario (with the risk of recapitalisation rising), our bear-case fair value is SEK50–60/share.

Bear-case fair value of SEK50–60/share

### Security compromise or regulatory change

Verisec's business model is built on the trust customers place in its ability to deliver a secure signature and authentication platform that is enforceable under law and the regions in which the company operates. As eID system administrators would gain access and control of large-scale population data, there is the potential to use it for fraud, tracking particular ethnic groups, political manipulation, and unauthorised surveillance, with the possibility to restrict online access such as payments, travel, and social media while any technical failures or data breaches would be threats to any digital ecosystem. Changes in that dynamic (through security breach or a change in regulation) would be detrimental to the company.

Security breaches could destroy user confidence in the business and create a significant headwind to growth

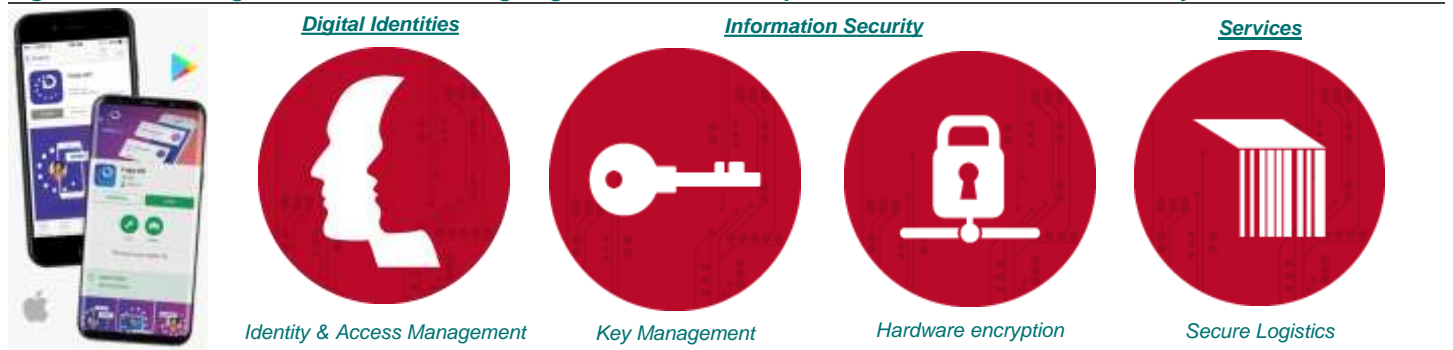
## An introduction to Verisec

Dating back to 2002, Verisec has a dynamic history of adapting its IT security solutions to meet customer demand, having transitioned from being the leading Nordic provider of security tokens for banking, governments, corporations etc (physical devices) to a cloud-based Identity as a Service (IDaaS) platform of trust providing Sweden's new mobile e-identity (eID). Verisec's Freja eID is a mobile ID ecosystem that verifies, manages, and controls digital identities in online activities such as log-in, signing, and approval. While the business model was overhauled in 2016 as customers demanded next-generation identities as a service, the foundation remains securing identity to prove you are who you say you are in a digital context.

Verisec's Identity-as-a-Service (IDaaS) offering secures digital identities, the cornerstone of a digital society

80% of confirmed breaches due to weak/poorly protected passwords, according to Verizon

Figure: Verisec's digital identities are in ongoing transition from on-premises solutions towards Identity-as-a-Service



Source: Company (underlying data), DNB Markets (structuring)

■ **Digital identities** through the complete security suite Freja, which offers locally installed B2B security solutions to manage digital identities on a large scale (two-factor authentication, user enrolment and device provisioning, cloud single sign-on). In particular, the Freja eID replaces complicated usernames/passwords with an easy-to-use mobile app. Freja is the only eID provider with a quality mark 'Svensk e-legitimation' issued by the Swedish Agency for Digital Government (DIGG) and Verisec has applied to DIGG to position Freja eID as Sweden's independent national eID in eIDAS, the EU's regulation to drive digital growth and cross-border electronic transactions between member states. In addition, we note that the Swedish Financial Supervisory Authority's investigation of eIDs, whose referral on 30 August 2019 highlighted competing BankID's shortcomings and the potential problems from its dominant market position, benefits Freja eID, in our view.

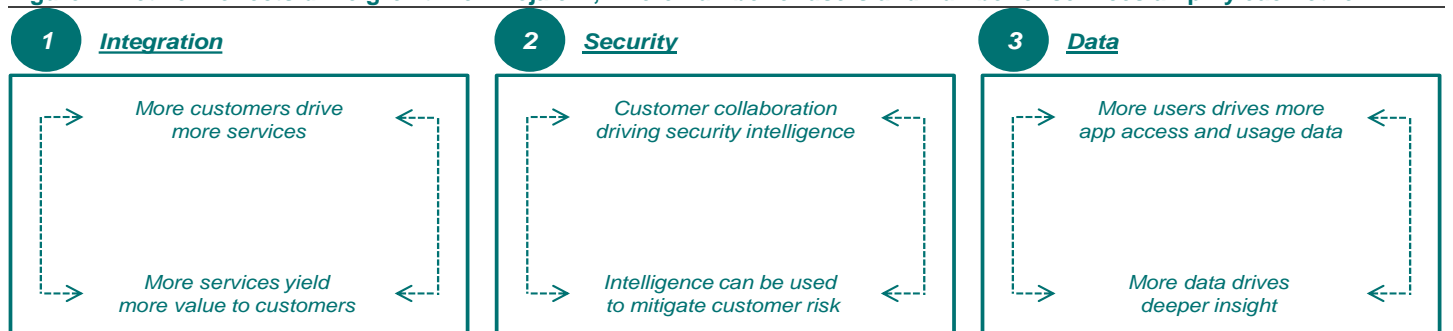
eIDs allow citizens to securely authenticate themselves to online services as proof of identification

■ **Information Security** involves key management solutions (the proprietary Chiave suite), hardware encryption and decryption of sensitive data, payments and communication where its distributor partnership with Thales comprises the bulk of its hardware sales.

There are two main growth drivers for Freja eID: 1) integrated service providers, extending the value to users; and 2) users attracting new service providers. As these factors amplify each other, it creates accelerating competitive advantages that are hard to replicate. Thus, Verisec's focus has been to build a relevant base of service providers with a broad user base and high interaction, now at 99 (86 relying parties, 13 partners).

Positioned to benefit from network effects where number of users determines platform's success

Figure 1: Network effects drive growth for Freja eID, where number of users and number of services amplify each other



Source: DNB Markets

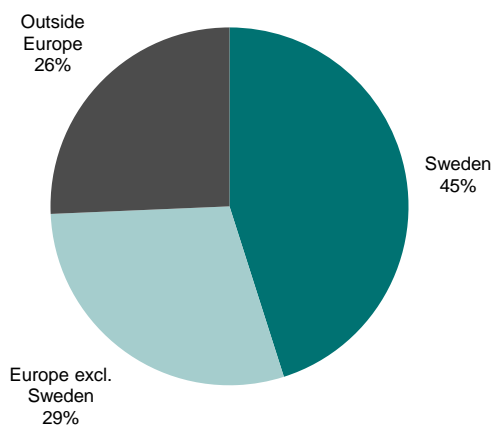
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The company's partners include system integrators such as Tieto, Svensk e-identitet, Curity and CGI, with which Verisec's potential customers in the private and public sectors collaborate. Verisec's geographical sales mix still reflects its legacy products of internet bank security tokens and third-party hardware security modules, with 45% of 2018 sales from Sweden, 29% from elsewhere in Europe, and 26% from Latin America and the Middle East. While Freja eID will initially target the mature market for eIDs in Sweden, it will also be positioned to expand in the Nordics and eventually elsewhere in Europe as broader adoption of eIDs is yet to be material in those markets, where Freja eID could position itself to drive that shift.

Taking market share in mature home eID market of Sweden is Verisec's focus...

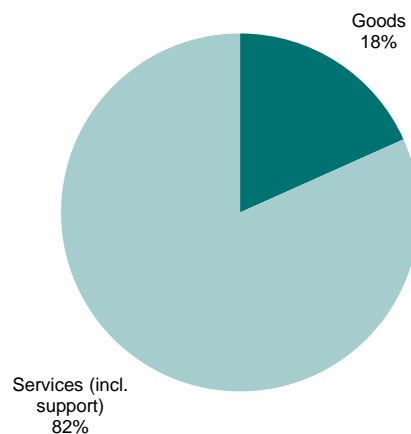
...and we see opportunities elsewhere in the Nordics

Figure 2: Geographical sales split (2018)



Source: Verisec

Figure 3: Sales by business model (2018)



Source: Verisec

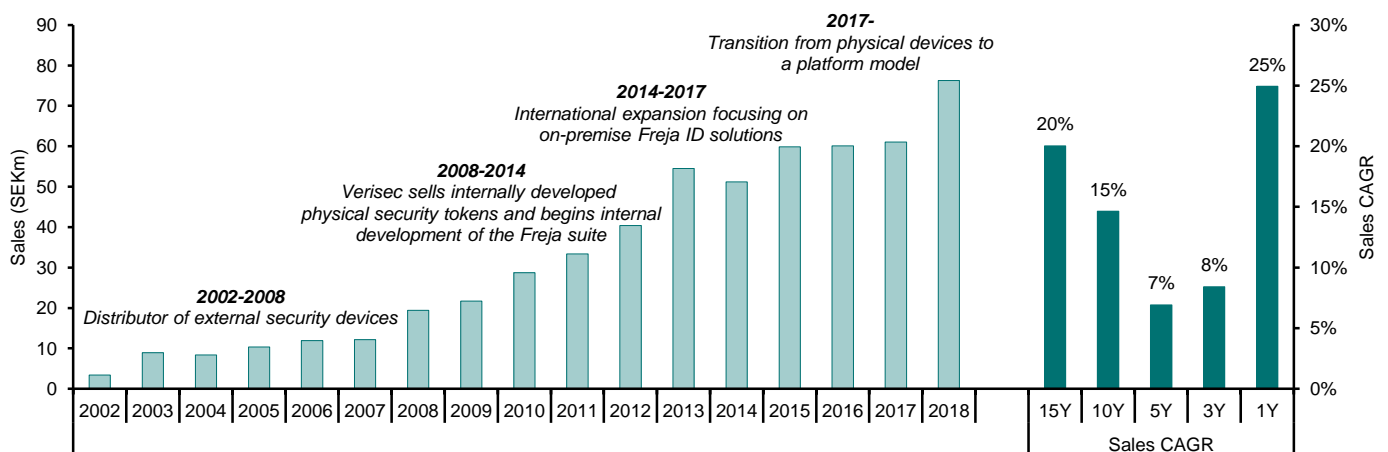
The Freja eID platform is free for users (consumer) and accessed via a mobile app. It is online service providers (businesses, municipalities, authorities, banks, online payment processes etc) where users log in, sign, or approve that are Verisec's customers, foremost via a transaction-based business model, which is the most common procurement method for the public sector (typically SEK0.15 per transaction), and complemented by a fixed subscription model, facilitating budgeting for customers.

Transaction-based business model means Verisec is building a broad user base with frequent interaction services

Verisec reported 2018 net sales of SEK76m (past 15-year sales CAGR of 20%), with a stable gross margin (60%+) but an operating loss of SEK28m (-37% EBIT margin), as management is investing into growth by adding as many Swedish service providers and users as possible at this early stage of growth (Freja eID launch in H2 2017) to build a large enough revenue base to create leverage and drive margin expansion.

Freja eID is key to reigniting organic growth, in our view

Figure 4: Verisec's 17-year footprint in the IT security market builds trust



Source: Company (underlying data), DNB Markets (graph structuring)



# Verisec in the digital identities market

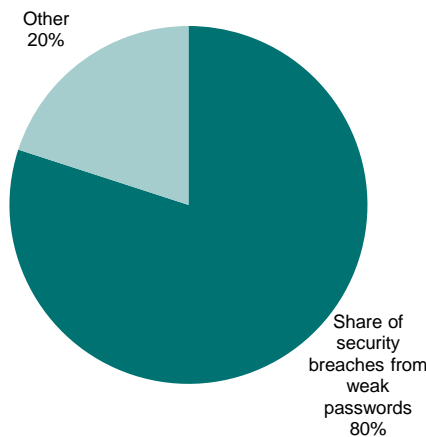
## Market overview

As more and more people, devices, and services move online and to the cloud, there is growing focus on the foundation of the digital environment – trusted identities. The ability to prove we are who we say we are is increasingly determining our opportunities to establish trust with each other and to carry out meaningful interactions in a digital economy.

Among the weakest links in online security is the simple username and password, which is behind 80% of confirmed security breaches according to Verizon’s 2019 Data Breach Survey. Furthermore, managing numerous sets of login details is becoming increasingly inconvenient, as evidenced by GSMA’s research that says 86% of users abandon a website when asked to register and the same percentage would prefer a single strong identity to authorise transactions and access services online (banking, government benefits, education etc.).

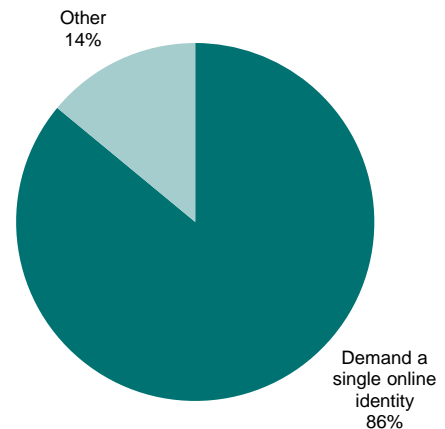
Becoming increasingly clear we need a standardised and secure way to verify our identity online

**Figure 5: 80% of breaches are caused by weak passwords**



Source: Verizon 2019 Data Breach Survey

**Figure 6: 86% of users demand a single strong identity to access different online authentications**



Source: GSMA Intelligence 2018

The opportunity for value creation through digital IDs is growing as technology improves, implementation costs decline, and access to smartphones and the internet increases. The foundational digital infrastructure that supports digital IDs grows in reach every day as digital IDs become increasingly embedded in everything we do.

Digital infrastructure that supports digital IDs grows in reach every day...

Every day we go through authentication processes that give others confidence in our assertions of who we claim to be, and these verifiable identities create new markets for businesses, offer a new way of governing for the public sector, and offer new jobs, financial services, etc for individuals.

...and positions digital ID at the centre of how to act online

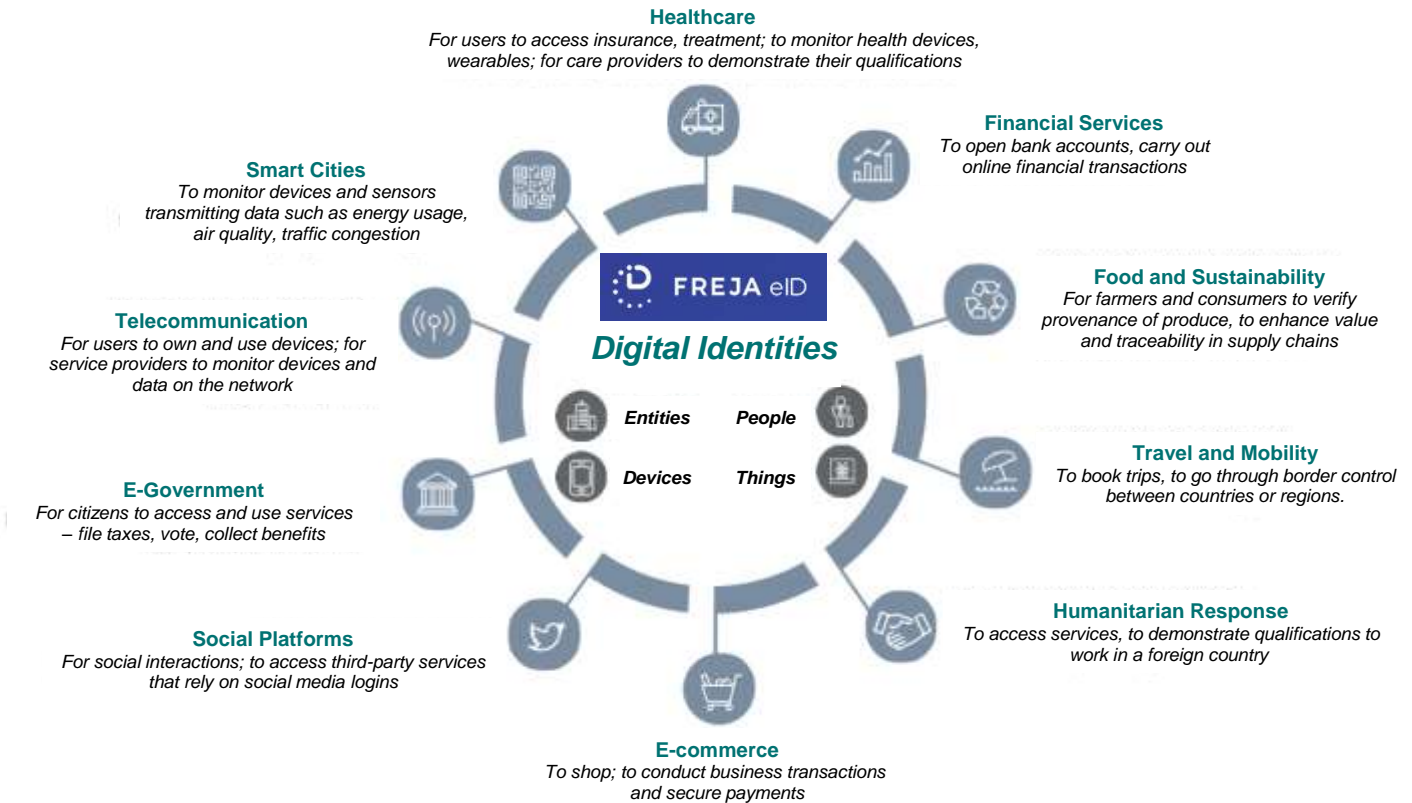
Albeit from a small base, Gartner estimates the global IDaaS market should have a CAGR of 37% from 2018 to 2021e, which we believe can be attributed to increasing digitalisation, the outsourcing of legacy security technologies that have typically been handled in-house, and global regulations (such as GDPR). Moreover, McKinsey describes ID verification as a service as “the next global USD20bn industry”.

Global IDaaS market CAGR of 37% from 2018 to 2021e

ID verification could grow into a USD20bn market

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Figure 7: Digital identities at the centre of everyday lives

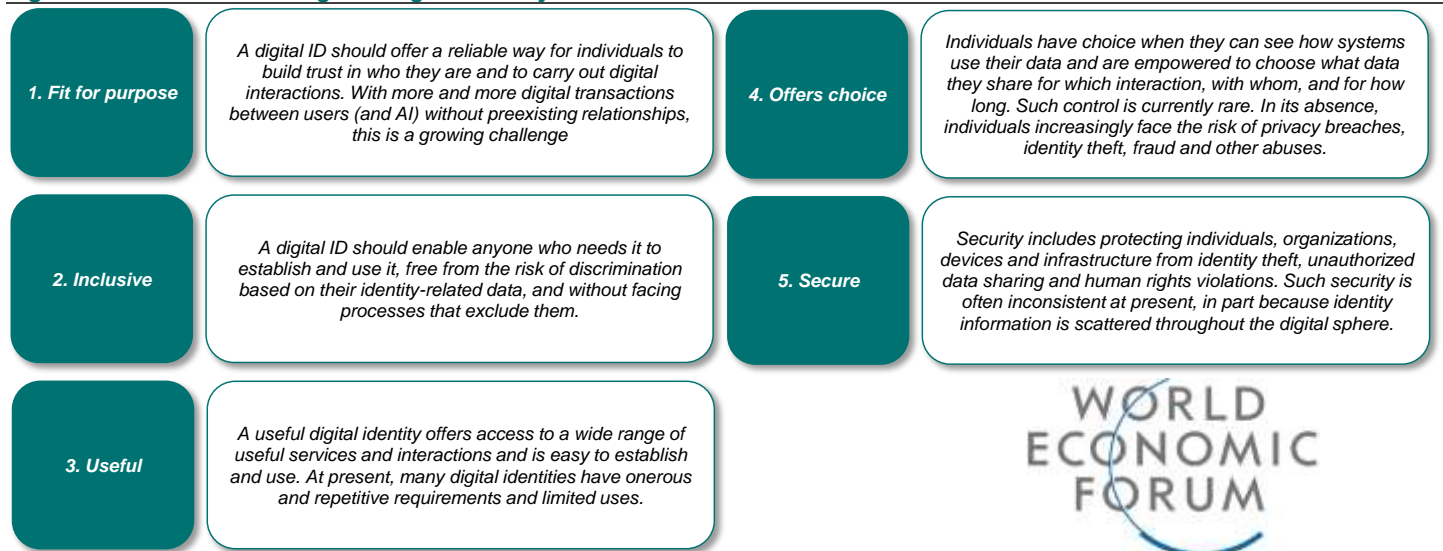


Source: World Economic Forum (underlying data), DNB Markets (graph structuring)

At the World Economic Forum in Davos in 2018, stakeholders from government, civil society, and businesses identified the following five elements that a user-centric digital identity should satisfy to deliver real user value and drive eID adoption.

eID should be fit for purpose, inclusive, useful, offer choice, and be secure

Figure 8: Five elements of 'good' digital identity

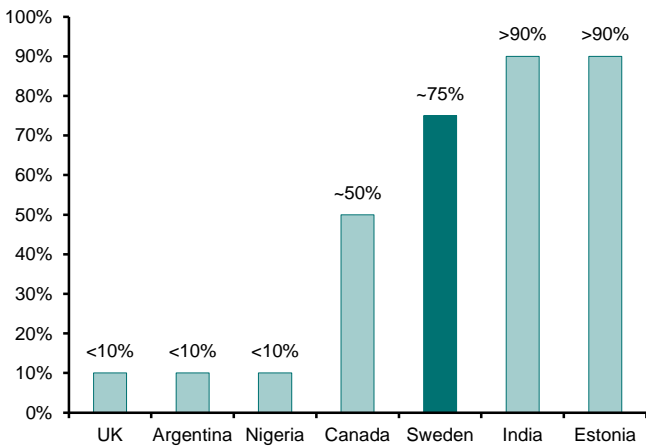


Source: World Economic Forum (underlying data), DNB Markets (graph structuring)

Electronic signatures have been around for years, but we believe we are approaching a time when adoption could accelerate as seen in mature eID markets such as Estonia (with >90% adoption) and Sweden (c75%). For many mature eID markets, the private sector – particularly the mobile industry – has played a key role in building national identity systems and authentication programmes as smartphone adoption has driven online interaction.

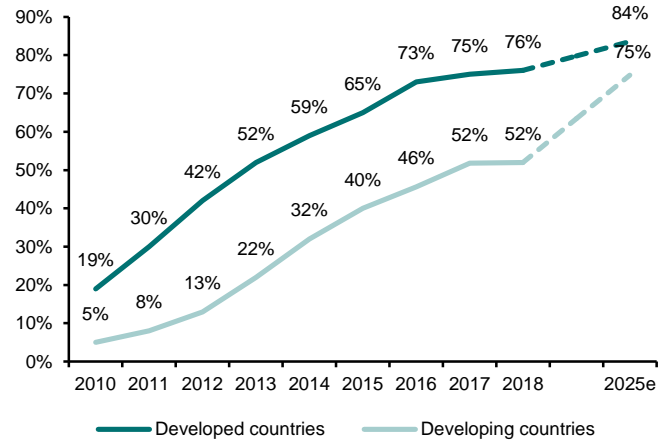
We believe eIDs are approaching a time when adoption could accelerate

Figure 9: Digital ID adoption (April 2019)



Source: McKinsey Global Institute analysis

Figure 10: Smartphone adoption is a key driver for eIDs

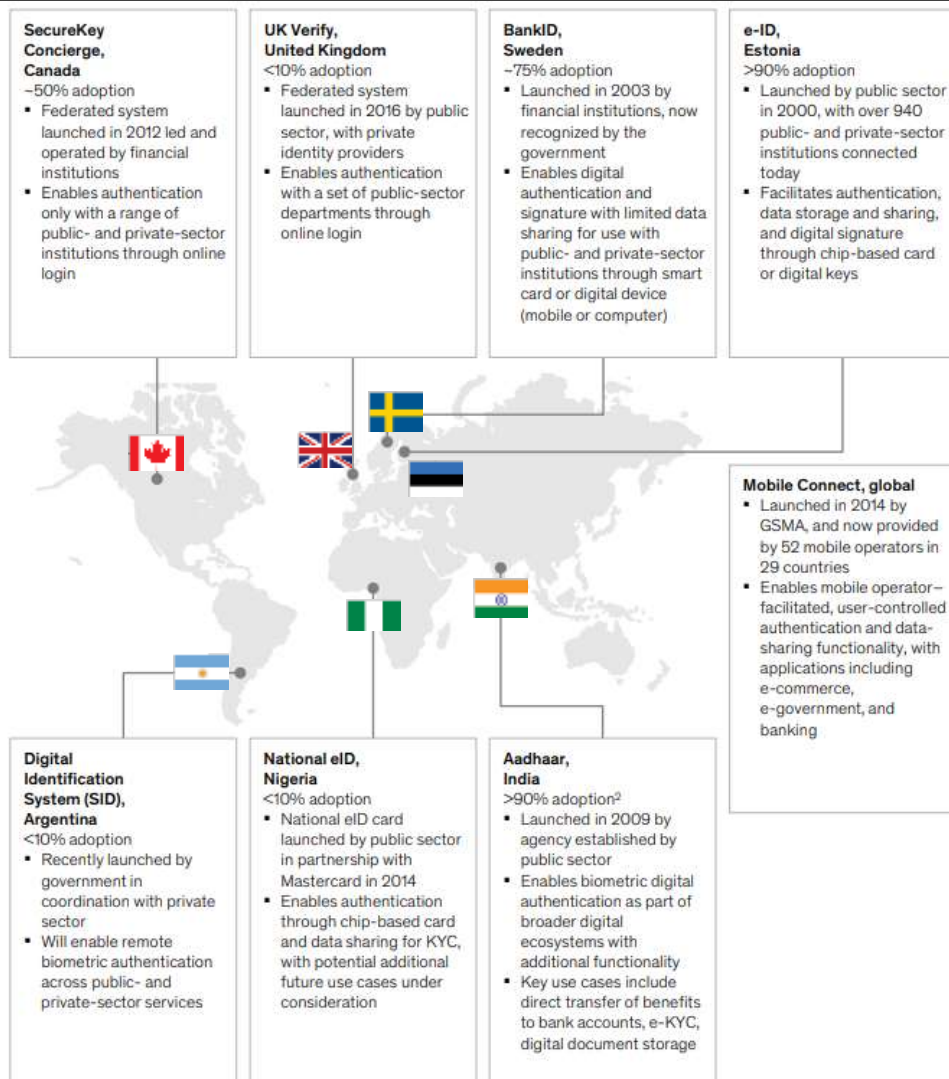


Source: GSMA Intelligence – The Mobile Economy forecasts

While many digital ID programs across the global have achieved only low coverage, the technology needed for digital ID is now ready and more affordable than ever, making it possible for emerging economies to leapfrog paper-based approaches to identification levels.

Digital infrastructure for eIDs is also maturing in emerging markets

Figure 11: Digital ID systems overview around the world



Source: McKinsey Global Institute analysis GSMA, BankID, SecureKey Concierge, Gov.uk, E -estonia, and NIMC (updated 1 February 2019)  
 Note: 2) Adoption figures reflect data from the Unique Identification Authority of India (UIDAI) as of January 2019

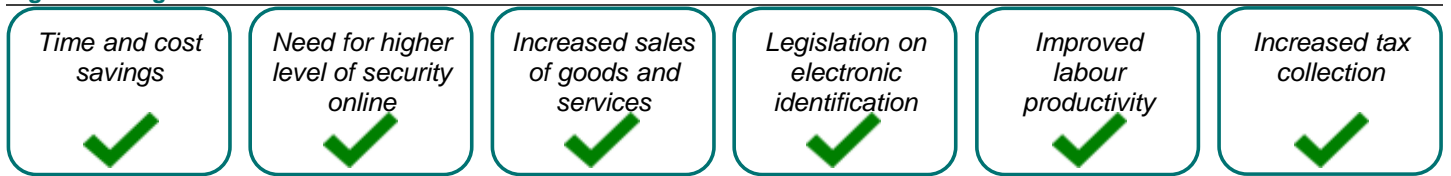
### Market drivers

The primary benefits of eIDs are user security, convenience, and quick turnaround. Entering a legally binding agreement with pen and paper takes time, costs money, and has a slow turnaround, whereas usernames and passwords (dominant online solution today) are threatening digitalisation as some users are reluctant to use some digital services that are only password-protected.

eID value proposition for government and private sector is simple: efficiency

Given the various use-cases across a broad set of industries discussed earlier, it becomes clear to us that eIDs are on a secular trend. With continuous spread of digitalisation, we believe continued solid market growth for the adoption of eIDs is supported by the following.

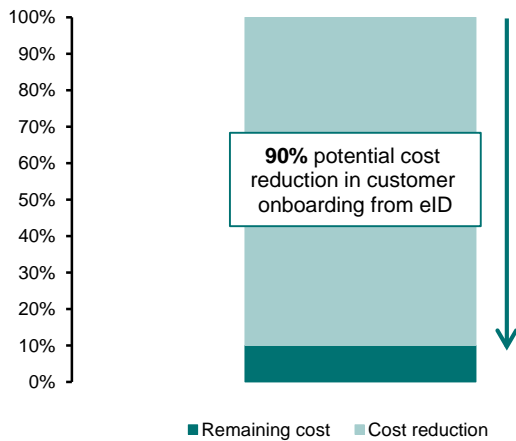
Figure 12: Digital identities market drivers



Source: DNB Markets

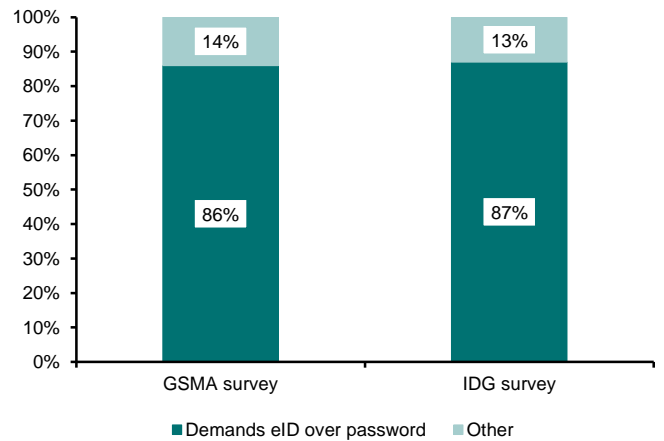
■ **Time and cost savings** as institutions using high-assurance ID for registration could see up to a 90% cost reduction in customer onboarding, with the time taken for these interactions reduced from weeks to minutes, according to a McKinsey study. We believe that by enabling streamlined online digital authentication, businesses could also drive demand for digital offerings that are cheaper to provide.

Figure 13: Estimated cost savings from eID onboarding



Source: McKinsey Global Institute

Figure 14: Consumers are requesting eIDs over passwords owing to security concerns



Source: GSMA Intelligence 2018 and Verisec's IDG Survey 'Glöm Lösenordet'

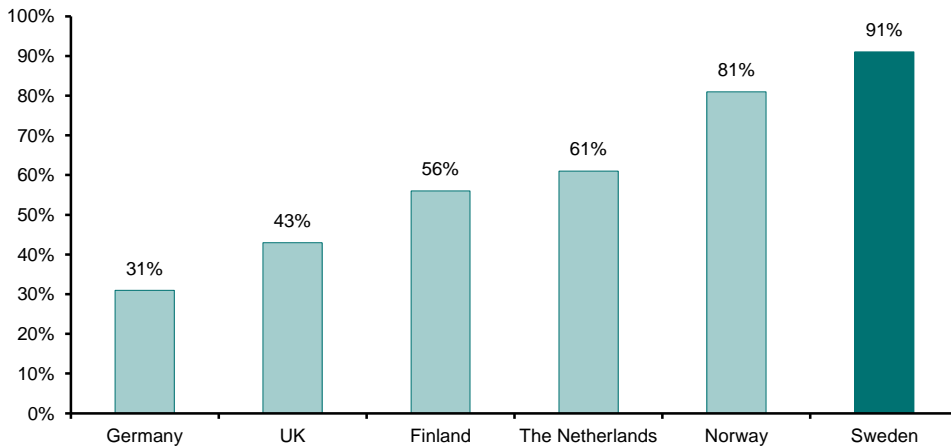
■ **Improved security** as digital IDs can help to reduce fraud in a wide range of transactions offering greater confidence in the authentication process. eIDs are increasingly demanded to replace passwords, as evidenced by: 1) GSMA's global survey 2018 saying 86% of users would prefer a single strong identity to authorise transactions and access services online instead of constantly changing their credentials; and 2) IDG's Swedish survey of 747 participants where 87% requested eID as online login over passwords, to feel more secure.

■ **Increased sales of goods and services.** Through streamlined digital onboarding, institutions could boost uptake of new products and services. For instance, Indian telecom provider Jio onboarded c160m new customers within 18 months using e-KYC enabled by its national digital ID system, Aadhaar (>90% adoption in India). Moreover, more business models relying on high-assurance identities such as smartphone-driven digital gig economy platforms (Uber, Airbnb etc) is poised to drive eID adoption, in our view.

■ **Technology at the right time given eID regulation.** The EU's eIDAS regulation came into force in September 2018, aiming to facilitate secure and seamless electronic

transactions in the EU. This should spur digital growth by giving electronic transactions the same legal standing as paper-based transactions as they require mandatory cross-border recognition of eIDs in member states, which should boost eID uptake in less mature markets such as Germany. Note additional tailwinds from PSD2 and GDPR.

**Figure 15: Do you have an official eID? (Signicat 2019 survey with 3,500 respondents)**



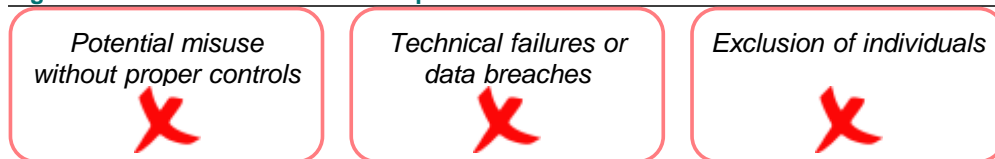
Source: Sapio Research in March 2019

- **Greater employment and labour productivity** as eIDs can expand and improve talent matching, streamline employee authentication, and enable contracting with non-traditional workers, such as contract and gig workers.
- **Increased tax collection.** While this is more attributable to emerging markets, we believe that greater revenue facilitated by eIDs could expand the tax base, helping to promote formalisation of the economy and more effective tax collection as seen in India where less than 3% of the total population is in the taxpayer base.

While eIDs have the potential for shared value creation and should reduce risks associated with conventional ID programs, we believe the following factors could hamper market growth.

- Factors that could hinder eID adoption:
- Potential misuse without proper controls
  - Technical failures or data breaches
  - Exclusion of individuals

**Figure 16: Potential for misuse and possible market risk elements**



Source: DNB Markets

- **Potential misuse without proper controls.** As eIDs system administrators (private or government) would gain access of – and control – large-scale population data, it has the potential to be used for fraud, tracking ethnic groups, political manipulation, and unauthorised surveillance, with the possibility to restrict online access such as payments, travel, and social media.
- **Technical failures or data breaches** are threats to any digital ecosystem.
- **Exclusion of individuals** without sufficient technological access or savviness could drive an aversion to adopt eIDs, so some alternative conventional ID options should remain.

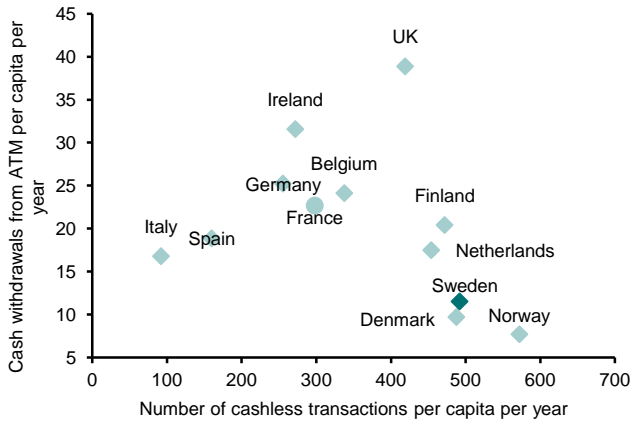
**Verisec’s position in the value chain**

Verisec’s eID plans to initially operate in Sweden where BankID (leading eID solution developed by a number of large banks), internet banks, and Swish (leading mobile payment solution) have experienced rapid penetration. This has created maturity, interest, and acceptance to fuel further adoption of eIDs, we believe. Meanwhile, as the Nordic countries in general are leading the transition towards a cashless society and increased mobile payments, its high eID maturity looks favourable for Verisec’s planned geographical expansion.

Verisec set to launch Freja eID in one of the world’s most mature eID markets

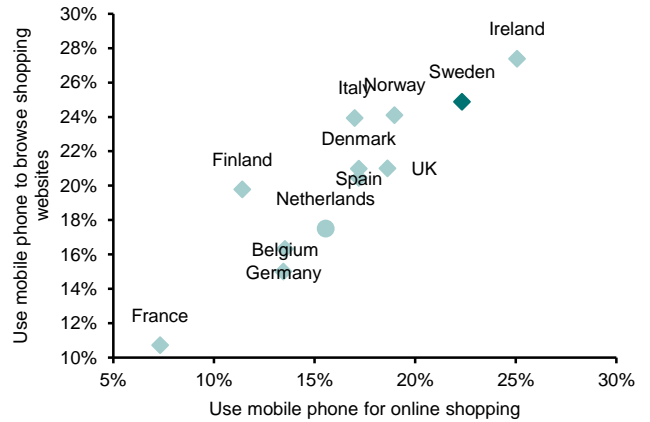
3 September 2019

**Figure 17: Cash withdrawals and cashless transactions per capita (2017)**



Source: ECS, Eurostat, Norges Bank, Deloitte Analysis

**Figure 18: Mobile phones' position in online shopping (2018)**

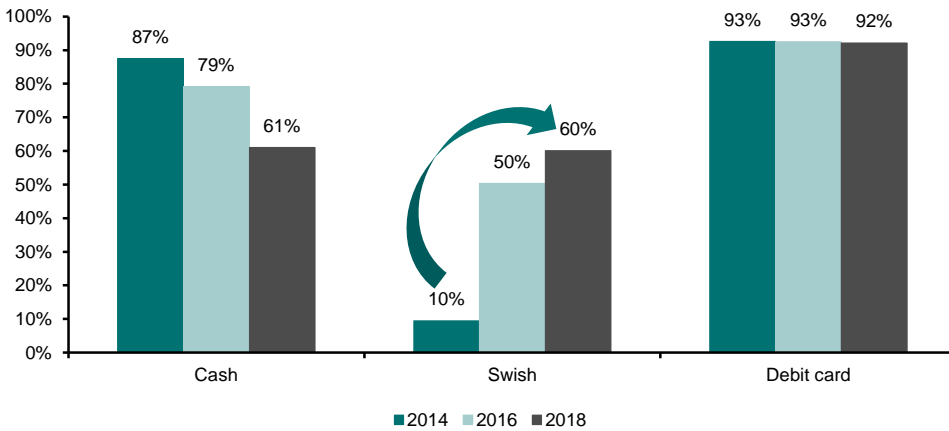


Source: Deloitte GMCS 2018, Eurostat, Deloitte Analysis

Zooming in on Verisec's main focus market, Sweden, only 10% of respondents in the Swedish Riksbank's annual payment pattern study had used Swish in 2014. Four years later Swish adoption had grown to 60%, and in parallel with the increase in popularity of mobile transactions, the use of cash has decreased significantly underpinning the increased use of eIDs to verify and authorise these mobile transactions.

Increased mobile transactions underpin need for eIDs to verify, approve, and sign

**Figure 19: Which payment means have you used in past month?**

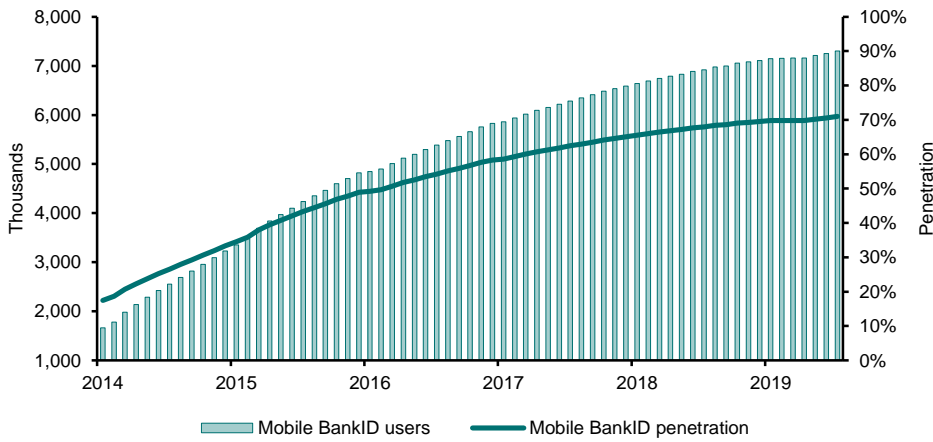


Source: The Riksbank

We estimate the addressable market for mobile eIDs in Sweden is cSEK1.2bn in 2019 based on extrapolating the average transaction value of signing and verifying multiplied by the annual number of authentications and signings via BankID (average login-cost of SEK0.17 and an average signature cost of SEK0.55). As shown in Figure 20, the Swedish eID market was ripe for penetration as mobile BankID users have grown from 1.7m in January 2014 to 7.3m in July 2019, corresponding to an adoption rate from 17% in early 2014 to c71% as a share of the total Swedish population by mid-2019 on our estimates.

Sizeable market opportunity in Sweden up to SEK1.2bn, which has had 20% CAGR in past three years

Figure 20: Development mobile BankID users in Sweden

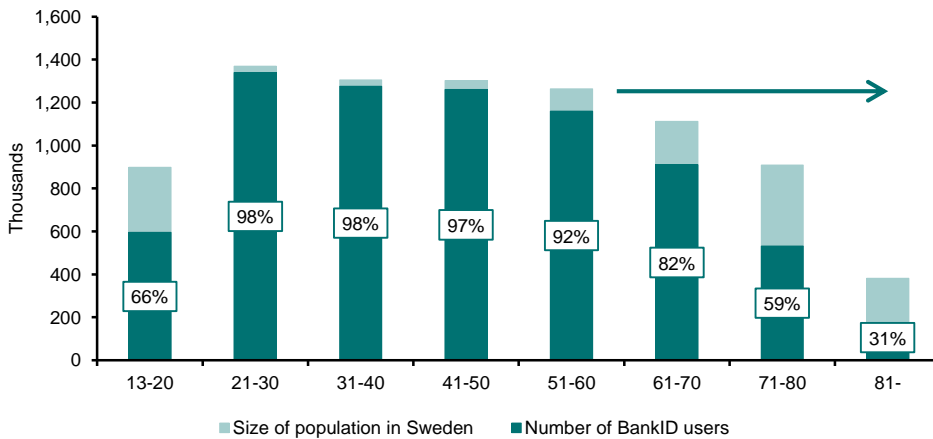


Source: Finansiell ID-Teknik, Statistics Sweden

c98% of Swedes aged 21–50 have one or more BankIDs, but the figure drops to 75% for those aged 51+. While there is a structural shift towards eID as the already adopted population ages, we still see a need for conventional ID options too, so as not to completely exclude the population that do not trust or do not want to use eIDs.

Digital infrastructure limitations (e.g. limited internet or telecom access) could prevent some from participating in eID

Figure 21: Age of BankID users



Source: Finansiell ID-Teknik, Statistics Sweden (end-2018)

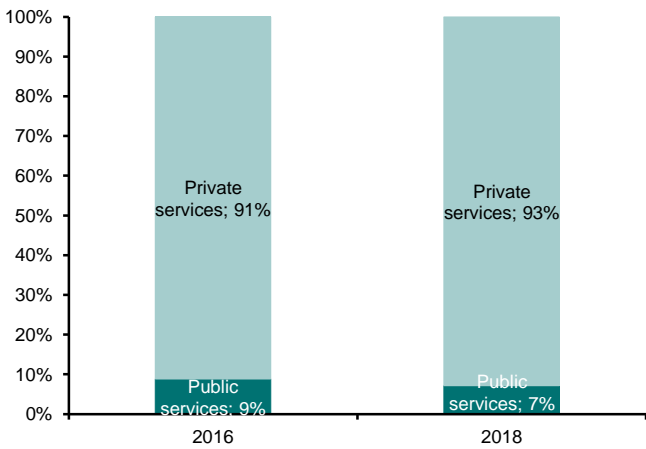
Note: BankID users include smart card, computers, mobile phones and tablet devices

BankID has enabled citizens to make arrangements regarding municipal or state services online in minutes. This helps public agencies to reduce processing times and the costs associated with paper documents, yet public services comprised only c7% of BankID usage in 2018 as paper handling and manual processes are still the norm for signatures.

Private services comprise 93% of eID usage in Sweden; public services 7%

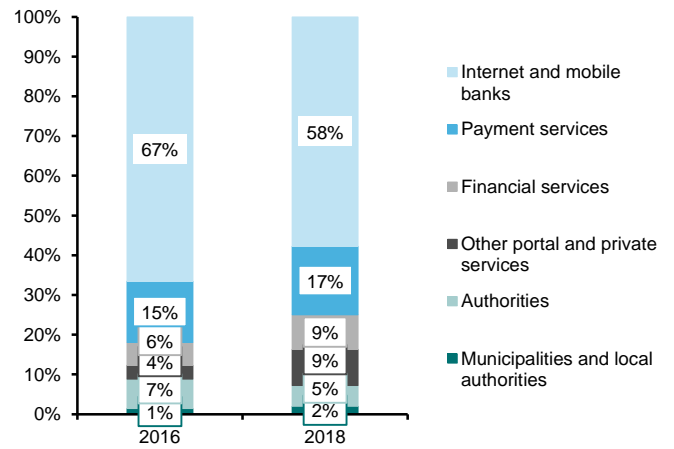
The dominant application for BankID in 2018 was internet and mobile bank services at 58%, down from 67% in 2016. The application fields where broader eID adoption has accelerated have been payment services (likely driven by Swish), financial services, and logins and authentication via businesses own websites (other portal and private services), which we attribute to the scalability of eID IT architecture.

Figure 22: Sector split of Bank ID usage (2016 versus 2018)



Source: Finansuell ID-Teknik (data), DNB Markets (graph structuring)

Figure 23: Sector split of Bank ID usage (2016 versus 2018)

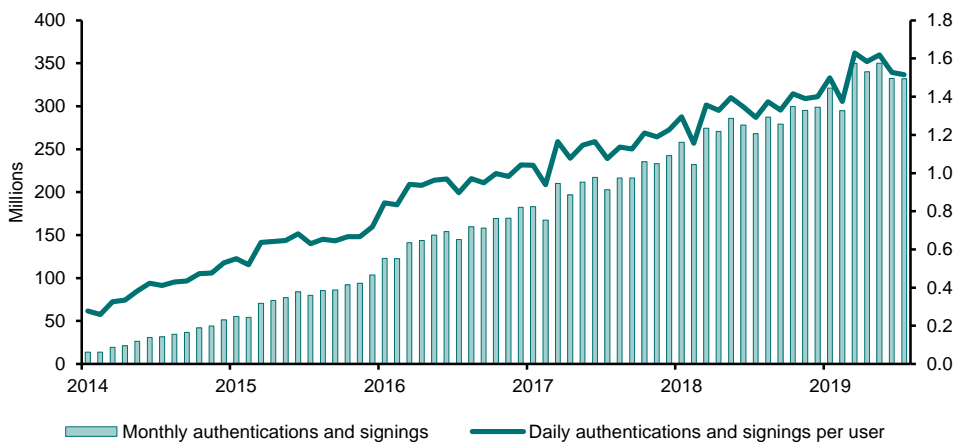


Source: Finansuell ID-Teknik (data), DNB Markets (graph structuring)

As shown in Figure 25, we continue to see a long-tailed shift to Identity as a Service (IDaaS) not only from the number of users, but also from the number of authentications and signings via mobile BankID (which has grown from 15m per month in early 2014 to >350m per month in mid-2019, implying an annual number of uses upwards of 4.7bn by end-2019 on our estimates). Moreover, we calculate the average citizen uses a BankID 1.6x per day, up from 0.3x in 2014, and the steep trend line lends room for even more frequent interactions.

We estimate BankID will be used in 4.7bn authentications and signings in 2019

Figure 24: Number of authentications and signings via BankID per month



Source: Finansuell ID-Teknik (data), DNB Markets (graph structuring)

### Competitive overview

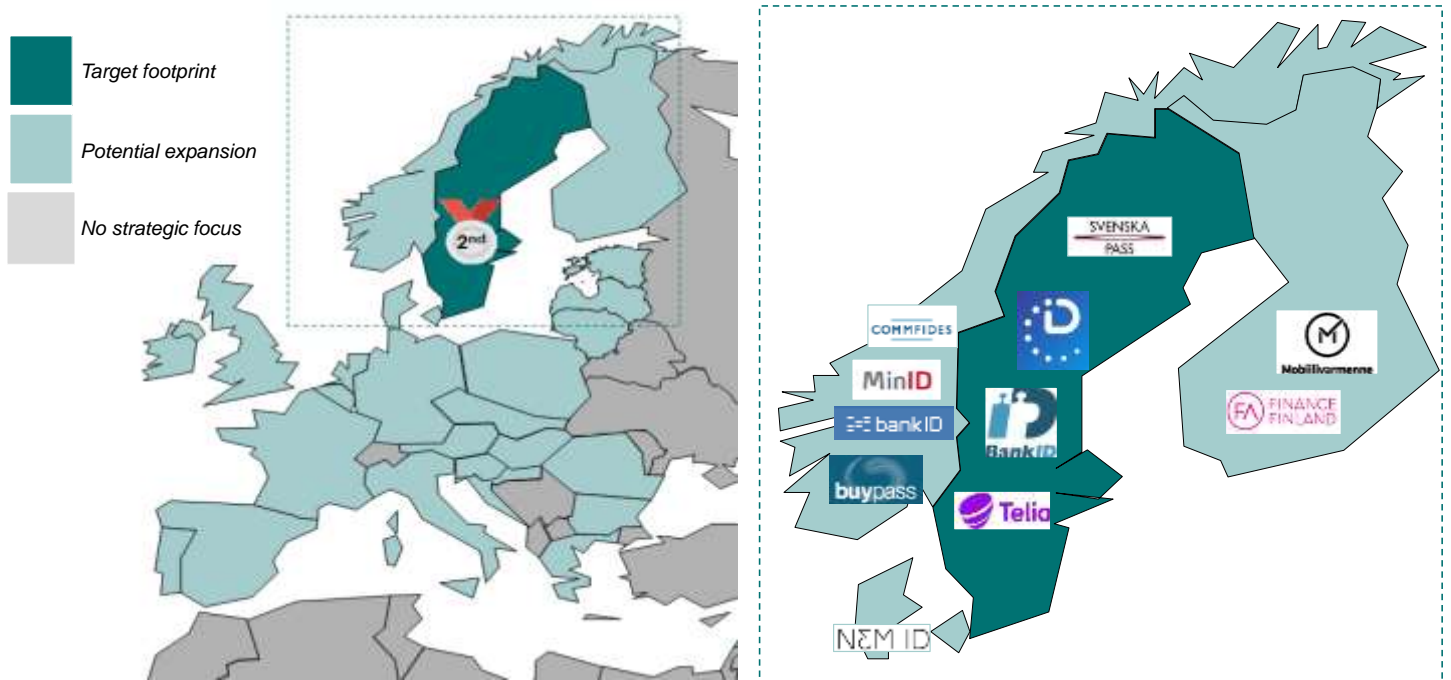
Verisec’s competitors differ between business areas. Generally, for Freja eID, the competitive landscape is dominated by bank-operated solutions. All of these have established critical market volume and scale through banking usage and have diversified beyond banking offering IDaaS to third-parties including government services and a variety of private services.

Good competitive position, but not the leader

For Verisec’s legacy authentication business (Freja ID, Freja Mobile, and its encryption solutions) it holds strong market shares in some niches (clear Nordic market leader for security tokens, c15–20% of all UK councils etc). As there is a structural shift in the market towards digital identities, we believe Verisec could stand to benefit from its current customers converting legacy locally installed identity security solutions to seamless and efficient eIDs in the cloud.



Figure 25: Verisec's competitive landscape for Freja eID



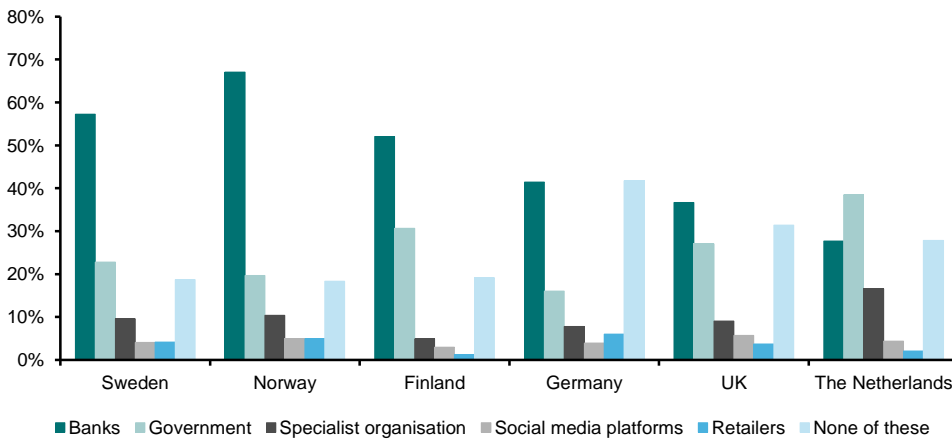
Source: DNB Markets

While Verisec Freja eID is to address the Swedish eID market, the dynamics are similar across Europe: banks (with a high level of assurance) are the most trusted institutions to provide and manage digital identity and had been chosen as the preferred provider by almost half of the 3,500 respondents in a market study by Sapio Research. We attribute this to banks' extensive experience in validating identities and managing compliance standards, as well as their investment capacity to handle high costs to develop commercially viable identity systems. Specialist organisations' eID such as Verisec have only gained the trust from European eID users by an average of 10% across Sweden, Norway, Finland, Germany, the UK, and the Netherlands, according to Sapio Research.

Banks are still the most trusted provider of eIDs

We estimate that Verisec's eID is the no.2 in the Swedish eID market, behind Finansiell ID-Teknik's BankID (which holds a monopoly-like position) but ahead of AB Svenska Pass and Telia's eIDs, which are not mobile eIDs.

Figure 26: Who do you trust most with your data to provide and manage your electronic identity (eID)?



Source: Sapio Research in March 2019

- **BankID (Sweden)** is the leading digital identification in Sweden, with 7.3m users of its mobile BankID in 2019 (c71% of Sweden’s population). Finansiell ID-Teknik, which owns, manages and develops BankID was founded in 2002 and is owned by Danske Bank, Handelsbanken, Ikano Bank, Länsförsäkringar Bank, SEB, Skandiabanken and Swedbank. As Freja eID’s challenger role versus the established BankID is a key piece of Verisec’s growth trajectory, we take a closer look at its respective competitive positioning later.
- **AB Svenska Pass (Sweden)** is a subsidiary of Gemalto and the first Swedish provider of eID to fulfil the requirements for the highest level of trust (level 4) by the quality mark ‘Svensk e-legitimation’, approved by DIGG that promotes and co-ordinates electronic identification and signatures for public sector e-services. The eID solution is linked to the Swedish Tax Agency’s ID card and the eID certificates are stored on the ID card’s chip, allowing non-citizens (who are registered in the population register) to carry an eID.
- **Telia (Sweden).** The Swedish telecom operator provides its authentication service Telia eID to businesses and authorities, which in turn issue eIDs to citizens. The service is used on a computer with a smartcard reader and needs the installation of Net iD software. In 2018, Swedish Post and Telecom Authority (PTS) said Telia had issued 1.1m eIDs.



Freja eID and BankID are the only mobile eIDs available in Sweden, but given the rapid growth of the mobile eID market we cannot rule out that large technology companies could make inroads too. We could for example imagine a tech player providing IDaaS to private and public services at almost no cost, in exchange for data it could use as a monetisation tool. In such a scenario, we believe Verisec’s investments would be likely to remain elevated for a long while and the competitive landscape would be tough. For instance, we note Google recently revealed it was working on developing electronic ID capabilities for Android devices, so developers could build mobile apps that could be used securely as an ID.

Competition is already strong, and might toughen

### David and Goliath – can Freja eID take on mobile BankID?

Sweden’s digital infrastructure is largely dependent on a single eID, Finansiell ID-Teknik’s BankID, which could pose risks for a country as digitally mature as Sweden. While BankID’s solution has been vital in driving eID adoption in Sweden, c20% of the Swedish population cannot access a BankID, as they: 1) are not customers of a particular bank; or 2) lack a Swedish social security number.

Sweden’s eID market is very reliant on BankID...

As eIDs are increasingly becoming key to everyday life, we see a rapidly growing need for solutions that can compete with or complement BankID to not shut out any citizen from e-services, while banks’ influence over what e-services can be utilised is too dominant. For instance, Freja eID is not dependent on Swedish social security numbers, which allows it to include all potential user groups, enabling cross-border functionality.

Figure 27: Swedish Agency for Digital Government simplifies how citizens can choose between eIDs



Source: DIGG

We believe this is a key reason the Swedish Agency for Digital Government (DIGG) formed a citizens’ ‘System of Choice’ for electronic identification in 2017, ‘Valfrihetssystem’. This is a form of procurement to: 1) simplify the process of citizens choosing between issuers of eIDs and public service providers; and 2) facilitate procurement and contract management for the authorities for which Verisec was approved in August 2018.

...and there are government initiatives to lessen that reliance...

**Figure 28: Freja eID is the only government-approved mobile eID compliant with the requirements for the 'Svensk e-legitimation' quality mark**



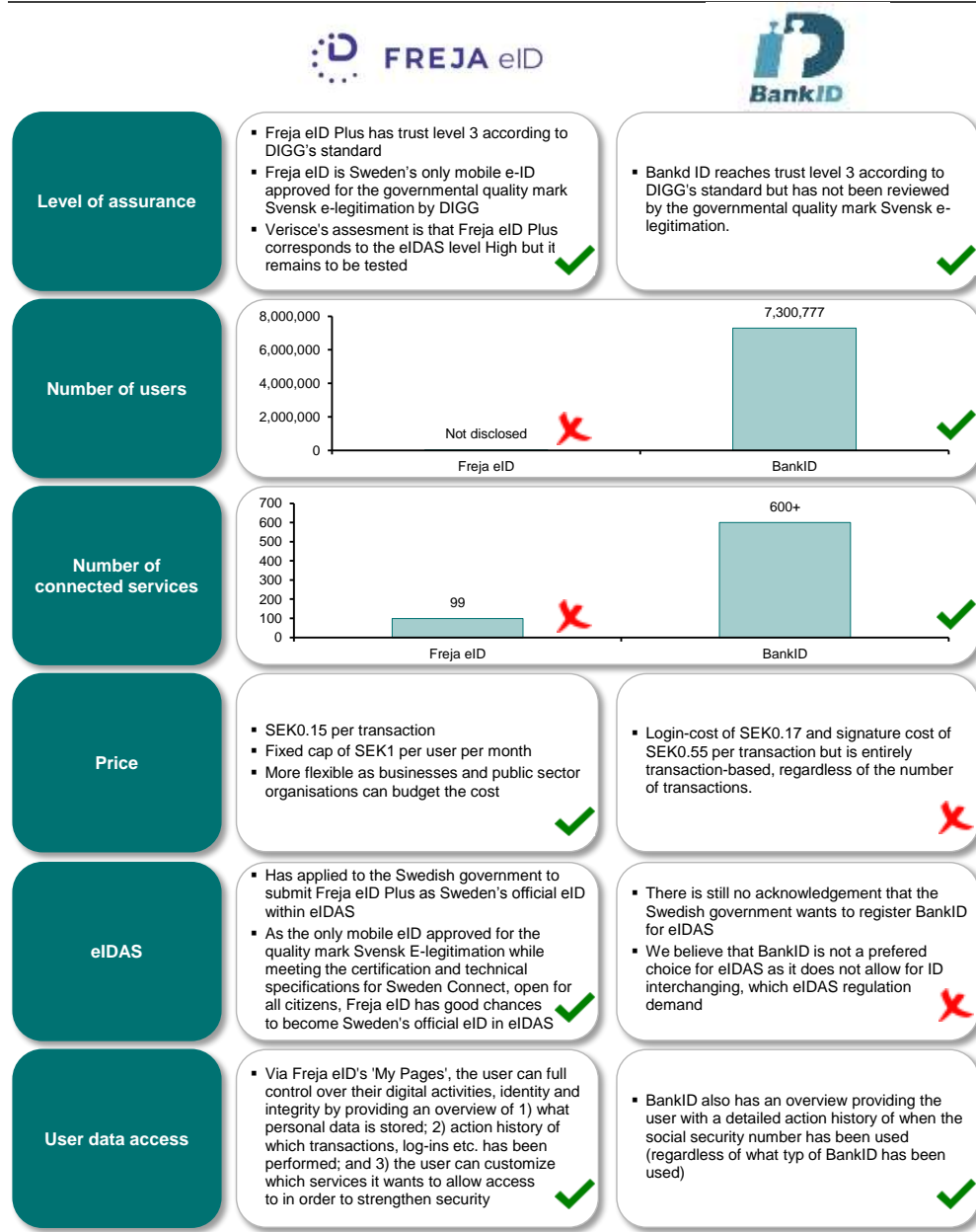
Source: DIGG (underlying data), DNB Markets (graph structuring)

Evidently, there is a need for a complement to BankID, which is playing into the hands of Freja eID as the only other mobile option in Sweden, we believe. In addition, monopoly-like situations seldom benefit the user:

...where we believe Freja eID is positioned to benefit

- **Being too reliant on one provider threatens the digital ecosystem.** Digital infrastructure in Sweden is increasingly dependent on fewer services provided by fewer providers (Swish and BankID are two examples). If these should experience technical failures, the consequences for the digital ecosystem would be immediate and comprehensive. Thus, we identify underlying demand for Freja eID to lessen the system risk.
- **Increased competition leads to higher innovation and product quality:**
  - BankID requires a Swedish social security number, whereas Freja eID supports multiple identifiers such as up to three email addresses, three mobile numbers, and a social security number to link to a Freja eID account. This allows for various levels of identity assurance based on service providers' needs and user groups.
  - Freja eID Plus is Sweden's only mobile e-ID approved for the government quality mark Svensk e-legitimation, achieving trust level 3. To achieve this, an identity is proven via a physical meeting where a user's approved Swedish ID document is vetted. The identity is protected by a secure carrier with protection of, for example, PIN or biometrics and two-factor authentication (2FA).
  - Freja eID is open to ID interchanging (using an eID for log-in to a service from which the user can apply for another eID) technically and contractually, which BankID is not.
  - Freja eID allows users to take full control of their digital activities, identity and integrity by giving an overview of: 1) what personal data is stored; and 2) a history of transactions and log-ins. Also, users can customise the services they want to allow access to, to strengthen security. Moreover, registered Freja eID Plus users get a free ID protection service.
- **Non-existent price competition:**
  - Freja eID offers private and public e-services a flexible business model where they can pay a fixed price instead of a per-transaction cost. This means public sector organisations can more easily and efficiently budget the cost of managing eIDs. We believe this is also applicable to transaction-intensive private service providers, where it is desirable to negotiate a fixed cost per user rather than transaction-based. In general, Freja eID is priced at SEK0.15/transaction (maximum of SEK1 per user per month), whereas we estimate that BankID charges an average of SEK0.25/transaction (login-cost SEK0.17 + average signature cost SEK0.55) regardless of the number of transactions.

Figure 29: Freja eID versus BankID



Source: DNB Markets

In terms of product capabilities, we believe Freja eID is as competitive on technology and ease-of-use as BankID's mobile app. The most obvious drawbacks for BankID are: 1) its reliance on Swedish social security numbers, which could be seen as a discriminatory based on users' identity related data; 2) it has not received the quality mark Svensk e-legitimation, thus the same acceptance verified by an independent third-party (in this case Swedish Agency for Digital Government); and 3) it does not offer ID interchanging.

We view Freja eID as an up and coming potential disruptor in the Swedish eID market, as it empowers users to choose what data they share for which service interaction, with whom, and for how long. Also, its innovativeness is highlighted by its recent innovation grants from Vinnova, Sweden's innovation authority, in physical identification with e-ID and electronic identification for profession- and workplace related purposes, reinforcing our view that Freja eID is prioritising building a footprint in niche eID segments where BankID is not as strong.

Yet, what we believe could be behind some market concerns about Freja eID's competitiveness compared with BankID is its weaker scope and scale, as a key competitive advantage and stickiness for BankID is that its technology already enables large volumes of

BankID started in the identity space in 2002, launching its mobile solution in 2010, giving it a head start over of Freja eID...

...yet we see Freja eID as a worthy complement to BankID and potential disruptor to incumbents

transactions through the provision of transaction-critical attributes and connecting a large number of users (7m+) with important and frequently used service providers (600+).

**Figure 30: We see Freja eID as a good complement to BankID**



Source: DNB Markets  
 Note: Green ticks highlight number of approved factors in DNB Markets' head-to-head study in Figure 29

In addition, the banks providing BankID have already vetted their customers' identity as a part of their KYC, whereas Freja eID users have to bring an ID document and mobile phone to a Freja eID agent (ATG store) as a part of their vetting process to achieve the highest level of security from Freja eID Plus, which to some could create a barrier for adoption, in our opinion.

The 30 August 2019 referral from the Swedish Financial Supervisory Authority's eID investigation stated that problems arise when a private participant achieves such a dominant market position as BankID has in Sweden. It suggested that there should also be a public eID issued by the government to aid the fundamental identification of citizens (ID card with a reader/software). In our view, this would facilitate Freja eID's user onboarding, as this public eID could be used for ID interchanging, thus removing Freja eID's barriers to entry in its vetting process.

**Barriers to entry**

In our view, perhaps the most significant barriers to entry to the mobile eID market include: 1) early market entry from Verisec as we believe eID platforms are unlikely to want to integrate with every new eID provider that wants to provide digital identities. To us, there is a diminishing return to added providers, where Verisec could become a preferred partner, clearly seen as independent to specific vendors; 2) Verisec started in the IT security solutions business 17 years ago, an industry characterised by trust, and has a strong brand in digital identities; and 3) meeting specific security requirements to become a quality assured e-ID is time- and cost-consuming, where Verisec has made significant investment in the past two years.

BankID's vetting process is considerably more convenient today, in our view...

...but this could change if there was a public eID that could use ID interchanging when onboarding for Freja eID Plus

- Significant barriers to entry:
- Early-mover advantage
  - Brand strength and reputation
  - Certifications, technical specifications, and quality assurance

**Figure 31: Key barriers to entry to mobile eID market**



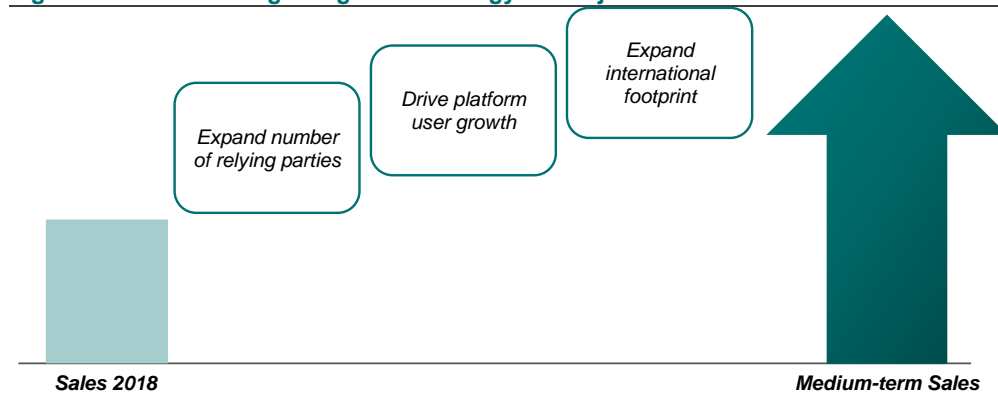
Source: DNB Markets

## Organic growth strategy

There are two main growth drivers for the Freja eID platform: 1) integrated service providers (relying parties) extending the value to users; and 2) users attracting new service providers. As these factors amplify each other, it creates accelerating competitive advantages that are hard to replicate. Thus, Verisec's organic growth strategy revolves around delivering a network effect that becomes more valuable the larger the Freja eID platform gets.

Freja eID positioned for virtuous circle

**Figure 32: Verisec's organic growth strategy for Freja eID**



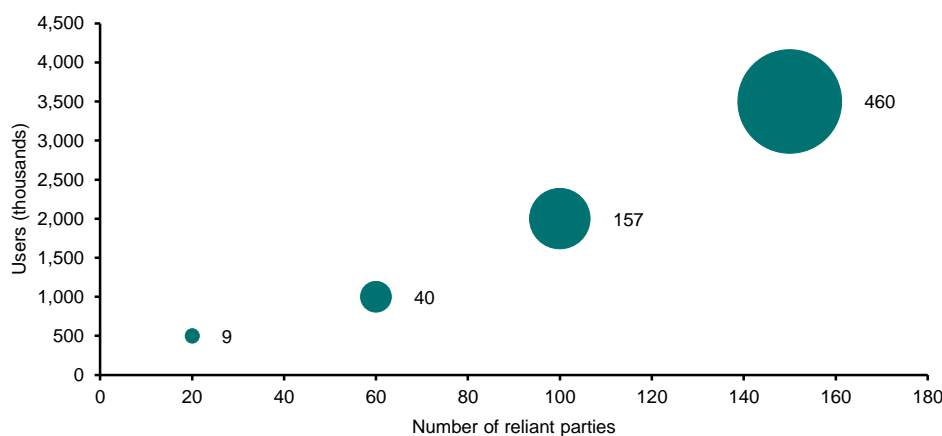
Source: DNB Markets

In a revenue simulation, using assumptions Verisec has provided, the network effect dynamics become clearer.

- The number of consumed services – where users log-in or sign via Freja eID – increases as more relying partners join the platform and enrich the user experience.
- The simulation assumes a sigmoid function, meaning the number of services a user utilises is low from inception (starting at 1–2) and accelerates until it flattens out at 15 per year. We believe this is a reasonable assumption.
- All users use Freja eID at least 7x a month, i.e. they hit the price cap of SEK1/user a month.
- While there is no official number of users of Freja eID, we conclude that by end-Q2 Verisec had c99 relying parties. To compare, BankID has 600+ relying parties and 7.3m users.

If Freja eID adds users, it should outgrow Verisec's legacy business in the next three years

**Figure 33: Freja eID platform annual revenue simulation (SEKm the size of the bubble)**



Source: Verisec (underlying data), DNB Markets (graph structuring)

## Expand number of relying parties

As with any ecosystem, Freja eID started with no relying parties or users in H2 2017. To manage this, Verisec's strategy was to build a critical mass of relying parties to connect their services to the Freja eID platform. This helped it to build and promote complementary capabilities and relevance that benefit users when they connect to the platform.

Verisec's strategy is to initially build a critical mass of relying parties

3 September 2019

Relying parties can be split into partnerships and service providers, where partnerships involve Verisec being in charge of the technical development of Freja eID whereas the partner facilitates the eIDs integration with its existing systems. It has been vital for Freja eID to initially build partnerships to reach out to large user groups, municipalities etc, and support its use.

**Figure 34: Freja eID selected partnership quotes**

*“Freja eID is the next generation electronic identities with **several advantages over competitors**. The functionality of the service is sharper than the competitors, but the **distribution is even more efficient as the physical identity checks are done via Freja eID agents and not by banks**. There is also a more **flexible business model where customers pay a fixed price instead of a per-transaction cost** which means that, for example, public sector organisations easier and more efficiently can budget the cost.”*

*“We believe that **Freja eID can be of great benefit to our customers, especially in countries where digital identities have not reached a critical user level**. Our customers work globally and strive for the most effective ID solutions out there, to create shorter onboarding processes and strong KYC processes. The collaboration with Verisec is important to our ID-hub Global Identity Integrator, **as it fills the gap between ID methods commonly used in some countries and the need for a cross-border solution.**”*

- Consid, March 2018

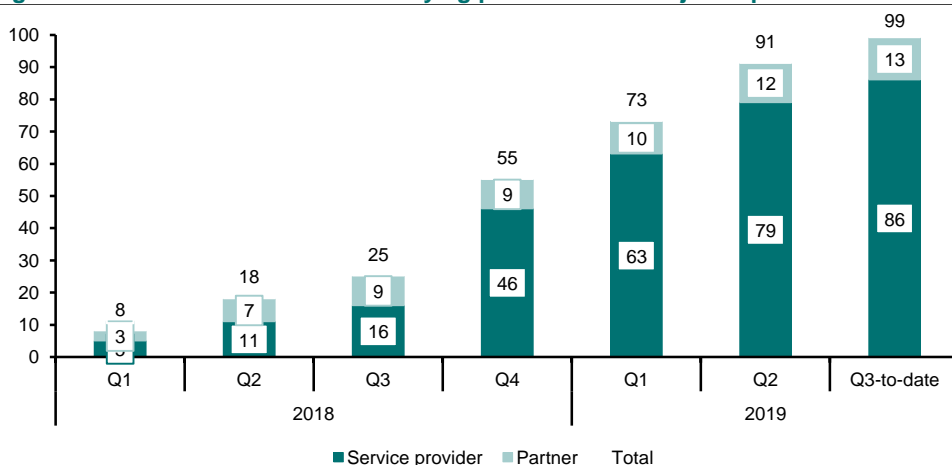
- Global Identity Integrator, September 2018

Source: Verisec press releases

As shown in Figure 35, the initial focus on partnerships drove an impressive uptick in the number of service providers (albeit with a time lag of several quarters), reaching 86 service providers and 13 partners, corresponding to 99 relying parties by end-Q2 2019. As we believe Verisec wants to achieve critical mass in terms of connected relying parties on the platform before starting to address the user base, we believe a critical relying partner base could be c150–200, which on our estimates seems achievable by end-2019e.

Partnerships have been vital to efficiently reach out to large groups of service providers

**Figure 35: Accumulated number of relying parties on the Freja eID platform**



Source: Verisec press releases (underlying data), DNB Markets (graph structuring)

Also, we find it noteworthy that the Freja eID platform has been able to attract such a rapidly growing number of relying parties without having an existing user base. To us, this signals that its relying parties need alternatives to today’s dominant solution, BankID.

That Freja eID’s relying parties have grown to 90+ with no existing user base highlights they see an attractive business case

In general, Verisec says it should take three months for a relying party to deploy Freja eID from the initial point of sale, but decision-making processes vary greatly among customers. For instance, Boplats Sverige (relying party announced in June 2017) opened the option for its users to login in via Freja eID 12 months after the announcement.

Freja eID deployment at a relying party should take c3 months, but it can actually be done in three days

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Figure 36: Press releases related to Freja eID (April 2017–August 2019)

Date	Title	Type
2017-04-01	Commercial launch of Freja eID	
2017-06-07	Sunet - Antagning.se	Service provider
2017-06-14	Vitec - Boplats Sverige	Service provider
2017-06-28	Svenska Försäkringsfabriken	Service provider
2017-08-25	laget.se	Service provider
2018-01-26	Informal application to make Freja eID + Sweden's official e-ID in eIDAS	
2018-01-31	Resurs Bank	Service provider
2018-02-16	PictureMyLife	Service provider
2018-02-19	Södertälje municipality	Service provider
2018-03-05	Consid	Partnership
2018-03-07	Tieto's Public Document Signing	Partnership
2018-03-28	Svensk e-identitet connects its services to Freja eID	Partnership
2018-04-06	Nexus Group integrates Freja eID into its login platform	Partnership
2018-05-25	Curity	Partnership
2018-06-12	Signicat	Partnership
2018-06-12	The Swedish Sports Confederation	Partnership
2018-09-06	Agreement with CGI	Partnership
2018-09-27	Agreement with Global Identity Integrator (DevCode)	Partnership
2018-10-04	Vklass	Service provider
2018-11-07	ATG	Service provider
2018-11-08	Agreement with one of Sweden's largest pharmacy chains	Service provider
2018-11-23	Seven authorities and municipalities	Service provider
2018-11-26	Six Swedish municipalities	Service provider
2018-12-17	Two authorities	Service provider
2018-12-18	Four Swedish municipalities	Service provider
2018-12-20	Agreement with IST Group	Service provider
2018-12-21	Järfälla municipality	Service provider
2018-12-21	The Swedish Pensions Agency joins the System of free choice 2017 E-identification	Partnership
2019-01-07	The Swedish Gambling Authority (Spelpaus.se)	Service provider
2019-03-07	Nynäshamn municipality	Service provider
2019-03-12	Svensk e-identitet adds services	Service provider
2019-04-16	Svensk e-identitet adds Norrbottens e-nämnd	Service provider
2019-05-27	Established Freja eID in Norway	
2019-05-28	Svenska Spel	Service provider
2019-05-28	City of Lidingö (municipality)	Service provider
2019-06-03	Agreement with Pagero payment platform	Partnership
2019-06-26	Agreement with Crunchfish Proximity	Partnership
2019-07-08	Agreement with Pulsen Integration AB	Partnership

Source: Verisec press releases (underlying data), DNB Markets (table structuring)

Studying the type of relying parties that have joined the Freja eID platform over the past year, we note a heavy skew towards the public sector with a number of authorities and municipalities now in the ecosystem (a target vertical for Verisec). This is an appropriate approach in our view, as the public sector in Sweden is experiencing rapid adoption of digitalisation, for which electronic identity management is critical.

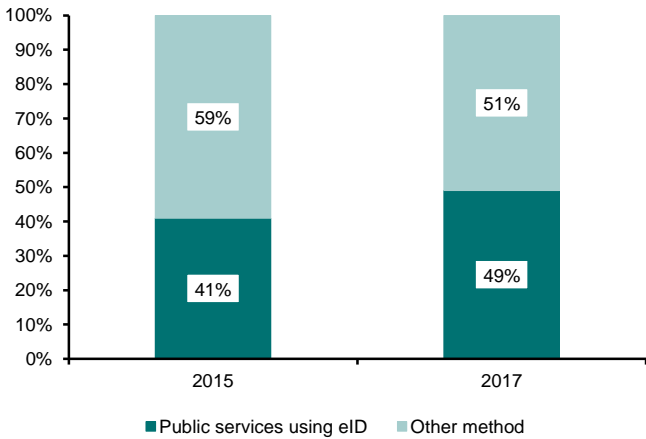
The number of eID transactions in the Swedish public sector has had a CAGR of 18% since 2012, reaching 218m in 2018 and corresponding to a market value of cSEK65m using a per transaction value of SEK0.3 (average transaction cost SEK0.45 in 2012, according to DIGG). Thus, we estimate a market value of SEK80m in 2019. Yet there is far to go, as eID penetration was just 49% back in 2017.

Public sector is a target vertical for Verisec to build scale...

...and we value the Swedish public eID sector at cSEK80m, with an 18% CAGR



Figure 37: Public sector using eIDs for its services

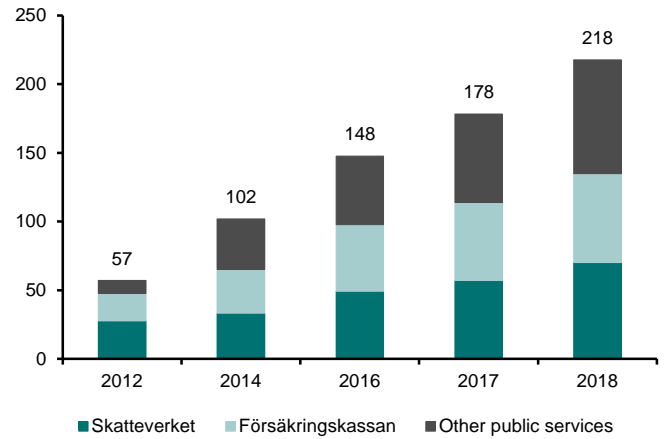


Source: DIGG

Two other factors that caught our attention from DIGG’s biennial public eID studies was that 55% of public sector eIDs were procured via DIGG’s Systems of free choice 2017 E-identification. Even more interestingly, Freja eID Plus is the only available e-ID in the System of free choice 2017 E-identification, highlighting the potential for a large number of additional authorities and municipalities to the Freja eID platform in the years to come.

Also, 54% of government officials use their private eIDs in their professional work, which does not meet basic requirements of integrity. Thus, Verisec has started a development project where officials can identify themselves using Freja eID based on their professional role, rather than their personal identity, which should drive further public sector demand, in our view.

Figure 38: Number of eID transactions in Swedish public sector



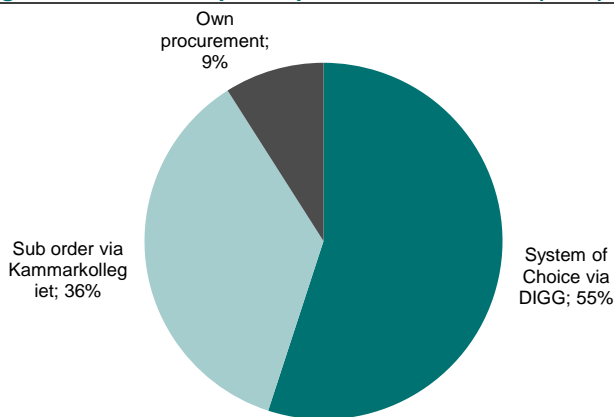
Source: DIGG

Note: DIGG study is performed only every other year

eID penetration in Swedish public sector was only 49% in 2017

Demand for eIDs based on professional roles (integrated in private eID), which is being developed at Verisec

Figure 39: Source of public procurement of eIDs (2017)



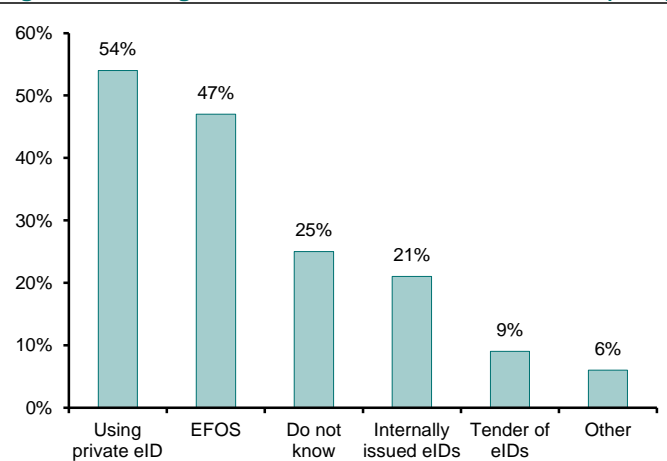
Source: DIGG

For many private services, secured identities are key to delivering the service at all, and as eID has emerged as the standard identification method, it is clear to us that private service providers cannot be dependent on a single eID. Hence, we believe Freja eID is positioned to become a natural alternative for a wider range of private online services in the coming years.

Over the past 1.5 years there have been numerous examples of growing demand from the private sector, including:

- A new gambling law from the Swedish Gaming Inspectorate (Spelinspektionen) was introduced on 1 January 2019, requiring gaming companies to register users with an eID (applicable for almost 100 game licences that have been applied for):

Figure 40: How government officials obtained an eID (2017)



Source: DIGG

For many online services, standard identification method is via eID, making it clear that service providers can no longer be dependent on a single eID

Gambling sector is transaction-intensive (but often small transaction values), making Freja eID’s flexible pricing model attractive

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- Svenska Spel (2.1m users) signed an agreement with Freja eID in May 2019, suggesting it has chosen to use Freja eID as an identification method for its digital gaming services.
- Spelpaus.se (Gaming Inspectorate) is responsible for a national self-shutdown system where players can turn off gambling for money and not receive marketing from gaming companies using their e-ID. In January 2019, the Swedish Gambling Authority connected Freja eID to Spelpaus.se
- ATG (AB Trav och Galopp with 1m active users) in November 2018 chose Freja eID as an identification method on its platform, partly for the registration of new customers, but also for log-in to ATG's gaming services.
- One of Sweden's largest pharmacy chains chose Freja eID for its staff in November 2018 (workforce c1,500–3,000), as Freja eID Plus is the only mobile eID that complies with SAMBI's framework for trust of eIDs (meeting Level of Assurance 3), which has been required from spring 2019 for all healthcare providers wanting to access e-services related to their professional duties, including pharmacies.
- Resurs Bank (Nordic niche bank with c6m-customer user base) said in January 2018 it would add Freja eID as an additional method for eID owing to its flexible ID platform and cross-border functionality (it has tens of thousands of retail stores and a very large user base).

Pharmacy chain deal could attract the attention of the rest of the healthcare vertical

Figure 41: Private transaction intensive services have also chosen Freja eID



Source: DNB Markets

Yet again, Verisec is targeting user groups where transactions are often of a lower monetary value but are more frequent, amplifying its flexible pricing model allowing for easier and more efficient budgeting of costs related to managing eIDs.

Aiming to achieve c600 relying parties by end-2020e

### Drive platform user growth

To expand Freja eID's user base, we believe it would have to continue to add new relying parties in an undiminished fashion to become relevant and truly benefit users. We believe Verisec should reach critical mass in the number of relying parties (c150 from today's 92) by end-2019; such a number should prompt it to intensify its efforts to drive platform user growth.

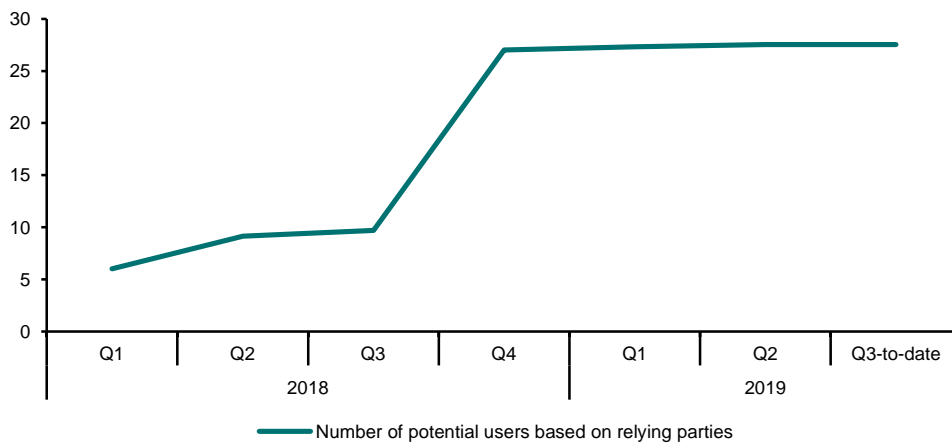
We believe c150 relying parties should mark the start of activities to build a user base

We believe Verisec will initially focus marketing activities on certain service providers to tap into specific large user bases (which is why the public and gaming sector were targeted as key verticals in 2018–2019). In other words, the user acquisition strategy will largely take place in partnership with current service providers to be perceived as natural in relation to the user and thus cost-efficient for Verisec.

Moreover, some relying parties could also market Freja eID to their own customers to drive adoption (Resurs Bank), but we believe the key factor in driving Freja eID user growth is ensuring the connected 99 relying parties successfully and quickly deploy Freja eID in their online services, as we estimate the potential user base affected by the agreements Verisec has signed in 2018–2019 corresponds to 28m users. This is a very rough estimate as Freja eID would rather complement current BankID solutions than fully replace them, in our opinion.

Vital that relying parties are quick to deploy Freja eID in their online services

**Figure 42: How many potential users do the 99 relying parties target? (m)**

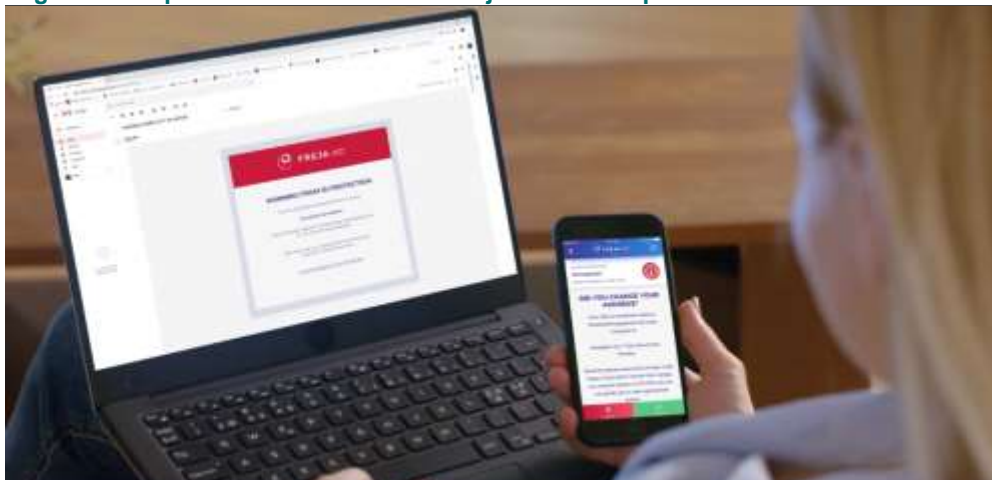


Source: DNB Markets

To enrich the user experience and drive adoption, Verisec will offer a free ID-Protection service for Freja eID Plus users with a Swedish social security number or users registered in the Swedish population register. The service informs the user if someone changes their registered address, special post address, or adds an additional address, giving the user the ability to act quickly and avert ID theft – one of Sweden’s most common frauds.

To increase attractiveness, Verisec aims to offer free ID-Protection service for Freja eID Plus users

**Figure 43: ID protection included with Freja eID Plus to prevent ID theft and fraud**



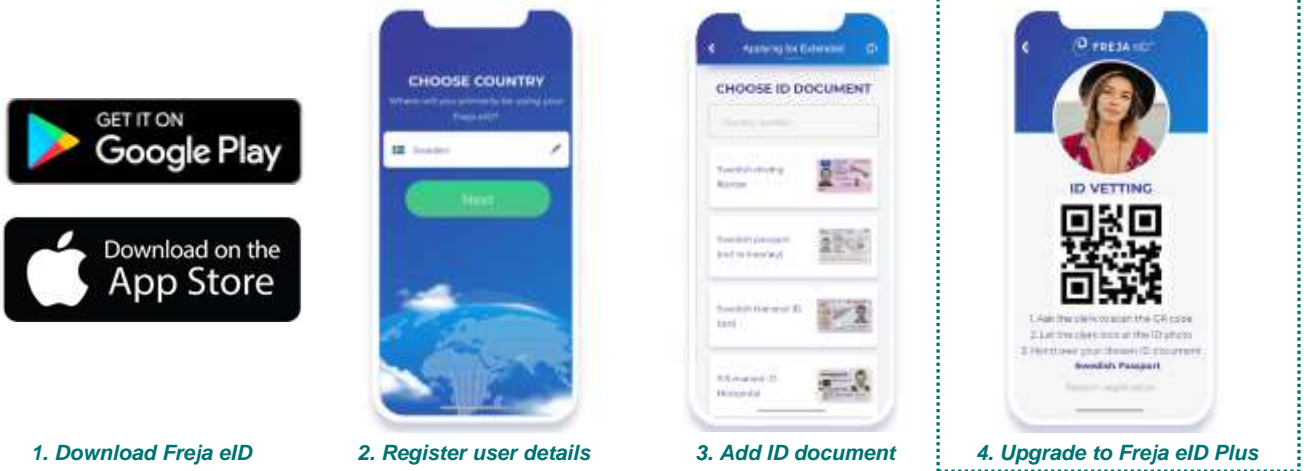
Source: DNB Markets

**Our analysis highlights Freja eID Plus upgrade concerns**

A key competitive advantage for Verisec, in our view, is that at trust level 3 Freja eID Plus is Sweden’s only mobile e-ID reviewed and approved by DIGG for the quality mark ‘Svensk e-legitimation’. To achieve this, identity is proven via a physical meeting where a user’s approved Swedish ID document is vetted.

To achieve trust level 3, physical ID vetting is required...

Figure 44: Steps to get a government-approved eID (upgrading to Freja eID Plus)



Source: Verisec (underlying data), DNB Markets (graph structuring)

Verisec manages the ID vetting in collaboration with ATG (Aktiebolaget Trav & Galopp), which has c2,000 stores in Sweden (most of which can vet ID).

...managed via Verisec's 2,000 vetting agents

Figure 45: 2,000 Freja eID vetting agents where users can upgrade to Freja eID Plus



By visiting one of Verisec's 2,000 vetting agents in Sweden you can upgrade to Freja eID Plus, an electronic identity approved by the Swedish government. With Freja eID Plus you can access even more services, for example government e-services.

Source: Verisec (underlying data), DNB Markets (graph structuring)

To better understand the dynamics of user onboarding to Freja eID Plus (key criteria, selling points, Freja eID's competitiveness, etc), we visited a selection of Verisec's vetting agents in the Stockholm area. We interviewed 24 vetting agents (highlighted as approved vetting agents in the Freja eID app), which largely supported our view that while onboarding was seamless and completed in less than two minutes, broader Freja eID awareness had yet to emerge. Below we have listed some conclusions from our visits:

Our analysis raised two issues:

- Only 14 of the 24 (<60%) visited ATG vetting agents could help in upgrading to Freja eID Plus. All 24 ATG stores were highlighted by Freja eID app's list of approved vetting agents.
- All certified vetting agent clerks had received some form of online training on: 1) scanning the QR code from the mobile app; 2) verifying the user's ID photo; and 3) processing a chosen ID document to upgrade to Freja eID Plus.
- Comments from vetting agents provided limited evidence of user uptake yet as they said that while interest was higher when Freja eID was introduced (more than a year ago) they now conduct only a handful of vettings a year.
- Areas close to universities (Stockholm University, KTH Royal Institute of Technology) had experienced significantly more vettings than others, which we attribute to Verisec's agreement with Sunet (a division of Vetenskapsrådet, The Swedish Research Council).

- <60% of vetting agents can upgrade to Freja eID Plus
- Perceived user base was smaller than expected

Sunet primarily uses Freja eID to issue electronic identities with a high assurance level, to be used in the academic world (antagning.se etc.).

- While we sense the user base is rather small, many users who upgraded to Freja eID Plus claimed the app was preferred over BankID. Moving forward, we believe Verisec will need to show an ability to rapidly scale its user base to drive awareness and challenge perception.

Figure 46: Three of 24 visited Freja eID vetting agents (ATG stores)



Source: DNB Markets

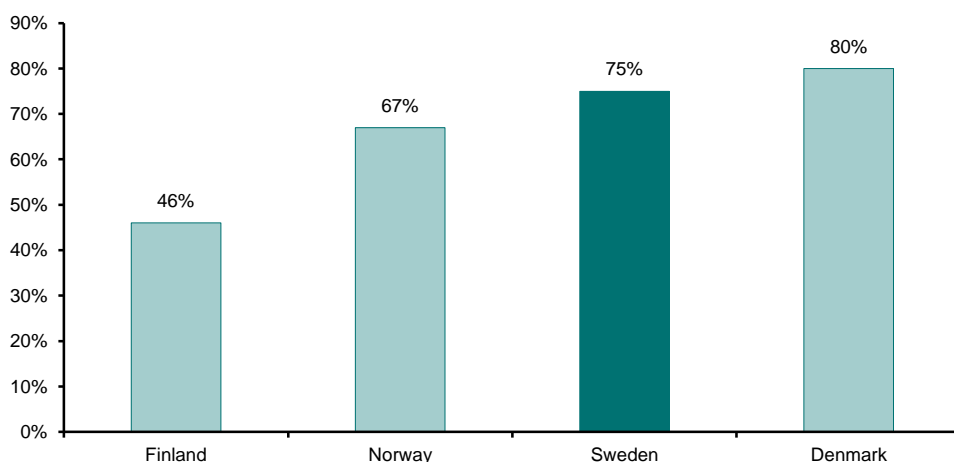
### Expand international footprint

We expect no Freja eID from outside Sweden in 2019, as it will initially target only the Sweden mobile eID market. Yet, we see a significant opportunity to grow Freja eID as the Nordics have embraced digitalisation and eID adoption more than many other places. We value the Swedish mobile eID market at SEK1.2bn and if we apply similar market characteristics, we estimate the Nordic mobile eID market could be worth up to SEK3bn:

- **Norway (c65% eID adoption)**, market value SEK0.6bn.
- **Denmark (c80% eID adoption)**, market value SEK0.8bn.
- **Finland (c45% eID adoption)**, market value SEK0.4bn.

Swedish SEK1.2bn mobile eID market provides a good start, and we estimate Nordic mobile eID market could be worth SEK3bn

Figure 47: Nordic eID adoption (DNB Markets estimates, 2019)



Source: DNB Markets

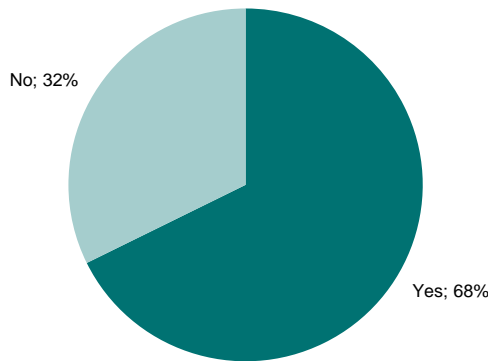
As Freja eID is not relying on Swedish personal identity numbers and is thus internationally scalable, we see a large opportunity for it expand in the Nordics without major financial or technical investment once it has received proof of concept in Sweden, as it already has Nordic integration partners. In May 2019 it established Freja eID Extended (trust level 2) in Norway and

Freja eID is internationally scalable, unlike BankID we believe

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we believe Freja eID could be a cross-border solution across the Nordics. For instance, 68% of Swedish public services intend to allow international eIDs on at least one digital service.

**Figure 48: Share of Swedish public services that intend to allow international eID login on at least one service**



Source: DIGG

**Figure 49: Freja eID has applied to become Sweden's eID in eIDAS**



Source: Verisec

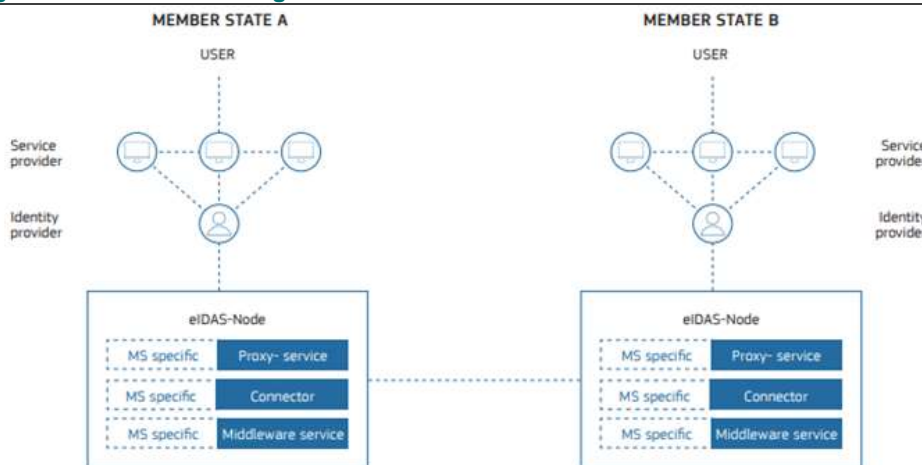
Moreover, we believe the Nordics could act as a stepping stone for Verisec into Europe. EU regulation eIDAS (initially published in 2014) aims to address that almost all member states have different eID security mechanisms for identification and authentication, which lack cross-border recognition and validation. Since 29 September 2018, it has been mandatory for public authorities to allow login with international eIDs across member states.

The Nordics as a stepping stone into Europe

Each country can – but is not obliged to – choose which eID(s) they will register for eIDAS with eID providers, to enable login to other countries' digital services. Thus, each participating country will have a unique eIDAS node acting as a translator between national identity infrastructures, enabling cross-border authentication. While a number of EU member states have chosen to publish national ID solutions for use in eIDAS, Sweden has not yet done so.

Each EU member state can have one or several national eID solution(s) in eIDAS...

**Figure 50: eIDAS – allowing EU member states cross-border eID authentication**



Source: European Commission

Verisec applied to DIGG in September 2018 (1+-year peer review process) for Freja eID Plus to be Sweden's eID in eIDAS. As it is the only mobile eID approved for Svensk e-legitimation and Valfrihetssystem 2017 (including certification service and fulfilment of technical specifications in relation to Sweden Connect, Sweden's eIDAS node), we see no technical reason why Freja eID could not be a national eID solution. For BankID, relying on Swedish personal identity numbers and not allowing ID interchanging (which eIDAS requires), we note little interest in eIDAS.

...and Freja eID has applied to become Sweden's eID in eIDAS

While international expansion could provide a long runway for future growth, as the total addressable market would become considerable, we do not expect significant Freja eID expansion in the coming three years outside of the Nordics, as we believe that a successful entry and establishing a critical user base into the Swedish mobile eID market will be its only focus short-term.

We expect short-term focus to be fully on successful Swedish market launch

## Consolidation trends in eID industry

In recent years, there has been consolidation in the eID market as industry giants and private equity firms have lined up for a piece of the fast-growing global digital identity market. The most recent one in the Nordics was Nordic Capital's cSEK1.2bn (our estimate) acquisition of Norwegian digital identity and signature solutions provider Signicat (valuing it at c6x sales, 2018). Admittedly, Signicat has reported consistently high growth since inception with NOK180m of 2018 sales. Other Nordic transactions include Intel's acquisition of Nordic Edge in 2011 valuing it at 6x sales also (2010).

In light of these trends we cannot rule out some kind of tie-up for Verisec by those looking to expand into the European eID market as the digital transformation of the economy evolves.

In our view, Verisec's Freja eID exposure is a unique asset in the listed environment and while it is clearly not the biggest company in the segment, it is most focused company. Thus, capitalisation-wise (market cap SEK400m), it could be a more accessible target than larger peers. In addition, we cannot rule out Verisec attracting interest from PE seeking to drive transformative growth and accelerate Freja eID's international expansion strategy if Freja eID builds a critical user base.

Consolidation trends are emerging in eID industry

Verisec could become interesting for a tie-up, we believe...

...if it can provide evidence such as building a large user base in Sweden

**Figure 51: M&A transactions in Identity Verification and Online Authentication market (2011–2019)**

Date	Target	Acquiring company	Transaction value (SEKm)	Implied EV/Sales NTM	Target description
2019-07-01	Idfy	Signicat	n.a.	n.a.	Provider of secure eID signature solutions
2019-04-11	Signicat	Nordic Capital	c1,200	c6.0	Provider of digital identity and signature solutions
2018-01-29	ThreatMetrix	RELX	7,785	n.a.	Integrated digital identity platform
2017-09-25	Nets (NemID)	Private consortium	38,350	4.9	Digital payment solutions
2017-12-17	Gemalto	Thales	59,571	1.8	Digital identification and data protection
2017-09-24	Gigya	SAP	3,283	n.a.	Customer identity and access management platform
2017-04-20	SecurEnvoy	Shearwater	264	6.8	Token-less two-factor authentication
2016-05-06	Jumio	Centana	213	n.a.	Online and mobile credentials authentication
2011-01-11	Nordic Edge	Intel	250	6.3	Identity and access management vendor

Source: Press releases (underlying data), DNB Markets (table structuring)



# Forecasts

## Sales

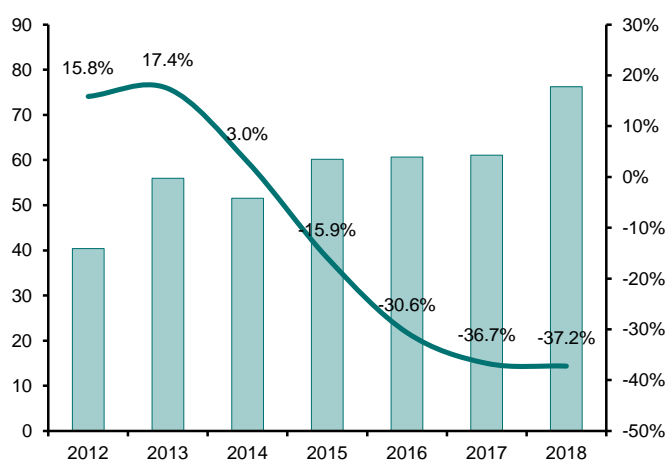
Verisec has reported a sales CAGR of 11% since 2012, driven by the Freja suite (excluding Freja eID), covering user management and Mobile ID solutions. Meanwhile, its information security goods (encrypting/decrypting data (hardware sales), of which the majority from Thales e-Security) has had rather lumpy sales (contributing -8% to the group 2012–2018 sales CAGR and partly offsetting the 19% sales CAGR from Services (including support)) (see Figure 54).

In terms of product areas, 82% of 2018 group sales came from Services (including support), 12% from Goods, and 0% from Freja eID. By 2021, we expect Freja eID to comprise 37% of group sales, highlighting our expectation it will be the key growth engine in our forecast period.

Verisec reported a 2012–2018 sales CAGR of 11%...

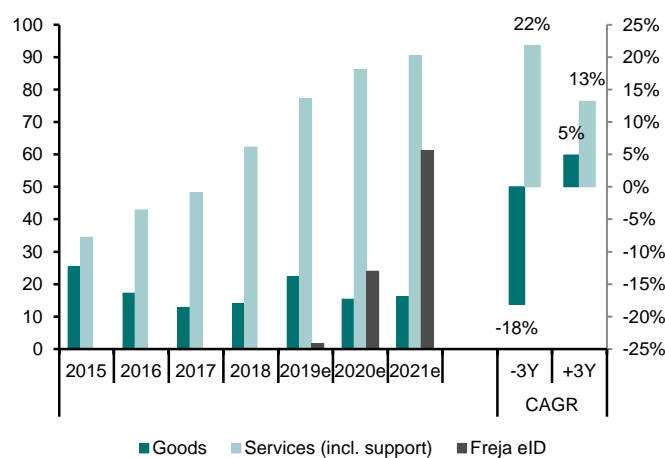
...and we forecast a 2018–2021 sales CAGR of 30% as sales from Freja eID materialise

**Figure 52: Net sales (SEKm) and adj. EBIT margin (%)**



Source: Company (historical data)

**Figure 53: Sales split and CAGRs (2015–2021e)**



Source: DNB Markets (forecasts), company (historical data)

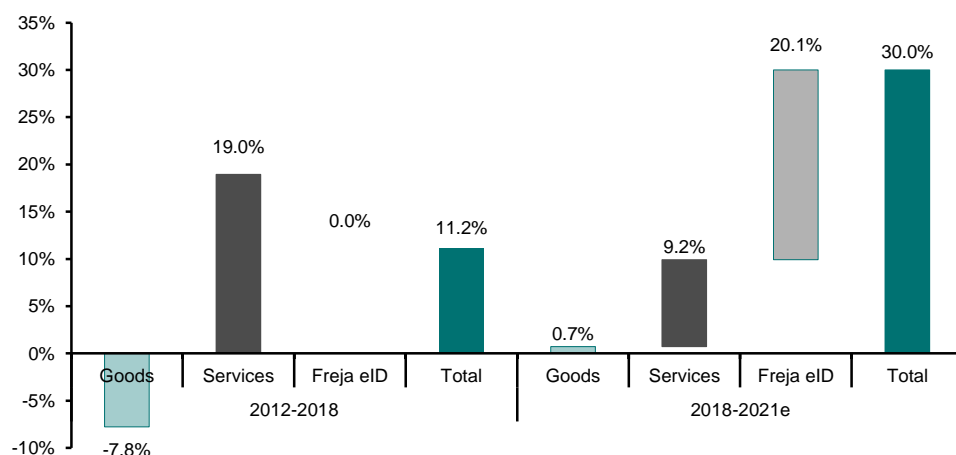
Our 2018–2021e sales CAGR of 30% is driven two thirds by Freja eID growing its revenue base to SEK61m by 2021e, which we consider reasonable given our c50% haircut to management’s ambitions and our estimate of a SEK80m public eID market in Sweden in 2019 (growing at c20% per year), a target vertical that is experiencing rapid adoption of digitalisation, for which electronic identity management is critical.

Being loss-making until 2021e on our estimates, we expect investor focus will be on new customer bookings in Freja eID and user base growth

While we expect the bulk of Verisec’s sales growth to come from Freja eID, we also see solid growth from Services (including support) in our forecast period, contributing 9% to the group 2018–2021e sales CAGR, driven by:

- Digitalisation and demand for cyber security solutions in Verisec’s legacy business.
- As a security token has an average battery life of c5-7 years, we believe Verisec should be benefiting from existing customers upgrading to new token solutions.
- Strong demand for its hardware security modules amongst banking customers in the Middle East.
- Growing demand for two-factor authentication solutions driven by PSD2.
- For comparison, this business has reported a steady 22% sales CAGR since 2015.

Figure 54: Sales growth components (2012–2021e)



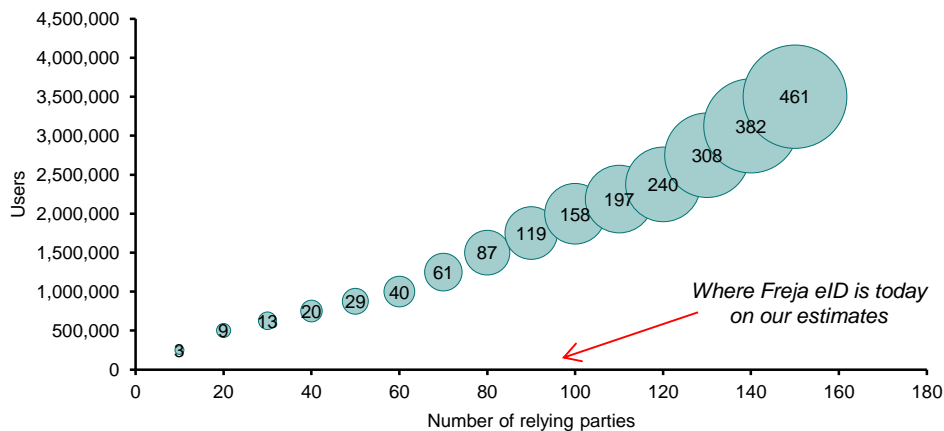
Source: DNB Markets (forecasts), company (historical data)

We see several future sources of growth for Freja eID, including an increase in new customers (relying parties), a growing user base in the eID platform, a growing number of eID use cases, and added features and functionality creating more revenue streams:

- Having added 99 relying parties for Freja eID, we believe that by H2 2019 Verisec will have the building blocks to accelerate its strategy by targeting users (demand side). We highlight its ability to secure numerous relying parties (supply side) without having an existing user base. This suggests its relying parties need alternatives to today's dominant solution, BankID.
- Based on the sigmoid function in the annual revenue figure below (see page 22 for assumptions), we forecast Verisec will reach c370 relying parties on the platform by end-2021e (management's target: 600 by end-2020e) and driver user adoption by having 40,000 users in 2019e, 220,000 by 2020e and 420,000 by end-2021e. This should be seen in light of there being c7.3m eID users in Sweden and c18m in the Nordics on our calculations.
- As mentioned earlier, Verisec's organic growth strategy revolves around delivering a network effect that becomes more valuable the larger the Freja eID platform gets. Beyond our forecasts, we assume users looking for a mobile eID solution are attracted by Freja eID having c370 services integrated in the platform by end-2021e, whereas service providers become attracted to put their services on the Freja eID platform because it can speed up implementation for new users. When Verisec begins to see the full impact of this, we could see sustained 30%+ top-line growth beyond our forecast period.
- While we do not include Freja eID sales from outside Sweden in our forecasts, we believe the Nordic ~SEK3bn eID market provides a long runway for growth and is ripe for disruption by an internationally scalable solution such as Freja eID. However, we await successful penetration in the Swedish eID market before including this potential in our sales forecasts.

More users drive more services, and more services yield more value to users

Figure 55: Freja eID platform annual revenue simulation (SEKm the size of the bubble)



Source: Verisec (underlying data), DNB Markets (graph structuring)

### Costs

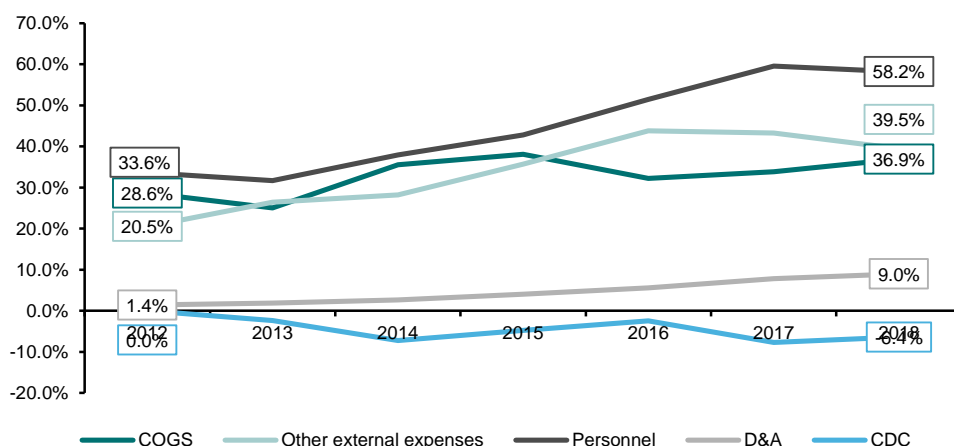
Personnel costs dominate the cost base, and 80 employees (excluding six consultants) by end-2018 comprised 58% sales. Verisec has made significant investments in personnel in the past five years, with the headcount increasing by 2.5x since 2013.

Large fixed cost base allows for economies of scale once revenue materialises

As Verisec is preparing itself for rapid growth, it means heavy investment in its opex lines including R&D, S&M, and G&A. Most software development costs for the Freja eID platform are already taken, although we still expect considerable maintenance expenses associated with additional investments in technology development. While these are vital to accelerate top-line growth, they hurt the bottom line, with profitability declining significantly to a trough EBIT margin of -37% in 2018 on our forecasts.

Moreover, if Verisec were to expand Freja eID internationally we argue that ramping this up would likely suppress margins as facilities; infrastructure and local headcount are all necessary costs that have to be borne prior to a region reaching scale.

Figure 56: Categorisation by type of cost (% of sales)



Source: Company (historical data)

### EBIT margin

We believe a typical business model transition often reduces or maintains revenues while operating expenses are likely to increase (absolute level). As this has been the case for Verisec, it has reduced profitability, turning a profitable business into a loss-making one. We estimate that prior to preparing for transition into an IDaaS model (Freja eID), Verisec enjoyed an EBIT margin of 15–20%. However, following the transition, margins have turned negative.

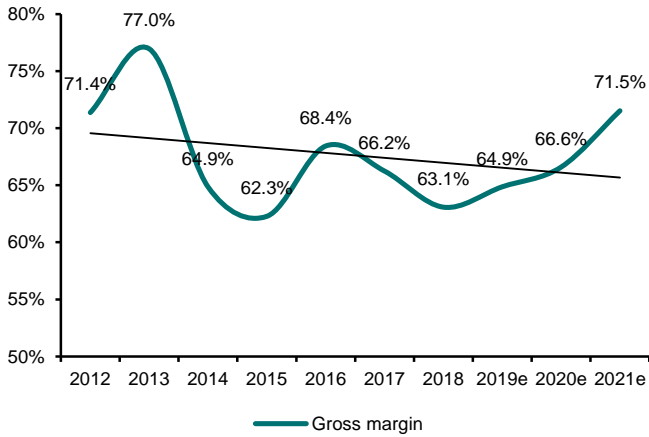
Business model transition has meant stable revenues but elevated opex...

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While some investors might be concerned by the losses and lack of clear near-term profitability target, we believe Verisec is on an appropriate path in terms of the land-grab opportunity to bring in as many service providers and partners as possible and build a user base on the platform.

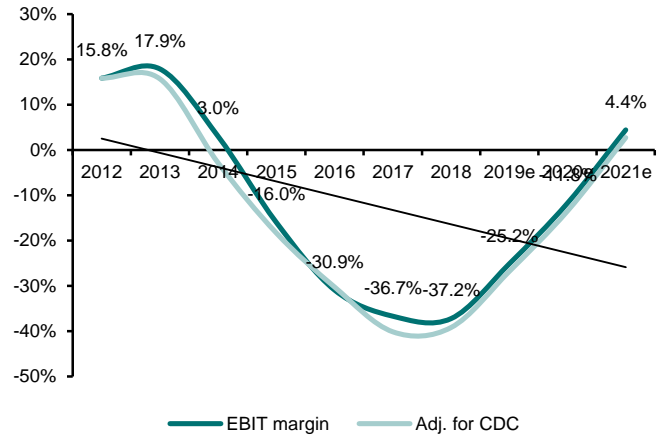
...meaning short-term pain for long-term gain

Figure 57: Gross margin



Source: DNB Markets (forecasts), company (historical data)

Figure 58: EBIT adj. margin



Source: DNB Markets (forecasts), company (historical data)

Verisec’s move towards an IDaaS model and greater scale should drive higher margins. We forecast the gross margin climbing to 72% by 2021e as it benefits from economies of scale from user and customer base growth in Freja eID, resulting in positive mix effects as the IDaaS model should become a greater proportion of group sales. As a comparison, other software security and SaaS peers typically have gross margins of 75–80%, which is why we identify potential upside to our forecasts.

Three moving parts in the margin story:

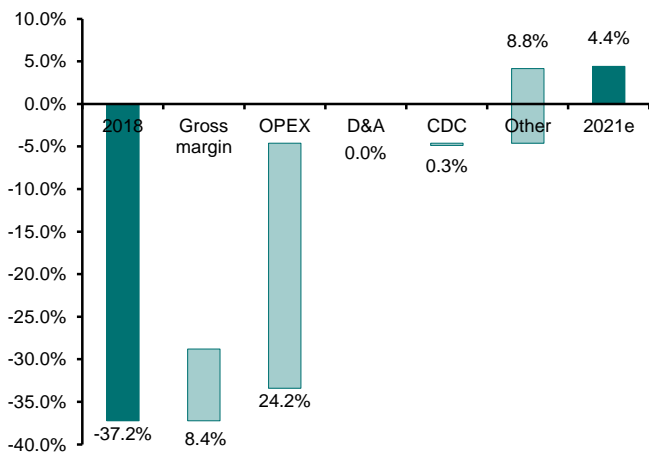
- gross margin progression
- operating margin progression
- discretionary investment

The early investments in the platform should help Verisec to grow a large enough revenue base to create leverage and drive margin expansion. While ramping up the Freja eID platform in terms of sales and marketing activity should hold back margins in the coming quarters, we believe that as opex normalises and Freja eID revenues materialise, we expect the EBIT margin to grow from -37% in 2018 to 4% by 2021e, with further expansion potential by 2025e.

We believe Verisec passed its trough operating loss margin (-40%) on a rolling 12-month basis in Q2 2018 and is now showing progress on its path to profitability, reporting an LTM EBIT margin of -25% in Q2 2019.

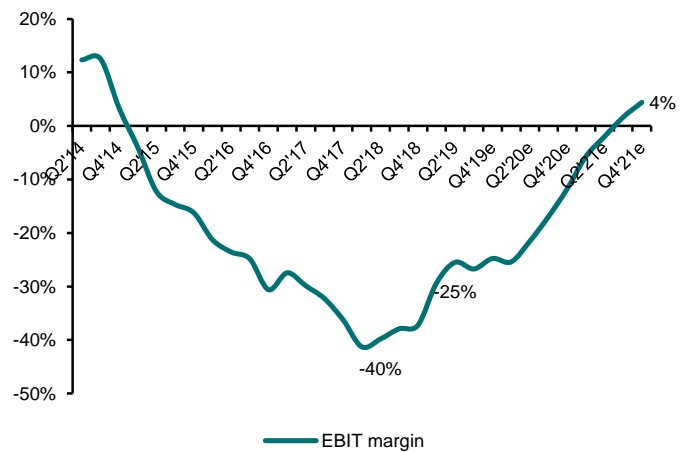
Verisec has started to deliver on its path to profitability, in our view

Figure 59: EBIT adj. margin bridge



Source: DNB Markets (forecasts), company (historical data)

Figure 60: EBIT adj. margin rolling 12-months

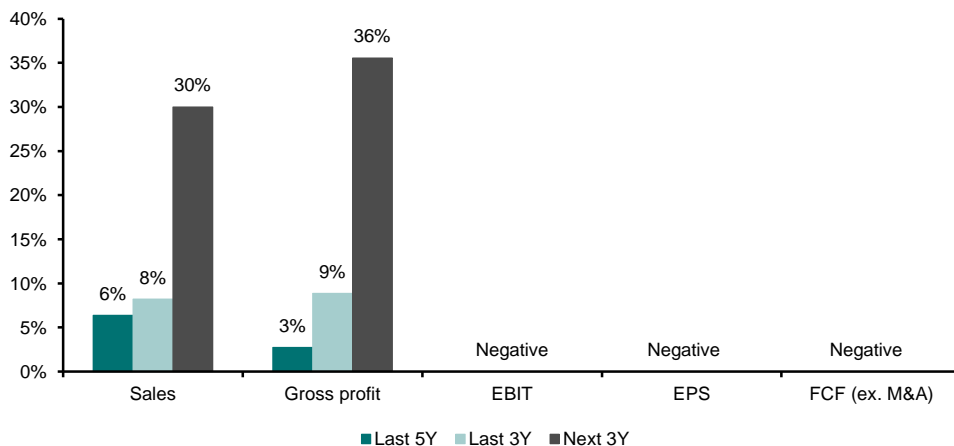


Source: DNB Markets (forecasts), company (historical data)

While Verisec has reported a sales CAGR of only 8% in the past three years, we expect 30% for 2018–2021e as we approach the inflection point of when investments made in the company’s main growth driver Freja eID become visible in the results by 2020e.

Freja eID is the main growth driver

Figure 61: CAGRs



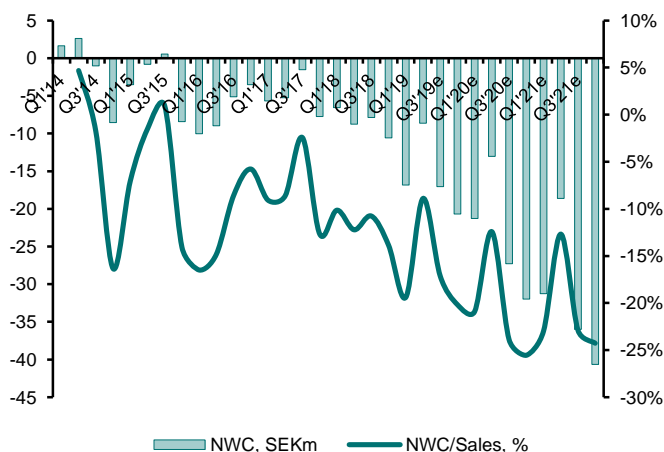
Source: DNB Markets (forecasts), company (historical data)

### Cash flow

Verisec has an asset-light operating model that should at maturity (post EBIT breakeven by 2021 on our forecasts) have achieved high cash conversion as it operates with moderate capex requirements and negative working capital (excluding cash) as customers pay at least 12 months in advance for its hardware security modules and up to 36 months in advance for its Freja ID suite licenses (which are then accrued over the period).

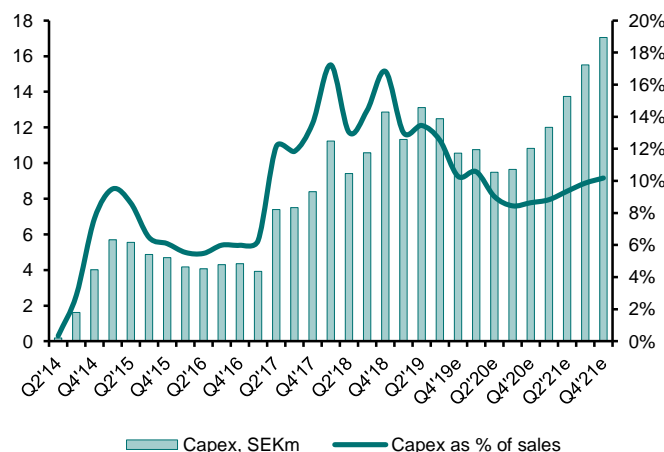
‘One of those’ negative NWC companies

Figure 62: Net working capital/sales (SEKm, 12-month rolling)



Source: DNB Markets (forecasts), company (historical data)

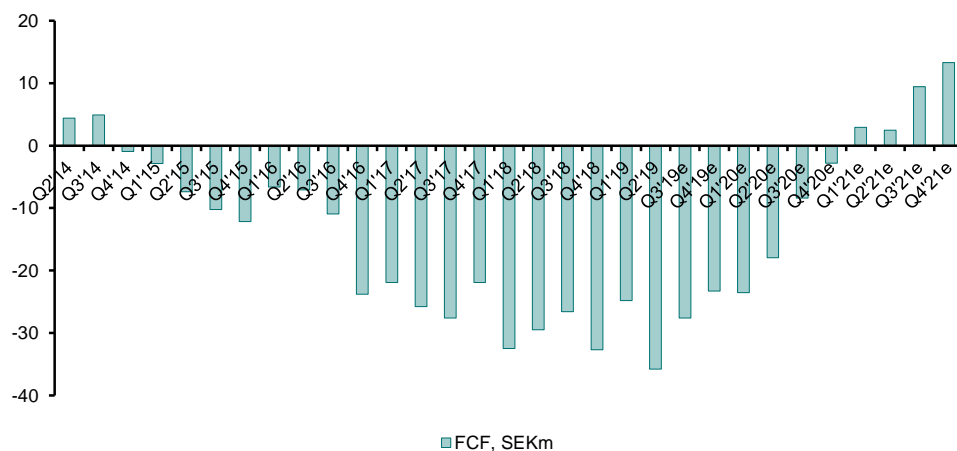
Figure 63: Capex/sales (SEKm, 12-month rolling)



Source: DNB Markets (forecasts), company (historical data)

Being in the midst of an investment phase, we consider it important to look at Verisec’s cash flow profile as another measure of progress in its core operations. We estimate a FCF margin of -23% in 2019e (up from -44% in 2018). While we expect quarterly cash flow fluctuations in 2019–2021e as the company invests ahead of growth, we expect the IDaaS model to drive steady FCF accretion and margin expansion as the company balances top-line growth with disciplined spend.

Figure 64: Free cash flow (SEKm, %, 12-month rolling)



Source: DNB Markets (forecasts), company (historical data)

A key debate for companies in Verisec’s stage of maturity being loss-making is how many years they can afford to burn cash before reaching a stressed situation. Based on our sensitivity analysis (Figure 65), a 5% EBIT margin is required to reach cash breakeven if it reports a >10% sales CAGR in 2018–2021e (we forecast 30% sales CAGR and a 2021 EBIT margin of 4%).

Our FCF analysis shows Versiec needs an EBIT margin of c5% in 2021e to reach cash breakeven

Figure 65: Verisec's FCF at various sales growth rates and EBIT margins (SEKm)

		Sales CAGR 2018-2021e					
		5%	10%	15%	20%	25%	30%
EBIT margin 2021e	-3.0%	-8	-8	-9	-9	-10	-10
	-2.0%	-7	-7	-8	-8	-8	-9
	-1.0%	-6	-6	-6	-7	-7	-7
	0.0%	-5	-5	-5	-5	-5	-5
	1.0%	-4	-4	-4	-4	-4	-4
	2.0%	-3	-3	-3	-3	-2	-2
	3.0%	-3	-2	-2	-1	-1	0
	4.0%	-2	-1	-1	0	1	2
	5.0%	-1	0	1	1	2	3
6.0%	0	1	2	3	4	5	
7.0%	1	2	3	4	5	7	
8.0%	2	3	4	5	7	8	

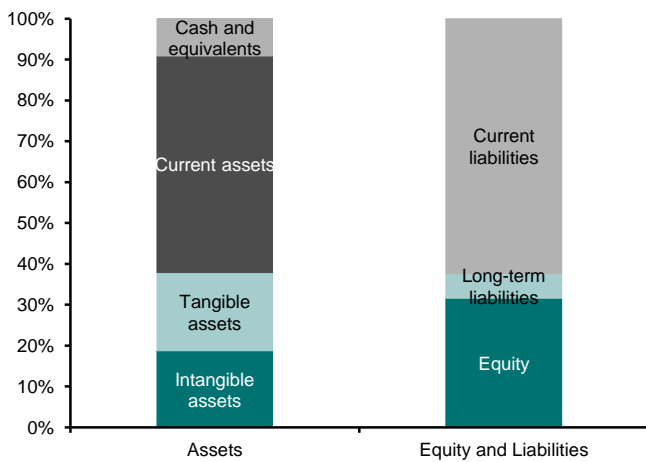
Source: DNB Markets (forecasts)

## Balance sheet

The balance sheet is asset-light from an operational perspective, with current assets and liabilities comprising c50–60% of the balance sheet (negative working capital). Based on our FCF analysis, we believe the net cash position of SEK9m by end-2019e (including the SEK30m credit facility) should provide enough headroom to become cash breakeven.

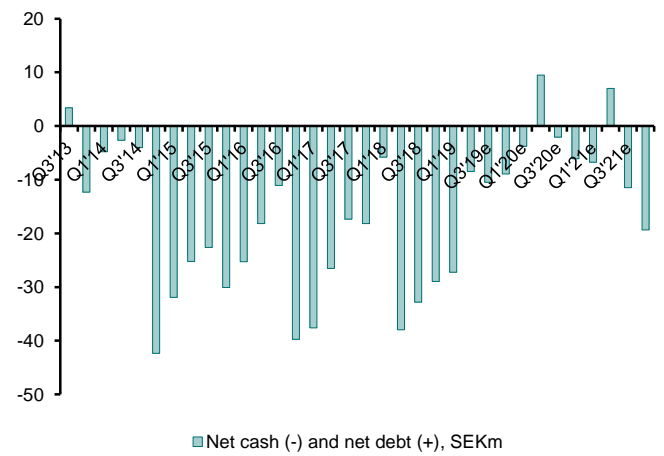
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Figure 66: Balance sheet (end-Q2 2019, %)



Source: Company (historical data)

Figure 67: Net cash (-) and net debt (+), SEKm



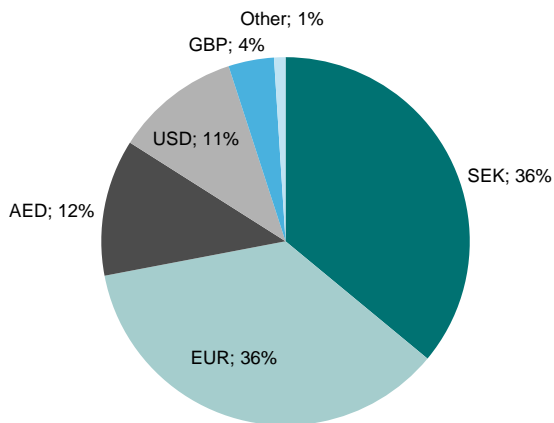
Source: DNB Markets (forecasts), company (historical data)

### FX sensitivity

Verisec reports in SEK and operates globally, with two thirds of sales from outside Sweden. While a large part of the opex cost base is in SEK, we believe the FX exposure from a sales and cost perspective match each other relatively well. Exchange rate movements between the SEK and the EUR, AED, and USD are of particular importance. For instance, if SEK were to weaken by 10% against the EUR, it would give a FX tailwind of SEK0.6m for Verisec.

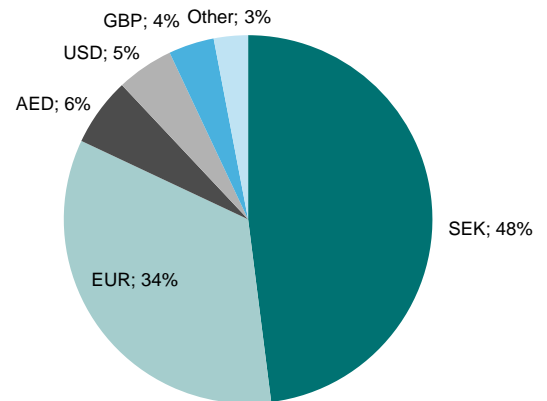
Benefiting from a weak SEK

Figure 68: Sales FX exposure (2018)



Source: Company (historical data)

Figure 69: Cost exposure (2018)



Source: Company (historical data)

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Figure 70: Annual income statement

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>Sales</b>	<b>40.4</b>	<b>56.0</b>	<b>51.5</b>	<b>60.2</b>	<b>60.7</b>	<b>61.1</b>	<b>76.3</b>	<b>102.5</b>	<b>125.2</b>	<b>167.5</b>
COGS	-11.6	-14.0	-18.3	-22.9	-19.6	-20.6	-28.2	-37.0	-41.8	-47.7
<b>Gross profit</b>	<b>28.8</b>	<b>42.0</b>	<b>33.2</b>	<b>37.3</b>	<b>41.1</b>	<b>40.4</b>	<b>48.1</b>	<b>65.5</b>	<b>83.4</b>	<b>119.8</b>
Capitalised development costs	0.0	1.3	3.7	2.9	1.5	4.7	4.9	6.2	8.2	8.6
Other external expenses	-8.3	-14.8	-14.5	-21.5	-26.6	-26.4	-30.1	-32.5	-40.8	-45.1
Personnel costs	-13.6	-17.7	-19.5	-25.8	-31.2	-36.3	-44.4	-58.0	-65.6	-76.0
<b>EBITDA</b>	<b>7.0</b>	<b>10.8</b>	<b>2.9</b>	<b>-7.1</b>	<b>-15.2</b>	<b>-17.6</b>	<b>-21.5</b>	<b>-14.7</b>	<b>-2.6</b>	<b>22.5</b>
Depreciation and Amortisation	-0.6	-1.0	-1.4	-2.5	-3.4	-4.8	-6.9	-10.7	-12.1	-15.1
<b>EBIT</b>	<b>6.4</b>	<b>9.7</b>	<b>1.5</b>	<b>-9.6</b>	<b>-18.6</b>	<b>-22.4</b>	<b>-28.4</b>	<b>-25.4</b>	<b>-14.7</b>	<b>7.4</b>
<i>EBIT margin</i>	<i>15.8%</i>	<i>17.4%</i>	<i>3.0%</i>	<i>-15.9%</i>	<i>-30.6%</i>	<i>-36.7%</i>	<i>-37.2%</i>	<i>-24.8%</i>	<i>-11.8%</i>	<i>4.4%</i>
One-offs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT adj.</b>	<b>6.4</b>	<b>9.7</b>	<b>1.5</b>	<b>-9.6</b>	<b>-18.6</b>	<b>-22.4</b>	<b>-28.4</b>	<b>-25.4</b>	<b>-14.7</b>	<b>7.4</b>
<i>EBIT adj. margin</i>	<i>15.8%</i>	<i>17.4%</i>	<i>3.0%</i>	<i>-15.9%</i>	<i>-30.6%</i>	<i>-36.7%</i>	<i>-37.2%</i>	<i>-24.8%</i>	<i>-11.8%</i>	<i>4.4%</i>
Net CDC	0.0	-1.2	-3.0	-1.4	0.4	-2.1	-1.5	-1.7	-2.2	-2.9
<b>EBIT adj. for cap. dev. costs</b>	<b>6.4</b>	<b>8.5</b>	<b>-1.5</b>	<b>-11.0</b>	<b>-18.2</b>	<b>-24.5</b>	<b>-29.9</b>	<b>-27.1</b>	<b>-16.9</b>	<b>4.5</b>
<i>EBIT adj. CDC margin</i>	<i>15.8%</i>	<i>15.3%</i>	<i>-2.9%</i>	<i>-18.3%</i>	<i>-30.0%</i>	<i>-40.1%</i>	<i>-39.2%</i>	<i>-26.4%</i>	<i>-13.5%</i>	<i>2.7%</i>
Net financial items	-0.2	-0.2	0.3	-0.1	0.5	-0.2	-0.6	-0.6	-0.6	-0.8
<b>Pre-tax profit</b>	<b>6.2</b>	<b>9.6</b>	<b>1.8</b>	<b>-9.7</b>	<b>-18.1</b>	<b>-22.6</b>	<b>-29.0</b>	<b>-26.0</b>	<b>-15.3</b>	<b>6.6</b>
Tax	-1.7	-0.6	-0.5	1.6	-0.3	-0.2	-0.4	1.2	-0.1	0.0
<b>Net profit</b>	<b>4.5</b>	<b>9.0</b>	<b>1.3</b>	<b>-8.1</b>	<b>-18.4</b>	<b>-22.8</b>	<b>-29.4</b>	<b>-24.8</b>	<b>-15.4</b>	<b>6.6</b>
Gross margin	71.4%	75.0%	64.5%	61.9%	67.8%	66.2%	63.1%	63.9%	66.6%	71.5%
EBITDA margin	17.2%	19.3%	5.6%	-11.9%	-25.0%	-28.8%	-28.2%	-14.4%	-2.1%	13.4%
Adj. EBIT margin	15.8%	17.4%	3.0%	-15.9%	-30.6%	-36.7%	-37.2%	-24.8%	-11.8%	4.4%
<b>Freja eID (DNBe)</b>										
Number of relying parties						0	55	131	251	371
Number of users						0	0	40,000	220,000	420,000
<b>Sales by product area</b>										
Goods	0.0	0.0	0.0	25.4	17.2	12.8	14.0	22.3	15.3	16.1
Services (incl. support)	0.0	0.0	0.0	34.4	42.9	48.2	62.3	77.2	86.1	90.4
Freja eID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	24.0	61.2
<b>Group Total</b>	<b>40.4</b>	<b>56.0</b>	<b>51.5</b>	<b>60.2</b>	<b>60.7</b>	<b>61.1</b>	<b>76.3</b>	<b>102.5</b>	<b>125.2</b>	<b>167.5</b>
<b>Sales growth by product area</b>										
Goods					-32%	-26%	9%	60%	-31%	5%
Services (incl. support)					25%	12%	29%	24%	12%	5%
Freja eID									1375%	155%
<b>Group Total</b>		<b>35%</b>	<b>-6%</b>	<b>17%</b>	<b>0%</b>	<b>2%</b>	<b>25%</b>	<b>32%</b>	<b>24%</b>	<b>34%</b>
<b>Sales growth, of which</b>										
Organic		35%	-8%	8%	1%	2%	21%	28%	23%	34%
Structure		0%	0%	0%	0%	0%	0%	0%	0%	0%
Currency		0%	2%	8%	-1%	0%	4%	5%	1%	0%
<b>Total growth</b>		<b>35%</b>	<b>-6%</b>	<b>17%</b>	<b>0%</b>	<b>2%</b>	<b>25%</b>	<b>32%</b>	<b>24%</b>	<b>34%</b>

Source: DNB Markets (forecasts), company (historical data)



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Figure 71: Quarterly income statement

(SEKm)	Q1'18	Q2'18	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19e	Q4'19e	Q1'20e	Q2'20e
<b>Sales</b>	<b>17.8</b>	<b>19.3</b>	<b>19.8</b>	<b>19.5</b>	<b>28.1</b>	<b>29.8</b>	<b>22.0</b>	<b>22.6</b>	<b>27.4</b>	<b>33.0</b>
COGS	-6.6	-8.1	-7.2	-6.4	-10.6	-11.3	-8.0	-7.1	-9.8	-12.1
<b>Gross profit</b>	<b>11.2</b>	<b>11.2</b>	<b>12.6</b>	<b>13.1</b>	<b>17.5</b>	<b>18.5</b>	<b>14.0</b>	<b>15.5</b>	<b>17.6</b>	<b>21.0</b>
Capitalised development costs	0.9	1.4	1.3	1.3	1.0	2.0	1.5	1.7	1.1	2.0
Other external expenses	-8.4	-8.0	-6.1	-7.7	-7.2	-10.6	-6.7	-8.0	-9.3	-11.5
Personnel costs	-10.9	-11.5	-10.2	-11.8	-13.9	-14.3	-14.6	-15.1	-15.6	-16.1
<b>EBITDA</b>	<b>-7.1</b>	<b>-6.9</b>	<b>-2.4</b>	<b>-5.2</b>	<b>-2.6</b>	<b>-4.5</b>	<b>-4.1</b>	<b>-3.6</b>	<b>-3.0</b>	<b>-1.5</b>
Depreciation and Amortisation	-1.6	-1.6	-1.7	-1.9	-3.1	-3.4	-1.8	-2.3	-3.2	-3.2
<b>EBIT</b>	<b>-8.7</b>	<b>-8.5</b>	<b>-4.1</b>	<b>-7.1</b>	<b>-5.7</b>	<b>-7.9</b>	<b>-5.9</b>	<b>-5.9</b>	<b>-6.2</b>	<b>-4.6</b>
<i>EBIT margin</i>	<i>-49.0%</i>	<i>-44.3%</i>	<i>-20.7%</i>	<i>-36.4%</i>	<i>-20.3%</i>	<i>-26.4%</i>	<i>-26.8%</i>	<i>-26.3%</i>	<i>-22.5%</i>	<i>-14.0%</i>
One-offs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT adj.</b>	<b>-8.7</b>	<b>-8.5</b>	<b>-4.1</b>	<b>-7.1</b>	<b>-5.7</b>	<b>-7.9</b>	<b>-5.9</b>	<b>-5.9</b>	<b>-6.2</b>	<b>-4.6</b>
<i>EBIT adj. margin</i>	<i>-49.0%</i>	<i>-44.3%</i>	<i>-20.7%</i>	<i>-36.4%</i>	<i>-20.3%</i>	<i>-26.4%</i>	<i>-26.8%</i>	<i>-26.3%</i>	<i>-22.5%</i>	<i>-14.0%</i>
Net CDC	-0.1	-0.6	-0.4	-0.4	0.0	-1.0	-0.3	-0.4	0.0	-1.2
<b>EBIT adj. for cap. dev. costs</b>	<b>-8.8</b>	<b>-9.1</b>	<b>-4.5</b>	<b>-7.5</b>	<b>-5.7</b>	<b>-8.9</b>	<b>-6.2</b>	<b>-6.3</b>	<b>-6.2</b>	<b>-5.8</b>
<i>EBIT adj. CDC margin</i>	<i>-49.6%</i>	<i>-47.4%</i>	<i>-22.7%</i>	<i>-38.5%</i>	<i>-20.3%</i>	<i>-29.7%</i>	<i>-28.3%</i>	<i>-27.8%</i>	<i>-22.5%</i>	<i>-17.5%</i>
Net financial items	-0.3	-0.3	0.0	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
<b>Pre-tax profit</b>	<b>-9.0</b>	<b>-8.8</b>	<b>-4.1</b>	<b>-7.1</b>	<b>-5.8</b>	<b>-8.0</b>	<b>-6.0</b>	<b>-6.0</b>	<b>-6.3</b>	<b>-4.8</b>
Tax	-0.1	-0.1	-0.1	-0.1	-0.1	1.4	-0.1	-0.1	-0.1	0.0
<b>Net profit</b>	<b>-9.1</b>	<b>-8.9</b>	<b>-4.2</b>	<b>-7.2</b>	<b>-6.0</b>	<b>-6.7</b>	<b>-6.1</b>	<b>-6.1</b>	<b>-6.3</b>	<b>-4.8</b>
Gross margin	63.0%	58.1%	63.8%	67.2%	62.3%	62.0%	63.5%	68.7%	64.1%	63.5%
EBITDA margin	-40.2%	-35.8%	-12.0%	-26.5%	-9.1%	-15.0%	-18.5%	-16.0%	-10.9%	-4.4%
Adj. EBIT margin	-49.0%	-44.3%	-20.7%	-36.4%	-20.3%	-26.4%	-26.8%	-26.3%	-22.5%	-14.0%
<b>Freja eID (DNBe)</b>										
Number of relying parties	8	18	25	55	73	91	111	131	161	191
Number of users	0	0	0	0	5,000	10,000	15,000	40,000	70,000	120,000
<b>Sales by product area</b>										
Goods	3.3	4.8	3.2	2.6	10.0	6.1	3.4	2.9	5.0	3.6
Services (incl. support)	14.4	14.4	16.6	16.9	18.2	22.1	18.3	18.6	20.0	24.8
Freja eID	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.1	2.4	4.8
<b>Group Total</b>	<b>17.8</b>	<b>19.3</b>	<b>19.8</b>	<b>19.5</b>	<b>28.1</b>	<b>29.8</b>	<b>22.0</b>	<b>22.6</b>	<b>27.4</b>	<b>33.0</b>
<b>Sales growth by product area</b>										
Goods	22%	296%	-44%	-17%	199%	27%	5%	10%	-50%	-40%
Services (incl. support)	26%	28%	31%	31%	26%	54%	10%	10%	10%	12%
Freja eID										2700%
<b>Group Total</b>	<b>25%</b>	<b>55%</b>	<b>7%</b>	<b>22%</b>	<b>59%</b>	<b>47%</b>	<b>11%</b>	<b>16%</b>	<b>-3%</b>	<b>17%</b>
<b>Sales growth, of which</b>										
Organic	25%	51%	1%	17%	51%	42%	8%	12%	-5%	16%
Structure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Currency	0%	4%	6%	5%	8%	5%	3%	3%	3%	1%
<b>Total growth</b>	<b>25%</b>	<b>55%</b>	<b>7%</b>	<b>22%</b>	<b>59%</b>	<b>47%</b>	<b>11%</b>	<b>16%</b>	<b>-3%</b>	<b>17%</b>

Source: DNB Markets (forecasts), company (historical data)

## Financial targets and DNB Markets' forecasts

Verisec has one overriding corporate objectives and three financial targets:

- **Corporate goal:** to create a wide service offering surrounding eIDs in Sweden and internationally. By building a platform that connects a vast number of end-users (consumers) with numerous online services with eIDs in the centre, considerable value can be created for connected parties.

- **Financial goals (communicated in 2015):**

- 1 Net sales of SEK200m by 2020e.

- 2 EBIT margin of 15–20%.

As financial goals 1 and 2 were communicated in 2015, we question their relevance given the shift in the business model and product focus since. Yet, as no other financial metrics have been provided, we note we are clearly below Verisec's sales ambition and path to profitability trajectory as we forecast 2020e sales of SEK125m and an EBIT margin of -12%.

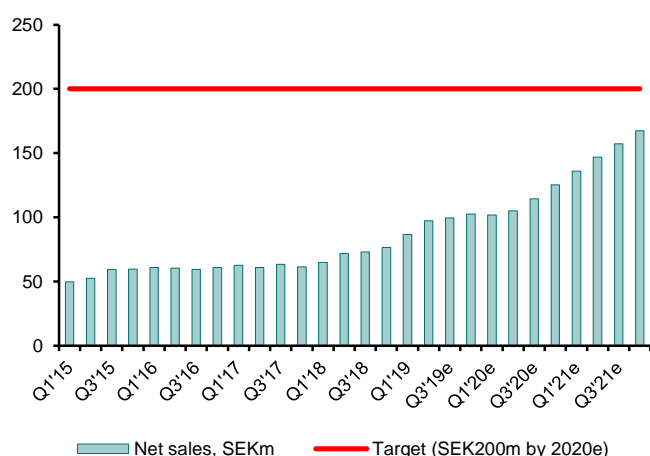
To us, it is more relevant to track the number of relying parties integrated into the Freja eID platform. In recent discussions with management, we believe it has an ambition to reach 600 relying parties by 2020e, implying the addition of c450 parties by 2020e. While this seems a bit too optimistic to us, we note Verisec has solid prospects to reach a relying party base of >350 by end-2021e as things stand now. If it experiences more rapid adoption of Freja eID than we assume, we would have reason to revisit our forecasts.

Figure 72: Versiec's ambitions – reported and DNB Markets' estimates

	Reported fiscal years					Verisec's 2020e ambition	DNB Markets' estimates		
	2014	2015	2016	2017	2018		2019e	2020	2021e
Net sales	52	60	61	61	76	200	102	125	168
EBIT margin	3.0%	-16.0%	-30.9%	-36.7%	-37.2%	15-20%	-25.2%	-11.8%	4.4%
Number of relying parties	0	0	0	0	55	600	131	251	371

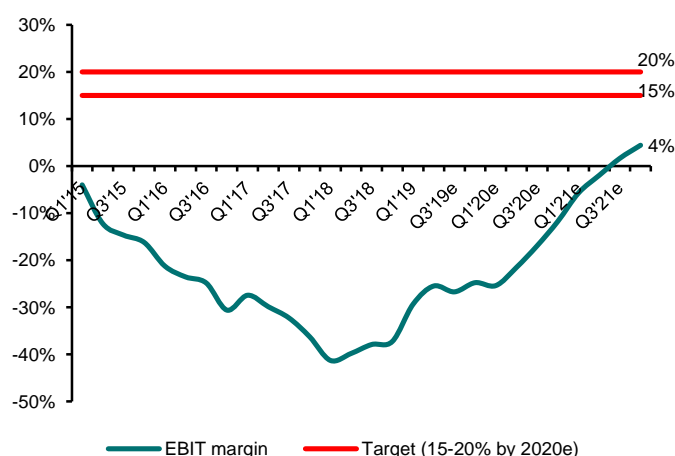
Source: DNB Markets (forecasts), company (historical data)

Figure 73: Sales growth – target and DNB Markets' estimates (LTM)



Source: DNB Markets (forecasts), company (historical data and target)

Figure 74: EBIT margin – target and DNB Markets' estimates (LTM)



Source: DNB Markets (forecasts), company (historical data and target)

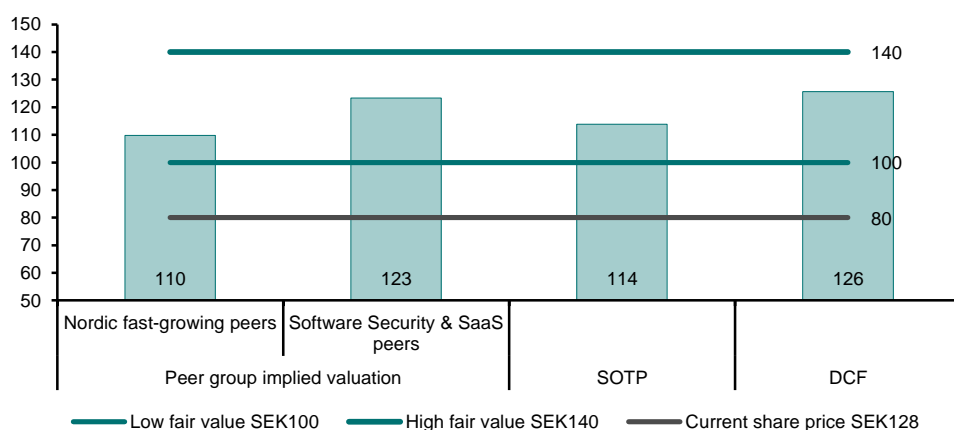
## Valuation

We calculate a fair value of SEK100–140/share based on an equally weighted average of our Nordic fast-growing and Software Security & SaaS peers group’s 2019–2021e multiples, SOTP, and DCF, corresponding to a 2020e EV/Sales of 3.8–5.4x. The current share price of SEK80 implies a value of SEK45/share (SEK55m, 2021e EV/Sales 0.9x) for Freja eID, which we believe could be conservative given its no.2–3 position in the Nordic eID market (which we estimate could be worth SEK3bn in 2019e). We believe the stock could appeal to technology and growth-oriented investors in particular.

Fair value of SEK100–140/share, suggesting c25–75% upside potential from the current share price

- Our bear-case fair value is SEK50–60/share:
  - We assume an unsuccessful launch of Freja eID. In this scenario, all 2021e sales stem from Verisec's legacy business and apply Verisec's historical average EV/sales of 3.0x prior to its Freja eID focus (pre-2017). With cash outflow rising, we assume a SEK40m rights issue (>10% dilution).
- Our bull-case fair value is SEK250–300/share:
  - Freja eID achieves its targeted 600 relying parties by end-2021e and adds 800,000 users to its platform, validating strong long-term growth prospects. We assume it has 5% of the Nordic eID market by end-2021e and investors using US IDaaS companies with EV/sales >10 as peers.

Figure 75: Valuation summary (SEK)



Source: DNB Markets

## Peer group valuation

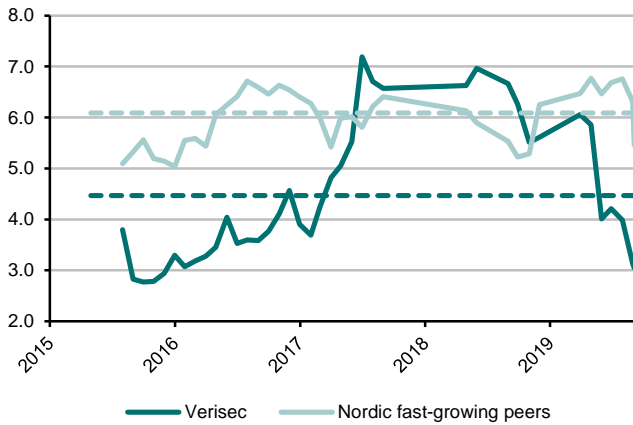
We have looked at various valuation methodologies but since Verisec is still investing for growth at the expense of being unlikely to turn profitable before 2021 on our forecasts, investors are more likely to focus on EV/sales medium-term, in our view. We have identified two primary peer groups relevant for valuation purposes in terms of business models, position in the value chain, and end-market exposure etc:

- **Nordic fast-growing peers**, mainly from the Swedish small and mid-cap lists of which the majority are leaders in niche markets with scalable (large fixed-cost base), high-growth, high-margin, and asset-light business models and cash-generative characteristics. We believe these should be the go-to peers for the Nordic investment community. Yet, we expect Verisec’s profitability to be inferior this peer group, with its considerably smaller SEK400m market cap and listing on First North Premier suggesting liquidity risk. Thus, we apply a 25% discount to this peer group, in line with the historical average.
- **Software Security & SaaS peers** are software-based vendors that operate subscription- and Software-as-a-Service business models. They have similar underlying drivers from secular trends such as the spread of digitalisation, rising adoption of cyber security, global regulation, corporate and personal transitions from physical to digital data etc. all providing

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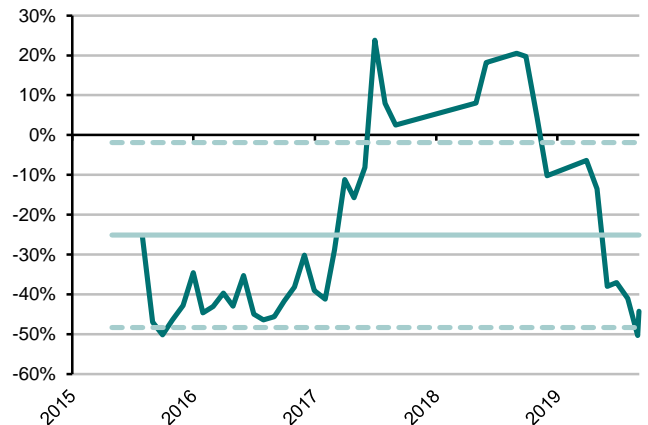
a long tailwind for market growth. The valuation for these companies looks rich, but there is premium valuation for premium growth, in our view. To this peer group we apply a 30% discount to, in line with the historical average.

**Figure 76: EV/sales 12-month forward Verisec versus Nordic fast-growing peers**



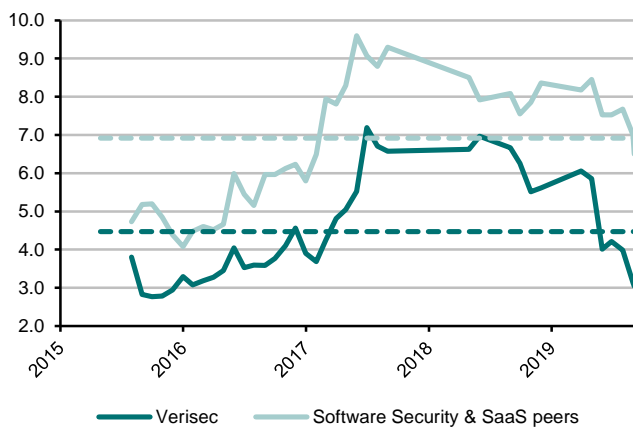
Source: Bloomberg (underlying data), DNB Markets (further calculations)

**Figure 77: Premium/discount EV/sales 12-month forward Verisec to Nordic fast-growing peers**



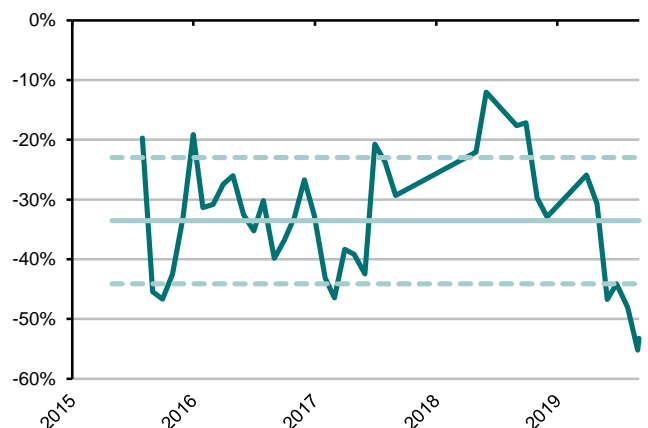
Source: Bloomberg (underlying data), DNB Markets (further calculations)

**Figure 78: EV/Sales 12-month forward Verisec versus Software Security & SaaS peers**



Source: Bloomberg (underlying data), DNB Markets (further calculations)

**Figure 79: Premium/discount EV/Sales 12-month forward Verisec to Software Security & SaaS peers**

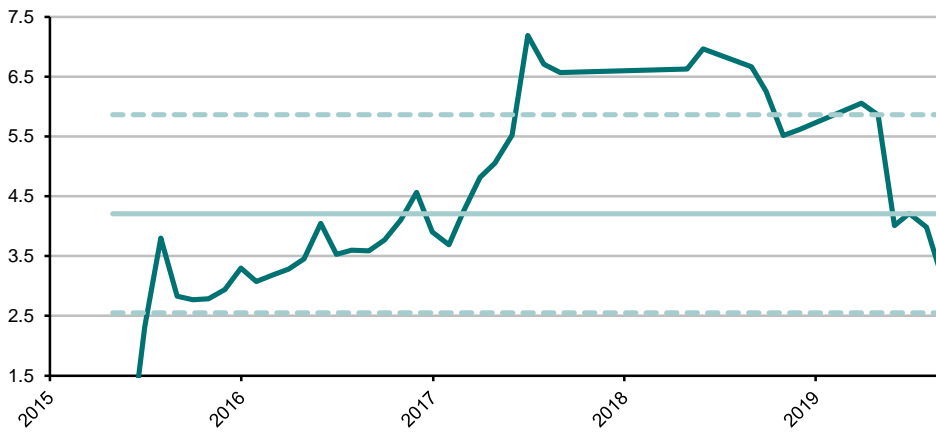


Source: Bloomberg (underlying data), DNB Markets (further calculations)

Verisec is trading at an 12-month forward EV/Sales of 3.0x, a 32% discount to its historical average of 4.5x.

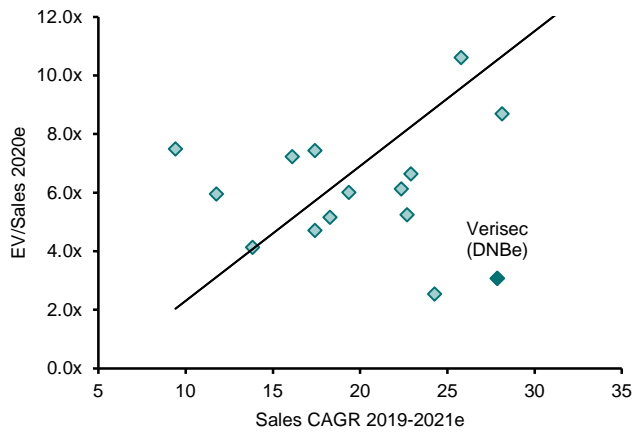
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Figure 80: EV/sales 12-month forward Verisec



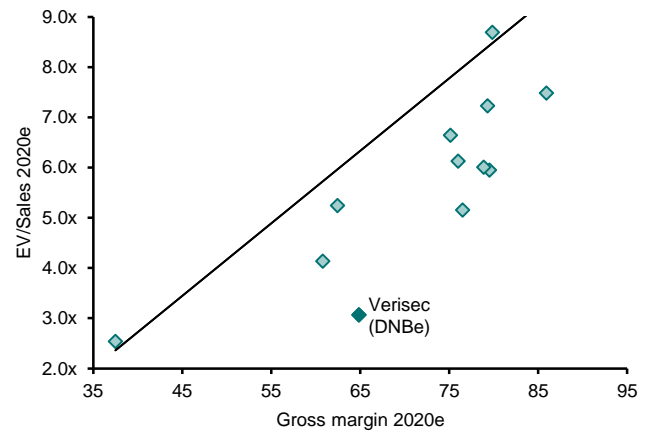
Source: Bloomberg (underlying data), DNB Markets (further calculations)

Figure 81: Sales growth versus EV/sales 12-month forward



Source: Bloomberg (underlying data), DNB Markets (further calculations)

Figure 82: EV/sales versus gross margin, 2020e



Source: Bloomberg (underlying data), DNB Markets (further calculations)

**Figure 83: Verisec valuation versus listed peers**

	Mkt. cap. (SEKbn)			P/E (x)			EV/EBIT (x)			EV/Sales (x)			Gross margin	EBIT margin	FCF margin	CAGR 2019–2021e (%)		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e				Sales	EBIT	EPS
<b>Verisec (DNBe)</b>	<b>0.4</b>		<b>59.3</b>			<b>50.1</b>			<b>3.7</b>	<b>3.1</b>	<b>2.2</b>	<b>64.9</b>	<b>-24.8</b>	<b>-22.7</b>	<b>28</b>			
Premium/discount		n.a.	n.a.	113%		n.a.	n.a.	159%	-51%	-50%	-59%	-11.4	-42.1	-36.5	8	n.a.	n.a.	
<b>Nordic fast-growing peers</b>																		
Admicom	2.5	43.3	33.8	26.9		32.8	25.0		13.8	10.6	8.7		41.8	38.6	26	27	27	
Evolution Gaming	34.3	24.1	20.3	17.8		21.5	17.9	15.5	8.9	7.4	6.5		40.9	27.8	17	15	16	
HMS Networks	7.0	34.8	27.3	22.1		26.4	19.9	15.8	4.7	4.1	3.6	60.8	17.3	14.4	14	26	25	
Invisio Communications	3.2	38.0	28.4	21.9		28.2	19.8	15.6	6.7	5.2	4.5	62.5	23.1	22.4	23	32	32	
Lime Technologies	1.5	34.5	27.4	21.0		31.6	23.8	17.8	5.6	4.7	4.0		17.4	13.3	17	30	28	
Sectra	11.7	61.6	54.2	48.2		47.1	40.7	35.7	8.2	7.5	6.9	86.0	17.3		9	14	13	
Storytel	6.1								3.2	2.5	2.1	37.5	-17.9	-16.7	24	-13	-8	
<b>Average</b>		<b>39.4</b>	<b>31.9</b>	<b>26.3</b>		<b>31.2</b>	<b>24.5</b>	<b>20.1</b>	<b>7.3</b>	<b>6.0</b>	<b>5.2</b>	<b>61.7</b>	<b>20.0</b>	<b>16.6</b>	<b>19</b>	<b>19</b>	<b>19</b>	
<b>Median</b>		<b>36.4</b>	<b>27.9</b>	<b>22.0</b>		<b>29.9</b>	<b>21.8</b>	<b>15.8</b>	<b>6.7</b>	<b>5.2</b>	<b>4.5</b>	<b>61.6</b>	<b>17.4</b>	<b>18.4</b>	<b>17</b>	<b>26</b>	<b>25</b>	
<b>Software Security &amp; SaaS peers</b>																		
Okta	148.4								38.3	26.6	20.3	74.7	-13.8	-1.8	37	-22	-32	
Sailpoint	19.6		81.1	70.4					6.9	5.9	5.5	79.6		7.5	12		53	
Proofpoint	64.0	71.2	54.9	42.2		60.2	46.9		7.2	6.0	5.1	78.9	12.8	22.5	19	27	30	
DocuSign	80.1							98.9	11.5	8.7	7.0	79.9	0.2	5.7	28	558	155	
Qualys	30.1	37.9	34.2	28.8		29.0	24.0	19.4	8.3	7.2	6.2	79.3	31.2	35.4	16	16	15	
Rapid7	25.7			68.3				48.2	8.2	6.6	5.4	75.1	1.4	-8.7	23	230	300	
Palo Alto Networks	189.7	37.2	32.2	26.9		26.7	20.9		6.1	5.2	4.4	76.5	22.0	32.8	18	20	18	
Mimecast	24.8		92.5	63.2		93.0	57.1	35.6	7.6	6.1	5.1	76.0	7.8	10.7	22	57	57	
<b>Average</b>		<b>48.8</b>	<b>59.0</b>	<b>50.0</b>		<b>52.2</b>	<b>37.2</b>	<b>50.5</b>	<b>11.8</b>	<b>9.0</b>	<b>7.4</b>	<b>77.5</b>	<b>8.8</b>	<b>13.0</b>	<b>22</b>	<b>127</b>	<b>74</b>	
<b>Median</b>		<b>37.9</b>	<b>54.9</b>	<b>52.7</b>		<b>44.6</b>	<b>35.4</b>	<b>41.9</b>	<b>7.9</b>	<b>6.4</b>	<b>5.5</b>	<b>77.7</b>	<b>7.8</b>	<b>9.1</b>	<b>21</b>	<b>27</b>	<b>42</b>	
<b>Average</b>		<b>42.5</b>	<b>44.2</b>	<b>38.1</b>		<b>39.6</b>	<b>29.6</b>	<b>33.6</b>	<b>9.7</b>	<b>7.6</b>	<b>6.4</b>	<b>72.2</b>	<b>14.4</b>	<b>14.6</b>	<b>20</b>	<b>73</b>	<b>49</b>	
<b>Median</b>		<b>37.9</b>	<b>33.8</b>	<b>27.9</b>		<b>30.3</b>	<b>23.9</b>	<b>19.4</b>	<b>7.6</b>	<b>6.1</b>	<b>5.4</b>	<b>76.3</b>	<b>17.3</b>	<b>13.8</b>	<b>19</b>	<b>27</b>	<b>27</b>	

Source: Bloomberg (underlying data), DNB Markets (further calculations)

## SOTP valuation

We consider the Freja eID business Verisec's core asset. Apart from this, Verisec's legacy business is in B2B security solutions to manage digital identities on a large scale (two-factor authentication, user enrolment and device provisioning, cloud single sign-on) as well as hardware encryption and decryption solutions. While Freja eID success is likely to be a swing factor on Verisec's valuation we acknowledge the shortcomings of using the same valuation multiple for Verisec's such different assets (given likely slower long-term growth in its legacy business), which is why we also include a SOTP valuation.

SOTP value of SEK114/share

- We value Verisec's legacy business using cyber security peers such as Symantec, Fortinet, SecureWorks, FireEye, and Radware applying the median peer group 2021e EV/sales of 3.0x
- On our 2021e forecasts, this indicates:
  - An EV of SEK48m (SEK10/share) for the Goods division.
  - An EV of SEK267m (SEK55/share) for the Services (including support) business.
  - Net cash of SEK19m (SEK4/share).
  - SEK220m (SEK45/share) for the Freja eID exposure applying an EV/sales of 3.6x.
  - Our SOTP values Verisec at SEK114/share. Interestingly, the current share price (SEK80) implies a SEK55m valuation or 0.9x 2021e sales for Freja eID applying legacy business peers on the remaining business, which could be on the low side in our view.

Figure 84: SOTP valuation

SOTP	2021e EV/Sales	2021e Sales	Value SEK (m)	Value SEK (share)	Implicit value SEK (share)	Implicit EV/sales 2021e
Goods	3.0	16.1	47.7	9.8		
Services (including support)	3.0	90.4	267.4	54.9		
Freja eID	3.6	61.2	220.1	45.2	55	0.9
Net cash			19.4	4.0		
<b>Sum</b>			<b>555</b>	<b>114</b>		

Source: Bloomberg (underlying data), DNB Markets (further calculations)

## DCF valuation

We have sanity-checked our findings by running a DCF that yields a value of SEK126 per share, based on a WACC of 10% and a terminal growth rate of 3% as well as in-house assumptions. We see significant upside potential to our DCF if Verisec proves an ability to achieve more software-like margins upwards of 30%+.

DCF value of SEK126

- A 2018–2021e sales CAGR of 30%, sales growth of 20% p.a. on average for 2022–2026e, 15% for 2027–2030e, and 3% growth in the terminal period.
- We forecast EBIT breakeven by 2021e and believe the EBIT margin should gradually increase to Verisec's 15–20% target, and we assume a sustainable 20% EBIT in the terminal period, with a convergence between capex and D&A over time.
- Finance costs based on current gearing, a tax rate of 27%, and working capital decreasing by 5% of sales growth, suggesting FCF increasing from SEK-34m in 2018 to SEK96m in 2030e, and to SEK111m in the terminal period.
- A WACC of 10%, assuming 10% cost of equity (including a 2.5% liquidity risk premium), 13% cost of debt, and a leveraged beta of 0.99 based on in-house assumptions and Verisec's balance sheet.

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Figure 85: DCF (SEKm)

DCF	2017	2018	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	Terminal
<b>Sales</b>	<b>61</b>	<b>76</b>	<b>102</b>	<b>125</b>	<b>168</b>	<b>201</b>	<b>241</b>	<b>289</b>	<b>347</b>	<b>417</b>	<b>479</b>	<b>551</b>	<b>634</b>	<b>729</b>	<b>751</b>
Growth		25%	34%	22%	34%	20%	20%	20%	20%	20%	15%	15%	15%	15%	3%
EBITDA	-18	-22	-15	-3	22	33	47	65	81	102	117	135	155	178	195
Margin	-29%	-28%	-14%	-2%	13%	16%	19%	22%	23%	24%	24%	24%	24%	24%	26%
D&A	-5	-7	-11	-12	-15	-19	-22	-25	-28	-32	-34	-37	-39	-41	-43
% of sales	-8%	-9%	-10%	-10%	-9%	-10%	-9%	-9%	-8%	-8%	-7%	-7%	-6%	-6%	-6%
<b>EBIT</b>	<b>-22</b>	<b>-28</b>	<b>-25</b>	<b>-15</b>	<b>7</b>	<b>14</b>	<b>25</b>	<b>40</b>	<b>53</b>	<b>70</b>	<b>83</b>	<b>98</b>	<b>116</b>	<b>137</b>	<b>153</b>
Margin	-37%	-37%	-25%	-12%	4%	7%	10%	14%	15%	17%	17%	18%	18%	19%	20%
Net financial items	0	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-3	-3	-3	-3
Pre tax profit	-23	-29	-26	-15	7	13	24	38	51	68	80	95	113	133	149
Taxes	0	0	1	0	0	-3	-6	-10	-14	-18	-22	-26	-30	-36	-40
Tax rate	-1%	-1%	4%	-1%	0%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
<b>Net income</b>	<b>-23</b>	<b>-29</b>	<b>-25</b>	<b>-15</b>	<b>7</b>	<b>9</b>	<b>17</b>	<b>28</b>	<b>37</b>	<b>50</b>	<b>59</b>	<b>70</b>	<b>82</b>	<b>97</b>	<b>109</b>
<b>FCF calculation</b>															
EBIT	-22	-28	-25	-15	7	14	25	40	53	70	83	98	116	137	153
D&A (-)	5	7	11	12	15	19	22	25	28	32	34	37	39	41	43
Taxes (+)	0	0	1	0	0	-3	-6	-10	-14	-18	-22	-26	-30	-36	-40
Capex (+)	-8	-13	-11	-11	-17	-19	-22	-25	-28	-32	-34	-37	-39	-41	-43
% sales	-14%	-17%	-10%	-9%	-10%	-10%	-9%	-9%	-8%	-8%	-7%	-7%	-6%	-6%	-6%
Net acquisitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in NWC (-)	-4	-3	-10	-11	-9	-2	-2	-2	-3	-3	-3	-4	-4	-5	-1
% of sales growth		-19%	-39%	-50%	-20%	-5%	-5%	-5%	-5%	-5%	-5%	-5%	-5%	-5%	-5%
<b>Free cash flow</b>			<b>-34</b>	<b>-25</b>	<b>-3</b>	<b>8</b>	<b>16</b>	<b>27</b>	<b>36</b>	<b>48</b>	<b>58</b>	<b>69</b>	<b>81</b>	<b>96</b>	<b>111</b>

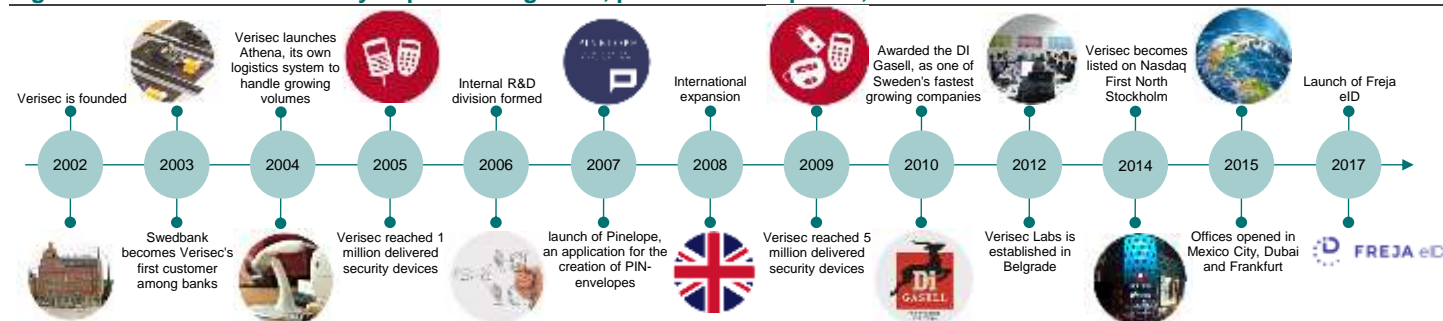
Source: DNB Markets



# Appendices

## Company history

Figure 86: Verisec has a history of profitable growth, product development, and innovation



Source: DNB Markets

## Management and board

Management has 20+ years' experience in IT security, originating from high-growth company Protect Data that was acquired by cyber security global leader Check Point in 2007 for cSEK4bn (5x NTM EV/sales). We believe management's background evidences key digital identity knowledge and building scalable high-growth companies. Moreover, management owns c60% of Verisec shares, suggesting their interests should be aligned with those of shareholders.

Management has proven ability to exploit potential in high-growth IT security companies and retain c60% ownership

### Management

- **Johan Henrikson – CEO since 2002**, co-founder, and board chairman (2001–2015). Mr Henrikson was born in 1969, holds a diploma in Business Administration, and has extensive experience of IT security, including marketing and sales of IT-based products and systems. He was previously a key account manager at Cognos and sales manager at Protect Data. Other commitments include CEO and board chairman of Aquitaine Holding AB, CEO and board member of Ludice AB, deputy board member of Ellacarl AB, Holding Point AB and Jetware AB, CEO and board chairman of other companies in the Verisec Group, as well as member of the City Council and the municipal executive board in Sigtuna Municipality and vice chairman of the Child and Youth Committee in Sigtuna. According to Holdings, he owns 617,337 Verisec shares (12.7% of the company).
- **Jakub Missuna – CFO and co-founder since 2002** as well as board member (2000–2015). Mr Missuna was born in 1972 and holds an MSc in Economics and a LL.M. Master of Laws. Other commitments include board member of Aquitaine Holding AB, board member of companies in the Cortinata Capital AB group, deputy board member of Skogsbron Invest AB and Tony Buss AB, as well as board member of subsidiaries in the Verisec Group. According to Holdings, he owns 635,514 Verisec shares (13.0% of the company).
- **Anders Henrikson – SVP Global Sales** since 2002, co-founder and board member since 2001. Mr Henrikson was born in 1972, holds a LL.M. Master of Laws, and has 14+ years' sales experience in IT security (key account manager and channel sales at Protect Data AB). Other commitments include CEO and board member of Ellacarl AB, board member of Aquitaine holding AB, board chairman of Aktiebolaget Våmfjärden, deputy board member of Ludice AB, board member of Holding Point AB and EfterSkolan AB, CEO of Jetware AB, deputy board member of Ulrika Gibson AB and board member in Verisec Group subsidiaries. According to Holdings, he owns 622,116 Verisec shares (12.8% of the company).
- **Dragoljub Nesic – CIO** since 2019, SVP of R&D since 2008, board chairman (2014–2018) and board member (2011–2018). Mr Nesic was born in 1969, holds an MSc in computer science and an MBA. He has 19+ years' experience of analysis, design and development of computer systems, including IT security related business development and marketing. As a consultant in e-authentication, he has worked with customers globally. He was previously a consultant at IBM Swedish AB, development manager at Entegrity Solutions, and marketing and consultancy services manager at Thales in the UK. Other commitments include board

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member of Aquitaine Holding AB, Crestina AB and other subsidiaries in the Verisec Group. According to Holdings, he owns 245,402 Verisec shares (5.0% of the company).

- **Tony Buss – CTO** since 2002, co-founder and board member since 2001. Mr Buss was born in 1975 and has several years' experience of IT security focusing on networks, design, and implementing security infrastructure for several publicly listed companies. Other commitments include board member and CEO of Tony Buss AB, and board member of Aquitaine Holding AB and other subsidiaries in the Verisec Group. According to Holdings, he owns 619,932 Verisec shares (12.7% of the company).
- **Nina Valloniemi – director of IT operations** since 2018. Mrs Valloniemi has broad management experience from growth companies undergoing transformation, and has driven software development and IT operations at Amadeus, Swedbank, and Verifone. She was born in 1966, holds 7,700 call options, and has no other relevant commitments.
- **Kristofer von Beetzen – CPO** since 2019 and VP marketing since 2012. Mr von Beetzen was born in 1972 and his university education included marketing and writing studies. He has 20+ years' experience of helping clients (from small businesses to large international companies) with marketing, branding and PR, as a consultant in a communication agency he founded in 1993. Other commitments include board member of Davinci Promotion AB. According to Holdings, he owns 120,377 Verisec shares (2.5% of the company).
- **Dan Salomonsson – chief logistics officer** since 2019, having been at Verisec since 2003 (one of the first employees). Mr Salomonsson was born in 1971, studied at University College London, and has experience in security logistics from previous positions as portal administrator at Ericsson and support leader at Boxman AB. Other commitments include being owner and CEO of Darus Marin Stockholm AB. According to Holdings, he owns 10,001 Verisec shares (0.2% of the company).
- **Frida Richter – chief marketing officer** since 2019 and market co-ordinator since 2018. Ms Richter has experience of managing projects, brand and business development, and digital marketing. She was born in 1992 and holds a Bachelor's degree in Graphic Design and Communication. She holds no Verisec shares and has no other relevant commitments.

#### Board of directors

- **Christian Rajter – chairman of the board** since 2018 and board member since 2015. Mr Rajter was born 1973 and holds an MSc in Psychology and BSc in Human Resources Management. He is the founder and CEO of At The Frontline and has vast experience of building growth companies on an international scale, acquisitions, and strategic partnerships, mainly in online gaming/gambling; previous roles include CEO of Expect.com and founder and CEO of Mobenga (acquired by Playtech). He is also board member and CEO of 242 Holdings AB and Split the Pot AB, and board member of Nuttery Entertainment, Egenera Networks AB, Komplementskolan Sverige AB, Oregon Main Interactive AB and Wopify Sweden AB. According to Holdings, he owns 27,641 Verisec shares (0.6% of the company). He is independent of Verisec and its main owner Aquitaine Holding AB.
- **Tony Buss – board member** since 2001, see above. He is not independent of Verisec or its main owner Aquitaine Holding AB.
- **Anders Henrikson – board member** since 2001, see above. He is not independent of Verisec or its main owner Aquitaine Holding AB.
- **Anders Moberg – board member** since 2015. Mr Moberg was born in 1972 and holds a LL.M. Master of Laws. He is a partner of Cirio Law Firm focused on M&A, PE investments, JVs, and restructuring in a broad range of sectors from energy and healthcare to technology and financial services. Other commitments include deputy board member of Sana Labs AB. According to Holdings, Mr Moberg owns 1,000 Verisec shares, or 0.02% of the company. He is independent of Verisec and its main owner Aquitaine Holding AB.
- **Taina Malén – board member** since 2019 and CMO and VP of Star Stable Entertainment AB. Previous experience includes Nordic marketing director at CANAL+ and VP at MSL

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PR. She has a diploma in Business Economy and other commitments include board member in MAG Interactive. She has no Verisec shareholding, and is independent of the company and its main owner Aquitaine Holding AB.

## Ownership

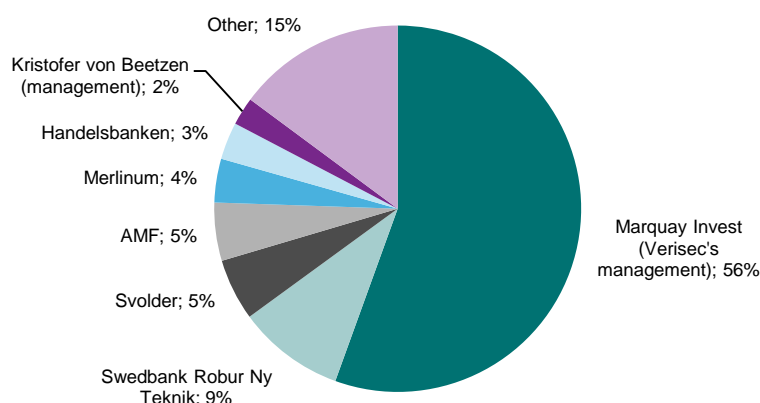
Verisec is listed on the Nasdaq First North Premier in Stockholm, which demands higher regulatory disclosure and accounting standards than First North. As Nasdaq First North Premier shares several of the Main Market's listing requirements, it is designed to further assist companies in raising investor visibility and preparing them for a Main Market listing.

Founders and management own c60% of the company, highlighting its interests are aligned with those of shareholders

Verisec has a relatively concentrated ownership base, with 44% free float. Over the past three years, international ownership has varied, albeit at a very low level from 0% to 1%.

- According to ownership database Holdings, Marquay Invest AB owns 56% of the market cap and votes via Aquitaine Holding AB, which is controlled by Verisec's CFO Johan Henrikson (owning 13% of Verisec), CFO Jakob Missuna (13%), SVP global sales Anders Henrikson (13%), CTO Tony Buss (13%), and CIO Dragoljub Nesic (5%). To us, management's high level of ownership ensures a long-term focus.
- Swedbank Robur Ny Teknik fund, focusing on small, innovative companies in Scandinavia, owns 9% of the shares in the company.
- Svolder, one of Sweden's successful investment companies focusing on listed small and medium-sized Swedish companies, owns 5% of Verisec.

Figure 87: Verisec ownership structure (2019)



Source: Verisec (as of 30 June 2019)

We also see insider support in the shares as of late, providing valuation support.

Figure 88: Insider transactions in Verisec (2018-)

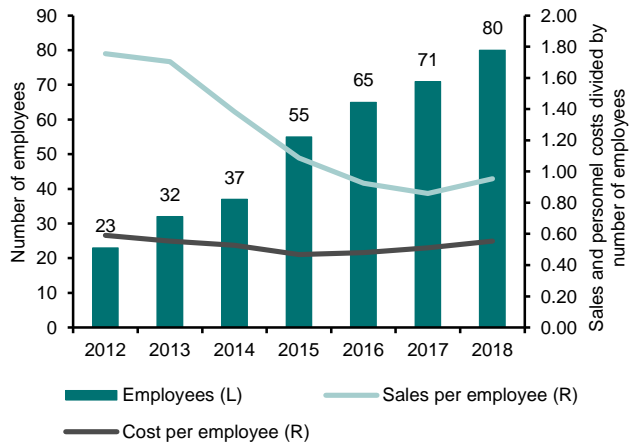
Reported	Insider	Position	Type	No. of shares	Price (SEK)	Value (SEKt)	Transaction
2019-06-29	Dragoljub Nesic	CIO	Buy	400	90	36	2019-06-28
2019-05-09	Dragoljub Nesic	CIO	Buy	1,250	93	116	2019-05-09
2019-05-09	Anders Henrikson	SVP Global Sales	Buy	1,000	96	96	2019-05-07
2019-05-09	Anders Henrikson	SVP Global Sales	Buy	1,000	96	96	2019-05-07
2019-01-10	Anders Henrikson	SVP Global Sales	Buy	380	111	42	2019-01-07
2019-01-10	Anders Henrikson	SVP Global Sales	Buy	1,300	105	136	2019-01-07
2019-01-09	Ulrika Gibson Henrikson	Related	Buy	900	109	98	2019-01-07
2018-10-02	Christian Rajter	COB	Buy	221	118	26	2018-09-28
2018-10-02	Christian Rajter	COB	Buy	340	99	34	2018-01-19

Source: Holdings

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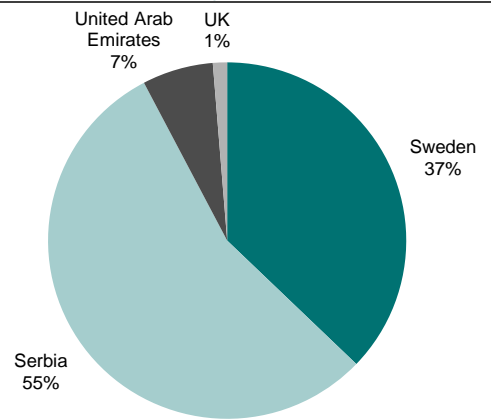
## Employees

Figure 89: Number of employees



Source: Verisec

Figure 90: Location of employees (2018)



Source: Verisec

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## Forecast changes – P&amp;L

(SEKm)	New			Old			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
Revenues	102	125	168						
Cost of sales	-37	-42	-48						
Gross profit	65	83	120						
Operating expenses	-84	-98	-112						
EBITDA	-15	-3	22						
EBITDA adj	-15	-3	22						
EBITDA margin (%)	nm	nm	13.4	nm	nm	nm	nm	nm	nm
Depreciation	-11	-12	-15						
EBIT	-25	-15	7						
EBIT adj	-25	-15	7						
Net interest	-1	-1	-1						
Net financial items	-1	-1	-1						
PBT	-26	-15	7						
Taxes	1	0	0						
Net profit	-25	-15	7						
Adjustments to net profit	0	0	0						
Net profit adj	-25	-15	7						
<i>Per share data (SEK)</i>									
EPS	-5.09	-3.17	1.35						
EPS adj	-5.11	-3.17	1.35						
DPS ordinary	0.00	0.00	0.00						
DPS	0.00	0.00	0.00						
<i>Other key metrics (%)</i>									
Revenue growth	34.4	22.2	33.8	nm	nm	nm	nm	nm	nm
EBIT adj growth	nm	nm	nm	nm	nm	nm	nm	nm	nm
EPS adj growth	nm	nm	nm	nm	nm	nm	nm	nm	nm
Avg. number of shares (m)	5	5	5						
Capex	-11	-11	-17						
OpFCF	-25	-13	5						
Working capital	-21	-32	-41						
NIBD adj	-9	-6	-19						

Source: DNB Markets

## Forecast changes – By segment and assumptions

(SEKm)	New			Old			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
<b>Revenue</b>									
Goods	22	15	16						
Services (incl. support)	77	86	90						
Freja eID	2	24	61						
<b>Assumptions</b>									
Revenue org. % YOY	27.74	22.87	33.77						
Structure impact % YOY	0.00	0.00	0.00						
Currency impact % YOY	4.64	1.23	0.00						

Source: DNB Markets

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## Quarterly numbers

(SEKm)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e	Q2 2020e
<b>Revenues</b>	16	18	19	20	20	28	30	22	23	27	33
Cost of sales	-5	-7	-8	-7	-6	-11	-11	-8	-7	-10	-12
<b>Gross profit</b>	11	11	11	13	13	18	18	14	16	18	21
Operating expenses	-16	-18	-18	-15	-18	-20	-23	-20	-21	-24	-26
<b>EBITDA</b>	-5	-7	-7	-2	-5	-3	-4	-4	-4	-3	-1
Depreciation	-1	-2	-2	-2	-2	-3	-3	-2	-2	-3	-3
<b>EBIT</b>	-6	-9	-9	-4	-7	-6	-8	-6	-6	-6	-5
Net interest	0	0	0	0	0	0	0	0	0	0	0
Net financial items	0	0	0	0	0	0	0	0	0	0	0
<b>PBT</b>	-7	-9	-9	-4	-7	-6	-8	-6	-6	-6	-5
Taxes	0	0	0	0	0	0	1	0	0	0	0
<b>Net profit</b>	-6	-9	-9	-4	-7	-6	-7	-6	-6	-6	-5
Adjustments to net profit	0	0	0	0	0	0	0	0	0	0	0
Net profit adj	-6	-9	-9	-4	-7	-6	-7	-6	-6	-6	-5
Dividend paid	0	0	0	0	0	0	0	0	0	0	0
Avg. number of shares (m)	5	5	5	5	5	5	5	5	5	5	5
<i>Per share data (SEK)</i>											
EPS	-1.41	-2.00	-1.82	-0.86	-1.49	-1.22	-1.37	-1.25	-1.25	-1.30	-0.99
<b>EPS adj</b>	-1.45	-2.04	-1.98	-0.88	-1.51	-1.24	-1.37	-1.25	-1.25	-1.30	-0.99
DPS ordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Growth and margins (%)</i>											
Revenues, QOQ growth	-13.3	10.5	8.5	2.9	-1.6	44.3	5.8	-26.2	2.7	21.5	20.4
Revenues, YOY growth	-11.2	25.0	54.7	6.9	21.4	58.4	54.5	10.9	15.7	-2.6	10.9
EPS adj, YOY growth	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Gross margin	68.0	63.0	58.1	63.8	67.2	62.3	62.0	63.5	68.7	64.1	63.5
EBITDA adj margin	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Depreciation/revenues	-8.6	-8.8	-8.5	-8.7	-9.9	-11.2	-11.4	-8.2	-10.3	-11.6	-9.6
EBIT adj margin	-39.2	-49.0	-44.3	-20.7	-36.4	-20.3	-26.4	-26.8	-26.3	-22.5	-14.0
Net profit margin	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

Source: Company (historical figures), DNB Markets (estimates)

## Adjustments to quarterly numbers

(SEKm)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e	Q2 2020e
<b>EBITDA</b>	-5	-7	-7	-2	-5	-3	-4	-4	-4	-3	-1
EBITDA adj	-5	-7	-7	-2	-5	-3	-4	-4	-4	-3	-1
<b>EBIT</b>	-6	-9	-9	-4	-7	-6	-8	-6	-6	-6	-5
Other EBIT adjustments	0	0	0	0	0	0	0	0	0	0	0
EBIT adj	-6	-9	-9	-4	-7	-6	-8	-6	-6	-6	-5
<b>Net profit</b>	-6	-9	-9	-4	-7	-6	-7	-6	-6	-6	-5
Other EBIT adjustments	0	0	0	0	0	0	0	0	0	0	0
Net profit adj	-6	-9	-9	-4	-7	-6	-7	-6	-6	-6	-5

Source: Company (historical figures), DNB Markets (estimates)

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Quarterly numbers by segment and assumptions

(SEKm)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e	Q2 2020e
<b>Revenue</b>											
Goods	3	3	5	3	3	10	6	3	3	5	4
Services (incl. support)	13	14	14	17	17	18	22	18	19	20	25
Freja eID	0	0	0	0	0	0	0	0	1	2	5
<b>Assumptions</b>											
Revenue org. % YOY	-9.57	25.18	50.98	0.93	16.59	50.87	42.30	8.16	12.29	-5.22	15.88
Structure impact % YOY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency impact % YOY	-0.99	-0.36	3.56	6.37	5.18	7.79	4.91	2.73	3.45	2.67	1.17

Source: Company (historical figures), DNB Markets (estimates)

Annual P&L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>Revenues</b>	<b>40</b>	<b>56</b>	<b>52</b>	<b>60</b>	<b>61</b>	<b>61</b>	<b>76</b>	<b>102</b>	<b>125</b>	<b>168</b>
Cost of sales	-12	-14	-18	-23	-20	-21	-28	-37	-42	-48
<b>Gross profit</b>	<b>29</b>	<b>42</b>	<b>33</b>	<b>37</b>	<b>41</b>	<b>40</b>	<b>48</b>	<b>65</b>	<b>83</b>	<b>120</b>
Operating expenses	-22	-31	-30	-44	-56	-58	-70	-84	-98	-112
<b>EBITDA</b>	<b>7</b>	<b>11</b>	<b>3</b>	<b>-7</b>	<b>-15</b>	<b>-18</b>	<b>-22</b>	<b>-15</b>	<b>-3</b>	<b>22</b>
Depreciation	-1	-1	-1	-2	-3	-5	-7	-11	-12	-15
<b>EBIT</b>	<b>6</b>	<b>10</b>	<b>2</b>	<b>-10</b>	<b>-19</b>	<b>-22</b>	<b>-28</b>	<b>-25</b>	<b>-15</b>	<b>7</b>
Net interest	0	0	0	0	1	0	-1	-1	-1	-1
Net financial items	0	0	0	0	1	0	-1	-1	-1	-1
<b>PBT</b>	<b>6</b>	<b>10</b>	<b>2</b>	<b>-10</b>	<b>-18</b>	<b>-23</b>	<b>-29</b>	<b>-26</b>	<b>-15</b>	<b>7</b>
Taxes	-2	-1	-1	2	0	0	0	1	0	0
Effective tax rate (%)	27	6	27	16	-2	-1	-1	4	-1	0
<b>Net profit</b>	<b>4</b>	<b>9</b>	<b>1</b>	<b>-8</b>	<b>-18</b>	<b>-23</b>	<b>-29</b>	<b>-25</b>	<b>-15</b>	<b>7</b>
Adjustments to net profit	0	0	0	0	0	0	0	0	0	0
Net profit adj	4	9	1	-8	-18	-23	-29	-25	-15	7
Dividend paid	0	0	0	0	0	0	0	0	0	0
Avg. number of shares		4	4	4	5	5	5	5	5	5
<i>Per share data (SEK)</i>										
EPS		2.15	0.32	-1.95	-4.06	-5.03	-6.03	-5.09	-3.17	1.35
<b>EPS adj</b>		<b>2.15</b>	<b>0.32</b>	<b>-1.95</b>	<b>-4.06</b>	<b>-5.03</b>	<b>-6.03</b>	<b>-5.11</b>	<b>-3.17</b>	<b>1.35</b>
DPS ordinary		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DPS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Growth and margins (%)</i>										
Revenue growth	nm	38.6	-7.9	16.8	0.8	0.6	24.9	34.4	22.2	33.8
EPS adj growth	nm	nm	-85.1	nm	nm	nm	nm	nm	nm	nm
Gross margin	71.4	75.0	64.5	61.9	67.8	66.2	63.1	63.9	66.6	71.5
EBITDA margin	17.2	19.3	5.6	nm	nm	nm	nm	nm	nm	13.4
EBITDA adj margin	17.2	19.3	5.6	nm	nm	nm	nm	nm	nm	13.4
Depreciation/revenues	-1.4	-1.9	-2.6	-4.1	-5.6	-7.9	-9.0	-10.4	-9.7	-9.0
EBIT margin	15.8	17.4	3.0	nm	nm	nm	nm	nm	nm	4.4
EBIT adj margin	15.8	17.4	3.0	-15.9	-30.6	-36.7	-37.2	-24.8	-11.8	4.4
PBT margin	15.3	17.1	3.6	nm	nm	nm	nm	nm	nm	3.9
Net profit margin	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

Source: Company (historical figures), DNB Markets (estimates)

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### Adjustments to annual P&L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>EBITDA</b>	7	11	3	-7	-15	-18	-22	-15	-3	22
EBITDA adj	7	11	3	-7	-15	-18	-22	-15	-3	22
<b>EBIT</b>	6	10	2	-10	-19	-22	-28	-25	-15	7
Other EBIT adjustments	0	0	0	0	0	0	0	0	0	0
EBIT adj	6	10	2	-10	-19	-22	-28	-25	-15	7
<b>Net profit</b>	4	9	1	-8	-18	-23	-29	-25	-15	7
Other EBIT adjustments	0	0	0	0	0	0	0	0	0	0
Net profit adj	4	9	1	-8	-18	-23	-29	-25	-15	7
<i>Per share data (SEK)</i>										
EPS		2.15	0.32	-1.95	-4.06	-5.03	-6.03	-5.09	-3.17	1.35
Recommended adjustment		0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00
EPS adj		2.15	0.32	-1.95	-4.06	-5.03	-6.03	-5.11	-3.17	1.35

Source: Company (historical figures), DNB Markets (estimates)

### Cash flow

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
Net profit	4	9	1	-8	-18	-23	-29	-25	-15	7
<b>Cash flow from operations (CFO)</b>	8	18	4	-8	-20	-14	-20	-13	8	30
Capital expenditure	-10	-1	-4	-5	-4	-8	-13	-11	-11	-17
Acquisitions/Investments	0	3	0	0	0	0	0	0	0	0
Divestments	0	0	0	0	0	0	0	0	0	0
<b>Cash flow from investing (CFI)</b>	-10	2	-4	-5	-4	-8	-13	-11	-11	-17
<b>Free cash flow (FCF)</b>	-2	20	0	-13	-24	-22	-33	-23	-3	13
Net change in debt	5	0	0	0	0	0	0	30	0	0
Dividends paid	0	0	0	0	0	0	0	0	0	0
Other	-3	-10	-5	1	0	1	2	0	0	0
<b>Cash flow from financing (CFF)</b>	3	-10	30	1	34	1	43	33	0	0
<b>Total cash flow (CFO+CFI+CFF)</b>	1	10	30	-12	10	-21	10	10	-3	13
<i>FCFF calculation</i>										
Free cash flow	-2	20	0	-13	-24	-22	-33	-23	-3	13
Less: net interest	0	0	0	0	-1	0	1	1	1	1
Less: tax shields/other	0	0	0	0	0	0	0	0	0	0
Less: acquisitions	0	-3	0	0	0	0	0	0	0	0
Less: divestments	0	0	0	0	0	0	0	0	0	0
<b>Free cash flow to the firm</b>	-1	17	0	-13	-25	-22	-33	-23	-2	14
<i>Growth (%)</i>										
CFO	nm	113.6	-77.4	-311.3	-135.8	31.1	-45.7	36.4	162.7	280.4
CFI	nm	121.6	-296.3	-12.6	6.0	-90.0	-58.5	20.0	-2.4	-57.6
FCF	nm	1409.9	-100.7	-8883.6	-85.4	9.2	-50.5	29.9	87.8	567.1
CFF	nm	-497.4	402.3	-96.8	3467.5	-98.2	6809.6	-24.4	-100.0	nm
FCFF	nm	1413.4	-102.8	-2703.4	-90.7	11.5	-48.4	30.3	90.1	724.2

Source: Company (historical figures), DNB Markets (estimates)



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## Balance sheet

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>Assets</b>	<b>33</b>	<b>44</b>	<b>70</b>	<b>62</b>	<b>82</b>	<b>64</b>	<b>85</b>	<b>111</b>	<b>120</b>	<b>145</b>
Inventories	1	0	1	1	1	1	1	1	2	2
Trade receivables	14	14	13	12	17	13	19	21	31	40
Other receivables	3	10	3	2	2	2	3	2	3	3
Current financial assets	2	4	6	9	12	15	13	13	16	16
Cash and cash equivalents	2	12	42	30	40	18	29	39	36	49
<b>Current assets</b>	<b>23</b>	<b>40</b>	<b>64</b>	<b>53</b>	<b>71</b>	<b>49</b>	<b>64</b>	<b>77</b>	<b>87</b>	<b>109</b>
<b>Non-current assets</b>	<b>10</b>	<b>3</b>	<b>6</b>	<b>10</b>	<b>11</b>	<b>14</b>	<b>20</b>	<b>34</b>	<b>33</b>	<b>35</b>
<b>Total assets</b>	<b>33</b>	<b>44</b>	<b>70</b>	<b>62</b>	<b>82</b>	<b>64</b>	<b>85</b>	<b>111</b>	<b>120</b>	<b>145</b>
<b>Equity and liabilities</b>	<b>33</b>	<b>44</b>	<b>70</b>	<b>62</b>	<b>82</b>	<b>64</b>	<b>85</b>	<b>111</b>	<b>120</b>	<b>145</b>
Total equity to the parent	7	7	38	31	47	24	39	17	2	8
<b>Total equity</b>	<b>7</b>	<b>7</b>	<b>38</b>	<b>31</b>	<b>47</b>	<b>24</b>	<b>39</b>	<b>17</b>	<b>2</b>	<b>8</b>
Trade payables	3	6	5	7	9	11	7	8	10	11
Other payables and accruals	16	29	25	24	26	28	39	51	73	90
<b>Total current liabilities</b>	<b>18</b>	<b>35</b>	<b>30</b>	<b>31</b>	<b>35</b>	<b>39</b>	<b>46</b>	<b>59</b>	<b>83</b>	<b>101</b>
Long-term debt	5	0	0	0	0	0	0	30	30	30
Deferred tax liabilities	2	2	1	0	0	0	0	0	0	0
Other non-current liabilities	0	0	0	0	0	0	0	6	6	6
<b>Total non-current liabilities</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>36</b>	<b>36</b>
<b>Total liabilities</b>	<b>25</b>	<b>37</b>	<b>32</b>	<b>31</b>	<b>35</b>	<b>39</b>	<b>46</b>	<b>94</b>	<b>119</b>	<b>136</b>
<b>Total equity and liabilities</b>	<b>33</b>	<b>44</b>	<b>70</b>	<b>62</b>	<b>82</b>	<b>64</b>	<b>85</b>	<b>111</b>	<b>120</b>	<b>145</b>
<i>Key metrics</i>										
Net interest bearing debt	3	-12	-42	-30	-40	-18	-29	-9	-6	-19

Source: Company (historical figures), DNB Markets (estimates)

3 September 2019

## Valuation ratios

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Enterprise value</i>										
Share price (SEK)			43.00	77.75	83.75	93.00	98.00	79.80	79.80	79.80
Number of shares (m)		0.00	4.03	4.03	4.44	4.44	4.79	4.87	4.87	4.87
Market capitalisation			173	314	372	413	469	389	389	389
Net interest bearing debt	3	-12	-42	-30	-40	-18	-29	-9	-6	-19
Adjustments to NIBD	0	0	0	0	0	0	0	0	0	0
Net interest bearing debt adj	3	-12	-42	-30	-40	-18	-29	-9	-6	-19
EV			131	283	332	394	440	380	383	369
EV adj			131	283	332	394	440	380	383	369
<i>Valuation</i>										
EPS		2.15	0.32	-1.95	-4.06	-5.03	-6.03	-5.09	-3.17	1.35
<b>EPS adj</b>		<b>2.15</b>	<b>0.32</b>	<b>-1.95</b>	<b>-4.06</b>	<b>-5.03</b>	<b>-6.03</b>	<b>-5.11</b>	<b>-3.17</b>	<b>1.35</b>
DPS ordinary		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DPS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P/E			134.3	-40.0	-20.6	-18.5	-16.3	-15.7	-25.2	59.2
P/E adj			134.3	-40.0	-20.6	-18.5	-16.3	-15.6	-25.2	59.2
Average ROE	126.6%	6.0%	-23.5%	-47.5%	-64.2%	-92.9%	-88.8%	-165.4%	134.0%	
Earnings yield adj			0.7%	-2.5%	-4.8%	-5.4%	-6.1%	-6.4%	-4.0%	1.7%
Dividend yield			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EV/SALES			2.54	4.71	5.47	6.46	5.77	3.71	3.06	2.21
EV/SALES adj			2.54	4.71	5.47	6.46	5.77	3.71	3.06	2.21
EV/EBITDA			45.6	-39.7	-21.8	-22.4	-20.5	-25.8	-145.6	16.4
EV/EBITDA adj			45.6	-39.7	-21.8	-22.4	-20.5	-25.8	-145.6	16.4
EV/EBIT			85.9	-29.6	-17.8	-17.6	-15.5	-15.0	-26.0	50.0
EV/EBIT adj			85.9	-29.6	-17.8	-17.6	-15.5	-15.0	-26.0	50.0
EV/OpFCF (taxed)			-103.5	-24.0	-16.9	-15.2	-12.7	-15.0	-28.5	67.9

Source: Company (historical figures), DNB Markets (estimates)

3 September 2019

## Key accounting ratios

	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Profitability (%)</i>										
ROA		23.7	2.4	-12.3	-25.5	-31.4	-39.6	-25.3	-13.3	5.0
<i>Return on invested capital (%)</i>										
Working capital/revenues	4.7	-12.5	-16.6	-14.0	-5.8	-12.7	-13.9	-20.2	-25.6	-24.3
<i>Cash flow ratios (%)</i>										
FCF/revenues	-3.7	35.3	-0.3	-21.8	-40.1	-36.1	-43.6	-22.7	-2.3	7.9
FCF/market capitalisation			-0.1	-4.2	-6.5	-5.3	-7.1	-6.0	-0.7	3.4
CFO/revenues	20.5	31.6	7.8	-14.0	-32.8	-22.5	-26.2	-12.4	6.4	18.1
CFO/market capitalisation			2.3	-2.7	-5.4	-3.3	-4.3	-3.3	2.1	7.8
CFO/capex	84.6	1838.5	96.5	-181.1	-454.4	-162.9	-151.6	-120.4	73.7	177.9
CFO/current liabilities	44.9	50.3	13.2	-27.2	-56.9	-35.2	-43.4	-21.7	9.6	30.1
Cash conversion ratio	-33.7	219.8	-10.9	161.1	132.1	96.6	113.0	93.9	18.4	202.1
Capex/revenues	24.2	1.7	8.0	7.8	7.2	13.8	17.3	10.3	8.6	10.2
Capex/depreciation	1724.9	91.7	306.6	190.3	129.1	176.0	192.2	99.1	89.4	112.9
OpFCF margin	-7.0	17.6	-2.5	-19.6	-32.3	-42.5	-45.5	-24.7	-10.7	3.2
Total payout ratio		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Leverage and solvency (x)</i>										
EBIT/interest payable	28.31	62.08	nm	nm	nm	nm	nm	nm	nm	9.02
Cash coverage	30.81	68.75	-9.05	-66.04	30.34	-81.90	-34.33	-26.06	-4.50	27.46
Net debt/EBITDA	0.37	-1.14	-14.71	4.22	2.62	1.03	1.34	0.61	2.31	-0.86
LTD / (LTD + equity (MV))			0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07
<i>Cash conversion cycle</i>										
Inventory turnover days	24.7	12.1	10.2	8.0	19.2	21.4	14.5	11.4	13.2	13.2
Receivables turnover days	159.2	152.6	108.0	80.5	113.3	88.4	103.1	85.3	99.0	92.0
Credit period	86.2	162.2	103.9	104.8	164.1	187.6	87.9	75.1	90.9	81.6
Cash conversion cycle	97.7	2.5	14.3	-16.2	-31.6	-77.8	29.7	21.5	21.4	23.5

Source: Company (historical figures), DNB Markets (estimates)

3 September 2019

## Important Information

Company: Verisec  
 Coverage by Analyst: Joachim Gunell  
 Date: 28/08/2019

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3 September 2019

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