Hexagon

Initiation of coverage

11/26/2023 12:00

Pauli Lohi
+358 45 134 7790
pauli.lohi@inderes.fi

inderes.

Global leader in digital twin -technologies

Built on series of acquisitions, Hexagon is a global diversified technology company that provides productivity-improving solutions to multiple industries. Despite partial dependence on cyclical industries, we find a good chance that the company may continue earnings growth even during tougher market conditions. We however expect organic growth to mean-reverse in the upcoming years and initiate coverage with reduce recommendation and SEK 102 target price.

Diversified high-tech company

Hexagon is a global diversified technology company providing different sensor and software solutions that help its customers to improve productivity through ”Smart Digital Realities”. The company made a complete renewal in the early 2000s and has built its current business portfolio through ~200 acquisitions. The company invested equivalent of 14% of its sales on R&D in 2022. Its focus on innovation and margin-accretive acquisitions has helped it improve its gross margin for two decades in a row to 65.9% in 2023e. The share of software sales has been on an increasing trend since the 2010s and nowadays some 40% of its revenues come from software, 40% from hardware and 20% from service sales. Hexagon reports two business areas with equal sizes that are further split into 5 divisions. Geospatial Enterprise Solutions focuses on open-world solutions that serve surveying, construction, infrastructure, mining, public safety, aerospace and defense customers. Industrial Enterprise Solutions focuses on solutions for closed industrial environments and serves, e.g., manufacturing, automotive, power and energy customers.

Macroeconomic slowdown unlikely to stop the earnings growth

Hexagon has recorded organic growth of 5% on average in 2018-22 and has frequently complemented its business with small acquisitions and gained new growth platforms with a few larger deals. The company is not immune to macroeconomic slowdown but so far it has been able to continue the strong organic growth (2023 YTD: 8%) supported by megatrends, organic innovation and fast growth in recently acquired software businesses. We expect the growth to moderate gradually and model in 5% organic growth for 2024-25. We expect the adjusted EBIT margin to continue increasing to 30.0% by 2026 supported by improving gross margins and moderate growth in fixed costs owing to the cost-saving program the company initiated in mid-2023. The company targets 8-12% annual growth of which 5-7% organic and adjusted EBIT over 30% as of sales by 2026.

Tight valuation offers little upside especially if growth slows down

Hexagon’s current forward-looking EV/EBIT (2024e) is 18x that is lower compared to the 10y median of 20x. Increased interest rates do, however, depress accepted valuation levels so we find Hexagon’s current valuation level to be fair at the moment. Looking to Hexagon’s peer group, we find pure software competitors trading roughly at 10y averages whereas some hardware-exposed peers trade with even higher discounts compared to Hexagon. Our DCF returns a fair value of SEK 102 per share assuming 5% sales growth and 30% adjusted EBIT margin for 2026-30% together with WACC of 7.5%. Our adjusted EBIT estimates are 3-6% below the company-collected consensus for 2024-25e that could act as a negative driver for the share price. The company will organize a CMD on 12/7/2023 where it could further elaborate its strategy development and the recently initiated rationalization program.

Recommendation

Reduce

SEK 102

Share price:
SEK 104.4

Key indicators

	2022	2023e	2024e	2025e
Revenue	5160.5	5450.6	5721.7	6014.6
growth-%	19 %	6 %	5 %	5 %
EBIT adj.	1517.8	1590.5	1685.3	1797.7
EBIT-% adj.	29.4 %	29.2 %	29.5 %	29.9 %
Net Income	1007.6	840.3	1075.4	1190.9
EPS (adj.)	0.44	0.43	0.46	0.50

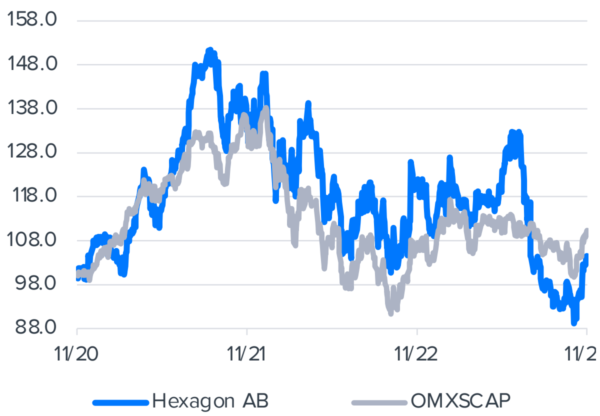
P/E (adj.)	22.1	21.3	19.8	18.3
P/B	2.7	2.4	2.2	2.1
Dividend yield-%	1.2 %	1.3 %	1.4 %	1.6 %
EV/EBIT (adj.)	19.7	17.4	16.2	14.7
EV/EBITDA	17.0	16.1	13.4	12.0
EV/S	5.8	5.1	4.8	4.4

Source: Inderes

Guidance

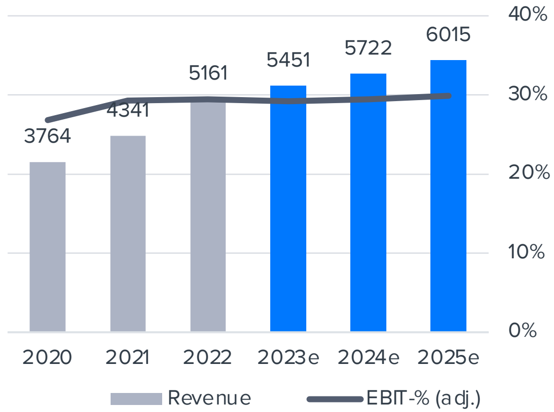
(No guidance)

Share price



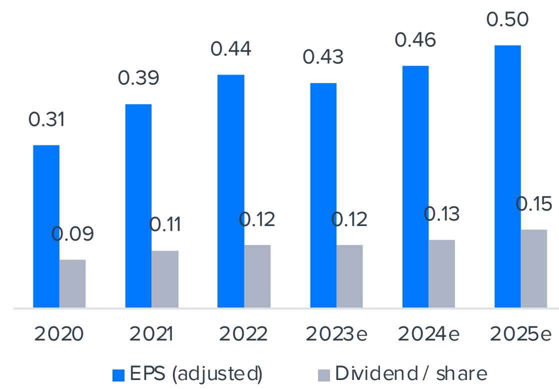
Source: Millistream Market Data AB

Net sales and operating earnings-%



Source: Inderes

Earnings per share and dividend



Source: Inderes

Value drivers

- Strong market position in core technologies
- Need to utilise data more efficiently in various industries adds demand for Hexagon's solutions over medium-term
- Focus on margin-additive growth and increasing the share of recurring revenue
- Solid track-record of creating value through acquisitions

Risk factors

- Cyclical demand in hardware sales and certain software products
- M&A strategy partially dependent on strong valuation multiples of Hexagon's share
- Execution risk in M&A
- Gradually saturating end-markets in certain segments

Valuation (EUR)	2023e	2024e	2025e
Share price	9.13	9.13	9.13
Number of shares, millions	2684.3	2684.3	2684.3
Market cap	24506	24506	24506
EV	27752	27237	26439
P/E (adj.)	21.3	19.8	18.3
P/E	29.2	22.8	20.6
P/B	2.4	2.2	2.1
P/S	4.5	4.3	4.1
EV/Sales	5.1	4.8	4.4
EV/EBITDA	16.1	13.4	12.0
EV/EBIT (adj.)	17.4	16.2	14.7
Payout ratio (%)	38.3 %	32.4 %	33.8 %
Dividend yield-%	1.3 %	1.4 %	1.6 %

Source: Inderes

Contents

Hexagon in short

Hexagon is a global provider of sensors and software that enable its customers to improve efficiency, productivity and quality in various industries and in the public sector.

5.2 EURbn (+8% y/y)
Net sales 2022

1.5 EURbn (29% of net sales)
Adjusted operating earnings 2022

1.0 EURbn (20% of net sales)
Net earnings (2022)

24,875 (+7% y/y)
Number of employees at the end of H1 2023

12%
R&D expenses of net sales (2022)

5%
Organic sales CAGR (2013-22)

~200
Acquisitions since 1998

Complete restructuring and focus on high-tech 1998-

- Melker Schörling becomes the largest owner in 1998
- Ola Rollen starts as CEO in 2000
- Divestment of various low-value-add businesses
- Acquisition of Brown & Sharpe in 2001 and growth in industrial metrology

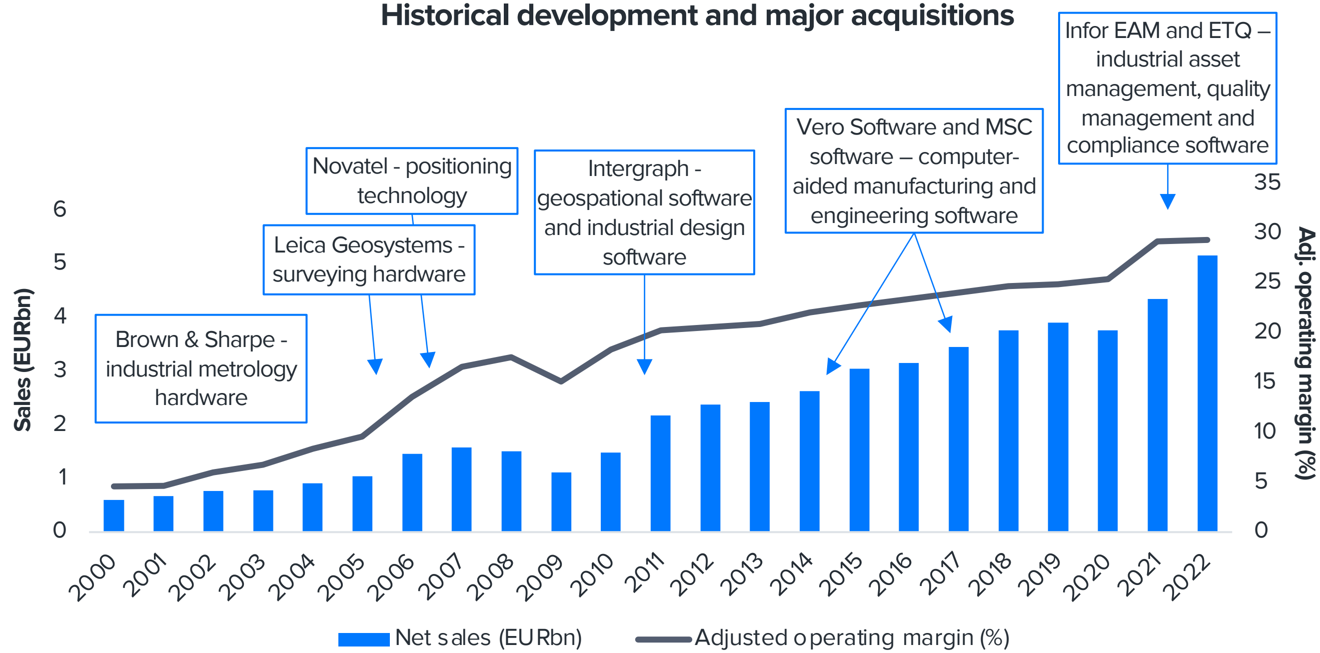
Geospatial business created through M&A 2006-13

- Acquisition of Leica Geosystems makes Hexagon a leader in the surveying equipment market
- Complementing acquisitions of navigation technology and software for visualising geospatial data

M&A focus on industrial software 2014-2022

- Industrial metrology offering complemented with different industrial software solutions including large platform acquisitions
- Geospatial business area developed organically and with small acquisitions

Historical development and major acquisitions



Company overview 1/3

Hexagon in short

Hexagon is a global provider of sensors and software that enable its customers to improve efficiency, productivity and quality in various industries and in the public sector. High-quality sensor technology has been a core competence of Hexagon since the early 2000s and has been complemented with numerous acquisitions of mostly software companies in the past 15 years. Nowadays, the business consists of comprehensive end-to-end customer offerings that contain wide array of solutions for a particular customer segment. The end-to-end approach makes Hexagon a close and important partner for its customers which further helps Hexagon gain sales synergies when it complements its product offering via acquisitions.

Hexagon's net sales reached 5.2 EURbn in 2022 with adjusted operating margin of 29%. Average growth in 2013-22 has been 8% of which 5 percentage points has been organic. The operating margin has been on an increasing trend supported by acquisitions of highly profitable businesses. The company had an average of 10,783 employees in the first half of 2023.

Two business areas with equal size

The company structure consists of two business areas, Geospatial Enterprise Solutions (GES) and Industrial Enterprise Solutions (IES). GES serves specifically applications that deal with large and open environments such as surveying, construction, public safety, mining and agriculture. IES focuses on manufacturing and process industry facilities that tend to be more closed and controlled environments. The two business areas are almost identical in size or profitability. The two business areas are further split into separate divisions with differing growth profiles.

High-quality sensor technology has been at the core of Hexagon for decades

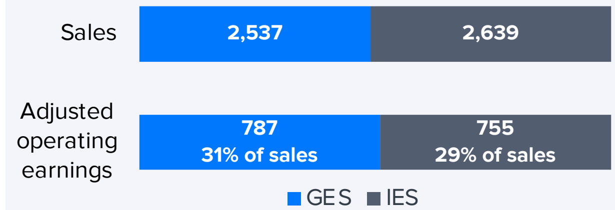
Hexagon offers high-quality sensor, measurement and positioning hardware through both of its business areas. In the past, a majority of Hexagon's revenue came from hardware sales (85% in 2009) although that proportion has diminished to only ~40% today due to strong growth in software and services. Geospatial hardware capabilities build on a platform acquisition of Leica Geosystems in 2005 which provided the company with world-class surveying technology including laser scanning and satellite positioning. Industrial hardware includes a variety of precision measuring instruments tracing to the acquisition of Brown & Sharpe back in 2001. Hardware business' profitability is strong (EBITA could be slightly above 20% of sales) but we estimate it is still below the group average.. However, the hardware business has helped Hexagon to build comprehensive and sometimes highly synergistic end-to-end offerings including various software products.

Software offering has grown rapidly with the help of M&A

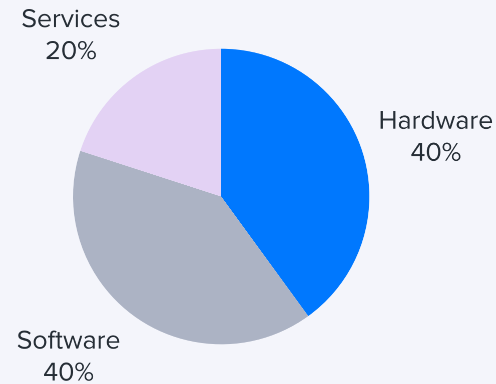
In the 2010s Hexagon's business mix took a big shift towards software supported by various acquisitions. Today, software brings in around 40% of Hexagon's revenue which equals the share of hardware sales. The push to software business can be viewed as an expansion within the existing value chains as Hexagon has acquired and developed software solutions that are used to utilize the data supplied by its own hardware solutions. Not all software businesses are, however, linked to Hexagon's hardware but they can be otherwise synergistic for example through distribution synergies.

HEXAGON

Geospatial Enterprise Solutions	Industrial Enterprise Solutions
▪ Geosystems (70% of sales, mostly hardware) ▪ Safety, Infrastructure and Geospatial (20% of sales, software) ▪ Autonomy and Positioning (10% of sales, software)	▪ Manufacturing Intelligence (75% of sales, hardware and sofware) ▪ Asset Lifetime Intelligence (25% of sales, software)



Sales distribution



Source: Inderes

Company overview 2/3

Recurring revenue share on an increasing trend

Acquiring and developing new business models around and beyond hardware sales has contributed to a significant increase in the share of recurring revenue in sales. In 2022, it stood at around 40% compared to 15% in 2009. The change owes mainly to the increased role of software revenue. Of Hexagon's software sales, roughly 30% stems from license sales, 20% from subscription sales, 10% from SaaS and 40% from maintenance. The company prefers the recurring business models such as SaaS or subscription-based revenue and seeks to shift license-based sales to recurring sales when suitable. Recurring revenue's share of sales is likely to increase over time but we do not, however, expect a rapid organic shift in the software sales mix in the near future. There are still many software products, customer groups and certain geographies where the license-based sales model is the most suitable one. Most of the software products are standardized and highly scalable. However, in Asset Lifetime Intelligence and Safety, Infrastructure and Geospatial divisions there is also larger software ramp-up projects that require manual work from Hexagon.

Diversified but somewhat cyclical end-markets

Hexagon's customer-base is naturally very broad given the company's extensive global presence and a strong market position in several product areas. Revenue streams are mostly rather diversified and there is typically no material dependence on single large customer projects. There is, however, cyclicality in the business which is most visible in hardware sales. The company is reliant on customer industries such as construction and manufacturing where activity levels tend to have high correlation with the broader macroeconomy.

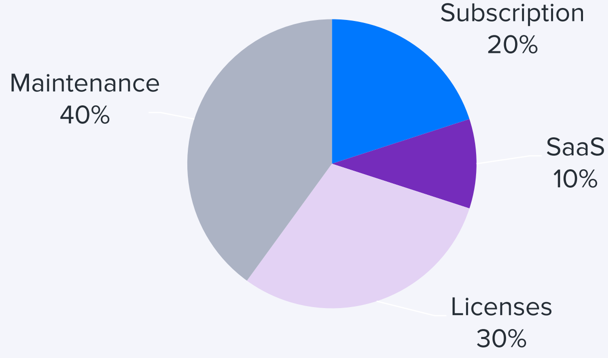
Direct customer relationships preferred

Hexagon prefers close direct relationships with its customers. Roughly 60% of its revenue comes from direct sales and the remaining 40% through distribution partners. The advantages of the direct sales approach include higher gross margins, potential for cross-selling and ability to innovate together with the customers. It requires, however, high enough scale that the benefits offset the cost of distribution. Hexagon sometimes acquires its distributor partners when it makes sense financially.

R&D is a key function to stay competitive

Hexagon focuses on highly value creating businesses requiring it to invest significantly in product development. It spent 714 MEUR on R&D in 2022, 14% of its net sales. The majority of R&D spend is allocated to developing new features and products. Since Hexagon's business is split quite evenly between hardware and software, its R&D expenses are clearly lower compared to purely software-focused competitors and somewhat higher compared to purely hardware focused players. Software development's share of R&D spend has increased in recent years owing to numerous acquisitions of software product companies. Hardware development is also still an important focus area and receives a large share of R&D investments. The most significant development projects in recent years include the launch of two software platforms HxDR and Nexus, as well as Hexagon's reality capture solutions. Many projects were delayed during the COVID-19 pandemic which led to a cumulation of projects in 2022. Therefore, we believe that the medium-term R&D spend level as percentage of sales is likely to be slightly lower than the 14% recorded in 2022.

Software sales split



Key manufacturing and R&D facilities

1) Switzerland: GES manufacturing and R&D
2) Rhode Island (US): IES manufacturing and R&D
3) Shanghai: Manufacturing and R&D hub
4) Germany: R&D facilities
5) Hyderabad (India): R&D facilities
6) Alabama and Atlanta: R&D facilities

Source: Inderes

Company overview 3/3

Manufacturing is relatively capital-light

The manufacturing of Hexagon's hardware products takes place in specialized hubs in different locations. Geosystem's products such as Leica total stations and reality capture products are manufactured in Heerbrugg, Switzerland. The production of Manufacturing Intelligence's products such as CMM machines and optical scanners is scattered between several locations in Germany, Italy and Rhode Island, USA. In addition, there's an overlapping manufacturing hub for wide range of products in China.

Production of Hexagon's high-tech tools consists of assembly and thorough testing. Manufacturing is capital-light and doesn't require much investment in production equipment as, e.g., the process industry. The procurement of components and sub-assemblies is an important business function that has been underscored by the global supply chain shortage in 2021-23. Many of the direct sub-contractors are located in relatively close proximity to Hexagon's production facilities but we assume that a large share of sub-contractors' material flows come from Asia. Hexagon's Chinese production facilities partly utilize the same European sub-contractors that serve the European factories.

Two share classes with different voting rights

Hexagon has two series of shares, Class A and Class B. Both classes warrant for the same dividend but Class A comes with ten votes each whereas Class B comes with only one vote per share. Only series B shares are listed on Nasdaq Stockholm exchange. Melker Schörling AB is Hexagon's largest shareholder with 21% proportion of shares and 43% of votes. Other top ten shareholders include both Swedish and international institutional investors, as well as Infor (5%) that became a shareholder in 2021 when it sold its EAM business to Hexagon.

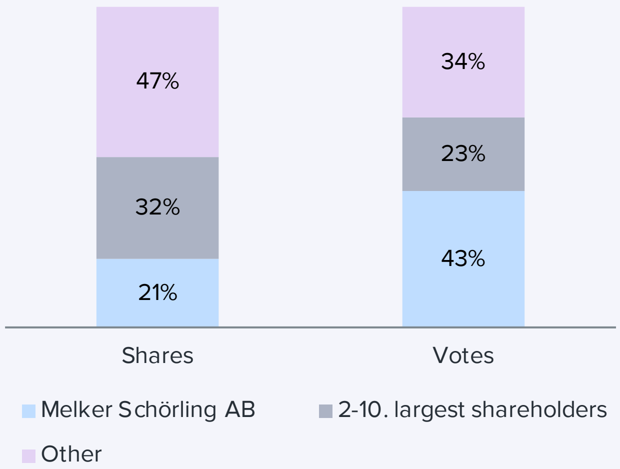
Strong major shareholder behind the success story

Melker Schörling, a businessman and former CEO of Securitas and Skanska, became the largest shareholder of Hexagon in 1998. He appointed Ola Rollen as CEO in 2000 who served until the end of 2022. During this period Hexagon transformed its business completely from a low-margin industrial conglomerate to a highly profitable technology company . Paolo Guglielmini followed Ola Rollen as CEO in December 2022. Guglielmini joined Hexagon in 2010 and was most recently serving as group COO and the President of the Manufacturing Intelligence division.

Criticism on corporate governance

Hexagon's corporate governance practices came up for public discussion in July 2023 when short seller Viceroy Research accused the company's insiders of unfairly benefiting by front-running Hexagon's investments. Greenbridge Partners, an investment company owned by Melker Schörling, Ola Rollen and three other current executives of Hexagon, had invested in the additive-manufacturing technology company Divergent before Hexagon in 2022. Greenbridge and Hexagon have denied the accusations and said that Greenbridge's investment took place 4 months after Hexagon's investment. However, Hexagon and Greenbridge signed an agreement to not invest in the same companies anymore. In its response to the short-seller report (8/2/2023), Hexagon also said it will nominate more independent board members.

Shareholders[1]



Board of directors[2]

Role	Name	Independent	In board since
Chairman	Ola Rollen	No	2000
Member	Märta Schörling Andreen	No	2017
Member	John Brandon	Yes	2017
Member	Sofia Schörling Högberg	No	2017
Member	Erik Huggers	Yes	2021
Member	Gun Nilsson	No	2008
Member	Brett Watson	Yes	2021

1) End of August 2023
2) We aim to measure independence from the main owner Melker Schörling.

Geospatial Enterprise Solutions 1/3

GES in short

Geospatial Enterprise Solutions (GES) includes a portfolio of sensors for capturing data from land and air, as well as sensors for positioning via satellites. The sensors are complemented with software for creating 3D maps and models, which are used for decision-making in a range of software applications, covering areas such as surveying, construction, public safety, mining and agriculture.

The business area is internally split into three reporting divisions: (1) Geosystems, (2) Safety, Infrastructure & Geospatial and (3) Autonomy & Positioning. Most of the business area's revenue comes from Geosystems (roughly 70%[1]). Some 50% of GES's revenue of 2.5 EURbn comes from hardware sales, 30 % from software sales and 20% from services, we estimate.

GES' average organic growth in the past 5 years has been on a good level of 5%. Lately, it has, however, grown less through acquisitions than IES. Autonomy and Positioning (A&P) is the fastest growing division in the GES business area (5y organic CAGR: 8%) whereas Safety, Infrastructure and Geospatial (SI&G) division has recorded roughly zero organic growth on average in the past 5 years.

Geosystems

Geosystems division's sales is predominated by technologies used in industries that are related to construction and mining. The division consists of the following product areas.

- Surveying equipment like total stations together with related software and services (~50% of sales[1]).
- Machine control solutions that enable automation in machines like excavators (~10% of sales[1]).
- Automation and remote control solutions for the mining industry (~20% of sales[1]).
- Reality capture solutions (~10% of sales[1]).
- Geospatial imagery and AEC[2] software (~10% of sales[1]).

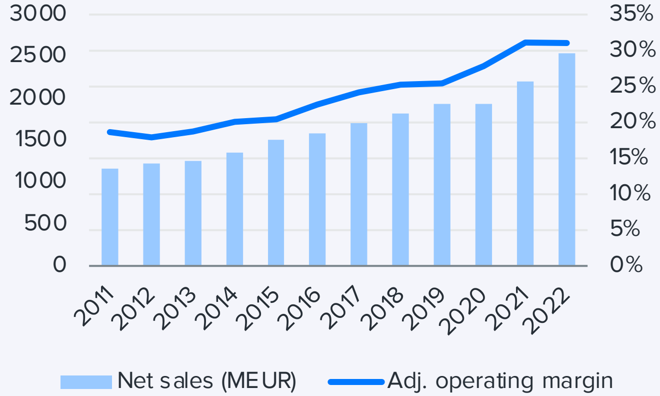
Roots in the acquisition of Leica Geosystems

Leica Geosystems, a technology leader in surveying, was acquired by Hexagon back in 2005 and today forms the core of the company's Geosystems division. Since 2005, Leica's business has transformed from a hardware-centric manufacturer to a comprehensive end-to-end solution provider for the surveyors. The acquisition provided Hexagon with sophisticated high-end measuring and positioning technology that could be utilized in other industries beyond surveying. Even if surveyors still are the largest customer segment in Geosystems, their relative share has been on a decline owing to higher growth in other areas.

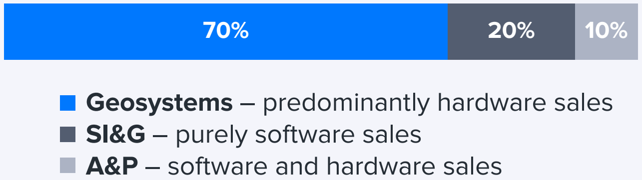
Precision measuring and aerial imagery have got new use-cases especially in the construction and infrastructure industries. Building sector firms increasingly utilize smart solutions in their operations to increase efficiency and reduce risks. In recent years, Hexagon has used its R&D spend to introduce several modern reality capture solutions that allow its customers to utilize real-time digital twins in various environments. It has also invested in smart solutions for the mining sector and their share of revenue has also been on an increasing trend.

1) Inderes' estimate 2) AEC = architecture, engineering and construction

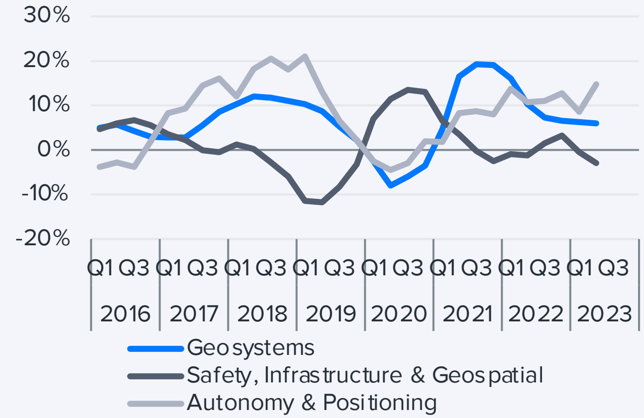
Net sales and profitability



Revenue split between divisions



Organic growth per division



Source: Hexagon and Inderes estimates

Geospatial Enterprise Solutions 2/3

Geosystems has grown well lately but is cyclical

Geosystem's organic growth was 7% on average in the last 5 years, slightly exceeding the group average. Some 60% of the division's sales (including surveying and machine control) is rather directly dependent on global construction activity. These segments typically enjoy strong growth in the developing countries where construction activity is still growing but, on the other hand, see stagnant growth in the developed world. Mining demand is also cyclical, although its demand pattern somewhat differs from construction.

Looking at the past 5 years, new product launches have from time-to-time clearly boosted growth. Organic growth picked up to double digit levels in late 2017 and 2018 helped by new products such as the Content Program (expansive database consisting aerial imagery, 3D models and analytics) and new sensors such as the RTC360 laser scanner. Growth turned slightly negative in late 2019 owing to decline in construction activity and further deteriorated in early 2020 owing to COVID-19, but picked up again in 2021 driven by very strong construction market. In 2023, the growth has normalized owing to slowing residential construction and high comparables. Demand for mining and reality capture solutions has been solid.

Safety, Infrastructure and Geospational (SI&G)

The SI&G division consist of pure software sales. The division's solutions help customers visualize and analyze complex data and combine the data with maps or geospational imagery. In 2020, the company introduced HxDR, a cloud-based digital reality visualization platform that allows the convergence of almost any geospational or reality capture data.

SI&G's solutions are used in various sectors, especially in public safety, infrastructure, transportation and defense industries.

Growth in SI&G has been sluggish in the past years

SI&G has recorded average organic growth of 0% during the past 5 years that makes it the slowest growing division in Hexagon. Slow growth is partially affected by the termination of a few low-value-add customer-contracts in early 2023 that has shaved some 10% of the division's revenues in H1 2023. The division originates from the acquisition of Intergraph in 2010. The division was known as Safety and Infrastructure until 2022 when the word Geospational was added to better capture the division's ambitions to utilize digital reality in multiple industries in addition to Safety and Infrastructure.

Public safety solutions are a material niche in SI&G

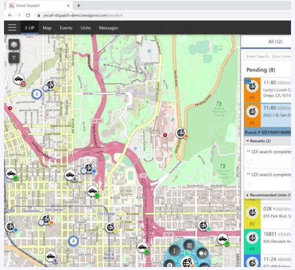
SI&G division's safety-related business is centered on Hexagon's computer-aided dispatch solutions software. These solutions help mainly public authorities such as police, emergency personnel, civil protection and border authorities to collect and manage critical incident data with visualized mapping and automated data analysis. They help customers make better decisions and act more quickly in case of an incident such as a fire, an act of violence or a major traffic accident. Hexagon is the global leader in public safety solutions and its software helps protect some 1 billion people worldwide. Hexagon launched a major safety-product in 2019 by introducing HxGN OnCall platform. OnCall is a modernized public safety portfolio that contains four different product suites and serves a wide range of different customer segments from small to large entities.

Selected product areas in GES

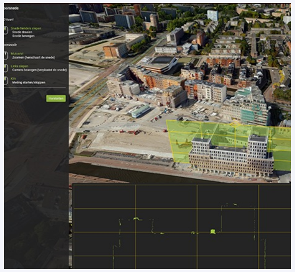
Total stations for surveying

Reality capture solutions

OnCall Dispatch for public safety



HxDR – cloud-based tool for spatial data



Positioning antennas, receivers and advanced systems

Autonomous mobility solutions

Source: Hexagon

Geospatial Enterprise Solutions 3/3

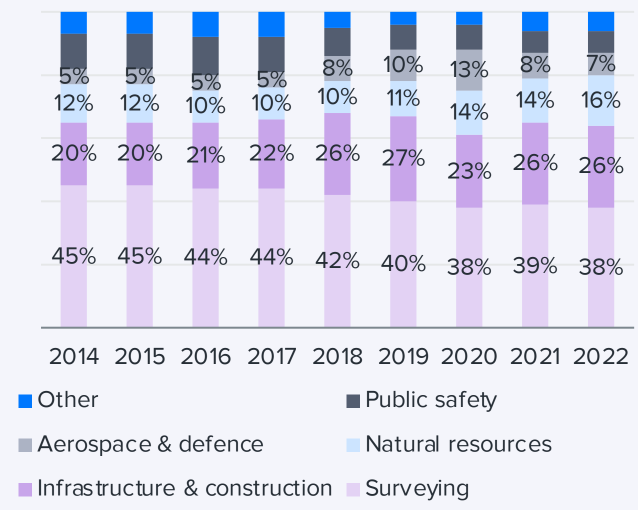
The launch significantly boosted the division's organic growth at the time of introduction. The safety business has in the past been heavily reliant on single large contracts by big cities that caused volatility in sales, especially in 2018-19 when sales declined steeply. Since then, Hexagon has taken actions to transform the safety solutions offering to consist of smaller pieces that can be sold to smaller cities to expand customer base and reduce dependence on single large contracts.

Autonomy & Positioning (A&P)

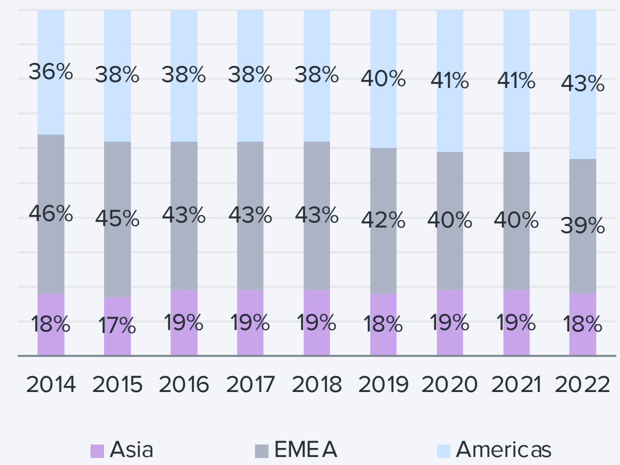
Autonomy & Positioning is the smallest but also fastest growing division in GES and in the whole Hexagon group with 8% organic CAGR in the last 5 years. The division has historically focused on positioning solutions such as GNSS equipment, GPS anti-jam systems, positioning correction systems and visualization software. The core positioning capabilities originate mainly from the acquisitions of Leica Geosystems (2006) and the GNSS-equipment provider NovaTel (2007). Positioning customers include, for example, aerospace & defense industry and marine shipping operators.

The division's name was simply Positioning until it changed to Autonomy & Positioning in early 2020 as Hexagon turned increasingly into the growing field of autonomous solutions. An acquisition of AutonomouStuff in 2018 provided Hexagon a platform for further growth in the segment. AutonomouStuff is US-based company focusing on integrated autonomous vehicle solutions and had sales of 45 MUSD in 2017. As a result, nowadays Hexagon masters a variety of important technologies to make vehicles autonomous including GNSS-positioning, drive-by-wire control technology and different sensors like LiDARs and radars. Autonomous solutions represents a growing, yet small share of Hexagon's revenue. Hexagon has been developing autonomous car technology together at least with Lexus. In July 2023, Hexagon announced that it will equip the world's first autonomous road train for an Australian mining company. In addition to cars and trucks, autonomous solutions can also be utilized in the agriculture industry to reduce operating costs and improve yields through precision cultivation.

Customer segments (% of revenue)



Geographies (% of revenue)



Source: Hexagon

Industrial Enterprise Solutions 1/2

IES in short

Industrial Enterprise Solutions includes metrology sensors and systems, as well as different software solutions for industrial customers. Software solutions include, for example, CAD (computer-aided design), CAM (computer-aided manufacturing), CAE (computer-aided engineering) as well as asset management, project planning and quality management solutions. These solutions optimize design, processes and throughput throughout the lifecycle of a manufacturing facility. Divisions reported in this segment include: (1) Manufacturing Intelligence with roughly a 75% share of revenues and (2) Asset Lifecycle Intelligence with roughly a 25% share of revenues.

IES has had a solid average organic growth of 4% in the past 5 years. It has also received most of Hexagon's acquisitions, so the total growth has been 9% on average. We find the two growth profiles of the two divisions to be rather equally good. Both divisions also include some demand cyclicality.

Manufacturing intelligence (MI)

The MI division consists of both hardware and software solutions for improving efficiency and quality in manufacturing. Hardware offering includes both stationary and portable dimensional measurement sensor technology such as coordinate measuring machines, optical scanners, laser trackers and measuring arms. A key cornerstone of this industrial hardware business was the acquisition of Brown and Sharp in 2001. The acquired company had low profitability at the time of the acquisition but has developed positively as part of Hexagon.

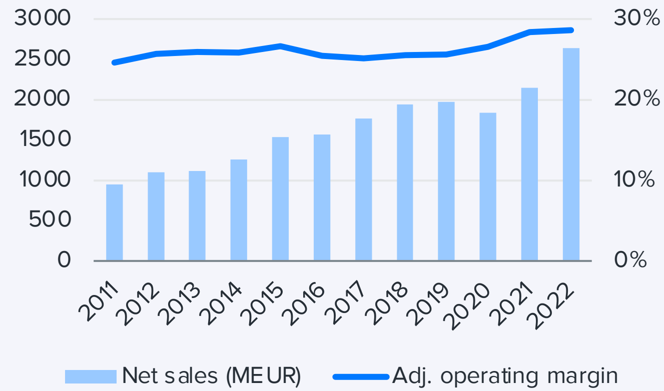
The MI division's software offering includes CAM, CAE, industrial metrology software and operations management tools. Hexagon holds a market leading (top 1-2) position in CAM solutions that bring in a large share of MI's software revenue. CAM solutions enable manufacturers to generate and optimize programmed instructions for automated machines to improve the efficiency of production processes. The CAM business is built on series of deals during the past decade, the most important being the platform acquisition of Vero Software in 2014 (2013 sales: 80 MEUR). Other complementing CAM-acquisitions include a number of smaller deals consisting of both developers and distributors.

CAE solutions consist of simulation software that allows engineers to validate and optimize product designs using virtual prototypes which can complement and even replace traditional physical testing procedures. Hexagon's CAE business was founded on the platform acquisition of MSC Software in 2017 (2016 sales: 209 MEUR) and complemented with the acquisition of Romax in 2020. Hexagon is one of the large players in the CAE segment globally (top 5).

Both hardware and software growing in MI

All revenue types (hardware, software, services) have contributed to MI's growth in 2015-22. Growth has been driven by increasing automatization and more efficient use of data in the manufacturing industry. Hardware has been much more cyclical whereas CAM and CAE software revenues have grown more consistently. MI's organic growth was rather steady in 2016-18 but deteriorated in 2019 due to weakened demand in China's electronics manufacturing industry. Organic growth was 5% on average in 2015-19.

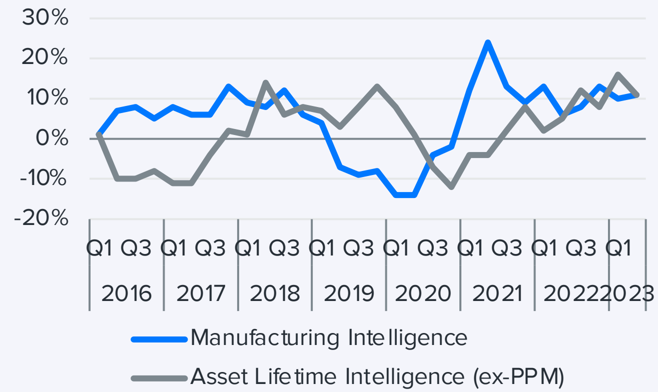
Net sales and profitability



Revenue split between divisions

- **Manufacturing Intelligence** – hardware and software sales
- **Asset Lifetime Intelligence** – purely software sales

Organic growth



1) ALI division has been reported since Q2'22. ALI includes former PPM and recent acquisitions Infor EAM (10/2021) and ETQ (4/2022).

Industrial Enterprise Solutions 2/2

The COVID-19 pandemic had a further negative impact in early 2020 but the electronics manufacturing industry recovered rather quickly. Strong demand for manufactured goods and global supply shortages boosted investments in the manufacturing industry in 2021, which was visible in MI growing by 15% organically. An important customer segment, the car manufacturing industry started to recover in late 2021 and Hexagon has reported positive contributions from the electric car manufacturing boom in the first half of 2023.

Asset Lifecycle Intelligence (ALI)

The ALI division consists of pure software revenues and generates around 25% of IES business area's net sales. It was formed in 2022 and includes the former PPM business together with newly acquired companies Infor EAM and ETQ. A large share of the division's sales is recurring owing to the high proportion of SaaS-revenue. Slightly above 50% of the recently acquired Infor EAM's and ETQ's software revenue is SaaS-based and the proportion has been on an increasing trend as the companies have been pushing their customer base to SaaS.

PPM business originates from the Intergraph acquisition that took place back in 2010. It consists of 3D design and management tools for process, power and marine industries.

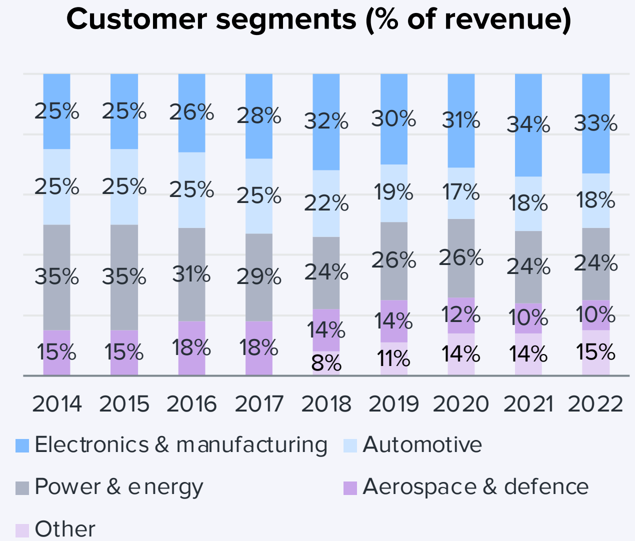
Infor EAM (enterprise asset management) is an asset management solution that is used to track industrial assets, digitalize maintenance operations and improve customers' operational efficiency in various industries.

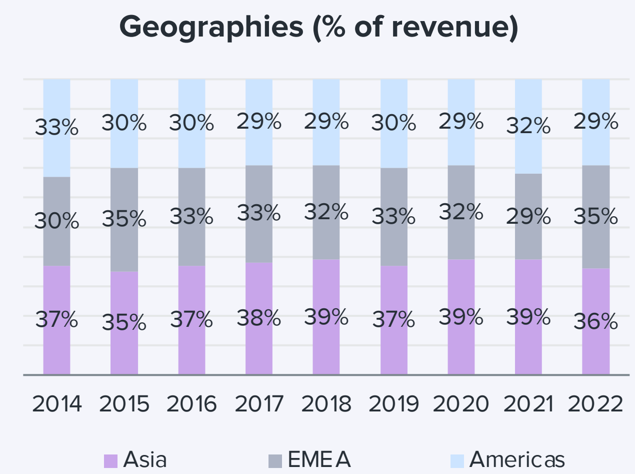
ETQ provides quality management, compliance and EHS (environmental, health, safety) management software.

Acquisitions have boosted ALI's growth profile

Looking to the past when the division consisted of only of PPM, the division's organic growth tended to fluctuate depending on cyclical demand patterns in the energy industry. PPM business had average organic growth of only 2% in 2015-19. The COVID pandemic burdened the growth in 2020-21, after which there has been some recovery. However, it seems to us that PPM's long-term organic growth outlook is rather moderate.

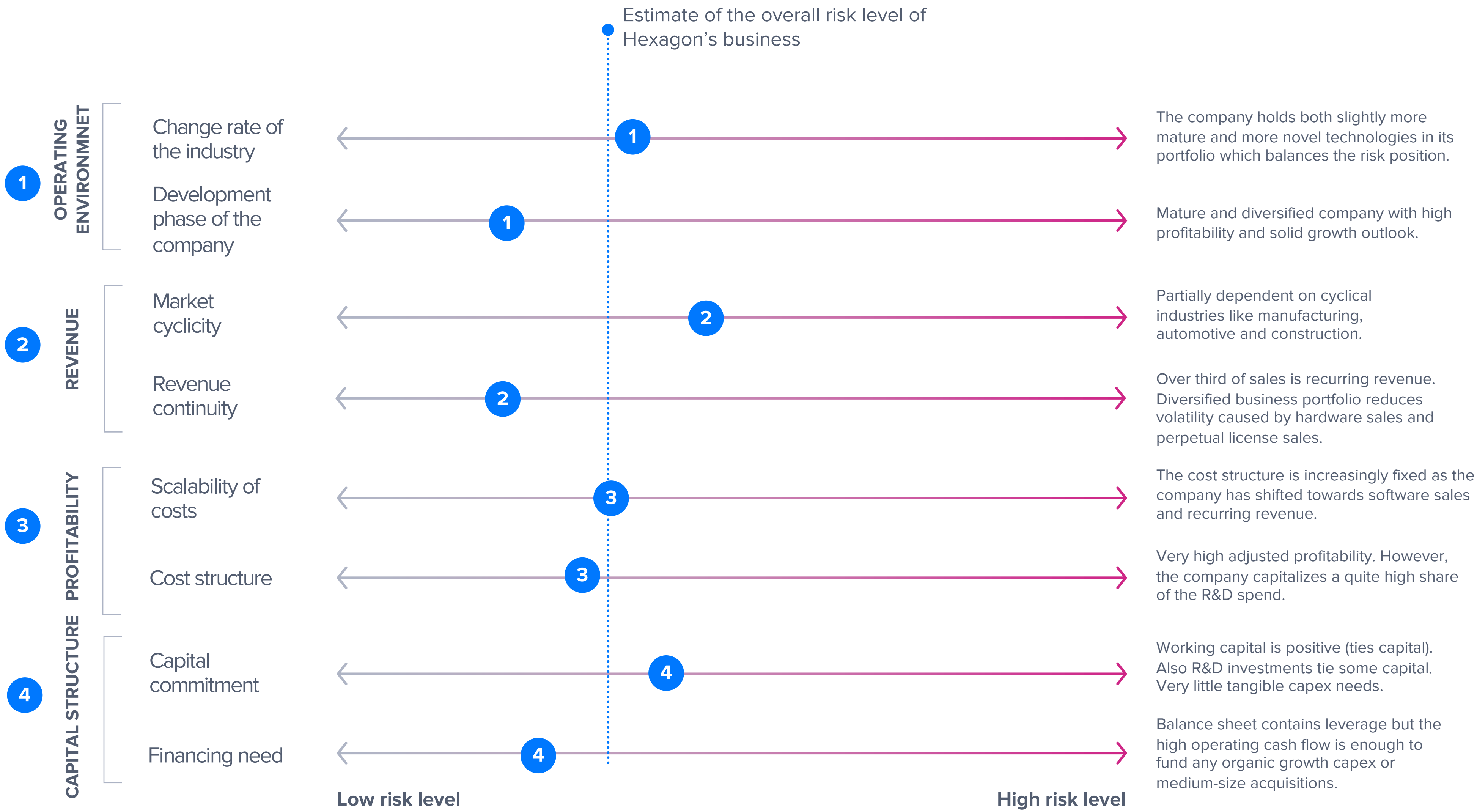
Recently acquired EAM and ETQ businesses have stronger growth profiles although we estimate their combined weight in the division is slightly less than half. Hexagon has estimated that these two businesses could achieve combined sales synergies of 160 MUSD by 2026 which are fueled, for example, by expanding sales into new geographies. The ALI division has recorded an average organic growth of 10% after the ETQ acquisition closed in April 2022. Faster growth may partially reflect the recovery after the COVID-19 pandemic but we believe it is mostly driven by strong growth in acquired businesses.





Source: Hexagon

Risk profile of the business model



Source: Inderes

Market overview 1/3

Summary of growth outlook in key market segments

Geospational Enterprise Solutions	Industrial Enterprise Solutions

We estimate total market growth in the medium-term at around 6% p.a.

Geosystems (hardware and software businesses)

Market growth ~5% p.a.

Growth drivers

-Digitalization and automation in construction and mining

-Automated safety systems drive productivity

-Increased utilization of reality capture sensors and software throughout the lifetime of a building, from planning and design to construction and maintenance

Manufacturing Intelligence (hardware and software businesses)

Market growth 5-10% p.a.

HW

SW

Growth drivers

-Automatization of manufacturing and quality control

-Digitally integrated processes from design to the shop-floor

-Adoption of additive manufacturing

Safety, Infrastructure & Geospatial (software)

Market growth ~5% p.a.

Growth drivers

-Public safety and resource efficiency in the public sector

-Building and protecting critical infrastructure

-Geopolitical uncertainty

Autonomy & Positioning (hardware and software)

Market growth ~10% p.a.

Growth drivers

-Autonomous technologies increasingly used in agriculture, mining and other heavy industries

-Resource efficiency and risk control

-Geopolitical uncertainty

Asset Lifetime Intelligence (software)

Market growth 5-10% p.a.

PPM[1]

EAM[1]
ETQ[1]

Growth drivers

-Larger and more complex industrial projects require better design and maintenance tools

-Increasing volume of required documentation in industrial processes

-Cyber security risk-management

Market growth figures represent our view on average annual growth in the medium term (within 5 years from now).

Estimates reflect Inderes' view that is based more on a rough top-down research than a thorough bottom-up analysis. We have considered both Hexagon's historical growth and examined various industry research studies that will be mentioned in the following pages.

1) PPM refers to design tools for industrial process facilities (abbreviation for Power, Process and Marine), EAM and ETQ refer to asset management, quality management and compliance software

Market overview 2/3

The addressable market is diversified but cyclical

Hexagon's addressable market is global and includes in various product segments that each have customers from multiple industries. These factors make the addressable market rather diversified and multi-dimensional. Despite the diversification, the market is cyclical given the dependence on industries such as construction, mining and manufacturing. The prevailing economic conditions affect especially hardware sales through customers' readiness to invest.

Market grows faster than the economy

The market for Hexagon's modern technology is likely to grow somewhat faster compared to GDP over the medium-term. Looking at the largest hardware segments, i.e., surveying equipment and manufacturing metrology sensors (particularly CMM machines), we find that they are expected to grow around 5-7% annually[1]. Hexagon's largest software segments, i.e., computer-assisted-manufacturing, computer-assisted-engineering and enterprise asset management are forecasted to grow by close to 10% annually[2]. Despite the high growth forecasts for the software segments, we believe that market growth is somewhat skewed towards smaller companies that introduce new services and often become acquired by large companies like Hexagon at some point.

Growth supported by megatrends

The favorable market growth outlook is based on several supporting megatrends that vary somewhat between the market segments. Resource efficiency and the ability to utilize data in decision-making are the key general drivers behind the demand for Hexagon's products in most of the segments. To be more specific, we consider the key growth trends to include, for example, automation in manufacturing, autonomous driving, autonomous farming, digitalization in construction and additive manufacturing. Hexagon's solutions reduce the need for human labor and increase both the speed and accuracy in processes.

Segment-specific market and competition overview

Surveying (Geosystems, GES)

Surveying is a somewhat mature market-segment compared to Hexagon's other software-focused segments. Surveying still has a good growth outlook with around 5% forecasted annual growth in the medium-term according to a study by MarketsAndMarkets[1]. The growth is driven by, e.g,. increased demand for geospatial data for different purposes, use of airborne technology such as unmanned aerial vehicles (UAV) and use of autonomous technologies than can be more efficient compared to manual surveying. Hexagon has a market leader position in surveying via its subsidiary Leica Geosystems. The market has consolidated over the years and is now dominated by a few players such as Hexagon, Topcon, Trimble, CHC-Navigation and Hi-Target. The quality requirements in the surveying equipment market are very high, which is an effective barrier for potential new entrants.

Computer-aided dispatch solutions (Safety, Infrastructure & Geospatial, GES)

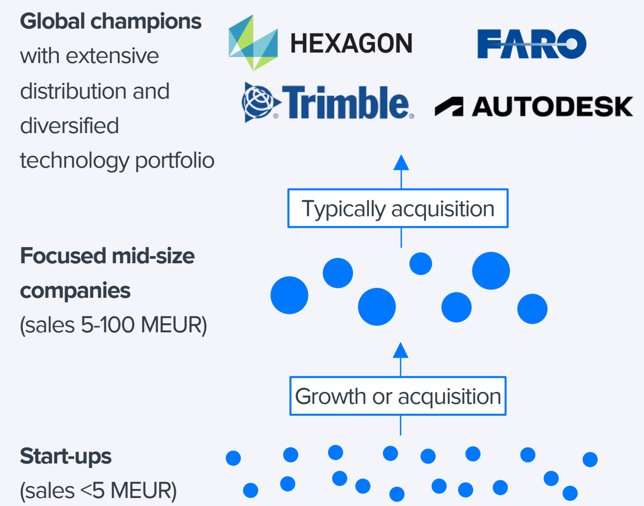
The size of the computer-aided dispatch market was 3 EURbn in 2022 according to a study by ResearchNester[3].

1) ResearchNester: Coordinate Measuring Machine Market (7/31/2023); MarketsAndMarkets: Land Survey Equipment Market (8/8/2023)
2) MarketsAndMarkets: Enterprise Asset Management Market (12/2022), Computer-Aided Manufacturing Market (4/2019); Allied Market Research: Computer-Aided Engineering Market (9/2022)
3) ResearchNester: Computer Aided Dispatch Market (6/13/2023), Grand View Research: Computer Aided Dispatch Market

Growth profile per division (p.a.)

>10%	**Growth stars:** Autonomous solutions
5-10%	**Growth segments:** Surveying: reality capture; geospatial software; manufacturing sensors; manufacturing software (CAM/CAE); asset management software; positioning
<5%	**Low growth segments:** Power, process and marine industrial design software; safety and infrastructure software

Growing small businesses tend to be absorbed by global champions like Hexagon



Source: Inderes

Market overview 3/3

We calculate that Hexagon's share of this dispatch market is roughly 18% making it one of the leaders in the market in general. The key segments where Hexagon operates include safety (26% of the total dispatch market), transportation (20%), government & defense (16%) and power & utilities (12%) according to another study by Grand View Research. The key growth drivers include increasing cyber threats, rising deployment of IoT, a growing number of connected devices, and rising demand for digital safety solutions. Competitors include, for example, Tyler Technologies and Motorola Solutions.

Industrial metrology (Manufacturing Intelligence, IES)

We estimate the market for industrial metrology to be a more-fragmented hardware-segment compared to surveying. The segment consists of several products such as CMMs and machine tool products. CMM market grows by 7% annually according to ResearchNester's study[1]. Growth in the segment is driven by industrial automatization together with the increasing importance of quality control and inspection in manufacturing. Key end-users consist of various industries such as automotive and electronics manufacturers. Hexagon is an established player in the market. Other competitors include such names as Nikon, Mitutoyo, Faro Technologies, Renishaw and Carl Zeiss.

Computer-assisted manufacturing (Manufacturing Intelligence, IES)

Hexagon is among the market leaders in the CAM software market segment. The segment grows by 8% annually according to Allied Market Research[2] driven by industrial and robotic automation. Key customer segments include, for example, automotive and electronics industry. The market is rather consolidated. Significant competitors include large companies such as Autodesk and Dassault Systemes.

Computer-assisted engineering (Manufacturing Intelligence, IES)

The CAE software market is a slightly more fragmented than the CAM market. The CAE segment includes multiple different specialized simulation needs end-uses for CAE solutions that has resulted in a larger number of different products and competitors. Hexagon is among the established players but does not have similar market-leading position as in CAM. The CAM market is expected to grow by some 9% annually according to Allied Market Research[2]. Ansys is a market leader in the CAE segment. Other competitors include, for example, Bentley Systems and Dassault Systemes.

Enterprise asset management (Asset Lifetime Intelligence, IES)

The EAM software market is forecasted to grow by around 11% annually[2]. Its growth is driven by IoT (more Internet-connected assets in industrial facilities) and a need to evaluate, analyze and maintain different assets effectively. Moreover, increasing compliance regulations surrounding, e.g., safety and environmental aspects require more documentation resulting in demand for tools to manage various documents more efficiently. Competitors in the segment include, for example, AVEVA, SAP and IBM.

1) ResearchNester: Coordinate Measuring Machine Market (7/31/2023); MarketsAndMarkets: Land Survey Equipment Market (8/8/2023)
2) MarketsAndMarkets: Enterprise Asset Management Market (12/2022); Allied Market Research: Computer-Aided Engineering Market (9/2022), Computer-Aided Manufacturing Market (5/2021)

Selected large competitors

Competitor	*Segments*
Ansys	CAE
Autodesk	CAM
AVEVA	EAM
Bentley Systems	CAE
Carl Zeiss	Industrial metrology
Dassault Systemes	CAE and CAM
ESRI	Geospatial
Faro Technologies	Industrial metrology
Mitutoyo	Industrial metrology
Motorola Solutions	CADi
Nikon	Industrial metrology
Renishaw	Industrial metrology
South Survey	Surveying
Topcon	Surveying
Trimble	Surveying
Tyler Technologies	CADi

Abbreviations

CAE: Computer-aided engineering
CAM: Computer-aided manufacturing
EAM: Enterprise asset management
CADi: Computer-aided dispatch solutions

Strategy and financial targets 1/3

Smart Digital Realities – a theme that unites the various businesses under the Hexagon umbrella

Resulting from roughly 200 acquisitions since 2000, Hexagon is a combination of various businesses. What unites these businesses is that they help customers measure, collect and use data in an efficient manner. Hexagon's solutions aim to provide tight integration between reality capturing devices and accompanying software to utilize the data real-time and autonomously. These highly-specialized solutions allow the benefits of digitalization even in unpredictable and less-structured areas where digitalizing operations has traditionally been difficult, such as construction, agriculture and mining.

Strong emphasis on R&D

Hexagon's specialized technology is built on significant research and development investments. The company aims to spend about 10-13% of net sales on R&D but the proportion was as much as 14% in 2022. Recently, the major R&D focus areas have been the two software platform projects HxDR and Nexus, as well as new autonomous types of reality capture hardware. The company might slightly reduce its proportional R&D spend from the current high level given that its efficiency program launched in mid-2023 seeks savings also from optimizing the R&D function.

Acquisitions have contributed to value-generation

Acquisitions have played a key role in Hexagon's transformation in history, and they are still a central part of the current strategy. The firm's current financial objectives set the target for acquisitive growth at 3-5% annually that is roughly 40% of the total annual growth target (8-12%). Hexagon conducts M&A routinely and has disclosed 60 acquisitions in total in 2017-2022. Those acquisitions added 974 MEUR in net sales to the company, which comprises 48% of Hexagon's total revenue growth during that period.

We conclude that at least historically, Hexagon has successfully created value to its shareholders with its M&A supported strategy. We have compared the total M&A net purchase prices in 2013-22 (7.5 EURbn) to growth in the adjusted operating margin (adjusted EBIT grew by 1.0 EURbn between 2012-22). With an unrealistic but simple assumption of zero organic earnings growth the acquired businesses would be valued at EV/EBIT 7.3x after synergies (yet unrealized synergies from Infor and ETQ acquisitions are not included). More realistic assumption of 5% organic earnings growth during that period would correspond to a post-synergy EV/EBIT multiple of 10.4x. We consider this an attractive valuation level given the capital-light nature of the acquired businesses and their future growth potential.

M&A strategy includes different types of acquisitions

The acquisitions conducted within Hexagon's M&A strategy can be categorized into three groups:

1. Platforms

When Hexagon desires to expand into a new business segment it may carry out a platform acquisition. These acquisitions are typically larger and are conducted infrequently.

Strategy in a nut-shell

Hardware

Focus on improving the existing products (surveying, industrial metrology, positioning) and creating new ones for new growth segments (e.g. reality capture, autonomy, additive manufacturing). Little M&A growth opportunities.

Software

Developing and acquiring products that help customers combine data out from silos. Actively acquiring new software businesses helps Hexagon extract more value from its large customer-base.

Synergies

End-to-end solution offering for multiple industries (potential for cross-selling, joint innovation, sales efficiency).
Strong capabilities in both software and hardware enable mastering the whole value-chain of a digital reality.

Summary of acquisitions 2013-22

Net purchase price	7,511 MEUR
Acquired revenue	1,342 MEUR
EV/sales	5.6 x
If we assume an organic EBIT CAGR of 5% for Hexagon in 2013-22, it would have acquired EBIT as much as 720 MEUR	
Acquired EBIT (adjusted)	720 MEUR
EV/EBIT for acquisitions	10.4 x
If we assume an organic EBIT CAGR of 8% for Hexagon in 2013-22, it would have acquired EBIT as much as 461 MEUR	
Acquired EBIT (adjusted)	461 MEUR
EV/EBIT for acquisitions	16.3 x

Source: Inderes

Strategy and financial targets 2/3

The intention behind such transformative acquisitions is to gain a platform that allows the company to grow in certain attractive segment through both organic business development and complementary acquisitions in the future. The acquisitions of Brown and Sharp, Leica Geosystems, Novatel, Intergraph, MSC and Infor EAM are the most important platform-acquisitions in the company's history.

2. Complementary products or technologies

Most of Hexagon's acquisitions are rather complementary to the current product offering than transformative. These are typically smaller than platform-acquisitions and closer to the existing core businesses.

3. Distributors

Hexagon has acquired 15 distributors in 2017-22 which comprises one-quarter of all acquisitions during that period. Acquired distributors tend to be smaller in size (average net sales 3 MEUR) compared to platform or product companies. These distributors typically serve Hexagon's end-customers or potential end-customers. Acquiring distributors allows Hexagon to get closer to the customer and enable cross-selling of additional Hexagon products potentially yielding a growth boost and an efficiency improvement in the sales process.

Eyes on high-margin, recurring revenue businesses

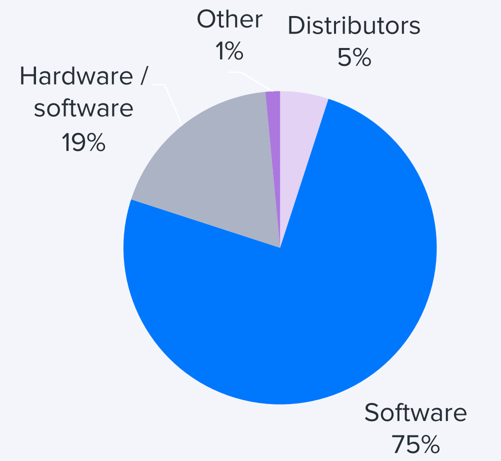
Hexagon's M&A evaluation process is based on a bottom-up approach to consider the benefit of filling certain gaps in the technology portfolio via an acquisition. It tends to favor target companies with a solid market position, good customer feedback, high margins and preferably a recurring revenue component. A key financial criteria is that the target has margins that are accretive to Hexagon's group average over the short-to-medium term (small exceptions may apply sometimes). Therefore, the acquired companies tend to be rather established players with revenues more often amounting to tens of millions of euros rather than single-digit MEUR (except for distributors that are often quite small). Around 75% of the acquired revenue in 2017-22 has been software sales, 19% integrated software-hardware businesses and 5% distributors.

Synergies and integration

Hexagon is a rather decentralized organization with range of different teams and products of which many have been acquired within the past 10 years. Newly acquired businesses can often continue operating quite independently and with an entrepreneurial mindset. The initial focus after a transaction is in retaining the key employees, allowing the operations to continue smoothly and achieving sales synergies, for example, through improved distribution capabilities. Integrating operations with other related businesses within a business division tends to take more time and is likely to bring cost-savings over the long-term.

As a result of roughly 200 acquisitions in the 2000s, Hexagon operates in roughly 500 premises. Reducing physical premises is one aspect where the company seeks to increase efficiency and promote cross-utilization of spaces and capabilities. With a cost-efficiency program kicked-off in mid-2023 it seems that the company is increasingly activating to capture also cost synergies between the various businesses it has acquired over the years.

Acquired revenue by business type (2017-22)



M&A contribution on sales (MEUR)

Source: Hexagon

Strategy and financial targets 3/3

Growth both organically and through M&A

Overall, we find Hexagon's financial targets rather reasonable. We believe reaching the growth and profitability targets over the medium-term (2026) is a plausible scenario if not a certain one, however.

Hexagon aims for annual average sales growth of 8-12% in 2022-26 of which 5-7% organically and 3-5% via acquisitions. The organic growth target is slightly more ambitious compared to the company's historical average of 5% in the past five years (2018-22). Speeding up the pace won't be easy after the strong macroeconomic cycle in 2021-22 has gradually turned into a slow-down. In the long-term, however, organic growth is likely to exceed GDP growth given the significant megatrends supporting the business.

Efforts taken to improve profitability

Hexagon targets to increase its adjusted EBIT margin to above 30% by 2026. It is already almost reached the target as the margin was 29.2-29.3% in 2021-22. Increased fixed costs and FX had a minor negative impact on profitability in Q1-Q3 2023. Growth in high-margin product areas could, however, help the company to continue improving the adjusted EBIT margin further together with opex cost control. Margin expansive acquisitions could also bring some support to reaching the target.

The company introduced a savings program in mid-2023 that aims for annualized savings of 160-170 MEUR fully in place by early 2025. The program includes a number of measures to improve efficiency such as cross-divisional shared-services centers, reducing offices and facilities by ~25%, rationalizing underperforming business activities and optimizing several corporate functions. We expect the program to also decrease relative R&D spending from the current high levels (cost 12% and total expenditure 14% in 2022). The program is expected to carry a one-off cost of 200 MEUR that was booked in Q3 2023.

Balance sheet and cash flow

Hexagon's equity ratio target is quite loose. Hexagon aims for an equity ratio at least of 25% which means that the balance sheet would allow for much more leverage compared to the 2022 level of 59.9%. Its net debt to EBITDA target (<2.5x) is, however, much more tangible. Net debt to EBITDA was 1.8x at the end of 2022 in line with the target.

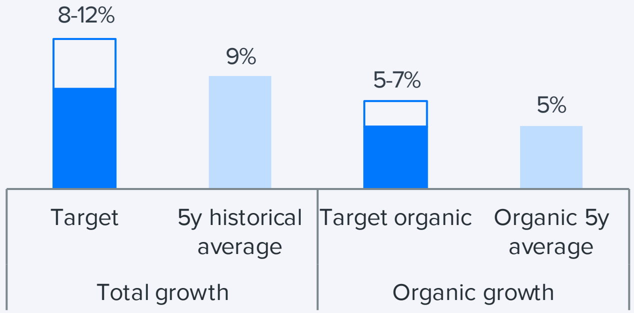
Hexagon's targets cash conversion is around 80-90% (91% on average in 2018-22). This measure considers operating cash flow after capex but before paid taxes and interest payments, also excluding NRI. This cash flow measure is then compared to adjusted EBIT. Cash conversion was 91% on average in 2018-22, thus slightly exceeding the targeted level.

Room for improvement in ROCE

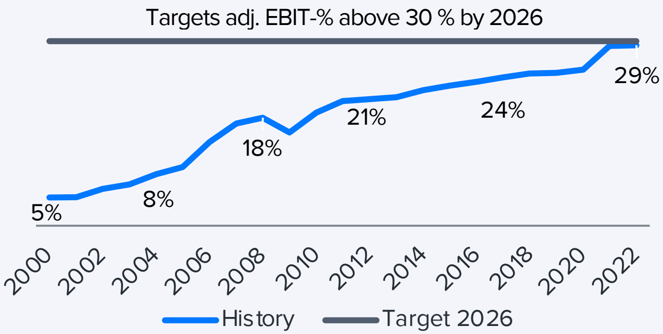
We find it interesting that Hexagon targets a ROCE of over 15% in the long-term and over the business cycle. Its ROCE was only 11.5% in 2022 and 12.1% on average in 2018-22. Despite strong growth in earnings, the ROCE figures are burdened by bloated goodwill and other intangible assets in the balance sheet after series of acquisitions. Should the company stop M&A-driven growth and focus on organic growth, we believe it would support improving ROCE in the long-term as it could make it possible to increase profits in a more capital-light way.

Financial targets

Growth 2022-26 CAGR



Adjusted EBIT-margin



Other financial targets

Equity ratio: At least 25%

- 59.9% at the end of 2022

Net debt to EBITDA: Below 2.5x

- 1.8x at the end of 2022

Cash conversion: 80-90% of adjusted EBIT

- 91% on average in 2018-22

ROCE: Over 15% over business cycle in the long-term

- 12.1% on average in 2018-22

DPS: 25-35% of EPS, if financial position allows this.

- 33% on average in 2018-22

Historical financials 1/3

Organic growth is good but somewhat cyclical

Hexagon's net sales has grown rather systematically over the past decade, from 2.4 EURbn in 2012 to 5.2 EURbn in 2022. Average growth has been around 8% of which 5% organic during that period. Organic growth has exceeded global GDP growth by 2 percentage points over the past decade.

Taking a closer look at the past 5 years (2018-22), Industrial Enterprise Solutions (IES) business area has grown slightly faster (9% on average) than Geospatial Enterprise Solutions (GES) (8% on average). This can be explained by acquisitions which have strengthened IES unproportionately. GES business area's organic growth has been slightly faster at 6% compared to 4% in IES. GES' growth has been boosted by organic innovation that has required significant R&D expenditure.

Moderate cyclicality visible in organic growth

In 2019, sales growth declined and organic growth turned negative for the first time since the financial crisis (2009). The negative impact came through hardware sales in both GES (decline in construction related demand) and IES (decline in demand from the automotive sector and China's manufacturing sector) whereas software sales were resilient and showed positive organic growth. The negative organic growth continued in 2020 still driven by the weakness in construction and automotive segments together with a slowdown in oil and gas. 2021 was a strong year for Hexagon as demand bounced back in various industries including construction, infrastructure and engineering. Good demand continued in 2022 even if organic growth moderated to 8% after peaking at 12% in 2021. Even with worsening macroeconomic conditions, Hexagon has maintained 8% organic growthin during Q1-Q3 2023 thanks to organic innovation and fast growth in recently acquired software businesses.

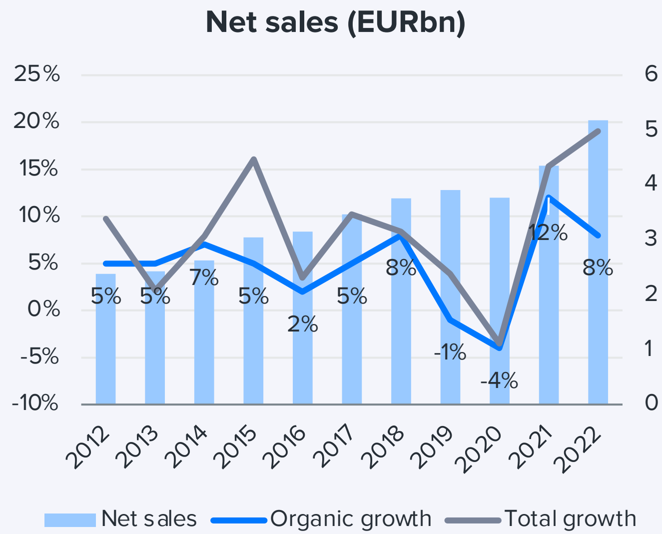
Profitability has improved consistently

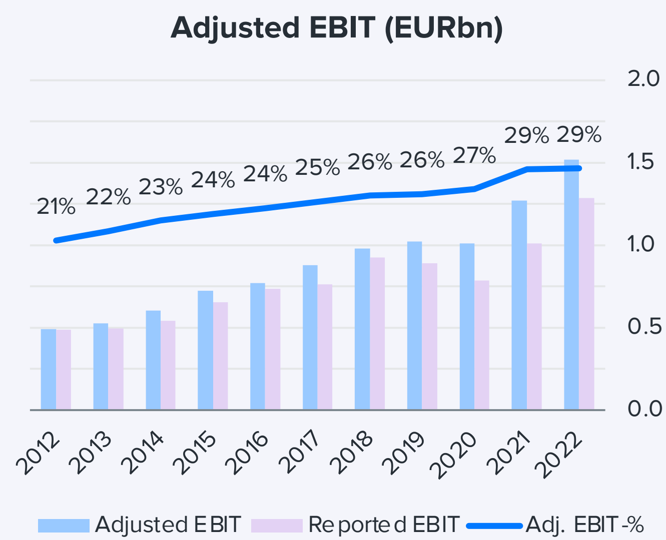
Adjusted operating earnings have grown consistently and the EBIT margin has been on an increasing trend since the financial crisis. Adjusted EBIT grew to 1.5 EURbn by 2022 that corresponds to a margin of 29.3%.

In 2007-10, when most sales came from hardware, adjusted EBIT was at 15-18%. The transition towards software and recurring revenue has been the major driver behind the increased profitability. This has been mainly achieved by acquiring margin-additive software businesses with a strategic fit to the existing portfolio. The gross margin was 65% in 2022 which reflects the lower margins in hardware (we guess <50%) and high margins in software (probably around or above 80%). The gross margin has improved by a hefty 19 percentage points in 2008-22, even more than the increase in the adjusted EBIT margin (11 pp).

Higher R&D investments compared to depreciation create a gap between adjusted EBIT and cash flow

The main profitability measure that Hexagon reports, adjusted operating earnings (or adjusted EBIT), contains several adjustments that mainly raise the figure above conventional reported EBIT. Adjustments include share-based program expenses (LTIP), amortization of surplus values stemming from acquisitions (PPA), acquired deferred revenue and non-recurring items related to transaction costs and freezing business operations in Russia. Adjustments were 231 MEUR in 2022. In addition, Hexagon capitalizes a large share of R&D expenses which further boosts both reported EBIT and adjusted EBIT.





Source: Hexagon

Historical financials 2/3

Capitalized R&D expenses are amortized in the subsequent periods but the amount of amortization is currently clearly smaller (2022: 174 MEUR) compared to the newly capitalized R&D expenses (2022: 378 MEUR). Due to these accounting practices, we find the actual operating cash flow to be slightly lower compared to adjusted EBIT. Actual net cash flow from operating activities after ordinary investments (capex), excluding paid taxes and interest has been 85% of adjusted EBIT in 2018-22 on average or 91% if adjusting cash flow for NRI. The disproportion stems mainly from clearly higher investments compared to depreciation. The disproportion is exacerbated by the recent acquisitions of Infor EAM and ETQ. These companies have not capitalized R&D expenses in the past, so they have little to amortize so far but after becoming part of Hexagon they have started to capitalize part of their current R&D investments according to group policy. Cash flow has also differed from EBIT for other reasons such as working capital variation. This is visible especially in 2022-23 cash flow that has suffered from increased inventory levels amid risks of component shortages and raising interest rates making it harder to collect cash early from customers or postpone payments to suppliers.

Balance sheet includes mostly intangible assets

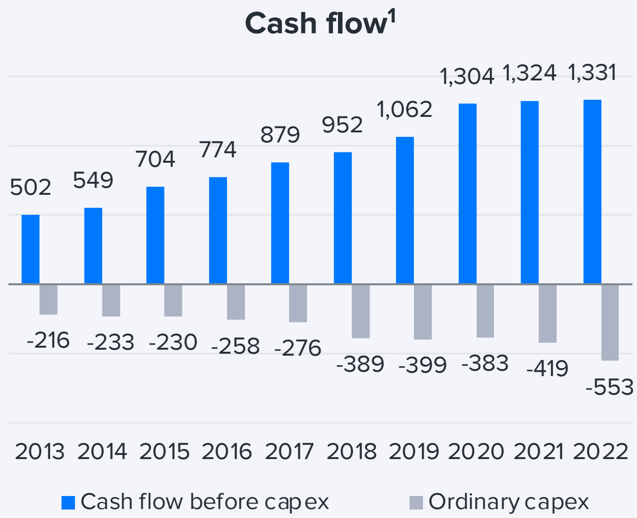
Most of Hexagon's assets are intangibles (12.8 EURbn), mostly goodwill (9.6 EURbn) that has accumulated through series of acquisitions. Goodwill is not subject to regular depreciation but is regularly tested against potential decrease in value. A majority of the goodwill is allocated to IES business area where the company has made a lot of acquisitions in recent years. The balance sheet also includes other intangible assets (3.2 EURbn) that are either acquired intangible assets with indefinite life or assets with definite life and amortized regularly over time. Other intangible assets consist of patents, customer relations and developed or acquired technology. Goodwill corresponds to 58% and other intangible assets to 19% of the total balance sheet. Other significant asset classes include receivables (9%), tangible assets (5%), inventory (4%) and cash (3%). Net working capital was at 186 MEUR or 4% of sales at the end of 2022 up from 90 MEUR or 2% of sales in 2021.

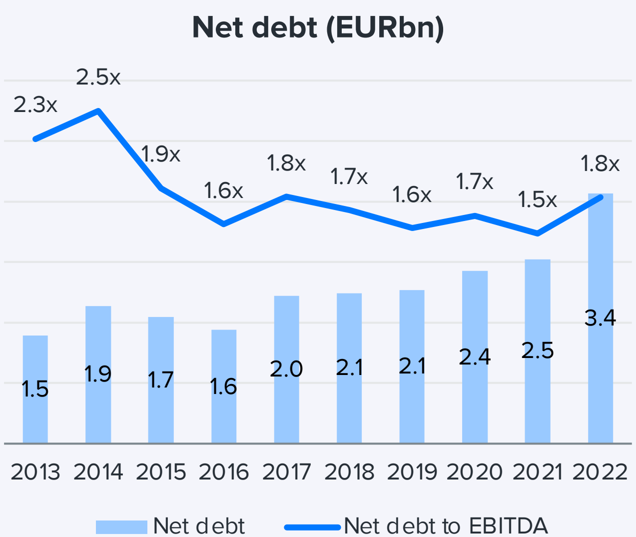
Big balance sheet burdens return on capital

Return on capital employed was 11.5% in 2022 down from 13.5% in 2021. The decline in ROCE can be explained, e.g., by the large ETQ acquisition during 2022 that tied lots of capital and increased working capital amid component shortages in the market. Generally, we find Hexagon's ROCE rather low for a high-tech company but that is naturally explained by the company's M&A-driven growth history and the resulting high amounts of goodwill in the balance sheet.

Leverage under control

Hexagon's equity ratio was at 59.9% at the end of 2022, well above its target of over 25%. Net debt was at 3.4 EURbn and its proportion to EBITDA was 1.8x – slightly up from previous years stemming from large acquisitions in 2021-22. However, we find Hexagon's debt-bearing capacity to be at a good level thanks to strong and upward-trending profitability together with a good cash flow.

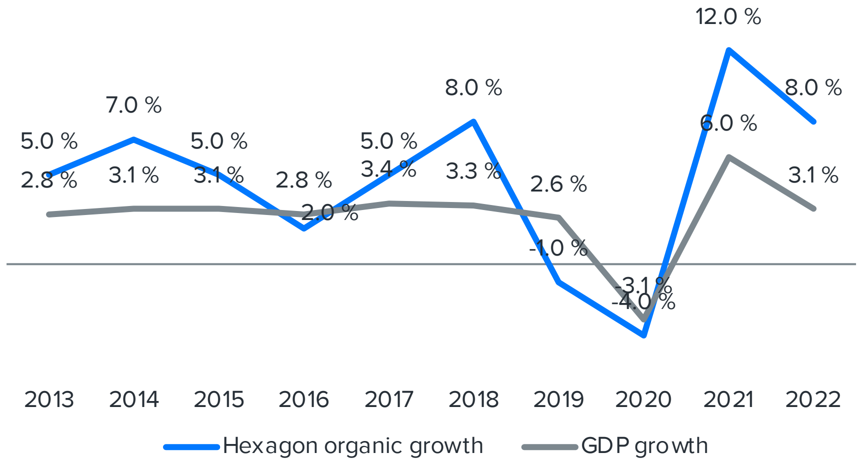




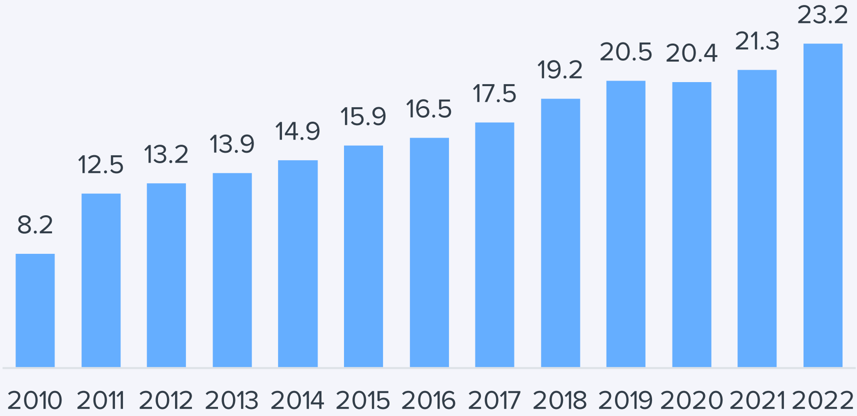
Source: Hexagon

Historical financials 3/3

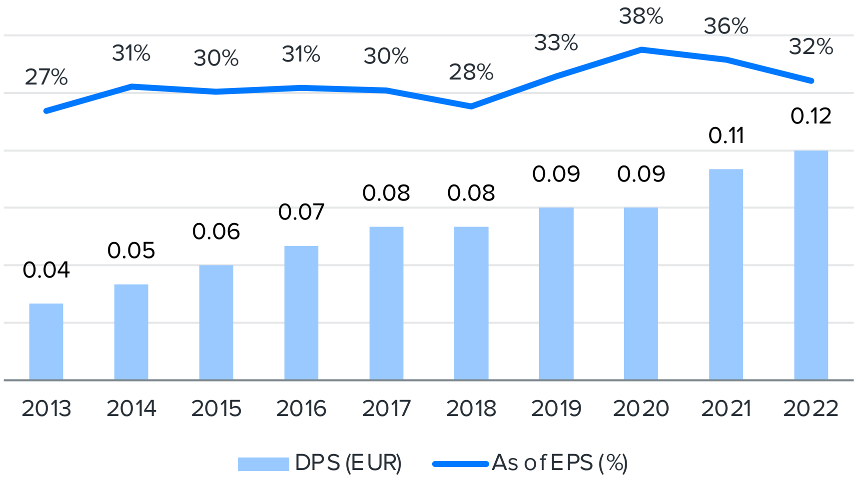
Hexagon's organic growth vs global GDP growth



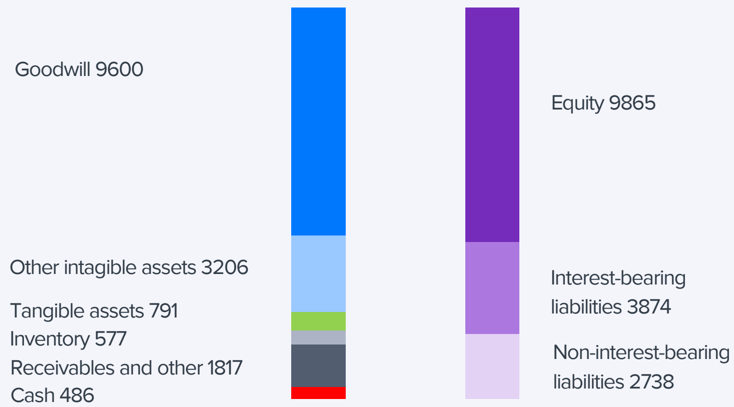
Number of employees (thousand)



Dividend per share



Balance sheet at the end of 2022 (MEUR)



Source: Hexagon

Estimates 1/5

Market for new digital solutions grows structurally

In the long-term, Hexagon's end-markets are set to grow faster than GDP owing to adoption of new digital tools in various industries. Big drivers include, for example, digitalization in the construction industry, higher rate of automation in manufacturing, increasing utilization of 3D reality capture and autonomous solutions in, e.g., agriculture or transportation. Companies and the public sector want to use data more efficiently which requires capturing data more frequently, combining it from silos and adding visual tools and analytics to understand it better. We estimate Hexagon's organic growth to exceed its historical average (2018-22: 5%) in 2023 (7%) and mean-reverse to 5% from 2024.

Small growth boost from M&A sales synergies

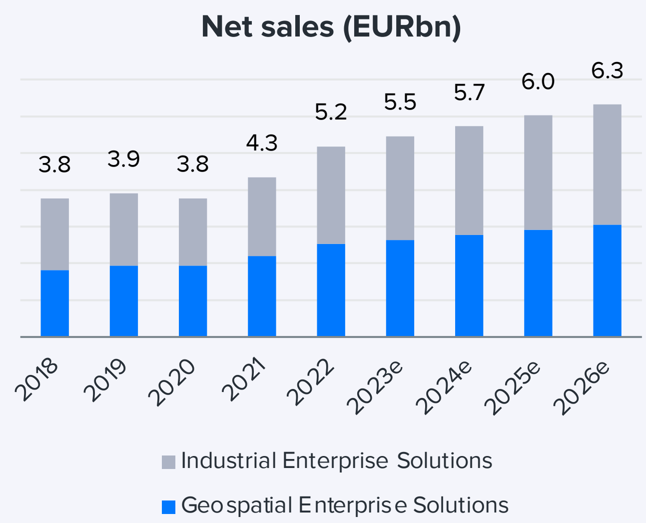
We estimate M&A synergies to somewhat support Hexagon's sales growth in the next years. In 2020-22, Hexagon acquired companies with combined sales of roughly 500 MEUR that has contributed mostly to the IES business area. The two largest single acquisitions were Infor EAM (closed 10/2021) and ETQ, which both are highly profitable and scalable software businesses. Hexagon has communicated that it expects sales synergies of 160 MEUR by 2026 from these two acquisitions with accretive margins to group average. Should these synergies materialize linearly over time, we calculate they would support IES' sales growth by 1.0-1.2% and adjusted EBIT growth by 1.5-1.7% in 2023-25 (assuming 40% EBIT margin). These two acquisitions correspond to roughly half of all acquired revenue in 2020-22 and our visibility to the potential synergies from the other half is limited. Considering the risk that not all planned synergies will materialize, we believe it could be fair to assume that synergies could provide some 1 percentage point support on IES growth or 0.5 percentage point support on group organic growth annually.

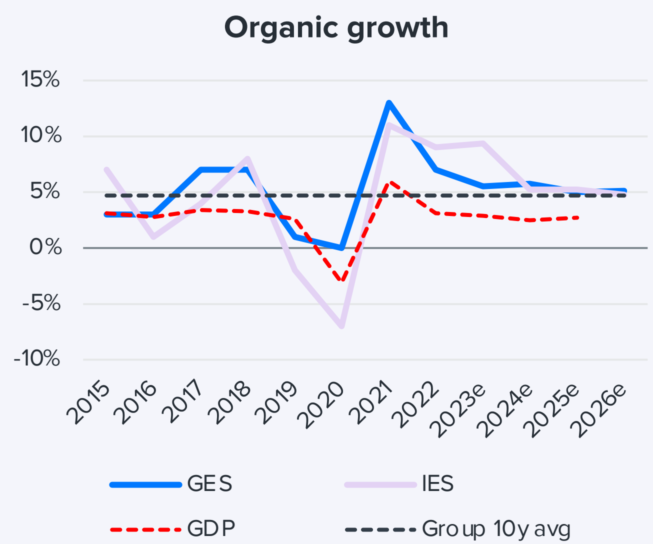
Innovation somewhat offsets macroeconomic slow-down in the short-term

Macroeconomic conditions have been deteriorating after a strong industrial investment cycle in 2021-22. The weaker macro-conditions have been visible especially in Hexagon's construction and automotive sector related businesses. However, the company has so far been able to offset the macro headwinds with broad-based growth fueled by innovation and long-term growth drivers. The company recorded organic growth of 8% in Q3 2023 and the outlook for the rest of the year remained rather positive in most of the segments. We expect the pricing to also provide some tailwind for Hexagon's growth. The inflationary environment in 2022 is likely to materialize with a lag in certain software businesses with longer contract periods. We have also understood that despite the deteriorating macroeconomic conditions, the company continues to actively hike prices in areas where it is highly competitive. The negative impact on growth from currencies is likely to decrease by 2024.

Organic growth assumptions by division: GES

We expect GES' sales to grow organically by 6% in 2023-24 driven by solid and stable growth in Geosystems, improving growth in SI&G and strong but moderating growth in A&P. In Geosystems, the main concern is construction-related product areas (60% of sales) that have already seen negative development in 2023. However, new reality capture products and strong demand for mining solutions are likely to offset the construction-related cyclical weakness.





Source: Inderes

Estimates 2/5

SI&G has shown negative growth in 2023 due to termination of certain low-value-add service contracts. Those projects won't affect comparison figures anymore in 2024. Hexagon has reported good momentum in Public Safety OnCall sales, which is likely to boost growth in SI&G by 2024. A&P has grown very fast in 2023 (Q1-Q3: +25% y/y) helped by demand in agriculture, defense, aerospace and marine markets. We have, however, understood that the growth has included single large deals and the underlying growth trend has been around 15%. That's why we expect A&P's organic growth to decline to 10% in 2024 (against tough comparison figures).

Organic growth assumptions by division: IES

We expect IES' sales to grow organically by 9% in 2023 and 5% in 2024 driven by a slow-down in MI from 9% to 4% and good but declining growth in ALI (2023: 12%, 2024: 9%). Manufacturing Intelligence's customer sectors are mixed. The automotive sector is postponing investments owing to weaker macroeconomic conditions and soft demand. Other manufacturing industries (such as electronics) are, however, in better shape. In the Asset Lifetime Intelligence division, we expect the PPM business to see low-to-mid single digit organic growth whereas EAM and ETQ (acquired in 2021-22) are likely to continue growing at double-digit figures.

Growth could moderate in the long-term

Hexagon's organic growth has been 5% on average in 2018-22, which is lower compared to current levels. We assume organic growth to slow-down to 5% in 2024 and continue at that solid level for 2026-30. The current high growth levels stem from high R&D investments in the past years and reflect the recent acquisitions of ETQ and EAM (2021-22), software businesses with strong growth profiles.

Gross margins on an increasing trend

Hexagon has been able to increase its gross margin almost for two decades (2003: 25.6%, 2023e: 65.9%) and we expect the trend to continue as positive in the coming years. We estimate gross margin to reach 66.4% by 2026 driven by new products created through high R&D investment in the past years and relatively faster growth in high-margin software businesses. The incremental improvement is, however, likely to be smaller compared to the improvements seen in 2020-22 boosted by the EAM and ETQ acquisitions.

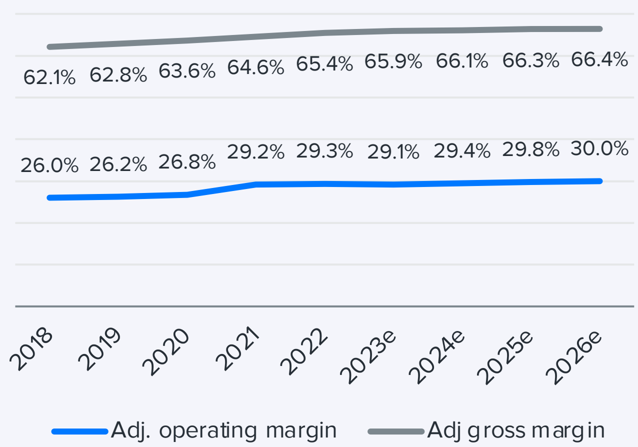
Rationalization program to curb fixed costs

Hexagon's adjusted fixed costs (fixed costs excluding adjustments on EBIT but including normal depreciation) have grown slightly faster than operating net sales in 2022-23. We consider it natural, since Hexagon has acquired software businesses with relatively high fixed costs. Growth in fixed costs also reflect high investments on R&D and increasing intangible depreciation. The company initiated a rationalization program in mid-2023 and targets savings of 160-170 MEUR to be fully in place by 2025 (~3% of 2023e net sales). Our fixed cost estimates grow roughly in line with sales in 2024-25. Wage inflation and growing depreciation are likely to burden profitability and at least partially offset the gains from the rationalization program.

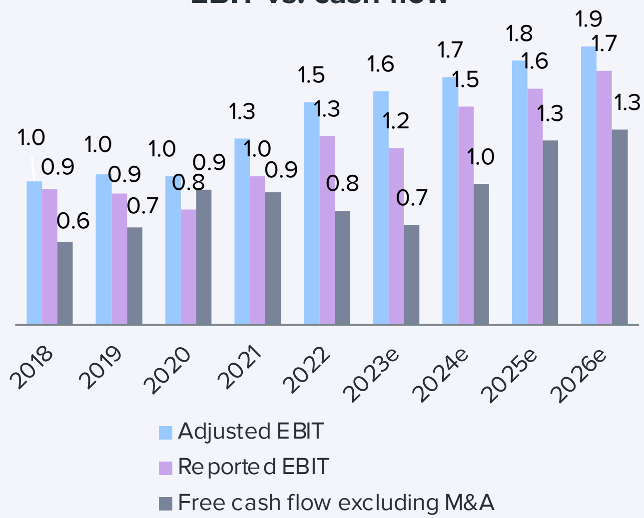
Considerable chance for adjusted EBIT to reach the target

We estimate adjusted EBIT as a % of sales to improve gradually in 2024-26 owing to an increasing gross margin and moderate growth in fixed costs. Adjusted EBIT reaches 30.0% of sales by 2026 in our estimates and thus touches the company's target of adjusted EBIT margin over 30% of sales.

Gross margin and adj. EBIT margin



EBIT vs. cash flow[1]



1) Free cash flow not adjusted for non-recurring items.

Source: Inderes

Estimates 3/5

Currencies cause fluctuation in profitability

Changes in currency exchange rates naturally play a role in profitability fluctuations given that Hexagon reports in EUR but has sales and costs in multiple currencies. The company has more sales than expenses in USD and CNY, for example. On the other hand, it has much more costs than sales in CHF given that Leica Geosystems maintains its headquarters and major R&D and production facilities in Switzerland. Currencies had a positive impact on the company's adjusted EBIT of 98 MEUR in 2022 and will have a negative impact of -81 MEUR in 2023 according to our estimate. The negative currency impact peaked in Q3 2023 assuming that the current FX-rates will hold. For 2024 we estimate negative FX-impact of 24 MEUR on adjusted EBIT.

Cash conversion slightly burdened in the short-term

We estimate cash conversion to be below the average of the past 5 years (91%) in 2023. In the short-term, cash flow is suffering due to extra non-recurring costs related to the recently kicked-off rationalization program in 2023-24 and high taxes paid in 2023. Investments are also estimated to exceed depreciation by 10% in 2023-25. We estimate cash conversion (adjusted for NRI) to be 79% of adjusted EBIT in 2023e. However, we expect the adjusted cash conversion to return to strong historical levels of 91% by 2024-25 even if the actual cash flow is still suffering from the rationalization costs in 2024. We have assumed the investments (excluding acquisitions) to grow in 2023-25 by CAGR of 5%.

Dividends should grow by 2024-25

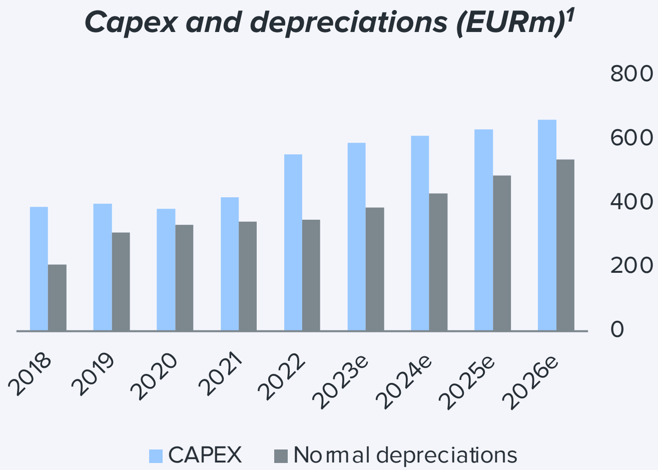
Hexagon targets 25-35% dividend payment compared to earnings per share taking, however, in account the financial position and future development potential. We believe that the company could keep its dividend flat at EUR 0.12 per share (38% of EPS) for 2023e even if that would mean temporarily exceeding the targeted range. 2023e EPS will suffer due to, e.g., restructuring related non-recurring costs but the underlying profitability has developed positively so it might not make sense to cut the dividend. We expect dividend to increase to EUR 0.13-0.15 in 2024-25e.

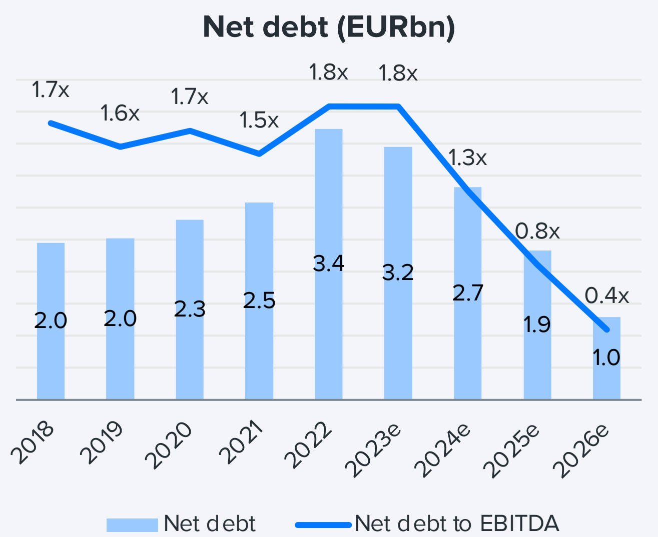
Net debt would decline fast without further M&A

Hexagon's high profitability, good cash flow and moderate dividend policy mean that the company's net debt position could improve rather quickly with no further M&A. We estimate net debt to decrease from 3.4 EURbn in 2022 to 1.9 EURbn in 2025e. Subsequently, the net debt to EBITDA would decline from 1.8x in 2022 to 0.8x in 2025e. However, the company tends to acquire companies continuously even if we have not included any future acquisitions into our estimates. We expect the company to boldly utilize financial leverage or share-based financing options if it sees attractive non-organic growth opportunities, as it has done in the past.

ROCE to decline due to increasing working capital

We estimate ROCE to decline in 2023 as our formula suggests 11.4% after 11.9% in 2022. However, ROCE should improve in 2024-25 (we estimate 11.8-12.4%) thanks to slower growth in WC and improving profitability. The ROCE reported by Hexagon in 2022 was 11.5% and the difference to our calculations is related to us calculating the capital employed as annual average compared to the company calculating it based on 12m quarterly average. Earnings used in the calculations are adjusted for NRI and does not include financial items or taxes.





1) Acquisitions of EAM and ETQ boosted group's capex level from 2022 (capitalized R&D) but did not increase depreciations proportionally because acquired companies had not capitalized their R&D in the past.
Source: Inderes

Estimates 4/5

Detailed estimates

Group, MEUR	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Net operating sales	**3761**	**3908**	**3771**	**4347**	**5176**	**5457**	**5730**	**6024**	**6320**
-Growth y/y	8 %	4 %	-4 %	15 %	19 %	5 %	5 %	5 %	5 %
-of which organic	8 %	-1 %	-4 %	12 %	8 %	7 %	5 %	5 %	5 %
-of which FX	-3 %	2 %	-2 %	-1 %	6 %	-4 %	-1 %	0 %	0 %
-of which structural	4 %	3 %	3 %	5 %	5 %	2 %	1 %	0 %	0 %
Gross margin (%)	62.1 %	62.8 %	63.6 %	64.6 %	65.4 %	65.9 %	66.1 %	66.3 %	66.4 %
Fixed costs (excluding adjustments)	-1357	-1430	-1385	-1535	-1857	-2001	-2098	-2190	-2296
-Growth y/y	10 %	5 %	-3 %	11 %	21 %	8 %	5 %	4 %	5 %
Adjusted EBIT	**978**	**1024**	**1010**	**1270**	**1518**	**1590**	**1685**	**1798**	**1894**
-of net operating sales	26.0 %	26.2 %	26.8 %	29.2 %	29.3 %	29.1 %	29.4 %	29.8 %	30.0 %
FX-impact on adj. EBIT					98	-81	-24		
EBIT-% change y/y if adjusting for FX-impact					0.6 pp	0.5 pp	0.5 pp		
Geospatial Enterprise solutions									
Organic sales growth	**7 %**	**1 %**	**0 %**	**13 %**	**7 %**	**6 %**	**6 %**	**6 %**	**5 %**
Geosystems	11 %	2 %	-4 %	19 %	7 %	7 %	5 %	6 %	5 %
Safety. Infrastructure and Geospatial	-6 %	-3 %	13 %	-3 %	3 %	-8 %	7 %	6 %	4 %
Autonomy and Positioning	18 %	2 %	2 %	8 %	13 %	23 %	10 %	10 %	8 %
Net operating sales	**1820**	**1934**	**1934**	**2201**	**2537**	**2634**	**2766**	**2904**	**3053**
Adjusted EBIT	**459**	**492**	**516**	**685**	**787**	**812**	**859**	**915**	**962**
-of net operating sales	25.2 %	25.5 %	26.7 %	31.1 %	31.0 %	30.8 %	31.1 %	31.5 %	31.5 %
Industrial Enterprise solutions									
Organic sales growth	**8 %**	**-2 %**	**-7 %**	**11 %**	**9 %**	**9 %**	**5 %**	**5 %**	**5 %**
Manufacturing Intelligence	9 %	-5 %	-9 %	15 %	10 %	9 %	4 %	4 %	4 %
Asset Lifetime Intelligence	7 %	8 %	-3 %	1 %	7 %	12 %	9 %	9 %	7 %
Net operating sales	**1941**	**1974**	**1837**	**2146**	**2639**	**2823**	**2963**	**3119**	**3267**
Adjusted EBIT	**495**	**505**	**456**	**609**	**755**	**804**	**854**	**911**	**961**
-of net operating sales	25.5 %	25.6 %	24.8 %	28.4 %	28.6 %	28.5 %	28.8 %	29.2 %	29.4 %

Source: Inderes

Estimates 5/5

Inderes estimates versus consensus

EURm	Inderes			Consensus			Difference		
	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e
Net sales	5451	5722	6015	5450	5785	6188	0 %	-1 %	-3 %
EBITDA	1726	2035	2204	1710	2131	2365	1 %	-4 %	-7 %
EBIT	1203	1485	1610	1213	1554	1735	-1 %	-4 %	-7 %
Adjusted EBIT	1590	1685	1798	1590	1729	1910	0 %	-3 %	-6 %
EPS (EUR)	0.31	0.40	0.44	0.32	0.42	0.48	-2 %	-5 %	-8 %
DPS (EUR)	0.12	0.13	0.15	0.12	0.13	0.15	0 %	0 %	0 %

Source: Company-collected consensus and Inderes estimates

Investment profile

1. **Global footprint and strong distribution capabilities to international industry leaders enable M&A synergies**

2. **Diversified technology portfolio and megatrends support organic growth**

3. **Profitability to improve further owing to margin-additive growth and cost control measures**

4. **Subdued ROI owing to high amounts of goodwill and other intangibles in the balance sheet**

5. **Good cash flow allows to invest in growth, reduce debt and pay small dividend**

Potential

- Value creation through synergistic M&A likely to continue
- Market growth should stay well above global GDP growth supported by megatrends and developing technology
- Profitability likely to improve further thanks to increasing gross margins and the rationalization program that could curb fixed costs
- Diversification and significant share of recurring revenue provide stability to sales

Risks

- Cyclical demand in hardware sales and certain software products
- M&A strategy is partially dependent on strong valuation multiples of Hexagon's share
- Execution risk in M&A
- Corporate structure could grow too complex to manage efficiently

Source: Inderes

Valuation 1/3

Investment profile: Diversified value-creator

Hexagon is a highly-profitable technology company with a solid organic growth outlook. The company continues to invest in growth especially in areas with a high gross margin. Its addressable markets also have significant barriers to entry that support maintaining the profitability. Hexagon operates in several market segments that, on average, have a solid growth outlook supported by mega-trends but certain segments may already show signs of maturation and slowing growth. There is cyclicality in Hexagon's business due to dependence on, e.g., construction, automotive and other manufacturing industries but the increasing share of recurring revenue (currently ~40%) partially mitigates cyclicality. The company's ROI is relatively low due to high amount of goodwill in the balance sheet, which would almost certainly start improving if the company focused purely on organic investments. The company's M&A strategy has created value in the past and acquisitions are likely to support growth also in the future even if we don't include any future deals in our estimates. Overall, we find Hexagon to be a clearly value-creating company and well-positioned for global mega-trends.

Earnings growth could continue even in tougher conditions

We expect Hexagon to continue improving its earnings in 2024-25 even if the macroeconomic conditions are not favorable. Earnings growth is supported by organic innovation and good growth in recently acquired software businesses that both drive up the gross margins. The efficiency program is also likely to curb growth in fixed costs even if normal depreciation is set to increase. We estimate adjusted EV/EBIT to decline from 17.4x in 2023 to 14.7x in 2025 (reported EV/EBIT from 23x to 16x). Hexagon's organic growth has not yet suffered from the current macroeconomic downturn and we see a risk that a softer cycle could become visible in 2024. However, we also believe that the market already somewhat prices in slight cyclical headwinds despite the consensus expecting 6% growth for 2024. Our adjusted EBIT estimate for 2024 is 3% below consensus which could be a minor negative driver to the share price.

Current valuation seems fair to us with no upside

Even if Hexagon's current forward-looking valuation multiple (reported EV/EBIT 2024e) at 18x is below its historical median of 20x, we believe the current level is close to fair. A significant increase in interest rates has resulted in a decline of accepted multiples in the equity markets. Especially peers with hardware sales tend to currently trade at a discount, compared to 10 years historical median multiples. Our DCF model also suggests Hexagon's current valuation to be rather fair at SEK 102 per share even if we have used an average 5% growth assumption for the next 10 years and a rather low WACC of 7.5%.

We initiate coverage of Hexagon with a Reduce recommendation and a target price of SEK 102. If the company could maintain organic growth at the 2023 year-to-date level of 8% throughout the macroeconomic downturn in 2024, there could be upside in the share price. We however see this as unlikely given the company's cyclicality and occasional fluctuation in organic growth levels in the past. The outlook for the company's earnings growth could become clearer when the company arranges a CMD on December 7, 2023.

Valuation (EUR)	2023e	2024e	2025e
Share price	9.13	9.13	9.13
Number of shares, millions	2684.3	2684.3	2684.3
Market cap	24506	24506	24506
EV	27752	27237	26439
P/E (adj.)	21.3	19.8	18.3
P/E	29.2	22.8	20.6
P/B	2.4	2.2	2.1
P/S	4.5	4.3	4.1
EV/Sales	5.1	4.8	4.4
EV/EBITDA	16.1	13.4	12.0
EV/EBIT (adj.)	17.4	16.2	14.7
Payout ratio (%)	38.3 %	32.4 %	33.8 %
Dividend yield-%	1.3 %	1.4 %	1.6 %

Source: Inderes

Factors supporting Hexagon's valuation:

- Value-creating technologies have pricing power and offer high profitability
- Good organic growth profile
- High diversification to different industries and high share of recurring revenue to provide stability

Factors negatively affecting valuation:

- Part of the technology portfolio likely to gradually mature over time, meaning slowing growth
- Higher investments compared to depreciation burden cash flow in the near-term
- High interest rates have pushed acceptable valuation levels down in the equity market

Valuation 2/3

Hexagon's valuation multiples are high as is its value-generation potential

We consider earnings-based valuation multiples to be the most relevant when examining Hexagon's valuation. We also believe it makes sense to look at EV/EBIT with both adjusted and reported EBIT figures.

As a profitable and well-growing technology company Hexagon's valuation is naturally higher compared to Nordic listed equities on average. With 2023 and 2024 estimates its adjusted EV/EBIT multiples are 17x and 16x. Corresponding adjusted P/E multiples are 21x and 20x. The historical forward-looking reported EV/EBIT median is 20x for the last 10 years and 22x for the last 5 years. The reported EV/EBIT multiples are 23x and 18x for 2023-24e. 2023 reported EV/EBIT would imply the valuation to be in line with historical medians but it is affected by large non-recurring costs related to the ongoing rationalization program. 2024e reported EBIT is a more forward-looking measure and therefore we consider Hexagon's valuation to be somewhat lower compared to its historical reported EV/EBIT level. However, interest rates have also increased to a higher level compared to the past decade, which also affects the accepted valuation multiples in the equity market. We also feel that macroeconomic risks should push the accepted valuation level down somewhat.

We find the P/B multiple to be a poor valuation indicator for Hexagon because technology businesses are typically rather capital-light. Hexagon's 2023e P/B at 2.4x is relatively low for a highly-profitable technology company, which reflects Hexagon's goodwill-heavy balance sheet after a series of acquisitions.

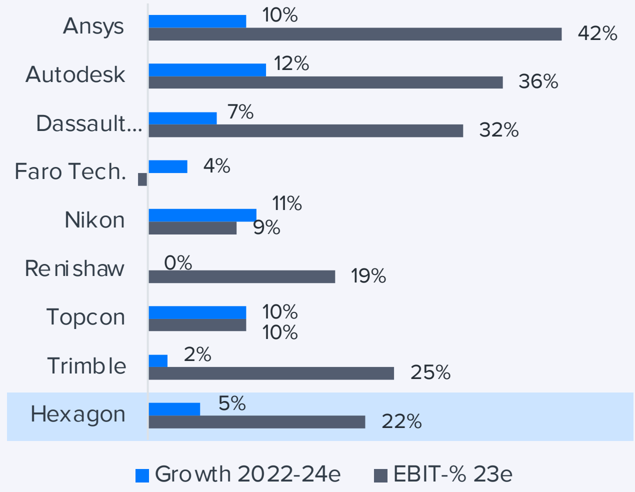
Peer valuation: Market values software sales above hardware

We have compiled a peer group from Hexagon's listed competitors. There are clear profitability variations in the peer group between highly profitable software companies like Ansys, Autodesk and Dassault Systemes compared to more hardware-focused Nikon, Topcon, Renishaw and Faro Technologies. We find Hexagon and Trimble positioned in the middle with a significant share of software sales and some 40% share of recurring revenue. Also in terms of the growth profile, Hexagon is positioned in the middle with 5% average sales growth estimate for 2023-24e compared to peer group CAGR ranging from 0% to 11%.

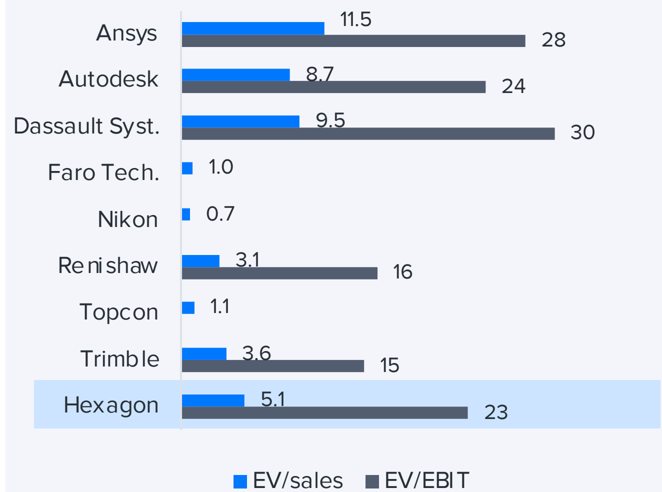
We find the highly-profitable and well-growing software-companies Ansys, Autodesk and Dassault Systems to be valued on average at EV/S 10x and EV/EBIT 27x for 2023e. Pure software companies are also valued somewhat in line with their historical median level for the past 10 years. Hexagon, Trimble and Renishaw are in the mid-range and we find their valuation levels to be at 5-25% discount compared to 10 years historical median. We believe that Trimble's lower valuation compared to Hexagon could be explained by Trimble's weaker growth outlook and higher dependence on the construction sector that is currently facing a demand slowdown.

Overall, we don't find significant discrepancy in Hexagon's valuation and general positioning compared to its peers. Its value generation potential is good with a solid growth outlook and high profitability but it is not, however, on par with the pure-software peers, which explains the valuation gap to the top. Hexagon is also more exposed to cyclical fluctuations compared to pure-software peers.

Growth and profitability comparison



Valuation multiple comparison (2023e)



Source: Peer data from Bloomberg, Hexagon estimates by Inderes
EBIT-figures are not adjusted for NRI or other adjustments.

Valuation 3/3

DCF works relatively well for valuing Hexagon

We find the DCF model to be rather well-suited for valuing Hexagon since the company has an established business with rather predictable sales growth, profitability and investment needs. The DCF model indicates a market value of EUR 23.9 billion (SEK 273 billion) and a share value of SEK 101.8 for Hexagon. We have set Hexagon's average cost of capital at 7.5%, which is relatively low compared to Nordic public equities in general and reflects the diversified nature of Hexagon's earnings, strong market position and a significant share of recurring revenue.

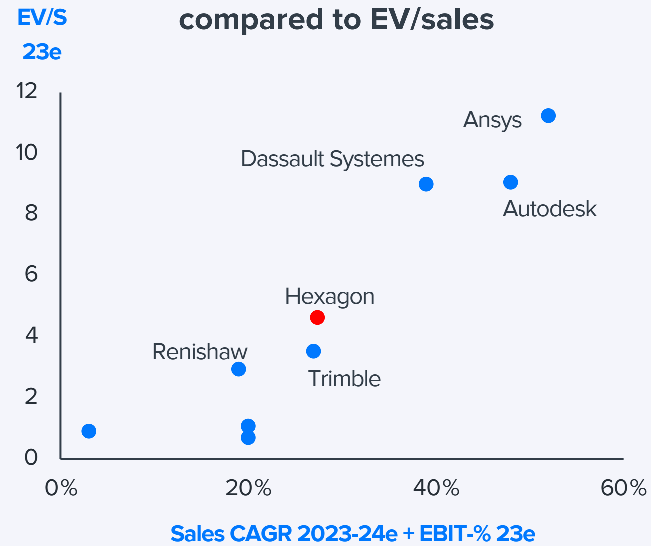
Our DCF model assumes that the Group's adjusted operating margin will improve to 30% in 2026-30, which would mean that the reported EBIT-% would improve from 24.9% in 2022 to 29.7% in 2030 due to declining PPA amortizations that are linked to past acquisitions. We have assumed reported EBIT to fall to 25% in the long-term (2031-). This is still a high level and requires Hexagon to stay competitive in high-tech market segments by continuing significant R&D investments and successful strategy work. Revenue growth is assumed to average 5% in 2023-2031 and be 2.8% in the terminal period. We expect investments to exceed depreciation over the estimate period by 11%, as we forecast continued investments in profitable growth.

In our DCF model, 17% of discounted cash flows take place in 2023-27 and 17% in 2028-32. The terminal value at the end of the period is 66% of the total enterprise value.

Value driver formula framework provides another angle

We have also utilized a valuation framework that assesses the fair value for the share based on future earnings growth, return on invested capital and cost of capital. The framework utilizes the aforementioned value drivers to find a number which, when multiplied with NOPAT (net operating profit after tax) should provide a theoretically correct fair EV for the company. In this calculation we used 2024e NOPAT (1,230 MEUR) which is less affected by one-offs compared to our 2023 estimate (1003 MEUR). The assumed WACC is the same as in DCF (7.5%). Hexagon's ROIC is currently low (2023-24e: 7.4-8.9%) but we believe it could improve closer to 15% in the long-term with no further acquisitions. NOPAT has grown by 9% on average in 2018-22 and we estimate it to grow by CAGR of 7% in 2023-26. However, in the long run, NOPAT growth could moderate owing to maturation of Hexagon's business segments. With assumed perpetual NOPAT growth of 3.5-5.0% and ROIC of 15% the value per share would be SEK 86-124.

Rule of 40 – growth + profitability compared to EV/sales



Source: Inderes (Hexagon) and Bloomberg consensus (other companies)

Fair value as function of growth and ROIC (SEK per share)

NOPAT growth								
6.0%	142	157	170	181	191	200	207	214
5.5%	115	126	135	143	149	155	160	165
5.0%	99	107	113	119	124	128	132	135
4.5%	88	94	99	103	107	110	113	116
4.0%	80	85	89	92	95	97	100	101
3.5%	75	78	81	84	86	88	89	91
3.0%	70	73	75	77	79	80	81	82
2.5%	67	69	70	72	73	74	75	76
2.0%	64	65	66	67	68	69	70	70
ROIC	11%	12%	13%	14%	15%	16%	17%	18%

We find the highlighted area to be the most realistic assumptions for the Value driver formula framework.

Share price drivers

Positive driver
Neutral
Negative driver

Solid organic sales growth driven by megatrends and innovation

Growth in higher margin product areas like software likely to drive gross margins up.

Fixed costs likely to grow along with sales - depreciation even faster. Savings program likely to curb the growth rate of fixed costs.

Earnings growth

EBIT to grow by CAGR of 8% in 2023-25

Profitable business with solid cash flow

Debt at somewhat high level but definitely under control

The company prefers investing in growth and grow with M&A over high dividend payout

Dividend yield

~1-2% p.a.

We argue that the current reported EV/EBIT multiples at 23x 2023e and 18x 2024e are close to fair or even slightly elevated

Higher interest rates depress accepted valuation levels compared to 10y median forward-looking EV/EBIT at 20x

Macroeconomic conditions add uncertainty to the estimates

Valuation

>20x reported EV/EBIT not sustainable in the current market environment

Total return

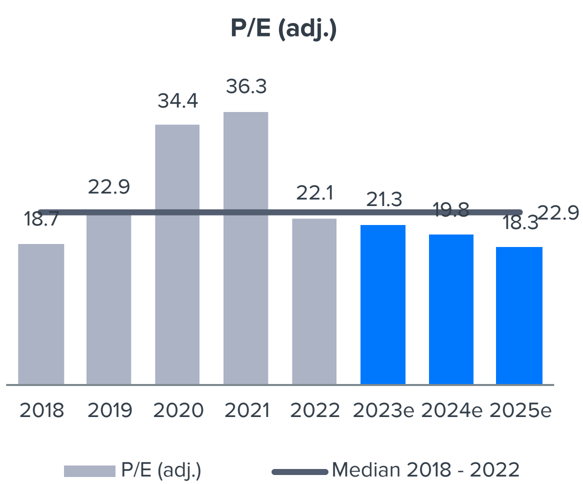
0-10% p.a.

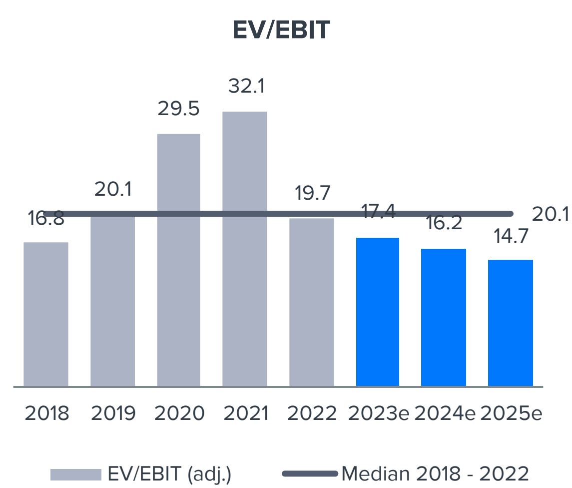
Source: Inderes

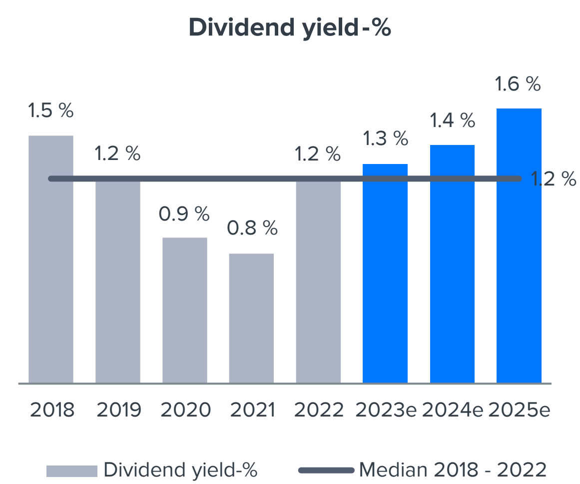
Valuation table

Valuation	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Share price	5.67	7.19	10.7	14.1	9.79	**9.13**	**9.13**	**9.13**	**9.13**
Number of shares, millions	2540.5	2572.8	2568.3	2599.3	2689.7	**2684.3**	**2684.3**	**2684.3**	**2684.3**
Market cap	14411	18494	27415	38095	26345	**24506**	**24506**	**24506**	**24506**
EV	16409	20552	29732	40703	29825	**27752**	**27237**	**26439**	**25603**
P/E (adj.)	18.7	22.9	34.4	36.3	22.1	**21.3**	**19.8**	**18.3**	**17.3**
P/E	19.7	26.3	44.4	45.7	26.1	**29.2**	**22.8**	**20.6**	**19.1**
P/B	2.7	3.0	4.6	4.4	2.7	**2.4**	**2.2**	**2.1**	**1.9**
P/S	3.8	4.7	7.3	8.8	5.1	**4.5**	**4.3**	**4.1**	**3.9**
EV/Sales	4.4	5.3	7.9	9.4	5.8	**5.1**	**4.8**	**4.4**	**4.1**
EV/EBITDA	13.6	16.1	22.5	25.6	17.0	**16.1**	**13.4**	**12.0**	**10.9**
EV/EBIT (adj.)	16.8	20.1	29.5	32.1	19.7	**17.4**	**16.2**	**14.7**	**13.5**
Payout ratio (%)	29.3 %	32.4 %	38.6 %	37.1 %	32.0 %	**38.3 %**	**32.4 %**	**33.8 %**	**33.4 %**
Dividend yield-%	1.5 %	1.2 %	0.9 %	0.8 %	1.2 %	**1.3 %**	**1.4 %**	**1.6 %**	**1.8 %**

Source: Inderes







Peer group valuation

Peer group valuation	Market cap	EV	EV/EBIT		EV/EBITDA		EV/S		P/E		Dividend yield-%		P/B
Company	**MEUR**	**MEUR**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**
Ansys	23747	23852	27.7	25.1	25.4	23.3	11.5	10.5	34.9	31.3			4.9
Autodesk	39707	40008	24.5	22.9	22.9	21.2	8.7	8.0	30.8	27.1			44.5
Dassault Systemes	57247	56883	30.0	29.8	25.8	24.5	9.5	8.8	36.0	32.8	0.6	0.6	7.0
Faro Technologies	317	311		18.3	49.4	10.9	1.0	0.9		30.1	5.5	5.5	
Nikon	3038	2729			5.3	5.9	0.7	0.7	11.3	15.1	2.9	3.5	0.8
Renishaw	2678	2450	15.8	16.3	12.4	13.5	3.1	3.2	19.6	22.0	2.4	2.4	2.8
Topcon	1026	1371			7.3	8.8	1.1	1.1	12.8	25.0	2.7	2.7	1.8
Trimble	9959	12560	14.7	14.2	14.1	13.6	3.6	3.6	16.6	16.0			2.4
Hexagon AB (Inderes)	**24506**	**27752**	**23.1**	**18.3**	**16.1**	**13.4**	**5.1**	**4.8**	**29.2**	**22.8**	**1.3**	**1.4**	**2.4**
Average			**22.5**	**21.1**	**20.3**	**15.2**	**4.9**	**4.6**	**23.1**	**24.9**	**2.8**	**3.0**	**9.2**
Median			**24.5**	**20.6**	**18.5**	**13.5**	**3.4**	**3.4**	**19.6**	**26.0**	**2.7**	**2.7**	**2.8**
Diff-% to median			***-6 %***	***-11 %***	***-13 %***	***-1 %***	***51 %***	***42 %***	***48 %***	***-12 %***	***-52 %***	***-48 %***	***-16 %***

Source: Refinitiv / Inderes

Based on reported earnings. NRI or PPA amortizations not adjusted.

Income statement

Income statement	2020	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23	Q2'23	Q3'23	Q4'23e	2023e	Q1'24e	Q2'24e	Q3'24e	Q4'24e	2024e	2025e	2026e
Revenue	**3764**	**4341**	**1160**	**1282**	**1317**	**1402**	**5161**	**1285**	**1365**	**1350**	**1451**	**5451**	**1350**	**1439**	**1431**	**1501**	**5722**	**6015**	**6311**
Geospatial Enterprise Solutions	1934	2201	583	650	642	662	2537	617	679	666	672	2634	648	721	710	687	2766	2904	3053
Industrial Enterprise Solutions	1837	2146	581	638	678	741	2639	670	687	686	781	2823	704	720	723	816	2963	3119	3267
Group adjustments	-6.1	-6.3	-3.7	-6.4	-3.6	-1.3	-15.0	-1.5	-1.0	-2.3	-2.0	-6.8	-2.0	-2.0	-2.0	-2.0	-8.0	-9.0	-9.0
EBITDA	**1321**	**1589**	**340**	**451**	**457**	**507**	**1754**	**447**	**475**	**292**	**513**	**1726**	**472**	**519**	**515**	**529**	**2035**	**2204**	**2352**
Depreciation	-534.2	-578.9	-103.6	-116.0	-114.5	-132.9	-467.0	-119.0	-124.6	-144.7	-134.7	-523.0	-130.0	-140.0	-140.0	-140.0	-550.0	-594.7	-624.0
EBIT (excl. NRI)	**1010**	**1270**	**335**	**379**	**386**	**418**	**1518**	**371**	**394**	**393**	**432**	**1590**	**387**	**425**	**422**	**451**	**1685**	**1798**	**1894**
EBIT	**787**	**1010**	**236**	**335**	**342**	**374**	**1287**	**328**	**350**	**147**	**378**	**1203**	**342**	**379**	**375**	**389**	**1485**	**1610**	**1728**
Geospatial Enterprise Solutions	516	685	176	206	197	208	787	187	209	203	213	812	196	224	220	218	859	915	962
Industrial Enterprise Solutions	456	609	166	178	198	213	755	189	192	197	227	804	198	208	209	239	854	911	961
Group adjustments	-185.1	-284.0	-105.4	-48.9	-52.7	-47.9	-254.9	-47.3	-50.0	-253.2	-62.1	-412.6	-52.0	-53.0	-54.0	-69.0	-228.0	-216.0	-194.4
Net financial items	-27.4	-26.2	-5.8	-5.6	-8.9	-18.4	-38.7	-26.8	-36.2	-43.0	-44.0	-150.0	-35.0	-35.0	-35.0	-35.0	-140.0	-120.0	-100.0
PTP	**760**	**984**	**230**	**329**	**334**	**355**	**1248**	**302**	**314**	**104**	**334**	**1053**	**307**	**344**	**340**	**354**	**1345**	**1490**	**1628**
Taxes	-134.9	-173.6	-45.7	-59.2	-60.0	-64.0	-228.9	-54.3	-56.6	-16.6	-72.7	-200.2	-58.4	-65.4	-64.6	-67.2	-255.6	-283.0	-325.5
Minority interest	-6.6	-8.4	-2.6	-3.1	-3.3	-2.5	-11.5	-2.9	-3.7	-3.6	-2.8	-13.0	-3.0	-3.9	-3.8	-3.6	-14.3	-15.7	-17.3
Net earnings	**618**	**802**	**182**	**267**	**270**	**289**	**1008**	**244**	**254**	**83.6**	**259**	**840**	**246**	**275**	**272**	**283**	**1075**	**1191**	**1285**
EPS (adj.)	**0.31**	**0.39**	**0.10**	**0.11**	**0.11**	**0.12**	**0.44**	**0.10**	**0.11**	**0.10**	**0.11**	**0.43**	**0.10**	**0.12**	**0.12**	**0.12**	**0.46**	**0.50**	**0.53**
EPS (rep.)	**0.24**	**0.31**	**0.07**	**0.10**	**0.10**	**0.11**	**0.37**	**0.09**	**0.09**	**0.03**	**0.10**	**0.31**	**0.09**	**0.10**	**0.10**	**0.11**	**0.40**	**0.44**	**0.48**

Key figures	2020	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23	Q2'23	Q3'23	Q4'23e	2023e	Q1'24e	Q2'24e	Q3'24e	Q4'24e	2024e	2025e	2026e
Revenue growth-%	-3.7 %	15.3 %	0.0 %	0.0 %	0.0 %	-67.7 %	18.9 %	10.8 %	6.4 %	2.5 %	3.5 %	5.6 %	5.1 %	5.4 %	6.0 %	3.5 %	5.0 %	5.1 %	4.9 %
Adjusted EBIT growth-%		25.8 %				-67.1 %	19.5 %	10.8 %	4.1 %	1.8 %	3.4 %	4.8 %	4.3 %	7.9 %	7.4 %	4.3 %	6.0 %	6.7 %	5.4 %
EBITDA-%	35.1 %	36.6 %	29.3 %	35.1 %	34.7 %	36.1 %	34.0 %	34.8 %	34.8 %	21.6 %	35.3 %	31.7 %	35.0 %	36.1 %	36.0 %	35.2 %	35.6 %	36.7 %	37.3 %
Adjusted EBIT-%	26.8 %	29.2 %	28.9 %	29.5 %	29.3 %	29.8 %	29.4 %	28.9 %	28.9 %	29.1 %	29.8 %	29.2 %	28.7 %	29.6 %	29.5 %	30.0 %	29.5 %	29.9 %	30.0 %
Net earnings-%	16.4 %	18.5 %	15.7 %	20.8 %	20.5 %	20.6 %	19.5 %	19.0 %	18.6 %	6.2 %	17.8 %	15.4 %	18.2 %	19.1 %	19.0 %	18.8 %	18.8 %	19.8 %	20.4 %

Source: Inderes

Balance sheet

Assets	2021	2022	2023e	2024e	2025e
Non-current assets	**11823**	**13833**	**13918**	**13988**	**14024**
Goodwill	8206	9600	9582	9582	9582
Intangible assets	2704	3206	3284	3334	3370
Tangible assets	738	791	791	791	791
Associated companies	0.0	0.0	0.0	0.0	0.0
Other investments	69.6	115	120	130	130
Other non-current assets	0.0	0.0	0.0	0.0	0.0
Deferred tax assets	106	122	140	150	150
Current assets	**2272**	**2644**	**3089**	**3211**	**3325**
Inventories	444	577	709	744	770
Other current assets	151	173	173	173	173
Receivables	1206	1407	1553	1608	1660
Cash and equivalents	472	486	654	687	722
Balance sheet total	**14095**	**16477**	**17007**	**17199**	**17348**

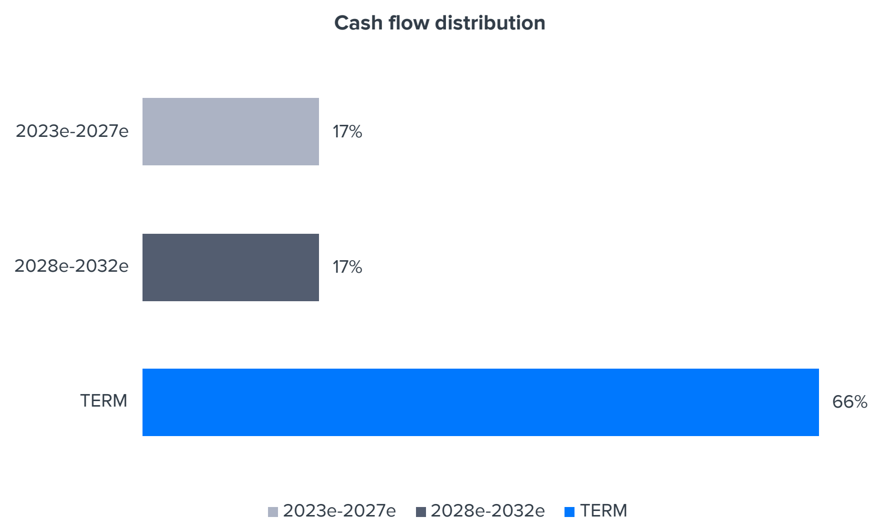
Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	**8765**	**9865**	**10382**	**11135**	**11977**
Share capital	0.0	0.0	0.0	0.0	0.0
Retained earnings	0.0	0.0	518	1271	2113
Hybrid bonds	0.0	0.0	0.0	0.0	0.0
Revaluation reserve	0.0	0.0	0.0	0.0	0.0
Other equity	8732	9830	9830	9830	9830
Minorities	32.6	34.4	34.4	34.4	34.4
Non-current liabilities	**2976**	**3945**	**3817**	**3301**	**2695**
Deferred tax liabilities	478	582	470	470	470
Provisions	88.9	63.4	170	35.0	35.0
Interest bearing debt	2293	3178	3055	2674	2068
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	116	122	122	122	122
Current liabilities	**2355**	**2667**	**2808**	**2763**	**2676**
Interest bearing debt	645	696	764	668	517
Payables	1710	1971	2044	2094	2159
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	**14095**	**16477**	**17007**	**17199**	**17348**

DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	TERM
Revenue growth-%	18.9 %	5.6 %	5.0 %	5.1 %	4.9 %	4.9 %	4.9 %	4.9 %	4.9 %	4.9 %	2.8 %	2.8 %
EBIT-%	24.9 %	22.1 %	26.0 %	26.8 %	27.4 %	27.8 %	28.2 %	28.6 %	29.7 %	25.0 %	25.0 %	25.0 %
EBIT (operating profit)	**1287**	**1203**	**1485**	**1610**	**1728**	**1839**	**1957**	**2080**	**2267**	**2001**	**2056**	
+ Depreciation	467	523	550	595	624	624	649	671	682	721	747	
- Paid taxes	-142	-330	-266	-283	-326	-357	-388	-416	-453	-400	-411	
- Tax, financial expenses	-7.0	-28.0	-26.6	-22.8	-20.0	-10.9	-3.7	0.0	0.0	0.0	0.0	
+ Tax, financial income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Change in working capital	-96.1	-204.8	-39.5	-13.2	-13.3	-7.2	-0.3	0.4	1.1	1.9	-7.9	
Operating cash flow	**1509**	**1164**	**1704**	**1885**	**1993**	**2088**	**2215**	**2335**	**2496**	**2323**	**2384**	
+ Change in other long-term liabilities	-19.6	107	-135.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Gross CAPEX	-2461	-590	-610	-631	-662	-694	-728	-763	-800	-800	-740	
Free operating cash flow	**-971.1**	**681**	**959**	**1255**	**1331**	**1394**	**1487**	**1572**	**1696**	**1523**	**1644**	
+/- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FCFF	-971.1	681	959	1255	1331	1394	1487	1572	1696	1523	1644	35316
Discounted FCFF		**676**	**885**	**1077**	**1062**	**1034**	**1026**	**1009**	**1012**	**846**	**849**	**18234**
Sum of FCFF present value		27710	27034	26150	25073	24010	22976	21950	20940	19928	19083	18234
Enterprise value DCF		**27710**										
- Interest bearing debt		-3874.1										
+ Cash and cash equivalents		486										
-Minorities		-81.5										
-Dividend/capital return		-322.8										
Equity value DCF		**23918**										
Equity value DCF per share		**8.9**										
Equity value DCF per share (SEK)		**101.8**										

WACC	
Tax-% (WACC)	20.0 %
Target debt ratio (D/(D+E)	15.0 %
Cost of debt	3.0 %
Equity Beta	1.25
Market risk premium	4.75 %
Liquidity premium	0.00 %
Risk free interest rate	2.5 %
Cost of equity	**8.4 %**
Weighted average cost of capital (WACC)	**7.5 %**



Summary

Income statement	2020	2021	2022	2023e	2024e
Revenue	3764	4341	5161	**5451**	**5722**
EBITDA	1321	1589	1754	**1726**	**2035**
EBIT	787	1010	1287	**1203**	**1485**
PTP	760	984	1248	**1053**	**1345**
Net Income	618	802	1008	**840**	**1075**
Extraordinary items	-223	-260	-231	**-387**	**-200**

Per share data	2020	2021	2022	2023e	2024e
EPS (reported)	0.24	0.31	0.37	**0.31**	**0.40**
EPS (adj.)	0.31	0.39	0.44	**0.43**	**0.46**
OCF / share	0.56	0.54	0.56	**0.43**	**0.63**
FCF / share	0.21	-0.85	-0.36	**0.25**	**0.36**
Book value / share	2.31	3.36	3.65	**3.85**	**4.14**
Dividend / share	0.65	0.11	0.12	**0.12**	**0.13**

Balance sheet	2020	2021	2022	2023e	2024e
Balance sheet total	10704	14095	16477	**17007**	**17199**
Equity capital	5949	8765	9865	**10382**	**11135**
Goodwill	5706	8206	9600	**9582**	**9582**
Net debt	2251	2466	3388	**3164**	**2656**

Growth and profitability	2020	2021	2022	2023e	2024e
Revenue growth-%	-4 %	15 %	19 %	**6 %**	**5 %**
EBITDA growth-%	3 %	20 %	10 %	**-2 %**	**18 %**
EBIT (adj.) growth-%	-1 %	26 %	20 %	**5 %**	**6 %**
EPS (adj.) growth-%	-1 %	25 %	14 %	**-3 %**	**7 %**
EBITDA-%	35.1 %	36.6 %	34.0 %	**31.7 %**	**35.6 %**
EBIT (adj.)-%	26.8 %	29.2 %	29.4 %	**29.2 %**	**29.5 %**
EBIT-%	20.9 %	23.3 %	24.9 %	**22.1 %**	**26.0 %**
ROE-%	10.3 %	10.9 %	10.9 %	**8.3 %**	**10.0 %**
ROI-%	9.2 %	9.9 %	10.1 %	**8.6 %**	**10.4 %**
Equity ratio	55.6 %	62.2 %	59.9 %	**61.0 %**	**64.7 %**
Gearing	37.8 %	28.1 %	34.3 %	**30.5 %**	**23.8 %**

Cash flow	2020	2021	2022	2023e	2024e
EBITDA	1321	1589	1754	**1726**	**2035**
Change in working capital	260	-14	-96	**-205**	**-39**
Operating cash flow	1428	1411	1509	**1164**	**1704**
CAPEX	-845	-3589	-2461	**-590**	**-610**
Free cash flow	544	-2199	-971	**681**	**959**

Valuation multiples	2020	2021	2022	2023e	2024e
EV/S	7.9	9.4	5.8	**5.1**	**4.8**
EV/EBITDA (adj.)	22.5	25.6	17.0	**16.1**	**13.4**
EV/EBIT (adj.)	29.5	32.1	19.7	**17.4**	**16.2**
P/E (adj.)	34.4	36.3	22.1	**21.3**	**19.8**
P/B	4.6	4.4	2.7	**2.4**	**2.2**
Dividend-%	0.9 %	0.8 %	1.2 %	**1.3 %**	**1.4 %**

Source: Inderes

Disclaimer and recommendation history

The information presented in Inderes reports is obtained from several different public sources that Inderes considers to be reliable. Inderes aims to use reliable and comprehensive information, but Inderes does not guarantee the accuracy of the presented information. Any opinions, estimates and forecasts represent the views of the authors. Inderes is not responsible for the content or accuracy of the presented information. Inderes and its employees are also not responsible for the financial outcomes of investment decisions made based on the reports or any direct or indirect damage caused by the use of the information. The information used in producing the reports may change quickly. Inderes makes no commitment to announcing any potential changes to the presented information and opinions.

The reports produced by Inderes are intended for informational use only. The reports should not be construed as offers or advice to buy, sell or subscribe investment products. Customers should also understand that past performance is not a guarantee of future results. When making investment decisions, customers must base their decisions on their own research and their estimates of the factors that influence the value of the investment and take into account their objectives and financial position and use advisors as necessary. Customers are responsible for their investment decisions and their financial outcomes.

Reports produced by Inderes may not be edited, copied or made available to others in their entirety, or in part, without Inderes' written consent. No part of this report, or the report as a whole, shall be transferred or shared in any form to the United States, Canada or Japan or the citizens of the aforementioned countries. The legislation of other countries may also lay down restrictions pertaining to the distribution of the information contained in this report. Any individuals who may be subject to such restrictions must take said restrictions into account.

Inderes issues target prices for the shares it follows. The recommendation methodology used by Inderes is based on the share's 12-month expected total shareholder return (including the share price and dividends) and takes into account Inderes' view of the risk associated with the expected returns. The recommendation policy consists of four tiers: Sell, Reduce, Accumulate and Buy. As a rule, Inderes' investment recommendations and target prices are reviewed at least 2–4 times per year in connection with the companies' interim reports, but the recommendations and target prices may also be changed at other times depending on the market conditions. The issued recommendations and target prices do not guarantee that the share price will develop in line with the estimate. Inderes primarily uses the following valuation methods in determining target prices and recommendations: Cash flow analysis (DCF), valuation multiples, peer group analysis and sum of parts analysis. The valuation methods and target price criteria used are always company-specific and they may vary significantly depending on the company and (or) industry.

Inderes' recommendation policy is based on the following distribution relative to the 12-month risk-adjusted expected total shareholder return.

Buy The 12-month risk-adjusted expected shareholder return of the share is very attractive

Accumulate The 12-month risk-adjusted expected shareholder return of the share is attractive

Reduce The 12-month risk-adjusted expected shareholder return of the share is weak

Sell The 12-month risk-adjusted expected shareholder return of the share is very weak

The assessment of the 12-month risk-adjusted expected total shareholder return based on the above-mentioned definitions is company-specific and subjective. Consequently, similar 12-month expected total shareholder returns between different shares may result in different recommendations, and the recommendations and 12-month expected total shareholder returns between different shares should not be compared with each other. The counterpart of the expected total shareholder return is Inderes' view of the risk taken by the investor, which varies considerably between companies and scenarios. Thus, a high expected total shareholder return does not necessarily lead to positive performance when the risks are exceptionally high and, correspondingly, a low expected total shareholder return does not necessarily lead to a negative recommendation if Inderes considers the risks to be moderate.

The analysts who produce Inderes' research and Inderes employees cannot have 1) shareholdings that exceed the threshold of significant financial gain or 2) shareholdings exceeding 1% in any company subject to Inderes' research activities. Inderes Oyj can only own shares in the target companies it follows to the extent shown in the company's model portfolio investing real funds. All of Inderes Oyj's shareholdings are presented in itemised form in the model portfolio. Inderes Oyj does not have other shareholdings in the target companies analysed. The remuneration of the analysts who produce the analysis are not directly or indirectly linked to the issued recommendation or views. Inderes Oyj does not have investment bank operations.

Inderes or its partners whose customer relationships may have a financial impact on Inderes may, in their business operations, seek assignments with various issuers with respect to services provided by Inderes or its partners. Thus, Inderes may be in a direct or indirect contractual relationship with an issuer that is the subject of research activities. Inderes and its partners may provide investor relations services to issuers. The aim of such services is to improve communication between the company and the capital markets. These services include the organisation of investor events, advisory services related to investor relations and the production of investor research reports.

More information about research disclaimers can be found at www.inderes.fi/research-disclaimer.

Inderes has made an agreement with the issuer and target of this report, which entails compiling a research report.

Recommendation history (>12 mo)

Date	Recommendation	Target	Share price
11/26/2023	Reduce	SEK 102.0	SEK 104.4

Inderes connects investors and listed companies. We help over 400 listed companies to better serve their investors. Our community is home to over 70 000 active investors.

Our social objective is to democratize information in the financial markets.

We build solutions for listed companies that enable seamless and effective investor relations. Majority of our revenue comes from services to listed companies, including Commissioned Research, Virtual Events, AGM services, and IR technology and consultation.

Inderes is listed on Nasdaq First North growth market and operates in Finland, Sweden, Norway and Denmark.

Inderes Oyj

Itämerentori 2

FI-00180 Helsinki, Finland

+358 10 219 4690

Award-winning research at **inderes.fi**

STARMINE ANALYST AWARDS FROM REFINITIV

THOMSON REUTERS ANALYST AWARDS

Juha Kinnunen
2012, 2016, 2017, 2018, 2019, 2020

Mikael Rautanen
2014, 2016, 2017, 2019

Sauli Vilén
2012, 2016, 2018, 2019, 2020

Antti Viljakainen
2014, 2015, 2016, 2018, 2019, 2020

Olli Koponen
2020

Joni Grönqvist
2019, 2020

Erkki Vesola
2018, 2020

Petri Gostowski
2020

Atte Riikola
2020

Research belongs
to everyone.