

# Cohort

Agile and responsive

Outlook

Cohort continues to make progress in a tough UK defence trading environment. Our earnings forecasts remain largely unchanged as performances at MASS and EID continue ahead of expectations, compensating for pressures at MCL and SEA. Our fair value calculation currently stands at 483p implying significant unrecognised potential. The recent share price fall seems unwarranted given the maintained outlook.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
04/16	112.6	12.0	25.0	6.0	12.7	1.9
04/17	112.7	14.5	26.6	7.1	12.0	2.2
04/18e	119.0	15.4	29.1	8.2	10.9	2.6
04/19e	128.2	16.1	31.2	9.0	10.2	2.8

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and tax credits of 2.20p in FY16 and 1.30p in FY17.

## H118 results

The H118 closing order book of £132.1m (H117: £129.6m) was slightly down from £136.5m at the start of the year. £55m of the current order book is scheduled for delivery in H218, demonstrating good order cover of 83% of FY18 consensus forecast revenue expectations. Reported revenues were £44.8m (H117: £50.0m) and reported adjusted operating profit was £3.6m (H117: £3.9m). Reported adjusted EPS was 6.31p (H117: 5.99p). The interim dividend of 2.55p (H117: 2.20p) is up 16%, in line with the group's progressive dividend policy. Net cash of £5.7m reflected the outflow of the final £2.5m payment against the Marlborough Communications Ltd (MCL) minority purchase.

## H218 delivery

Cohort is agile in nature, executing contracts that are often fixed price. As the company holds risk and builds contingency, this can be unwound typically at the year end. With a fixed overhead base, this can tend to skew H1/H2 performance. In recent years Cohort's results have reflected this trend and been heavily weighted towards the second half. We expect it to repeat this year, with the H218 outlook supported by order cover and recent order wins. Management has reiterated FY guidance and our earnings estimates are unchanged. While the company is not immune to UK MOD budgetary delays, it continues to exploit export opportunities and remains positioned for further M&A opportunities should they arise.

## Valuation: Premium warranted to UK defence peers

Cohort continues to execute well in the face of clear pressures within the UK defence sector in recent months. As such, it deserves a premium rather than the current 20% FY19e discount to the UK defence sector, comprising less resilient and profitable peers that face company-specific ratings issues. The reduction in minorities is enhancing and at our peer-based SOP value of 460p the stock would trade on 14.7x our FY19e EPS, a c 10% premium to UK defence peers. Our DCF value continues to rise, currently standing at 506p. Our fair value rises 3% to 483p (from 471p), calculated as the average of the SOP and DCF.

Aerospace & defence

13 December 2017

**Price** 318p  
**Market cap** £129m

Net cash (£m) at 31 October 2017	5.7
Shares in issue	40.4m
Free float	70%
Code	CHRT
Primary exchange	AIM
Secondary exchange	N/A

### Share price performance



### Business description

Cohort is an AIM-listed defence and security company operating across four divisions: MASS (30% of FY18e sales); SEA (40%); MCL (15%); and the 80%-owned Portuguese business EID (10%).

### Next events

FY18 results June 2018

### Analysts

Andy Chambers +44 (0)20 3681 2525  
Annabel Hewson +44 (0)20 3077 5700

[industrials@edisongroup.com](mailto:industrials@edisongroup.com)

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## Investment summary

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Interim results from Cohort indicate that the company strategy remains on track to deliver growth in FY18 against a still challenging market backdrop. The returns to shareholders have been further improved by the successful actions to address the performance of SCS, the buyout of the MCL minority in FY17 and the increase of the interest in EID to 80%, as expected. The agile and flexible nature of Cohort's strategy leaves the company well-positioned to pursue suitable further complementary, selective opportunities to enhance organic performance as they arise.

### Strength of MASS and EID encouraging

H118 results were underpinned by better than expected performances at MASS and EID. MASS's improved result included a contribution from the Training Support Business that was previously part of SCS, as well as strong development of the cyber activity, including the Metropolitan Police Service (MPS) Digital Forensic Programme secured at the end of FY17. While below management expectations, EID's operating margins of 19% were above our FY18 estimate, although falling from the exceptional levels delivered in FY17 that resulted from very high margin marine support work. SEA experienced an improvement in first half margin performance as its mix moved towards deliveries of maritime systems with a reduction in research activity, largely for the MOD for land forces. However, this trend also led to lower revenues than anticipated. MCL's revenue and profit contribution was also lower than anticipated due to deferred timing of some hearing protection systems deliveries as well as some slippage on milestones of a development programme.

### Improvement in H2 expected

Management expects a stronger second half with both MASS and EID continuing to make better than expected progress. MASS should see continuing positive development for cyber and the EWOS business in H218 and beyond, and EID should recover some revenue slippage from H118 as well as executing its 100% order cover. Although SEA and MCL have faced challenges in the first half, we expect improved contributions in H218. Better margin performance at SEA as the mix shifts towards marine systems is encouraging and research may recover from very low levels at some point in the future. At MCL, margins are as expected weaker than the exceptional levels seen last year, but the volume of activity should rise sharply in the second half in support of the various hearing protection programmes.

Although our FY18 revenue estimate has been reduced by £4.3m (3.9%), our profit forecasts remain unchanged at the pre-tax and profit levels. In addition, our FY19 numbers remain largely as before, except for a minor tweak to EPS (31.2p versus 31.3p previously) due to the higher contribution we now expect from EID with its 20% minority. The balance sheet remains supportive. The company is expected to end FY18 with close to £10m of net cash after spending c £6m on the MCL final payment (£2.5m) and the purchase of the additional 23% interest in EID (£3.53m).

### Valuation: Improvement relative to peers

In our SOP calculation we have enhanced our relative ratings of Cohort's businesses against their UK defence peers, reflecting the more resilient growth and margin performance being achieved. The uplift in valuation premiums to peers has been partly offset by declines in several peers' ratings that appear to be largely company-specific but have weighed on the overall sector against the backdrop of budgetary issues faced by the MOD. Our peer based SOP falls 4% to 460p, from 477p, as a result of these changes. The progress is reflected in the increase in our capped DCF for Cohort, which now returns a value of 506p (vs 481p), mainly due to improved working capital.

## H118 results summary

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The salient features of the interim results are as follows:

- Reported closing **order book** of £132.1m (H117: £129.6m) was slightly down from £136.5m at the start of the year. £55m of the current order book is scheduled for delivery in H218, demonstrating good order cover of 83% of FY18 consensus forecast expectations.
- Reported **revenues** were £44.8m (H117: £50.0m).
- Reported **adjusted operating profit** was £3.6m (H117: £3.9m).
- Reported adjusted EPS was 6.31p (H117: 5.99p).
- Reported DPS was 2.55p (H117: 2.20p), a 16% increase in line with the group's progressive dividend policy.
- Net cash of £5.7m (H117: £9.9m) was down from £8.5m at FY17, largely reflecting the final payment on MCL. A cash inflow is expected in H218.

### Divisional performance

MASS (H118 sales: £17.2m; 38% of group sales) produced the strongest result for the group, with good delivery in Electronic Warfare Operational Support (EWOS). This area will continue to support growth in the division. In addition, the business delivered growth in cyber markets with the Metropolitan Police Service (MPS) Digital Forensic Programme secured at the end of FY17 and potential future orders. The Training Support Business (previously part of SCS) is included in the H118 result. The division's operating margin was affected by a higher bought-in element. £15.0m of the current order book is scheduled for delivery in H218.

SEA (H118 sales: £15.7m; 35% of group sales) delivered a lower top-line result but a higher operating margin due to increased maritime system export deliveries. There is a natural lull between the completed design work on the Astute Class and the increased activity on Dreadnought Class, and export sales of torpedo launch systems helped to counter this. SEA has been affected by the current lower demand from the UK customer, as has MCL. Research work weakened further with most land activity halted and future work in the area is being brought into the Simulation, Support and Product (SSP) activity. Meanwhile, the ROADflow product range is seeing growth. The division has taken action to mitigate oil & gas sector challenges and the business generates strong returns on depressed revenues. £16.6m of the current order book is scheduled for delivery in H218.

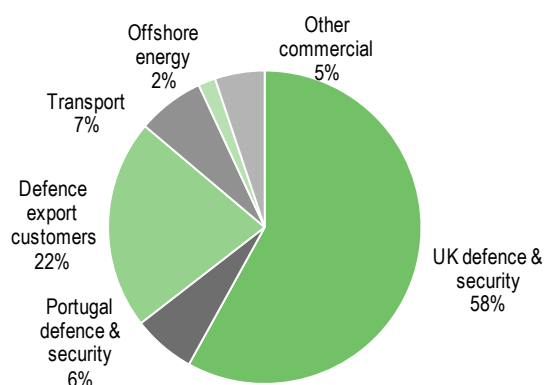
EID (H118 sales: £6.7m; 15% of group sales) performance reflected lower than expected sales (rescheduled to H218) and reduced operating margin from the abnormally high level seen in FY17. Cohort announced the acquisition of an additional 23% of EID last month, taking the total holding to 80% as expected, enhancing future EPS. Going forward, Portugal is seeing a relatively robust level of spending with upgrades to maritime and land communication systems, from which EID should benefit. The order book of £29.7m underpins 100% of H218 expected revenue performance and adds confidence that FY18 guidance will be met.

MCL (H118 sales: £5.1m; 12% of group sales) revenue and operating profits were lower than management expected. Although the division is seeing better order cover than it has seen historically, this division has been affected by a challenging customer backdrop and project delays. The hearing protection systems revenue was affected by a planned lower level of deliveries. As with SEA, the UK MOD tightening of spending is apparent and will likely have an impact on H218 revenues for the division. FY18 performance for the year is expected to be similar to last year.

## Company strategy: Agile and responsive

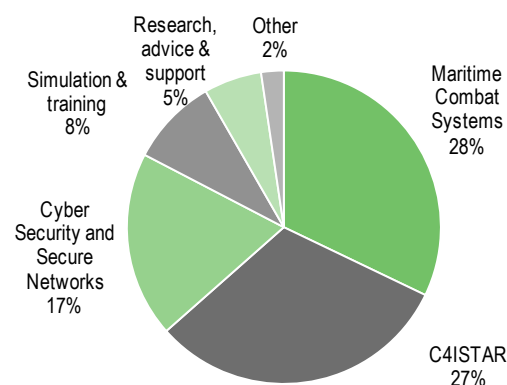
Since floating on AIM in 2006, Cohort has been progressively pursuing its strategy of building an independent group in defence technical services, systems and products, through both organic growth and bolt-on acquisitions. A series of acquisitions has seen the company continue to develop, despite ongoing pressures on defence budgets. The group remains a predominantly defence and security company (86% of H1FY18 sales), but has small positions servicing markets in oil & gas (2%), transport (7%) and other commercial markets (5%, including education).

**Exhibit 1: Revenue by customer sector (H118 total £44.8m)**



Source: Cohort

**Exhibit 2: Defence & security sales by market segment as % of group sales (H118 total £38.6m, 86%)**



Source: Cohort

Cohort provides a holding company structure for four independent autonomous subsidiaries, all of which provide specialist capabilities for varying defence and security niches, as shown in Exhibit 4.

Cohort's strategy is based around the three elements of agility, acquisition strategy and making the most of the market opportunities that present themselves. We will address each of these in turn.

## Agility

Cohort's FY17 Annual Report states: "Within our markets we have sought to use our agility and innovation to identify niches where future prospects are attractive and where we have some sustainable competitive advantage."

By the very nature of Cohort's business structure, each subsidiary has operational autonomy. While Cohort today employs c 720 people globally, the group employs just 10 people at its headquarters in Theale, which really demonstrates how much autonomy each business has.

The devolved structure enables each business to remain close to its customers and be as responsive as required, hence the focus on agility. However, the group structure and balance sheet bring scale and confidence and allow the smaller companies to address opportunities and win contracts of a nature that their standalone size might preclude.

Management is prepared to step up to make significant adjustments to the portfolio. This was demonstrated in December 2016 with the restructuring of the former SCS division. As a defence consultancy business, combining technical expertise with armed forces experience and domain knowledge, it had been operating in a challenging business environment due to a general tightening of some consultancy fees by its main customer, the UK MOD. The negative mix effect was a product of the increase in the proportion of lower-margin work following the end of several profitable projects, particularly following the cessation of activity in Afghanistan.

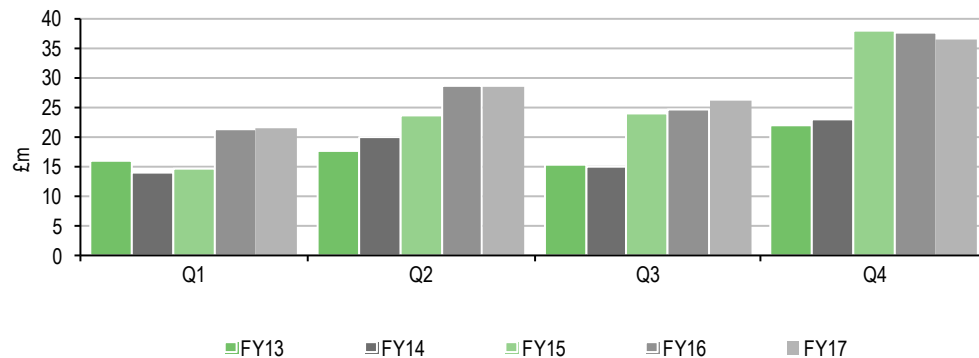
To give the right platform and opportunity for the operational parts of SCS to continue to deliver their valued and profitable service to customers while reducing the overhead, SCS was divided and

rehomed. The Air Systems and Capability divisions moved into SEA, while Training Support and Communications Systems divisions became part of MASS.

<b>Exhibit 3: Cohort businesses and core capabilities</b>					
	<b>Products, systems and services</b>	<b>EID</b>	<b>MASS</b>	<b>MCL</b>	<b>SEA</b>
<b>Maritime Combat Systems</b>	Ship and Submarine Communication Systems	X			X
	Combat System Data Networks				X
	Message Handling Systems	X			
	Acoustic Arrays				X
	Hydrophones and Transducers				X
	Echosounders				X
	Portable Underwater Communications				X
	Torpedo, Acoustic Decoy and Sonobuoy Launcher Systems				X
	Weapons Handling Systems				X
<b>C4ISTAR</b>	Tactical Radio and Intercom Systems	X		X	
	Field Communications	X			
	Military Message Handling Systems	X			
	Specialist User Communications			X	
	Military Hearing Protection			X	
	Tactical Situational Awareness			X	
	Small Unmanned Air Systems			X	
	Counter UAV Systems			X	
	Electronic Warfare Operational Support		X		
	Electronic Warfare Data Management		X		
	Countermeasures Development		X		
	SIGINT Systems, ELINT and COMINT, and ESM		X	X	
<b>Simulation &amp; Training</b>	Simulation Applications				X
	Procedural Training Solutions				X
	Virtual and Augmented Reality				X
	Electronic Warfare and Cyber Training		X		
	Electronic Warfare COMINT Simulation		X		
	Strategic Level Exercise Support		X		
	Strategic Analysis and Education		X		
<b>Cyber security &amp; secure networks</b>	Information Assurance		X		
	Cyber Essentials and GDPR Certification		X		
	Digital Operations Centres		X		
	Secure ICT Networks		X		
	Classified Mission Networks		X		
	Information Management Services		X		
	Digital Forensics		X		
<b>Research, advice &amp; support</b>	Contract Research and Development		X		
	Research Management				X
	Technical Advice and Support				X
	Capability Development				X
	Soldier Systems				X
	Air Systems				X
	Human Factors & Ergonomics Services				X

Source: Cohort

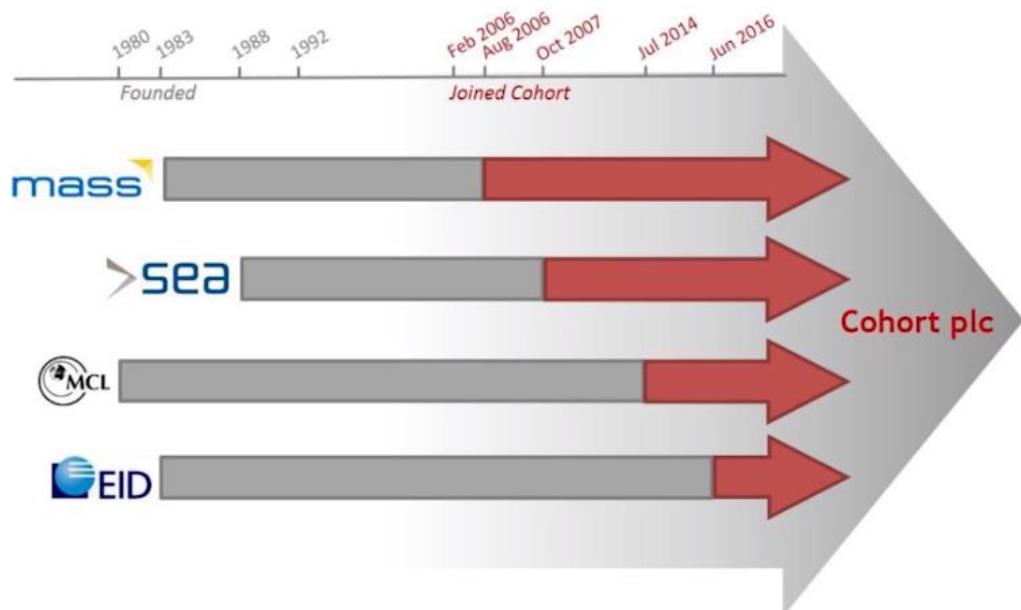
Many of Cohort's contracts are fixed price in nature and these often include an element of technology development. The company holds risk and builds contingency into its projects, which if successfully delivered can be unwound, typically at the year end. With a fixed overhead base, this can tend to skew H1/H2 performance. This can be seen in Exhibit 4. We expect that this historical second half weighting will continue in FY18.

**Exhibit 4: Cohort – quarterly profile of group revenue**


Source: Cohort

## Acquisition strategy

A key element to Cohort's growth strategy over the years has been to support organic growth with targeted M&A. The company will consider a target as either a standalone business to join as a subsidiary, or as a bolt-on acquisition where it is closely aligned with an existing business. The chart below gives an outline of the current four divisions, in terms of when they were founded and when they joined the Cohort group.

**Exhibit 5: Organisation timeline**


Source: Cohort

It is important to recognise that each time Cohort has brought a new subsidiary company into the group, the target company brings with it longstanding customer relationships in addition to a quality product/service portfolio. Quality of the management is vital given the level of autonomy expected and the limited bandwidth of capacity at the HQ level.

Cohort is prepared to take part shares in businesses but with a controlling interest, as we saw at EID and MCL. It is additionally important to recognise that when management states that it intends to increase the shareholding that it does so. While timing may be contingent on external factors,

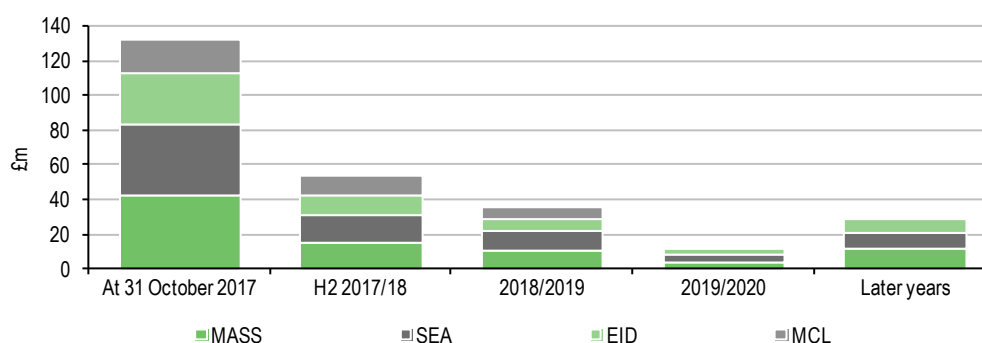
Cohort management has achieved subsequent holding increases at EID and MCL within financial expectations.

Targeted M&A activity will focus on businesses that offer technology and end market opportunities. For standalone businesses, Cohort sees opportunity in defence and security markets around the globe for a target that would benefit from being part of a larger group. This strategy can build “home” markets within the defence sector, such as Portugal can be considered today.

It should be remembered that a disciplined and cautious approach runs through the group’s M&A strategy. In addition, the integration of companies, most recently EID, requires time and attention. Typically, cash generation within the group is strong and will support future acquisitions. Naturally, this metric can see year on year fluctuations. FY17 cash conversion was just 27% (FY16: 73%) reflecting a working capital unwind plus some slippage in contract payments. However, over the last four years, cash conversion has averaged 80%.

Cohort’s order book progression shows additional strength. Exhibit 6 gives a picture of the visibility of the order book across the divisions. Part of the strategy has been to stabilise and build out visibility. Cohort’s delivery schedule does stretch out to 2025; however, order cover is typically in the range of 55%-65% at the start of any given year. Cohort can also operate with an increasing level of shorter-term contracts, which can be supportive at the operating margin level but may not be visible in order book charts. The agility we described above supports this approach.

**Exhibit 6: Delivery of the group’s order book into revenue (£m)**



Source: Cohort

## Market opportunities

Cohort’s FY17 Annual Report states: “The political and economic context within which Cohort operates has not changed appreciably since last year. On the one hand the international and domestic security environment calls for greater resources to be devoted to defence and counter terrorism in the UK and many other countries. On the other hand the pressures on public expenditure in the UK are strong and this applies in varying degrees in many other markets, including Portugal.”

The above paragraph from the company’s annual report highlights the fundamental dynamic within the global defence market. For the UK in particular, recent peer group market commentary has put the spotlight on short-term contract delays for the sector.

Cohort has longstanding relationships with the UK MOD across many different business areas. The existing programmes in submarines and combat aircraft EWOS remain stable, long-term in nature and operationally important. The planned fleet additions by the UK MOD are outlined in Exhibit7.



**Exhibit 7: Planned new additions to the Royal Navy fleet**

Class	# of units	Investment
Dreadnought submarine	4	£31bn
Astute submarine	7	£10bn
Aircraft Carrier	2	£6.1bn
Type 45 destroyer	6	£6.0bn
Type 26 frigate	8	£3.7bn
Type 31e frigate	5	£1.25bn
Offshore patrol vessels	5	£0.64bn

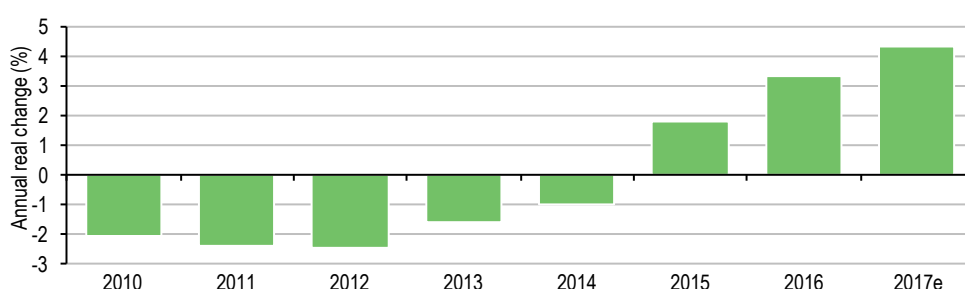
Source: UK MOD Equipment Plan 2016

However, from a shorter-term contract perspective, the UK MOD is under continued budgetary pressures and the changing terms of trade have had an impact on the business environment. There are additional challenges with the single-source regulatory regime keeping pressure on margin and there has been a notable commentary on the concerns over current trading from across the sector. Even the change of defence secretary has caused alarm for some, while also being seen as a reason for further delays on contract decisions.

Within the divisions, MCL is expected to remain somewhat unpredictable in terms of business due to its shorter order book lead times. However, in hearing protection new and follow-on orders in June demonstrated the group's technical cooperation and supplier status with the UK MOD and provide a more visible and sustained delivery programme. For SEA, it is likely that the Research business will remain under pressure in the short term and it is now part of the SSP business. For MASS, the business has been investing and has been building its order book, and while delivery timing remains difficult to predict, the division is expected to return to growth.

The H118 report has demonstrated some project delays due to budgetary tightening at the UK MOD. However, export business is developing well and the order book underpins FY18 prospects.

Innovation continues across the Cohort businesses to drive growth and to meet changing needs around the globe. The company expects to increase self-funded R&D by 25% in FY18. In addition, Cohort is very well positioned to address lateral markets including security. For MASS, the innovation focus is on EW and cyber, while at SEA the focus is on the Krait Defence System (which we will discuss later) and the developing further ROADflow derivatives.

**Exhibit 8: Changes in NATO Europe and Canada defence expenditure**


Source: NATO. NB: Annual real change, based on 2010 price and exchange rates.

Non-UK business currently represents c 32% of group revenues and export activity is expected to accelerate further with EID. Cohort identifies opportunities in the Middle East (regional competitiveness), South-East Asia (Chinese assertiveness) and Eastern Europe (pressure from Russia). With 25 NATO countries planning to increase defence spending in real terms, the number of countries moving towards the 2% of GDP guideline is increasing. Exhibit 8 reflects NATO's belief that the non-US NATO members will continue to see a real increase in their defence spending. With the 2018 NATO summit set for Brussels in July, the message from the secretary general is: "In



response to evolving threats, NATO has implemented the biggest reinforcement of our collective defence in a generation... We are also stepping up our efforts against cyber-attacks and hybrid threats.”

Turning now to the subject of traffic enforcement, Cohort is a clearly established market participant through its SEA subsidiary. The company is able to provide both the system and subsequent support work for a number of road traffic situations. One area that has seen increased interest in recent years is monitoring level crossings, where reckless driving and disregard for signals can have dramatic consequences. The only way to eliminate all risk in this area is to remove the level crossing itself, and UK National Rail has closed more than 1,000 in the last six years. However, SEA’s ROADflow Signal System has been selected by the UK Home Office to improve public safety and provide enforceable evidence to prosecute offenders. The system is relatively swift to install as it does not require either connectivity with rail signalling or installation of road based sensors.

From bus lane cameras to monitoring yellow box junctions, the direction of travel for SEA’s transport monitoring solutions is encouraging. The company is working well with Transport for London and FY17 was a record year for ROADflow sales at 108 units (over 400 in total installed at the year end). Global trends in road safety suggest that export opportunities are good, although timing is always tricky to predict.

## Divisional overview

<b>Exhibit 9: Divisional estimates, £m</b>				
	<b>FY17</b>	<b>% of group</b>	<b>FY18e</b>	<b>% of group</b>
<u>Revenues</u>				
MASS	32.5	29%	39.0	33%
SCS*	5.0	4%		
SEA	44.4	39%	43.0	36%
MCL	14.8	13%	17.5	15%
EID	16.0	14%	19.5	16%
<b>Total</b>	<b>112.7</b>	<b>100%</b>	<b>119.0</b>	<b>100%</b>
<u>Operating profit</u>				
MASS	5.9		7.0	
SCS*	-0.5			
SEA	5.3		5.2	
MCL	2.1		2.1	
EID	4.2		3.9	
HQ & other	-2.5		-2.8	
<b>Total</b>	<b>14.5</b>		<b>15.4</b>	
<u>Operating profit margin</u>				
MASS	18.2%		18.0%	
SCS*	-9.1%			
SEA	11.9%		12.0%	
MCL	13.9%		12.0%	
EID	26.4%		20.0%	
<b>Total</b>	<b>12.9%</b>		<b>12.9%</b>	
Source: Cohort reports, Edison Investment Research estimates. Note: *SCS business was restructured into MASS and SEA in December 2016.				

## MASS

**Exhibit 10: MASS overview**

Operating division (MASS FY17 sales £32.5m)	Products	Locations	Major customers
<b>Electronic Warfare</b> (47% of MASS FY17 sales)	<ul style="list-style-type: none"> <li>Electronic Warfare solutions (including Thurbon database) and training.</li> <li>Also operates overseas providing EW Operational Support (EWOS) for Tornado and other platforms.</li> </ul>	Lincoln Overseas	<ul style="list-style-type: none"> <li>UK MOD</li> <li>Export defence</li> <li>Prime integrators</li> </ul>
<b>Strategic Systems</b> (30%)	<ul style="list-style-type: none"> <li>Technical and managed IT services.</li> </ul>	St Neots Customer sites	<ul style="list-style-type: none"> <li>UK MOD</li> </ul>
<b>Cyber</b> (7%)	<ul style="list-style-type: none"> <li>Delivery of cyber solutions and services.</li> </ul>	St Neots Customer sites	<ul style="list-style-type: none"> <li>UK security services</li> <li>Government</li> <li>Commercial customers</li> </ul>
<b>Secure Networks</b> (16%)	<ul style="list-style-type: none"> <li>Design, delivery and support of secure ICT systems and other niche design solutions.</li> <li>Software and hardware.</li> </ul>	St Neots Customer sites	<ul style="list-style-type: none"> <li>UK MOD</li> <li>Government agencies</li> <li>Education</li> <li>Commercial customers</li> </ul>

Source: Cohort

MASS was founded in 1983 and was acquired by Cohort in August 2006 for £13m. Employing c 250 people, MASS operates from sites in Lincoln and St Neots. MASS provides the core capabilities in Cohort's electronic warfare (EW) and ICT services offerings. It serves the defence, government, education and commercial markets, and includes Cohort's developing cyber capability. MASS competes against significant cyber security providers including Ultra Electronics and BAE Systems Applied Intelligence.

MASS is the group's most profitable business. However, FY17 was affected by slower electronic warfare operational support (EWOS) order intake and a delay to the Metropolitan Police Services (MPS) digital forensic services contract. Nevertheless, MASS did deliver order growth in FY17 and has good visibility through FY18. In addition, the EWOS business delivered strongly in H118 and the now-secured MPS contract could lead to opportunities to provide this cyber service to other police forces both in the UK and overseas. In addition, post the restructuring of SCS, this business now includes a capability in military collective training.

## SEA

**Exhibit 11: SEA overview**

Operating domain (SEA FY17 sales £44.4m)	Products	Locations	Major customers
<b>Defence</b> (82% of SEA FY17 sales)	<ul style="list-style-type: none"> <li>Software, hardware and through life support for maritime defence systems. High Value External Comms Systems for the entire UK submarine fleet.</li> <li>Simulation and training system.</li> <li>MOD research programmes.</li> <li>Air Worthiness and Capability Development.</li> </ul>	Beckington Bristol Barnstaple	<ul style="list-style-type: none"> <li>UK MOD</li> <li>Export customers</li> <li>Prime integrators</li> </ul>
<b>Transport</b> (13%)	<ul style="list-style-type: none"> <li>Hardware and software solutions for transport sector.</li> <li>ROADflow traffic monitoring and enforcement systems.</li> </ul>	Bristol	<ul style="list-style-type: none"> <li>TFL</li> <li>Network Rail</li> <li>The Highways agency</li> </ul>
<b>Offshore Energy</b> (5%)	<ul style="list-style-type: none"> <li>Product and support services to the North Sea oil and gas industry.</li> <li>HV cable splicing, and other subsea power/connection.</li> </ul>	Aberdeen	<ul style="list-style-type: none"> <li>UK security services</li> <li>Government</li> <li>Commercial customers</li> </ul>

Source: Cohort

SEA was formed in 1988 and acquired by Cohort in October 2007 for £25m. SEA employs c 300 people in Beckington, Bristol, Barnstaple and Aberdeen. The division operates in four market-facing

areas: Maritime, Research & Advice, Simulation, Subsea and Transport. Across its various activities, SEA competes against major companies such as Thales, QinetiQ, Selex and Babcock.

Maritime defence is a key focus of the division in the areas of communication systems, sonar and weapons launch. The company's External Communications System (ECS) is in service with the UK Royal Navy's operational and planned submarine fleet (including Dreadnought Class). In terms of trading, the business is in a natural lull as the work on Astute finishes and before the full transition work from Vanguard to Dreadnought begins. Core to the system is its open architecture, which facilitates low-cost upgrades and replacement of the radios it controls. SEA is working with its sister company EID to develop a combined technology maritime communications system that could be attractive to both UK and export customers.

The company's work in the area of sensors is moving towards state-of-the-art low-profile towed line arrays that are more suitable for deploying with smaller vessels, including unmanned water vehicles. An example here is the Krait Array with directional sensing abilities, which has drawn interest from both sides of the Atlantic. The company launched the Krait Defence System earlier in 2017 to incorporate the array technology within a modular anti-submarine warfare suite offering four levels of capability. Meanwhile, SEA's torpedo launcher systems can be configured to launch any lightweight torpedo and can operate with mixed payloads via an auto-recognise ability. It is the sole supplier to the UK Royal Navy in this area. This is also another area for exports, as in August the company announced a £5m torpedo launcher system contract from Hyundai Heavy Industries for the South-East Asian market.

Research & Advice works closely with the UK's Defence Science and Technological Laboratory (DSTL). Work here covers multiple areas but the business has suffered from delays to budgetary issues at DSTL in FY17, which has had an impact on overall divisional performance. The company has made reductions here and is merging the operation into the simulation activities. The Simulation business provides development to support work for a UK MOD and international training audience. In addition, post the restructuring of SCS, this business now includes a capability in military air safety, ensuring that military aircraft are fit to fly in the UK and overseas.

For the relatively small Subsea business acquired with J+S in 2014, the offshore energy segment has continued to prove challenging. However, while demand levels remain weak, in FY17 the business did see a pick-up in margin as the workflow switched from replacement to repair.

The Transport business brings things much closer to home, providing a complete range of enforcement technologies for roads in London and New York. The ROADflow traffic monitoring and enforcement system has seen strong growth over recent years and remains good. We will discuss market opportunities here in greater detail later.

For FY18, the opportunities for SEA focus closely on growth in Maritime and Transport.

## MCL

**Exhibit 12: MCL overview**

Operating division (MCL FY17 sales £14.8m)	Products	Locations	Major customers
<b>Electronic Warfare</b> (26% of MCL FY17 sales)	<ul style="list-style-type: none"> <li>Equipment for Astute submarines and the British Army, especially special forces.</li> </ul>	Horley	<ul style="list-style-type: none"> <li>UK MOD</li> <li>Export customers</li> </ul>
<b>Communications</b> (64%)	<ul style="list-style-type: none"> <li>Communications systems for ISTAR (intelligence, surveillance, targeting and reconnaissance).</li> <li>Advanced ear protection systems.</li> </ul>	Horley	<ul style="list-style-type: none"> <li>UK MOD</li> <li>Export customers</li> </ul>
<b>Surveillance and UAVs</b> (10%)	<ul style="list-style-type: none"> <li>Covert surveillance equipment and systems.</li> <li>Sourcing and support of nano and micro UAVs for enhanced situational awareness.</li> </ul>	Horley	<ul style="list-style-type: none"> <li>UK armed forces</li> <li>Other government</li> </ul>

Source: Cohort

MCL was established in 1980 and Cohort acquired a controlling 50% plus one share stake for £8.8m in July 2014. On the 31 January 2017, Cohort acquired the remaining non-controlling interest in the business, for consideration and earn out in line with the original purchase agreement.

Based in Surrey, MCL employs c 27 people and has been supplying specialised and innovative communications and surveillance technologies to meet Command, Control, Communications, Computer Information Systems (C4IS) and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions for the UK armed forces since its foundation. It identifies requirements, designs solutions and/or seeks out available technologies to meet them, and supports advanced electronic and surveillance technologies in operation.

MCL supplies the special forces and intelligence agencies, but technologies are increasingly being adopted by the regular army. The customisation of commercial off the shelf technologies (COTS) differentiates MCL's business model from other Cohort group businesses. MCL competes against a range of niche systems suppliers, which are often small private ventures.

MCL is the UK's leading supplier of hearing protection for the armed forces and has tens of thousands of systems in operation today.

## EID

**Exhibit 13: EID overview**

Operating division (EID 2017 sales £16.0m)	Products	Locations	Major customers
<b>Maritime</b> (c 40% of EID FY17 sales)	<ul style="list-style-type: none"> <li>Fully Integrated Communications Control Systems (ICCS) for naval vessels with interface to the command and combat systems</li> <li>Fully Integrated Information and Communications Systems using ICCS as the core for all internal and external communications.</li> </ul>	Lisbon	<ul style="list-style-type: none"> <li>Portuguese Navy</li> <li>Royal Navy</li> <li>Other NATO and export naval customers</li> </ul>
<b>Tactical Communications</b> (c 60%)	<ul style="list-style-type: none"> <li>Tactical radio equipment, vehicle intercom systems and networking equipment.</li> <li>Communications systems including secure military and turn-key integrated command, control, communication and surveillance systems.</li> </ul>	Lisbon	<ul style="list-style-type: none"> <li>Portuguese armed forces</li> <li>Export customers</li> </ul>

Source: Cohort

The acquisition of an initial 57% stake in EID was completed on 27 June 2016. A further 23% was acquired in November 2017 for an additional consideration of €3.97m from existing cash resources and debt facilities. The Portuguese government is expected to retain a minority stake of 20% hereafter. Andy Thomis and Simon Walther have seats on the board.

Based near Lisbon with a regional office in Indonesia, EID employs around 140 people. It has an experienced management team and a modern manufacturing facility at its main location. EID has been spending around 10% of sales on self-funded R&D to upgrade its technology, notably to IP-based communications systems. Over the last few years EID has been placing increasing emphasis on higher-margin export markets as budget constraints in Portugal have hit home. EID's offerings have proved to be highly attractive in export markets compared to some of the more major suppliers like Harris, Rohde and Schwarz and Thales, combining a high level of functionality and technical sophistication with a low cost base and competitive pricing.

Domestic activity has been focused on longer-term support work providing a recurring stream of revenues, although contracts tend to be relatively short and renewed on a regular basis. However, in August, the business was awarded a contract by the Portuguese Navy for the supply of Integrated Communications systems to the Tejo Class Coastal Patrol Vessels, worth a total of €4.6m. The contract encompasses the supply of radio equipment, ICCS, integration engineering and logistic services. The contract also includes additional supplies for the second batch of the Viana do Castelo Oceanic Patrol Vessels, currently being built in Portugal.

In addition to adding Portugal as a home market, EID contributes the strong and growing export market relationships it has developed, both to other NATO Europe countries and further afield, for example Egypt and Indonesia. Over 120 warships now utilise EID's communications equipment, which can be provided for both new build and upgrade projects. This global presence is expected to stimulate new export opportunities for Cohort's existing businesses.

## Sensitivities

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- **UK defence budget, Brexit and SDSR:** The 2015 Strategic Defence and Security Review (SDSR) and subsequent developments have enhanced visibility for many of Cohort's key capabilities. For example, spending on submarine programmes shows sustained growth through the current 10-year MOD budget plan despite more modest overall procurement growth. Sole source contract margin regulations are also relevant, although this developing topic is not seen as unduly penalising companies such as Cohort where most contracts are won in competition. As defence policy has always remained sovereign under the EU, Brexit is not expected to dramatically alter Cohort's position. It has little existing direct UK to Europe activity and EID adds direct access. Most of Cohort's non-EID European business relates to NATO activity.
- **Export contract visibility and timing:** Export contracts tend to offer higher-margin sales and thus can be material in terms of expectations. However, timing of contract award is difficult to predict, so we take a cautious view when forecasting long-term export wins.
- **Rebids, follow-ons and renewals:** While there is always a risk with rebids, we note that MASS (formerly SCS) had held contracts to support the Joint Forces Command and its predecessors continuously since 1996, successfully rebidding in competition multiple times. Follow-on development contracts and renewals also carry levels of uncertainty, although Cohort's project involvements tend to be stable, long-term and operationally committed.
- **Acquisition performance:** Management's ability to successfully integrate and deliver acquisition business cases including potential synergies could affect results. Cohort maintains a rigorous acquisition, management and review process to ensure successful execution.
- **FX movements:** Until the acquisition of EID the impact of FX exposure was quite limited. EID introduces an element of translational exposure to the €/£ rate, as well as some additional \$/€ transactional exposure in export markets.

## Valuation

We continue to derive a fair value for Cohort from the simple average of a capped DCF and a peer-based group SOP. The current value is 483p (from 471p), equivalent to a P/E ratio of 15.5x our FY19e EPS, which represents a c 50% premium to the current share price and equates to a c 10% P/E premium to the UK defence sector. We feel that this is warranted by the continuing growth in EPS and dividend, as well as the maintenance of strong group margins and operational cash flows. Thus the recent share price fall seems unjustified as Cohort trades on a FY19e P/E multiple of just 10.2x against the UK defence sector on an estimated 13.7x, a substantial discount.

### Capped DCF valuation

We have utilised a capped DCF methodology to value Cohort. The valuation utilises our forecast cash flows for a period of six years, then assumes zero growth in the terminal value. To reflect the lack of growth, we also normalise capex to depreciation and working capital movements to zero in the terminal cash flow. For Cohort we use a calculated WACC of 7.8% in our base assumption. Our working capital assumptions and lower provision consumption has improved our forecast cash flows. The DCF currently returns a value of 506p per share.

<b>Exhibit 14: Capped DCF sensitivity (p/share) analysis for WACC and terminal growth rate</b>									
WACC	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%
<b>Terminal growth rate</b>									
0%	668	614	569	530	<b>495</b>	465	438	414	392
1%	673	619	573	533	499	468	441	416	395
2%	678	624	577	537	502	471	444	419	397
3%	683	628	581	541	505	474	447	422	400

Source: Edison Investment Research estimates

For a company such as Cohort where we envisage a continued growth of cash flows due to the strategy of enhancing long-term organic growth in defence markets with selective, value-creating and complimentary acquisitions, we feel that such a methodology is inherently conservative for a DCF. We show a sensitivity analysis to terminal growth rate and WACC assumptions in Exhibit 14 above, with the value closest to our calculated levels highlighted.

### Peer group sum of the parts (SOP)

We also continue to analyse Cohort on a sum-of-the-parts basis, identifying the nearest peers for each division and calculated on a calendar 2018 basis. We feel that this is appropriate due to the nature of the group with standalone divisions. Given the variable fortunes of peers in the sector we have chosen to reassess our valuation premiums for the divisions against those used. The rationale for the upgrade in premiums is that Cohort is exhibiting greater resilience in profits, margins and cash flows than many of its peers, where ratings have adjusted to reflect generally company-specific issues. Currently the SOP value is 460p per share, below the previously calculated value of 479p despite the de-rating of the wider UK defence sector over recent months.

**Exhibit 15: Cohort peer group SOP calculation (CY18 basis)**

	EBITA, £m (CY18)	Tax rate (%)	NOPAT, £m (CY18)	Applied P/E (x)	Value (£m)	Notes
MASS	7.3	17.5%	6.0	14.7	88	Average of 20% premium to QinetiQ (12.9x) and BAE (12.5x), 25% to Ultra (9.9x) and 25% discount to Cobham (21.3x)
SEA	5.3	17.5%	4.4	13.3	58	Premium of 10% to QinetiQ (12.9x) and 25% to Ultra (9.9x)
MCL	2.3	17.5%	1.9	14.0	25	25% premium to Ultra (9.9x) and BAE (12.5x)
EID	3.8	17.5%	3.1	13.3	42	Premium of 10% to QinetiQ (12.9x) and 25% to Ultra (9.9x)
Less Minority interest in EID					-8	20% of EID
Less Head office costs					-29	Calendarised central costs (12.3x P/E)
<b>EV</b>					<b>178</b>	
Net cash					8	FY18e net cash
<b>Equity value</b>					<b>186</b>	
Shares in issue (m)					40.4	
<b>Implied fair value per share (p)</b>					<b>460</b>	

Source: Bloomberg, Edison Investment Research estimates

## Financials

**Exhibit 16: Cohort revisions to estimates**

Year to April (£m)	2018e		%	2019e		%
	Prior	New		Prior	New	
MASS	37.1	39.0	5.3	38.2	41.4	8.3
SEA	49.4	43.0	-13.0	50.4	46.4	-7.9
MCL	18.5	17.4	-5.6	19.7	19.7	-0.1
EID	18.9	19.5	3.4	19.9	20.7	4.4
<b>Total group revenue</b>	<b>123.8</b>	<b>119.0</b>	<b>-3.9</b>	<b>128.2</b>	<b>128.2</b>	<b>0.0</b>
<b>EBITDA</b>	<b>16.7</b>	<b>16.6</b>	<b>-0.3</b>	<b>17.4</b>	<b>17.4</b>	<b>0.2</b>
MASS	6.7	7.0	5.3	6.9	7.4	7.7
SEA	5.9	5.2	-13.0	6.0	5.4	-10.2
MCL	2.3	2.1	-9.4	2.5	2.4	-4.1
EID	3.2	3.9	21.6	3.4	3.7	10.5
HQ Other and intersegment	-2.7	-2.8	1.8	-2.7	-2.9	5.1
<b>Adjusted OPBIT (pre PPA amortisation)</b>	<b>15.4</b>	<b>15.4</b>	<b>0.0</b>	<b>16.0</b>	<b>16.0</b>	<b>0.2</b>
<b>Underlying PTP</b>	<b>15.4</b>	<b>15.4</b>	<b>0.0</b>	<b>16.1</b>	<b>16.1</b>	<b>0.0</b>
<b>EPS - underlying continuing (p)</b>	<b>29.1</b>	<b>29.1</b>	<b>0.0</b>	<b>31.3</b>	<b>31.2</b>	<b>-0.4</b>
DPS (p)	8.2	8.2	0.0	9.0	9.0	0.0
Net cash/(debt)	11.5	9.7	-15.9	17.0	17.2	1.2

Source: Edison Investment Research estimates

Our group-level estimates for Cohort remain broadly unchanged at the profit before tax and EPS level, although the higher contribution from EID does mean a higher minority charge in FY19, which reduces EPS marginally. Our FY18 revenue reduction is largely due to lower than expected sales at SEA and MCL offset by better than expected performances from MASS and EID. FY19 sales are unchanged, although divisional contributions have altered in both years.

A tax charge of around 17.5% is expected in FY18e and FY19e, with long-term changes to the R&D tax treatment likely to provide further favourable reductions to the rate in future years. The reduction of both the MCL and EID minority levels are enhancing to EPS, although the 80% ownership level in EID appears fixed for the longer term.

## Strong balance sheet and cash flows

We expect the group to continue to generate strong free cash flows. Half-year net cash of £5.7m is expected to increase to just under £10m at the year end, despite the £3.5m outflow to fund the EID interest increase.

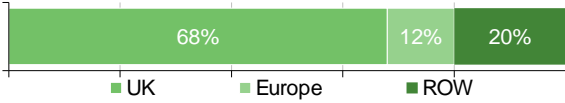


The payments for 80% of EID and the c 50% MCL minority are now complete and we expect a significant cash inflow in FY19 in the absence of any acquisition activity. Cohort also retains borrowing facilities totalling £25m that should support further M&A as new opportunities arise.

**Exhibit 17: Financial summary**

	£m	2016	2017	2018e	2019e
Year end 30 April		IFRS	IFRS	IFRS	IFRS
<b>PROFIT &amp; LOSS</b>					
Revenue		112.6	112.7	119.0	128.2
Cost of Sales		(79.1)	(73.7)	(83.5)	(90.1)
Gross Profit		33.5	39.0	35.4	38.2
EBITDA		13.0	15.7	16.6	17.4
Operating Profit (before amort. and except.)		11.9	14.5	15.4	16.0
Intangible Amortisation		(6.4)	(11.3)	(5.2)	(3.9)
Exceptionals		(0.3)	(2.3)	0.0	0.0
Other		0.0	0.0	0.0	0.0
Operating Profit		5.2	1.0	10.2	12.1
Net Interest		0.1	0.0	0.0	0.0
Profit Before Tax (norm)		12.0	14.5	15.4	16.1
Profit Before Tax (FRS 3)		5.3	1.0	10.2	12.1
Tax		0.1	1.1	(1.9)	(2.2)
Profit After Tax (norm)		11.2	11.4	12.7	13.3
Profit After Tax (FRS 3)		5.4	2.1	8.3	10.0
Average Number of Shares Outstanding (m)		40.6	40.4	40.4	40.4
EPS - fully diluted (p)		26.7	27.6	28.7	30.8
EPS - normalised* (p)		27.2	27.9	29.1	31.2
EPS - (IFRS) (p)		12.7	9.1	18.3	23.0
Dividend per share (p)		6.0	7.1	8.2	9.0
Gross Margin (%)		29.8	34.6	29.8	29.8
EBITDA Margin (%)		11.5	13.9	14.0	13.6
Operating Margin (before GW and except.) (%)		10.6	12.9	12.9	12.5
<b>BALANCE SHEET</b>					
Fixed Assets		59.7	60.6	55.1	50.9
Intangible Assets		49.5	50.6	45.4	41.5
Tangible Assets		10.2	9.9	9.7	9.4
Investments		0.0	0.0	0.0	0.0
Current Assets		54.0	56.3	62.1	74.9
Stocks		2.0	5.3	6.5	7.3
Debtors		27.3	37.8	39.3	42.3
Cash		23.1	12.0	15.0	24.0
Other		1.6	1.2	1.3	1.3
Current Liabilities		(40.1)	(39.7)	(35.7)	(36.5)
Creditors		(36.8)	(36.1)	(35.7)	(36.5)
Short term borrowings		(3.3)	(3.5)	0.0	0.0
Long Term Liabilities		(2.7)	(3.2)	(8.5)	(10.0)
Long term borrowings		(0.0)	(0.0)	(5.3)	(6.8)
Other long term liabilities		(2.7)	(3.2)	(3.2)	(3.2)
Net Assets		70.8	74.0	72.9	79.3
<b>CASH FLOW</b>					
Operating Cash Flow		8.5	3.8	14.0	14.8
Net Interest		0.1	0.0	0.0	0.0
Tax		(1.8)	(3.1)	(2.7)	(2.8)
Capex		(1.0)	(0.9)	(1.0)	(1.1)
Acquisitions/disposals		(0.7)	(9.1)	0.0	0.0
Financing		(3.2)	0.5	(6.1)	0.0
Dividends		(2.2)	(2.5)	(3.0)	(3.4)
Net Cash Flow		(0.3)	(11.4)	1.2	7.5
Opening net debt/(cash)		(19.7)	(19.8)	(8.5)	(9.7)
HP finance leases initiated		0.0	0.0	0.0	0.0
Other		0.5	0.0	0.0	0.0
Closing net debt/(cash)		(19.8)	(8.5)	(9.7)	(17.2)

Source: Cohort accounts, Edison Investment Research. Note: \*Includes non-recurring tax credits in FY16 and FY17.

Contact details	Revenue by geography
Arlington House 2 Riverside Drive Theale, Reading, RG7 4SW UK 0118 909 0390 www.cohortplc.com	
Management team	Finance Director and Company Secretary: Simon Walther
<b>CEO: Andrew Thomis</b> <p>Andrew took over as CEO of Cohort in May 2009. He graduated with an M.Eng in electrical and electronic engineering from Imperial College, London, in 1987. He spent nine years in science, technology and policy roles in the UK MOD. He left in 1996 and, after a period working with public and private sector clients at Capita's management consultancy arm, joined Alvis in a strategy, M&amp;A and business development role. Following the acquisition of Alvis by BAE Systems in 2004, he worked with Nick Prest and Stanley Carter on the creation of Cohort, acting as finance director during the flotation and subsequently corporate development director. From 2007 to 2009 he was managing director of MASS.</p>	<p>Simon Walther joined Cohort as finance director in May 2006. After graduating with a BSc in toxicology and pharmacology from University College, London, he went on to qualify as a chartered accountant with Touche Ross in 1992. Simon moved to the Peninsular and Oriental Steam Navigation Company (P&amp;O) in 1993 where he was appointed a chief accountant for P&amp;O European Ferries in 1995. He has over 15 years' relevant industry experience, with previous senior finance roles at Alvis and BAE Systems.</p>
Chairman: Nick Prest	
<p>Nick Prest became chairman of Cohort on flotation in March 2006. After graduating from Oxford in 1974, Nick joined the UK MOD. He then moved to Alvis in 1982, undertaking a variety of roles before becoming CEO in 1989 and chairman and CEO in 1996. Nick left Alvis following its acquisition by BAE Systems in 2004. He was also chairman of Aveva Group from 2006 until 2012 and is currently chairman of Shephard Group, a privately owned media company specialising in defence and aerospace.</p>	
Principal shareholders	(%)
Stanley Carter	22.8%
Schroder IM	14.8%
Liontrust AM	9.0%
Marlborough FM	7.3%
Blackrock	6.4%
Nick Prest	5.1%
Hargreaves Lansdown AM	3.5%
Companies named in this report	
BAE Systems (BA.), Cobham (COB), QinetiQ (QQ.), Ultra Electronics (ULE)	

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