

Operating review

Another year of good progress



Andrew Thomis
Chief Executive

"2020 has been another year of good progress for Cohort, with a record level of adjusted operating profit, despite the impact of COVID-19 related restrictions in the last two months of the financial year."

2020 highlights

- ▶ The Group's adjusted operating profit of £18.2m (2019: £16.2m) on revenue of £131.1m (2019: £121.2m) represented a net return of 13.9% (2019: 13.3%).
- ▶ MASS remains the strongest contributor to the Group's adjusted operating profit and saw continued growth.
- ▶ Chess, which was acquired in December 2018, made a full year contribution to this year's results.
- ▶ EID had a stronger year.
- ▶ MCL and SEA both had weaker performances.
- ▶ On 12 December 2019 the Group agreed to acquire Wärtsilä ELAC Nautik GmbH (ELAC), subject to the German Federal Government and other conditions.

Operating review

2019/20 has been another year of progress for Cohort, with a record level of revenue and adjusted operating profit. Revenue grew by 8% and adjusted operating profit by 12%. Both revenue and adjusted operating profit benefited from a full year contribution from Chess, which was part of the Group for only five months last year.

MASS achieved a record adjusted operating profit and EID returned to a better level of performance as a result of higher export sales. These improvements were offset by weaker performances at MCL and SEA. MCL's revenue was affected by changes to customer plans, orders slipping into 2020/21 and the timing of deliveries on other projects which peaked in 2018/19. SEA also saw projects slip, especially export orders, in part due to the impact of COVID-19. The impact of these delays has required the cost base of SEA to be adjusted to align with expected orders. An exercise to reduce the annual cost by £1.3m will be completed by the end of July 2020 and is expected to cost £0.7m. This will be recognised as an exceptional cost in the first half of 2020/21.

The COVID-19 pandemic and resultant lockdowns impacted many of our markets, with some business restrictions remaining in place today. The impact arose in the final and busiest quarter of our financial year and resulted in delays to orders and deliveries, particularly at EID and SEA. Restrictions in movement affected our ability to access customer sites to complete integration and testing milestones, and prevented customers from accepting deliveries of completed goods. We estimate the effects on our reported results for the year ended 30 April 2020 are a reduction in revenue of around £3m and a reduction in adjusted operating profit of £1m. The impact of COVID-19 is not expected to affect the Group's ability to continue as a going concern, as is discussed in more detail below.

The Group's adjusted operating profit grew by 12% to £18.2m (2019: £16.2m) on revenue of £131.1m (2019: £121.2m), a net operating return of nearly 13.9% (2019: 13.3%). The Group's statutory operating profit of £10.7m (2019: £5.9m) is significantly impacted by the amortisation of other intangible assets, a £7.4m charge in 2020 (2019: £9.5m charge). In this review, therefore, the focus is on the adjusted operating profit of each business, which we consider to be a more appropriate measure of performance year on year. The adjusted operating profit is reconciled to the operating profit in the Consolidated Income Statement and by business in note 2.

Operating review continued

Adjusted operating profit by subsidiary

	Adjusted operating profit			Adjusted operating margin	
	2020 £m	2019 £m	Change %	2020 %	2019 %
Chess	3.9	1.7	229	15.6	15.8
EID	3.1	1.3	238	17.2	11.8
MASS	8.9	8.2	9	21.7	21.0
MCL	1.7	2.3	(26)	11.0	10.5
SEA	3.5	5.5	(36)	11.1	14.3
Central costs	(2.9)	(2.8)	(4)	—	—
	18.2	16.2	12	13.9	13.3

Chess's first full year contribution was stronger than we expected, delivering a performance, on a straight-line basis, equivalent to what was a very good five months in 2018/19. The business saw strong growth in its naval system deliveries to export customers.

MASS achieved a record performance, with the growth in revenue mainly deriving from long-term support contracts to the UK MOD. Its Electronic Warfare Operational Support (EWOS) business, which is mostly export, was flat year on year, large multi-year orders having been secured in 2018/19.

EID had a welcome return to growth and net return, more in line with expectations. This came from delivering part of an export order secured in late 2018/19 and the initial batch of a large Portuguese Army order which will continue until 2027.

MCL retreated from what was a good result last year. The timing of deliveries on its hearing protection work accounted for most of the revenue and margin drop, although the lower bought-in content improved its net margin.

SEA had a disappointing result, with contract timing and delays in expected export orders for torpedo launcher systems resulting in a decrease in revenue. Some of this slippage was a result of the impact of COVID-19 and we have continued to see some delay in the early part of 2020/21. As a result, SEA has undertaken a programme to align its cost base more closely with its anticipated revenue sources and levels.

Our people

All the Group's capabilities and customer relationships ultimately derive from our people, and the success we have enjoyed is a result of their efforts. We would like to take this opportunity to express our thanks to all employees of Cohort and its businesses.

In the recent COVID-19 pandemic and resultant lockdown, our people, across the Group, demonstrated their agility and flexibility with over 70% moving to home-based working in less than 24 hours. Thanks to our ability to implement socially distanced working practices, some 20% of our colleagues remained on site to continue production and support our customers, many performing critical national defence and security roles. We would particularly like to thank our IT teams for supporting this sudden marked change in the working environment, enabling our employees to continue to perform their roles efficiently and securely. Since the end of June, following the successful implementation of infection prevention measures, we have seen a gradual return to site working. We currently have nearly 50% of our employees back on site and expect that proportion to rise over the coming months.

Operating strategy

Organic growth

Cohort currently operates as a group of five medium-sized businesses, operating primarily in defence and security markets, and with a strong emphasis on technology, innovation and specialist expertise.

Within our markets we have sought to use our agility and innovation to identify niches where prospects are attractive and where we have some sustainable competitive advantage. These can be for products, services or high-value one-off projects to design bespoke equipment or software. Examples include MASS's EWOS offerings, SEA's External Communication System (ECS) for submarines, MCL's range of hearing protection systems and Chess's counter-sUAV systems for military and civilian customers. We have also been active in finding new customers for the capabilities we have developed, both in export markets and for non-defence purposes. During the recent year we have continued to widen the customer base for our THURBON™ EW database, our torpedo launcher system and our small diameter sonar array (Krait).

Being part of the Cohort Group brings advantages to our businesses compared with operating independently. The Group's strong balance sheet gives customers the confidence to award large or long-term contracts that we are well able to execute technically but which might otherwise be perceived as risky. One example is a £50m plus in-service support contract awarded to MASS last year, a renewal of a contract we have been performing for over 15 years. Others include approximately £85m of contracts awarded to SEA for ECS across the UK's submarine platforms, over £30m of orders won by MCL for supply and support of hearing protection systems across a range of UK military users, and a recent win by Chess of a £20m order to supply observation and targeting systems for a Northern European customer, its largest ever contract.

The Group's Directors have a long experience of operating in the defence sector and have contacts and working relationships with senior customers in the UK and internationally, which would be hard for independent smaller businesses to establish. Our current four UK operating businesses, while remaining operationally independent, have formed close working relationships and benefit from sharing technical capabilities, customer relationships and market knowledge. We have made further progress in the year on ensuring that EID participates in this collaborative approach. We will continue to work to promote the Group's services and products in wider markets, including through business development visits. In the past year, Andy Thomis led a combined UK and Portuguese team visit to Australia.

Cooperation between the Group businesses has extended to the sharing of technology. For example, SEA and Chess are also working together on a possible future decoy launcher solution for the UK Royal Navy. Last summer, SEA and EID collaborated on an important trial with the Portuguese Navy, demonstrating a new anti-submarine warfare system, based on the Krait array. Further trials of the system are expected in the coming year, including with the UK Royal Navy.

These strategies have generated long-term customer relationships and good opportunities that give us confidence that we can continue to prosper, despite the current difficult and unpredictable market conditions. Overall, the organic performance of the business in the year (i.e. excluding the effect of Chess's full year contribution) was slightly behind that achieved in 2018/19 with improved results at MASS and EID being offset by weaker performance at MCL and SEA.

Operating review continued

Operating strategy continued

Acquisitions

Alongside our organic growth strategy, we continue to see opportunities to accelerate our growth by making further targeted value enhancing acquisitions. We believe that there are good businesses in the UK and overseas that would thrive under Cohort ownership, whether as standalone members of the Group or as “bolt-in” acquisitions to our existing subsidiaries.

The most likely candidates for bolt-in acquisitions are businesses with capabilities and/or customer relationships that are closely linked to one of our existing subsidiaries. We would expect to integrate an acquired business of this nature fully within the relevant subsidiary. This could lead to both cost savings and benefits from shared access to markets and technologies.

For standalone acquisitions we are looking for agile, innovative businesses that have reached a stage of development where there will be mutual benefit in joining Cohort. It is likely that candidates will be operating in the defence and security markets either in the UK or internationally, as that is where the Group can add most value. Growth prospects, sustainable competitive advantage and the ability to operate as part of a publicly quoted UK group will all be important.

On 12 December 2019, we announced that we had signed an agreement to acquire 100% of Wärtsilä ELAC Nautik GmbH (ELAC) for a consideration of €11.25m on a debt free, cash free basis. ELAC, a leader in sonar systems technology for naval surface ships and submarines, will join the Group as Cohort's sixth standalone subsidiary. The completion of the acquisition is subject to German Federal Government approval and, though the timing of this is hard to predict, we currently expect completion to be on or before 30 September 2020.

The acquisition of ELAC fits well with our acquisition strategy. Importantly, it increases the Group's exposure to scalable product and systems and export customers, particularly in the naval market. ELAC shares highly complementary expertise, capabilities and technologies with SEA, providing a significant cross-selling opportunity. It will increase the Group's reach and potential in new international markets and provides Germany as a new home market.

We acquired 81.84% of Chess in December 2018 for an initial consideration of just over £20.0m. The acquisition includes an earn-out clause and an option for acquiring the minority interest (18.16%), both based on Chess's performance for the three years ending 30 April 2021. These additional payments are capped at £12.7m and £9.1m respectively. We currently expect to pay £4.0m (2019: £5.5m) in total on or before 31 October 2021.

The acquisition model for Chess is very similar to that successfully used for the acquisition of MCL, where we initially acquired 50% in 2014 and the remainder in 2017.

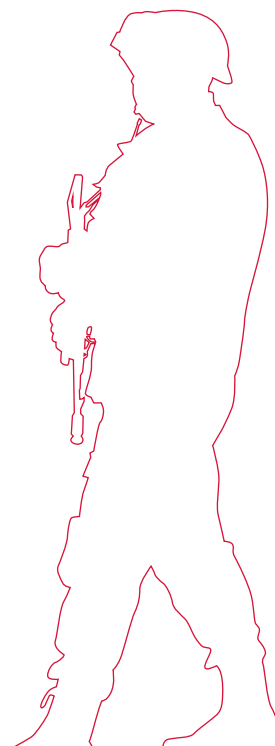
“The acquisition of ELAC fits well with our acquisition strategy. Importantly, it increases the Group's exposure to scalable product and systems and export customers, particularly in the naval market.”

Maintain confidence

Cohort's management approach is to allow its subsidiary businesses a significant degree of operational autonomy in order to develop their potential fully, while providing light-touch but rigorous financial and strategic controls at Group level. Our experience is that our customers prefer to work with businesses where decision making is streamlined and focused on solving their immediate problems. This model provides us with a degree of competitive advantage over some larger rivals where the decision-making process can be more extended. It is also cost effective as it avoids the need for additional layers of management involved in coordination activities and for a large headquarters team. High-calibre employees find our business model attractive and more rewarding as it allows them to be involved in decisions affecting the business, even at a relatively junior level, rather than being constrained to a narrow or purely technical role. This positions us well with customers where such attributes are highly valued.

Although the degree of autonomy our subsidiary businesses enjoy is high, and we believe that this is an effective operational strategy, we take a practical view of the best way forward when circumstances change. When the operational situation is such that a merger, restructuring or even sale is necessitated, we will act and have acted in the best interests of the wider Group and its shareholders.

Andrew Thomis
Chief Executive



Subsidiary reviews



Graham Beall
Managing Director of Chess Technologies

REVENUE

£25.2m

2019: £10.7m (five months)

ADJUSTED OPERATING PROFIT

£3.9m

2019: £1.7m (five months)

OPERATING CASH FLOW

£(2.8)m

2019: £1.3m (five months)



Overview

Chess Technologies (Chess) operates through two distinct businesses, Chess Dynamics and Vision4ce.

Chess Dynamics is an innovative, well-respected surveillance, tracking and gunfire control specialist for military and commercial customers. Chess's military customers include defence forces and prime contractors in the UK and overseas for the naval and land sectors.

Based in Horsham and Plymouth, Chess Dynamics designs, develops and manufactures precision stabilised and non-stabilised multi-axis platforms, fire control directors and positioners for electro-optic, radar, communication, security, surveillance and targeting systems, and a wide range of high-performance cameras and special sensors.

The more complex tracking and targeting systems are integrated into naval fire-control solutions and sophisticated vehicle-based surveillance, targeting, tracking and force protection systems.

The company is a major developer and worldwide supplier of counter-sUAV (drone) protection systems including rapid deployment systems for military and security use. It provides a complete service including survey, installation, training and maintenance across its entire product range, including bespoke engineering solutions.

Vision4ce is a leading technology software house based in Wokingham. It designs, develops and supplies high-performance digital video trackers and operator interface control software for Chess Dynamics and other customers.

Founded in 1993 by its Group Managing Director Graham Beall, Chess Technologies, which is 82% owned by Cohort, joined the Cohort group in 2018.

CHESS-DYNAMICS.COM

"Chess Dynamics is an innovative, well-respected surveillance, tracking and gunfire control specialist for military and commercial customers. Chess's military customers include defence forces and prime contractors in the UK and overseas for the naval and land sectors."

Subsidiary reviews continued



Chess has continued its good run of performance since its acquisition by Cohort. The result for this year was better than we expected, the five months for 2018/19 having been unusually strong as a result of deployment of counter-sUAV systems at two major UK airports in late 2018.

On a like for like basis, Chess showed growth on the full year ended 30 April 2019 with higher sales of naval systems, both to the UK and export customers. The contribution to profit from this sales growth was partly offset by investment in more staff, both direct and overhead, the latter to ensure Chess is well invested to manage its current and future growth potential.

Chess's revenue is dominated by export customers. This year they have included the US DoD and a first sale into Eastern Europe. It has also begun funded study work with a European prime contractor for a new fire control system.

Chess has continued to demonstrate what a good strategic fit it is for the Group. It is a leading supplier within its market and has a strong ethos of innovation and responsiveness.

Chess was only marginally impacted by the COVID-19 pandemic and lockdown with a few in-country activities being postponed. It continued to carry out production and support from its main site in Horsham with little disruption, whilst observing all the necessary safety requirements for its employees, customers and suppliers.

Chess's rapid growth over the last few years has caused it some growing pains, especially in project control and delivery. This, along with growing working capital, is reflected in its weaker cash performance this year. Cohort has begun work with Chess's management to strengthen its processes to ensure it can successfully grow whilst still maintaining its agility and innovative approach. This work will focus on improving the cash performance of the business and ensuring it is fully able to deliver on its recent order successes.

Chess's order book, recent wins and prospects, especially on some significant overseas naval programmes, give us optimism for Chess's future. For the coming year, our expectation is that Chess will perform in line with 2018/19 as a result of the timing of deliveries, but it has given itself better visibility for the years beyond 2020/21.



"Chess has continued to demonstrate what a good strategic fit it is for the Group. It is a leading supplier within its market and has a strong ethos of innovation and responsiveness."



António Marcos Lopes
Managing Director of EID

REVENUE

£18.0m

2019: £11.5m

ADJUSTED OPERATING PROFIT

£3.1m

2019: £1.3m

OPERATING CASH FLOW

£3.6m

2019: £(1.7)m



Overview

EID is a Portuguese based high-tech company with 35 years' experience and deep know-how in the increasingly critical fields of electronics tactical and naval C3 (command, control and communications). The company's focus is the design, manufacture, delivery and support of advanced high-performance command C3 equipment for the global defence and security markets.

EID operates through two market-facing divisions:

- ▶ Naval Communications: integrated command C3 systems for warships and submarines; and
- ▶ Tactical Communications: tactical radio, vehicle intercoms, field communications and networking software and equipment.

These divisions are supported by an internal production and logistics unit.

The UK Royal Navy is amongst the customers for its naval communications systems and its products equip over 145 vessels worldwide including the navies of Portugal, the Netherlands, Spain and Belgium and many non-NATO export customers. Its tactical communications products are used extensively in a variety of personal and vehicular applications for armies worldwide.

EID operates from an engineering and production facility near Lisbon and is led by its Managing Director, António Marcos Lopes. EID is 80% owned by Cohort, with the remaining 20% of its shares held by the Portuguese Government. It joined the Group in 2016.

EID.PT

"The UK Royal Navy is amongst the customers for its naval communications systems and its products equip over 145 vessels worldwide including the navies of Portugal, the Netherlands, Spain and Belgium and many non-NATO export customers."

Subsidiary reviews continued



After a disappointing 2018/19, EID has returned to much stronger performance with a net return in line with our long-term expectations for the business.

The increase in revenue of over 50% improved the gross margin whilst the overhead for the business remained flat. As a result, the net margin of EID rose from 11.8% to 17.2%.

This improvement derived from a near doubling of revenue from the Portuguese Ministry of National Defence and deliveries of intercom systems to an overseas customer. Both revenue streams were delivered from EID's Tactical division. Its Naval division saw a decline in revenue following completion of a number of programmes in 2018/19, in particular work on Portuguese offshore patrol vessels and Belgian frigates.

EID saw a relatively notable impact from COVID-19 with several in-country milestones being postponed by the customer and a delivery delayed into early 2020/21 due to local lockdown constraints. The overall impact was around £1.5m of revenue slipping into the new financial year. Portugal has seen a quicker return to pre-COVID conditions and EID has over 90% of its employees now back on site, again with the safety of employees and visitors of paramount importance.

As expected, EID had a better cash performance this year, unwinding some of the working capital arising from delivery delays at the end of last year.

The mix of work at EID is expected to continue to change in the coming few years with lower levels of naval support activity and increased deliveries of intercom and radio products. Overall, we expect the operating margin to remain at around the current level. We are expecting longer-term naval orders to progress this year, although the timing of the contract awards is unpredictable.



"Overall, we expect the operating margin to remain at around the current level. We are expecting longer-term naval orders to progress this year, although the timing of the contract awards is unpredictable."



Chris Stanley
Managing Director of MASS

REVENUE

£41.1m

2019: £39.0m

ADJUSTED OPERATING PROFIT

£8.9m

2019: £8.2m

OPERATING CASH FLOW

£11.6m

2019: £7.4m



Overview

MASS is a data technology company with over 35 years' heritage serving the defence and security markets in the UK and around the world. It provides electronic warfare operational support, digital services and training support to military operations.

The company delivers tailored, integrated solutions that are increasingly critical to customers' operational advantage. MASS's expertise in data management, system engineering and project management enables delivery of through-life capability in the form of high-technology solutions, training and trusted managed services. These are underpinned by MASS's strong research and development capability.

MASS's core skill is enabling its customers to convert their own data, often of vast quantities, into information for operational and strategic application.

MASS operates through four divisions.

The EWOS division includes the THURBON™ Electronic Warfare (EW) database, SHEPHERD (the provision of a system embodying THURBON™ to the UK MOD) and MASS's EW managed service offerings in the UK and elsewhere.

The Digital Services division offers solutions and training to government security customers, including the Metropolitan Police. This division also delivers secure network design, delivery and support and information assurance services to commercial, defence and educational customers.

The Strategic Systems division provides certain managed service and niche technical offerings to the UK MOD.

The Training Support division provides training simulation and support to the UK's Joint Warfare Centre as well as similar high-level command training to other UK and overseas customers.

Established in 1983, MASS joined the Cohort Group in 2006. The company is based in Cambridgeshire and it also operates an Electronic Warfare Training Academy in Lincolnshire. MASS is led by Managing Director Chris Stanley.

MASS.CO.UK

"MASS's core skill is enabling its customers to convert their own data, often of vast quantities, into information for operational and strategic application."

Subsidiary reviews continued



MASS had another year of good growth with adjusted operating profit rising 9% on revenue that grew 5% compared to 2018/19.

The main drivers of growth in revenue were two long-term support contracts to the UK MOD. One of these was renewed last year for eight years. The second, its support to the UK Joint Forces Command, was recently extended for another two years with three further one-year extension options. The renewal of these contracts speaks to the continued quality of service provided by the team at MASS to customers.

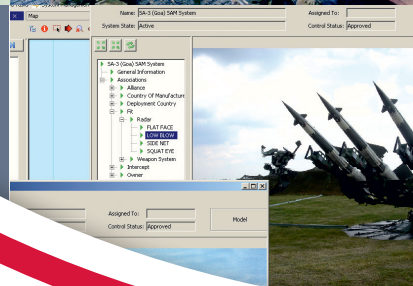
The EWOS business, which is mostly export, was flat in revenue terms but had a slight improvement in margin as a result of the mix of work.

MASS's net margin increased to 21.7% (2019: 21.0%). Higher revenue and the improved mix in EWOS increased its gross margins and more than offset the growth in overheads.

MASS's operating cash flow this year was very strong and was boosted by its primary customer, the UK MOD, accelerating payments in the final month of the financial year in response to COVID-19. We do not expect this timing advantage to be repeated in 2020/21. Other than this positive cash flow effect, MASS saw minimal impact on its operations from COVID-19 and now has over 50% of its employees back on its own or customer sites.

MASS continues to demonstrate its strength in its core markets of EWOS and niche technical support to key government capabilities. Its order book of £90m gives good visibility beyond 2023.

"MASS continues to demonstrate its strength in its core markets of EWOS and niche technical support to key government capabilities. Its order book of £90m gives good visibility beyond 2023."





Shane Knight
Managing Director of MCL

REVENUE

£15.1m

2019: £21.7m

ADJUSTED OPERATING PROFIT

£1.7m

2019: £2.3m

OPERATING CASH FLOW

£(2.3)m

2019: £4.4m

"MCL starts 2020/21 with improved visibility and some good prospects for the coming year."



Overview

Marlborough Communications Limited (MCL) is a leading supplier of advanced electronic communications, information systems and signals intelligence technology to the defence and security sectors.

MCL utilises an unparalleled and ever-expanding international network of specialist technology providers, combined with its own bespoke design, engineering and integration skills, to deliver and support a diverse portfolio of C4IS and ISTAR capabilities that transform its customers' ability to deliver effective operations.

The company's specialist C4IS portfolio includes hearing protection, communication headsets and radios, while its ISTAR capabilities include signals intelligence, electronic warfare and UAV and UGV technologies. With 35 employees, the company supplies customers including the UK MOD, other UK Government departments and defence prime contractors. MCL is adept at identifying the latest technologies and capabilities to suit the unique demands of each customer it works with.

Founded in 1980 and based in Surrey, this year sees MCL celebrate 40 years' experience in supporting the UK's ISTAR programmes. MCL is led by Managing Director Shane Knight and has been part of the Cohort group since 2014.

MARLBOROUGHCOMMS.COM

After several years of growth, MCL had a disappointing year following completion of some larger deliveries of hearing protection systems in 2018/19. These fell back to more normal levels in 2019/20 and MCL has not yet secured replacement programmes. The result was a fall in sales by 30% and adjusted operating profit by 26%.

MCL saw little impact from COVID-19. The small team is flexible and at present around half are on site with the remainder working from home.

When we acquired MCL, back in July 2014, one of the primary objectives was to support it in building an order book and business with greater longevity and visibility. This year saw the order book fall back from £14.6m (April 2019) to £8.6m (April 2020) and the visibility of MCL's revenue remains, on average, in the three to six-month range. However, MCL now sees some substantial opportunities in long-term UK naval support programmes. Success in these would enable MCL to improve its revenue visibility significantly. More immediately, MCL starts 2020/21 with improved visibility and some good prospects for the coming year.

The cash outflow this year was as expected, with a large supplier payment having slipped from 2018/19 into 2019/20.

Subsidiary reviews continued



Stephen Hill
Managing Director of SEA

REVENUE

£31.7m

2019: £38.3m

ADJUSTED OPERATING PROFIT

£3.5m

2019: £5.5m

OPERATING CASH FLOW

£3.6m

2019: £0.8m



Overview

SEA delivers products and services into the defence, transport and offshore energy markets alongside performing specialist research and providing services, including training and product support.

In the maritime domain, SEA's engineering capabilities cover a wide range of maritime mission systems requirements, including communications, torpedo and decoy launching systems, sonar systems, infrastructure and training. Using its systems engineering skills, combined with in-depth knowledge and understanding of dismounted soldier operations, SEA provides independent advice and research into future dismounted soldier systems and applications.

With award-winning expertise in signal processing and software engineering, SEA delivers complex data management solutions alongside automated traffic enforcement systems to UK Government and export customers in the transport domain.

SEA manages its business through three divisions:

- ▶ Complex Systems, based at Beckington;
- ▶ Integrated Electronic Systems, based at Barnstaple; and
- ▶ Subsea, based at Aberdeen.

The activities of the organisation are underpinned by strong project management and enabled through dedicated production and support teams.

SEA was founded in 1987 and joined the Cohort group in 2007. SEA is located in the UK in Somerset, Bristol, Devon and Aberdeen, and is led by Managing Director Steve Hill.

SEA.CO.UK

"A recent submarine communications order for an export customer and new UK orders underpin expectation that this revenue stream will begin to grow again."



SEA had a disappointing year with revenue falling by 17% and its adjusted operating profit by 36%, the drop mostly driven by the slippage of export orders.

The change in SEA's revenue over the last four years is analysed by activity as follows:

	2017 £m	2018 £m	2019 £m	2020 £m
Submarine systems	16.9	7.3	4.7	2.7
Research	2.1	2.3	4.5	5.2
Export defence	6.0	7.1	8.2	1.6
Other defence products and support	11.9	13.2	9.6	11.7
Transport	5.9	5.3	9.2	7.6
Subsea	1.9	2.1	2.1	2.9
SEA total revenue	44.7	37.3	38.3	31.7

The submarine systems and research activities have historically been for the UK MOD.

The above table shows that UK submarine systems activity at SEA has continued to decline since its peak in 2016. Recent order wins in this area, both for the UK and export, should see this grow in the coming year.

SEA's research activity has also continued to show growth and we expect the proportion of naval research within this to continue to progress.

Export revenue at SEA fell significantly. In 2018/19, SEA completed deliveries of Torpedo Launcher Systems (TLS) to several overseas customers. Expected order wins from new and existing customers slipped, and one customer requested a delay on a current programme, on which work will recommence in 2021/22. We expect some of the delayed orders to be secured in the coming year although timing remains unpredictable.

SEA's transport business saw a 17% fall in revenue following delivery of a large initial batch of Red-Light ROADflow systems to Network Rail in 2018/19. Underlying UK and export ROADflow sales increased slightly with the revenue from annual support and maintenance for the existing installed base of systems now worth over £1.5m of revenue per annum.

The decline in submarine systems work has resulted in a higher proportion of revenue being derived from less predictable orders. For instance, SEA's transport contracts are typically on short timeframes from win to delivery,

usually a few weeks to months. SEA's opening order book as at 1 May 2020 does provide higher cover for 2020/21 with over £18m of revenue on order compared with last year's cover of just over £12m. However, revenue visibility for SEA is shorter-term than we have seen historically, and we expect this situation to continue until longer term naval programmes (UK and export) are secured for submarine communications and TLS products.

A recent submarine communications order for an export customer and new UK orders including more substantial work on the Dreadnought class underpin our expectation that this revenue stream will begin to grow again. For TLS, a number of overseas navies are regenerating their fleets and this provides good opportunities for long-term significant work for SEA. Nevertheless, the timing of export orders remains unpredictable and slippage of specific opportunities for TLS negatively impacted SEA's revenue in 2019/20.

During the year SEA trialled its new Anti-Submarine Warfare (ASW) system based upon its 16mm diameter towed sonar array (Krait) with the Portuguese Navy. This activity was supported by EID in country. The system successfully detected and tracked a submarine in a live environment. Further trials are now required and we are working with the UK Royal Navy to test the system on a Type 23 Frigate in the coming year.

SEA's Subsea division saw revenue grow by nearly 40% with increased support activity offshore. As a result of the recent sharp fall in the oil price, the current market for this division is challenging and strategic options for the Subsea division are under review.

A restructuring exercise was completed in late 2018 to integrate back-office services at SEA at its Barnstaple site and make a small reduction in direct costs. The weak performance during 2019/20, including a disproportionate fall in adjusted operating profit when compared to revenue, and the current shorter-term nature of SEA's order book indicate that a further cost reduction is required. This exercise has begun and will be largely complete by the end of July 2020, realising an annual saving of £1.3m at a cost of £0.7m. These changes are intended to shape SEA's cost base to its current level of activity, while ensuring it is ready to deliver when longer-term orders are secured.

During 2019/20, SEA completed the integration of J+S, the latter now being dormant. A new management and reporting system, the same as that used by MASS, went live in February 2020.