



Cohort plc

An Introduction

October 2016



Overview

Andrew Thomis, Chief Executive

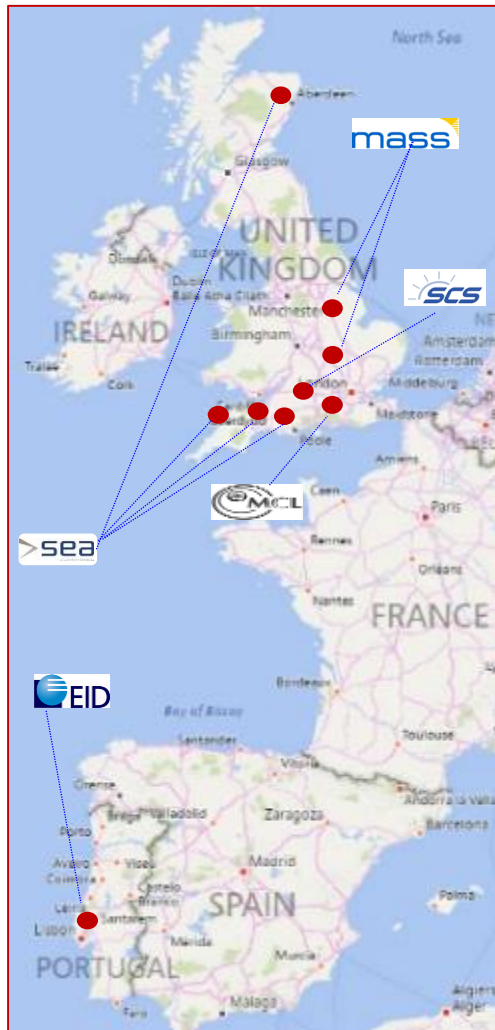
Cohort plc

The independent technology group

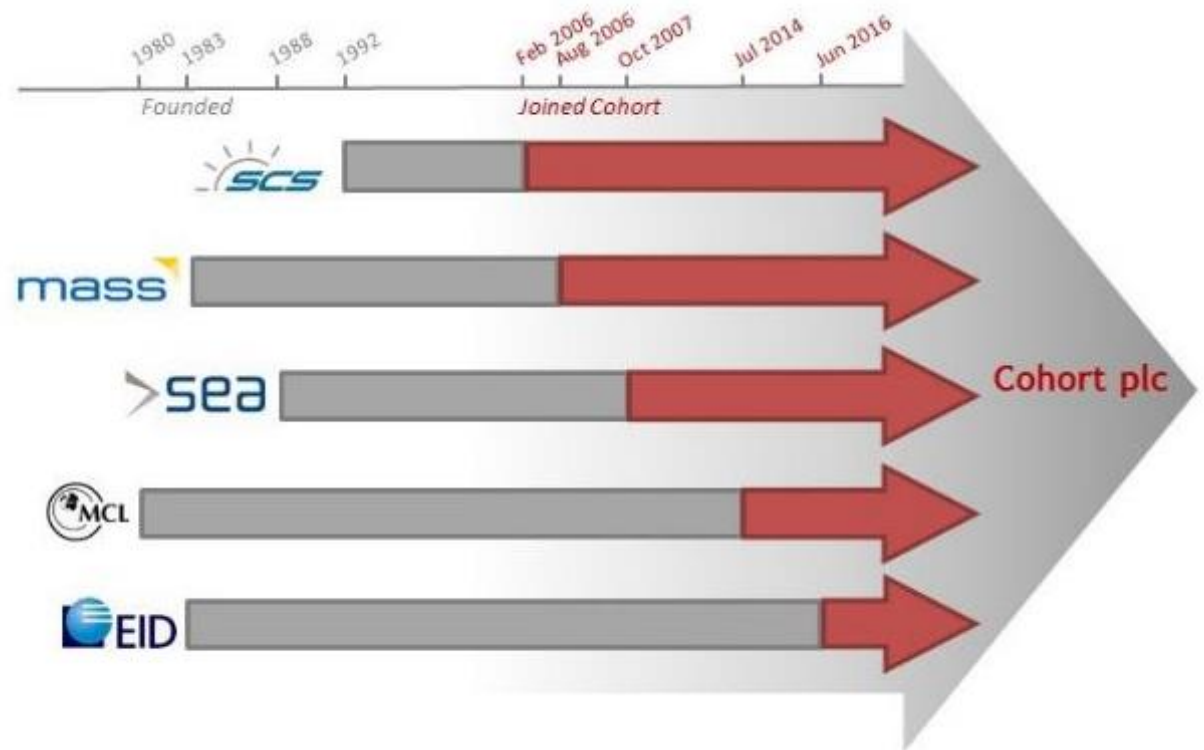
Cohort plc

- Group of small to medium sized businesses
- Defence, security and related markets
- Agile and innovative
- Stability, customer visibility and access to capital from listing
- Sharing information and access to customers across group
- Growing organically and by acquisition

Shape and Size



- Five member companies
- Around 800 people
- Annual revenue 2015/16 £113m
- Market capitalisation ~£150m





The Cohort Group companies

Cohort plc

The independent technology group

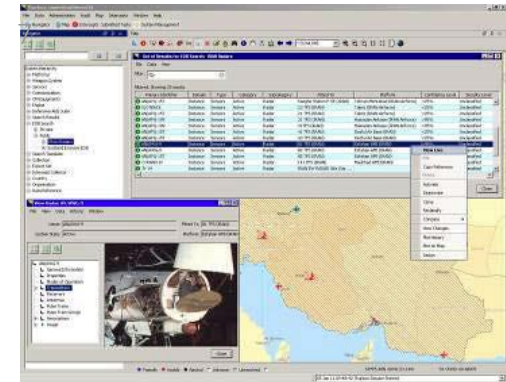


- Around 300 people
- Offices in Beckington, Bristol, Barnstaple and Aberdeen
- Areas of expertise:
 - Maritime defence systems: communications, sensors and weapons
 - Technology research and expert advice
 - Training and simulation
 - Transport systems – including Roadflow
 - Subsea engineering





- Around 250 people
- St Neots and Lincoln
- Areas of expertise:
 - EW Operational Support
 - Cyber defence
 - Secure networks
 - Strategic Systems





- Around 55 employees, ~200 associates
- Theale, near Reading
- Areas of expertise
 - Major exercise support
 - Military aircraft safety





- 27 people
- Horley, Surrey
- Areas of expertise:
 - Tactical hearing protection
 - Electronic warfare and intelligence systems
 - Communications
 - Force protection





- Around 140 people
- Near Lisbon, Portugal
- Areas of expertise
 - Naval communications
 - Military C3
 - Vehicle intercoms





Market Outlook

Cohort plc

The independent technology group

UK Market Prospects: A Mixed Picture

- Strongly positive 2015 Strategic Defence Review
 - Extra £12bn on equipment over 10 years
 - New class of frigates
 - Big investment in Special Forces and Cyber
- Cohort's major programmes are stable, long term and operationally important
 - Nuclear deterrent
 - Combat aircraft EWOS
 - Astute class submarines
 - Surface ship and submarine support
 - Joint Forces Command exercise programme
- MOD remains a difficult business environment
 - No new equipment money before 2018/19
 - Tight expenditure controls continuing
 - Commercially challenging: single source regime, IPR terms



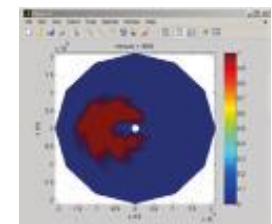
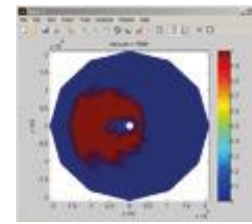
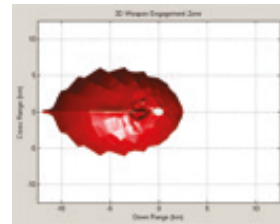
Export Markets: Continuing Strong Regional Demand

- Expecting export growth
 - Middle East
 - Southeast Asia
 - Eastern and Northern Europe
- Markets based on UK equipment sales and political ties
- Some good prime relationships
- EID brings new prime relationships and markets
- Challenges as well as opportunities



Investing for Organic Growth

- Well-established private venture and customer-funded R&D activities at MASS and SEA – complements acquisition strategy
- Self-funded R&D planned to increase from £1.4m in 2015/16 to £2.0m in 2016/17
- Priorities at MASS
 - EW software tools
 - Cyber tools and techniques
 - New high security cyber facility
- Priorities at SEA
 - Export naval system offerings
 - Roadflow derivatives
 - Decksim – customer funded developments for MOD and Australia



Acquisition Strategy – Promising Pipeline

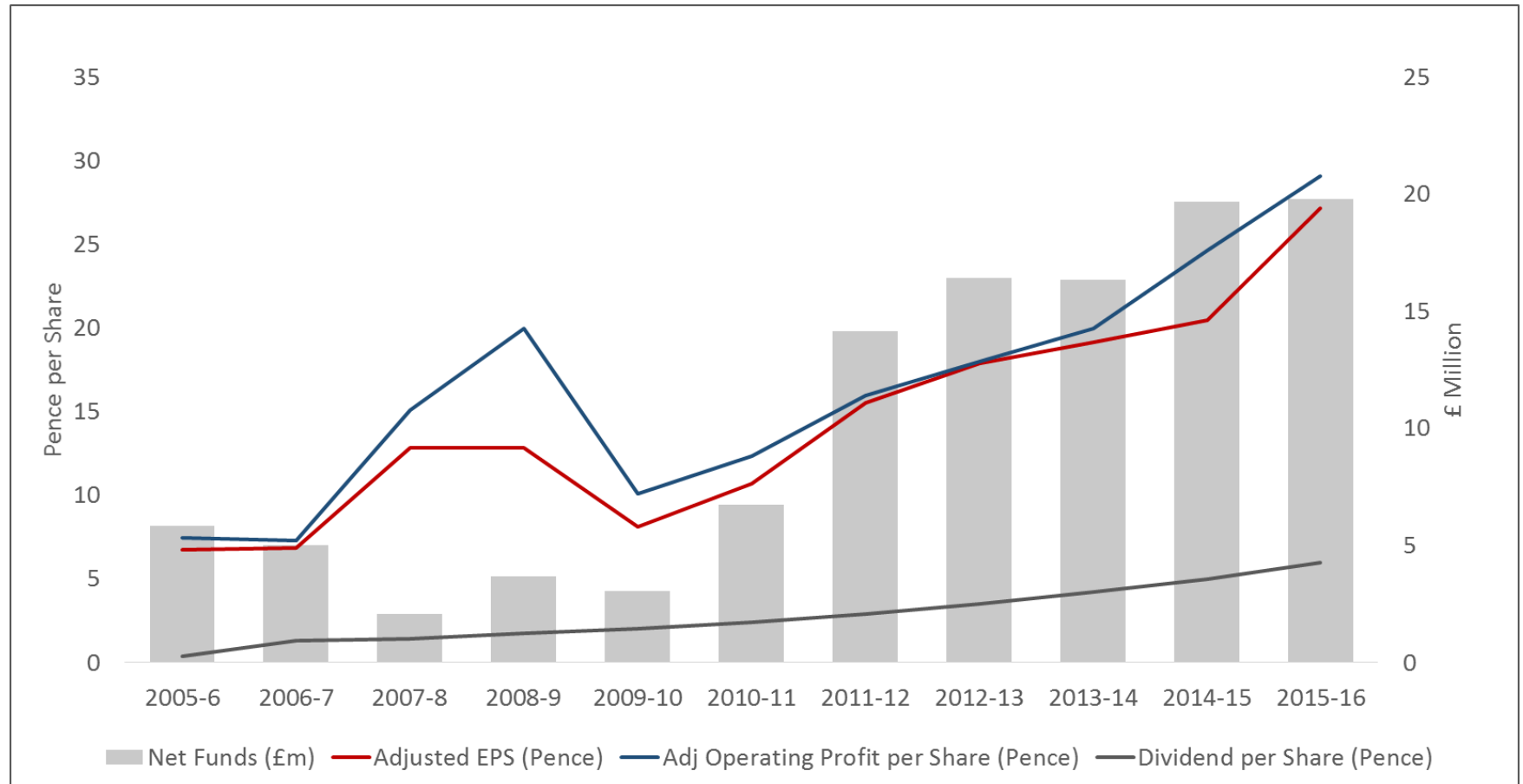
- Integration of EID needs time and attention
- Continue to see opportunities to for targeted acquisitions
- Stand-alone acquisitions
 - Likely to be operating in defence and security markets
 - Ready to join a larger public group
 - Growth potential and sustainable competitive advantage
- Bolt-in acquisitions
 - To be integrated with an existing group business
 - Closely-linked capabilities and/or customer relationships
- Disciplined and cautious approach – experienced team

Historic Acquisitions and Disposals

Date	Business	M&A Type	Consideration	1 st FY Adj Op Profit	1 st FY Multiple	Last FY Adj Op Profit	Last FY Multiple
1 Aug 06	MASS	Standalone Acquisition	£13.0m	£2.27m	5.7x	£5.96m	2.2x
31 Oct 07	SEA	Standalone Acquisition	£25.4m	£2.25m	11.3x	£5.44m	6.8x
1 Oct 14	J&S	SEA Bolt-in Acquisition	£11.7m	£1.06m*	11.0x		
9 Jul 14	MCL	Standalone Acquisition	£7.0m	£1.40m	10.0x	£1.40m	10.0x
28 Jun 16	EID	Standalone Acquisition	€10.8m	€2.9m*	6.5x		

* - figures reported in last full year statutory accounts before acquisition by Cohort

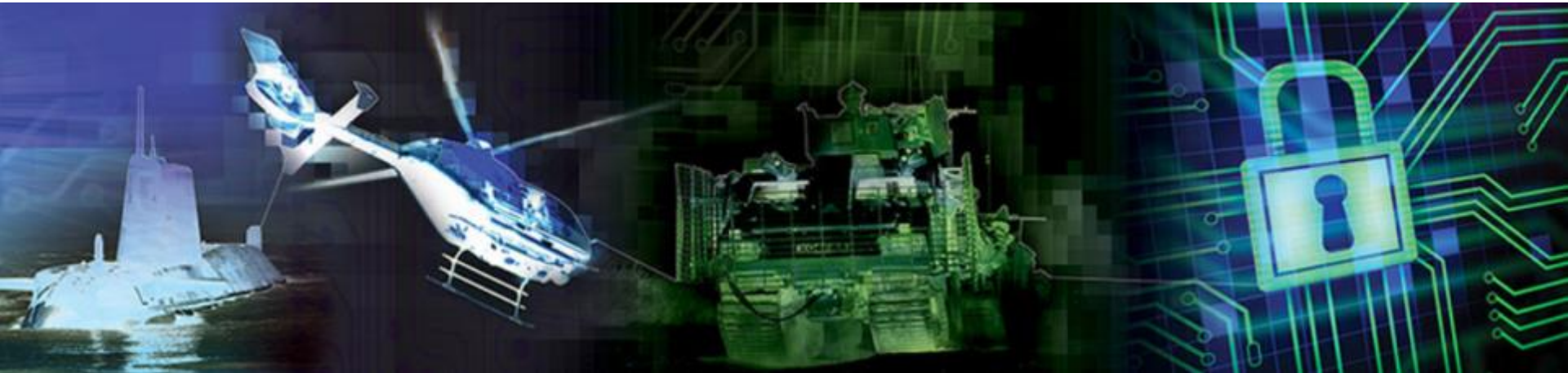
10 year Historic Performance



In Conclusion

- Strong market positions driven by technology and people
- Responsive, agile, customer-friendly
- Growth prospects both organically and by acquisition
- Increasingly strong exports
- Financially sound

SEA Maritime Defence



HMS Belfast
4th October 2016

Unclassified

Introduction

1. Introduction

- Strategy
- Markets and Capabilities

2. Products and Services

- Submarine Communications
- Torpedo and Decoy Launch Systems
- Sonar Systems
- Through Life Support

Maritime Defence - Headlines

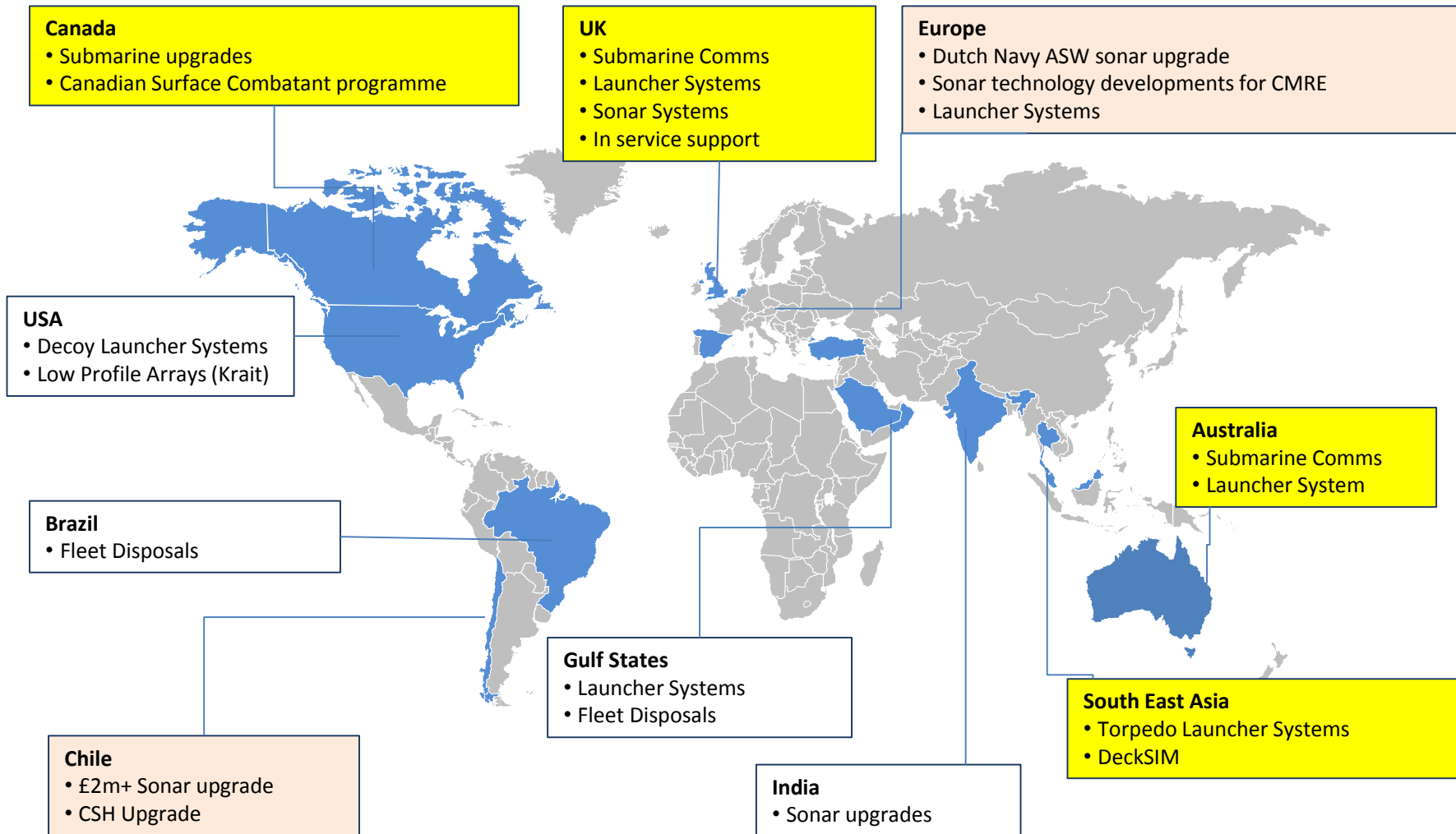
2016 - Revenue of £31m, >60% of SEA total

- **United Kingdom c.£25m**
 - Submarine Comms,
 - Sonar Systems
 - Torpedo & Decoy Launcher Systems
 - In-service Support
- **Exports c.£6m**
 - Mature products
 - RN point of reference
- **Product Development**
 - Low Profile Array, ASW Sonar

Domestic demand has enabled recent growth – now targeting export opportunities to sustain and expand this

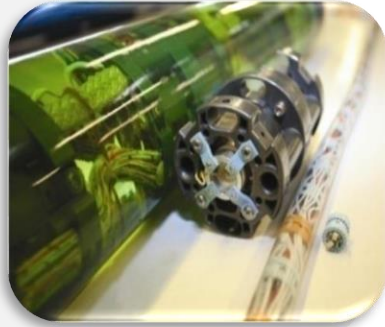


Markets



Product Lines

Sonar



Submarine Comms



Weapon and Decoy Launch Systems



In-service Support





Submarine Communications



Submarine Communications

External Communication System (ECS)

- Secure open architecture system
 - SEA Intellectual property in
 - Intelligent, flexible Network Interface Unit
 - Management & Control Software
 - Radio system agnostic
- Scalable & flexible
 - Easy implementation of new radios and upgrades
 - Reduced user & maintainer workload
- Selected for all UK Submarines
 - Astute Class x 7
 - Vanguard SSBN x 4
 - Trafalgar SSN x 2



Submarine Communications

Continuous 'spiral development' contract

- BAES, MOD, Babcock and SEA
- £15m revenue this year
- Destined for Successor SSBN

Current Order book c.£20m (UK)

Major Export Opportunities

Canada

- Victoria Class submarines
 - £10m

Australia

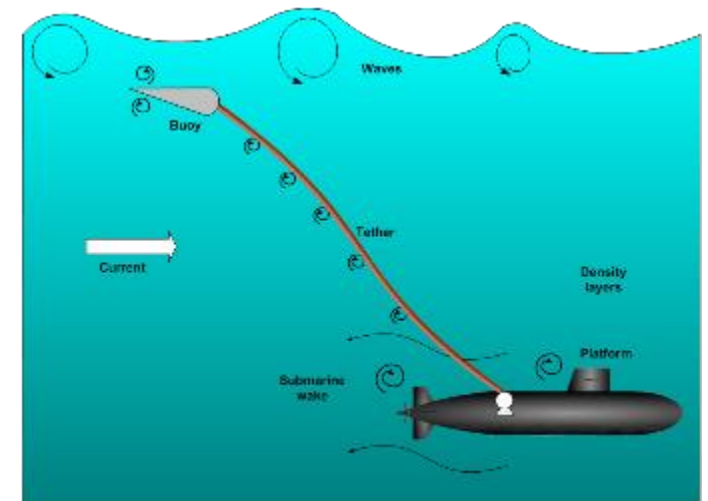
- Collins Class replacement
 - £20m

Submarine Communications Buoy

- For submerged communications
 - Inboard System development
 - Design and Manufacture for SSBN
 - £15m



Voice Terminal





Torpedo and Decoy Launch Systems



Torpedo and Decoy Launcher Systems

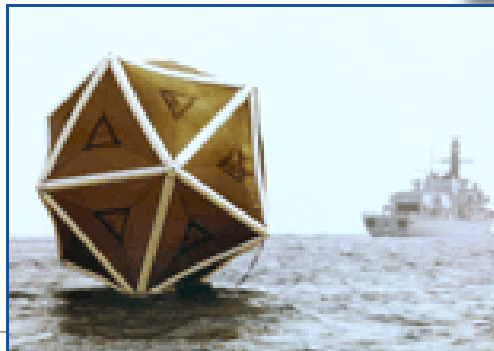
Torpedo Launchers

- Fixed, trainable, single, multi tube, internal or external
- Torpedo agnostic
- Weapon handling & storage
- In service with RN since 1980
- Successful export product based on updated RN system
- £1.5 - £2.5m dependent on configuration



Decoy and Sonobuoys Launchers

- Identical control system
- Tube size varies to suit payload



Torpedo and Decoy Launcher Systems

UK - Multi-year support contract to maintain Royal Navy Systems

Malaysia - Six new build frigates

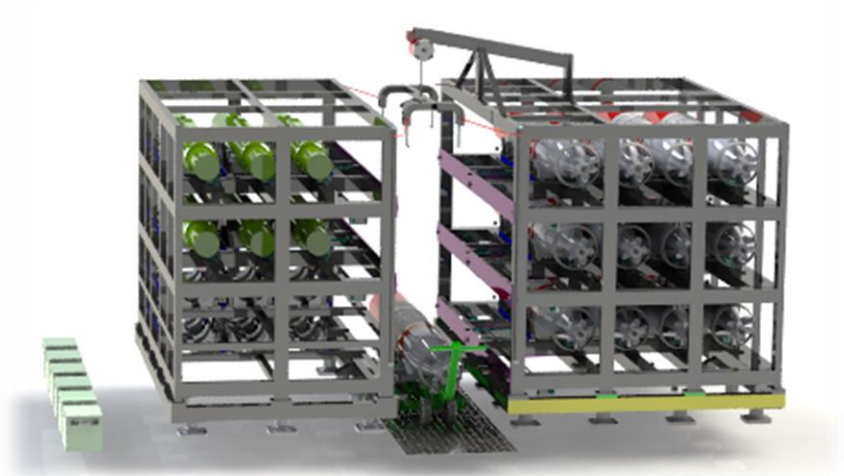
- Torpedo Launcher
- Weapon Handling & Stowage system
- £19m to 2021

Thailand - One new build frigate

- £2.4m

Opportunity Pipeline of more than £70m

- Royal Navy T23 & T26 from 2017
- 6 x new frigates for KSA – 2017
- 2 x new frigates for Philippines - 2017
- 15 x new frigates for Canada – from 2018
- 5 x new frigates for UAE – 2018
- 4 x new frigates for Turkey - 2018





KRAIT

Low Profile Array



Conventional Towed Arrays

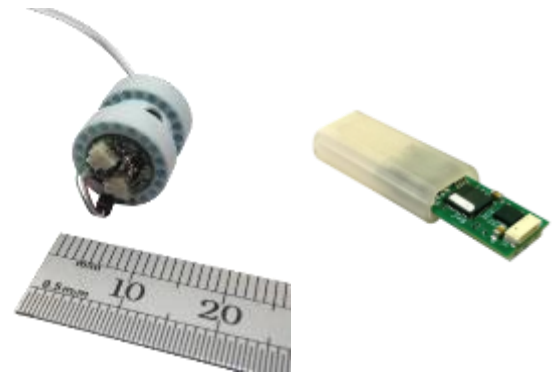
- Typical diameter 50-90mm
- Large and very heavy
- Complex and expensive
- High power consumption
- Large drag loading
- Big platforms, lots of power



Krait - Low Profile Acoustic Array

A lightweight, acoustic sensor system for Unmanned vehicles

- Delivers
 - Maritime Domain Awareness
 - Border and choke point traffic monitoring
 - Marine Mammal monitoring
- Utilises miniature acoustic sensors and microelectronics



Product Launched two years ago

- 50m system to 'test the market'
- Extensive trials with Boeing and Liquid Robotics Inc
- UK MOD, DRDC (Canada), WASS, BAES and NATO
- 10 systems sales to date
- Further product development to deliver
 - Better acoustic sensitivity
 - Improved reliability
 - Reduced production costs



Prospects

USA (Boeing & LRI)

- Swarms of AUV's patrolling the Pacific
- Delivering persistent ocean surveillance
- Six month deployments, return to base, replace Krait and re-deploy
- Requirement for >40 Krait Arrays per year



UK

- Royal Navy evaluation this autumn
- Sister system purchased by MOD for Submarine signature measurement
- Future towed array system for Successor



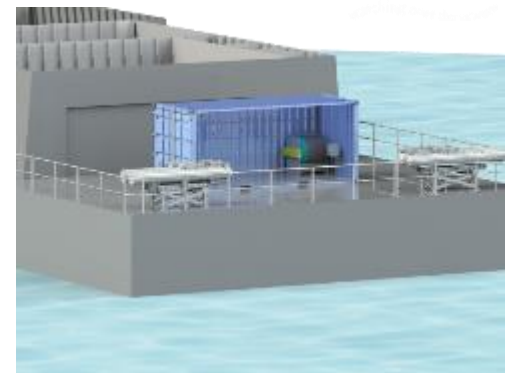
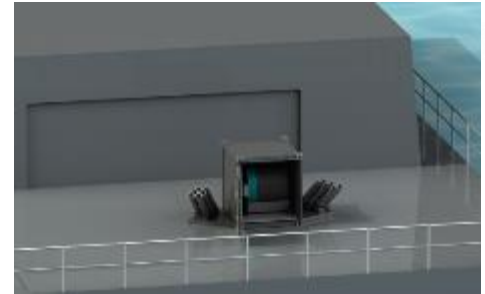
South East Asia

- Cost effective offshore surveillance
- Limited budgets, manpower, skills base and support infrastructure – Krait offers an affordable military capability

Product Development

Lightweight Anti-Submarine Warfare System

- Exploits LPA & Launchers Capability
- Three variants
 - Acoustic detection only
 - Self protection mode
 - Full offensive weapon system
- Inboard signal processing, track localization and target classification
- Integrated decoy and torpedo launch system
- Commercial lightweight winch
- Containerised or standalone
- Aimed at thriving OPV and small frigate market
- Targeting affordable price for SE Asia





In Service Support



Through Life System Support

Multi year, firm price in-service support contracts

- £7-8m pa

1. Sonar Systems

- Towed Arrays, Active ASW systems, Under water telephones, echosounders and Oceanographic sensors

2. Launcher Systems

- Torpedo and Decoy Launchers

3. Combat System Infrastructure

4. Submarine Weapon Launch System

5. DeckSIM Training Aid

- Hi-fidelity, 3D VR trainer for flight deck operations
- Configurable for any aircraft type or deck
- Sales to RN, Norway, Australia



Summary and conclusions

- An innovative business investing in new technology
- Focused on growing export markets
- Benefitting from the market access and visibility offered by the Cohort group
- Co-operation with EID brings new markets and opportunities

Thank You

Questions



SHAPING THE FUTURE

... in defence communications

since 1983

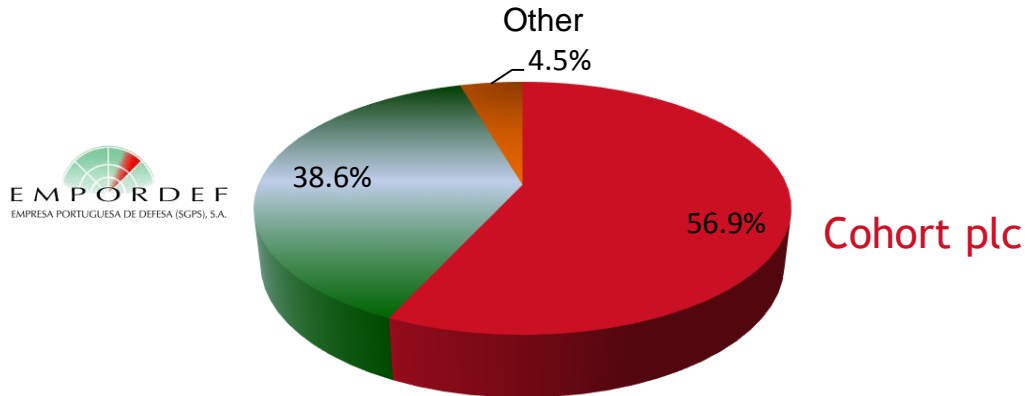


4 October 2016

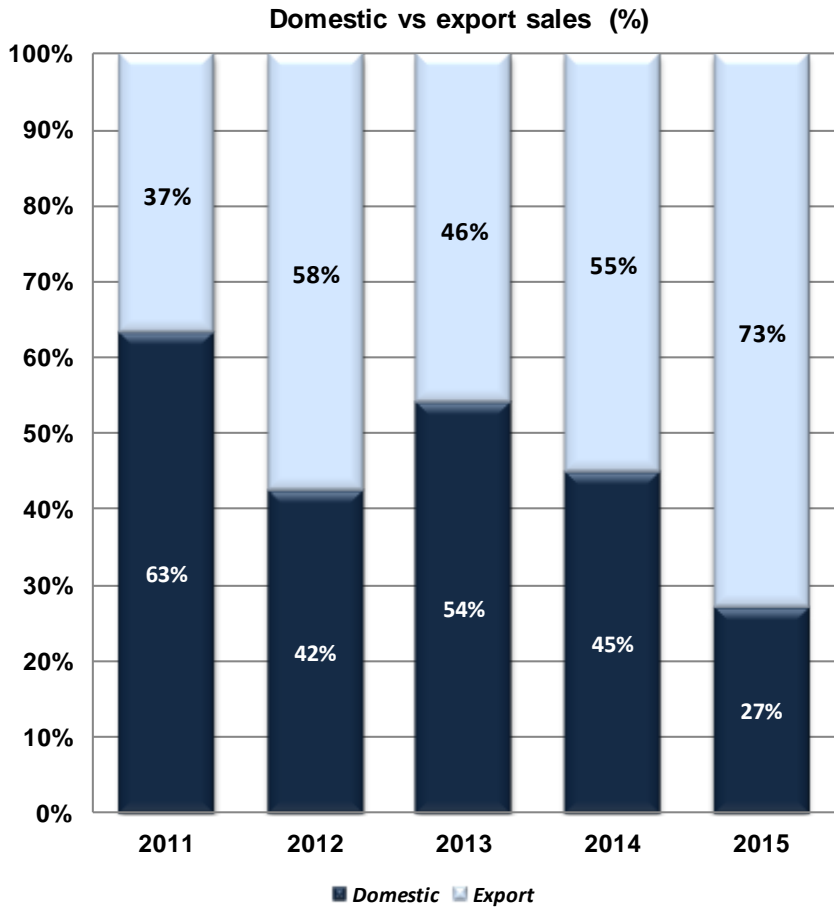
- Established in 1983, EID is a high-tech Portuguese business with deep know-how and long experience in the fields of
 - **Electronics and microelectronics**
 - **Communications**
 - **Command & control**
- The company is focused on the design, manufacture and supply of advanced, high performance equipment and systems, mainly for the worldwide defence community



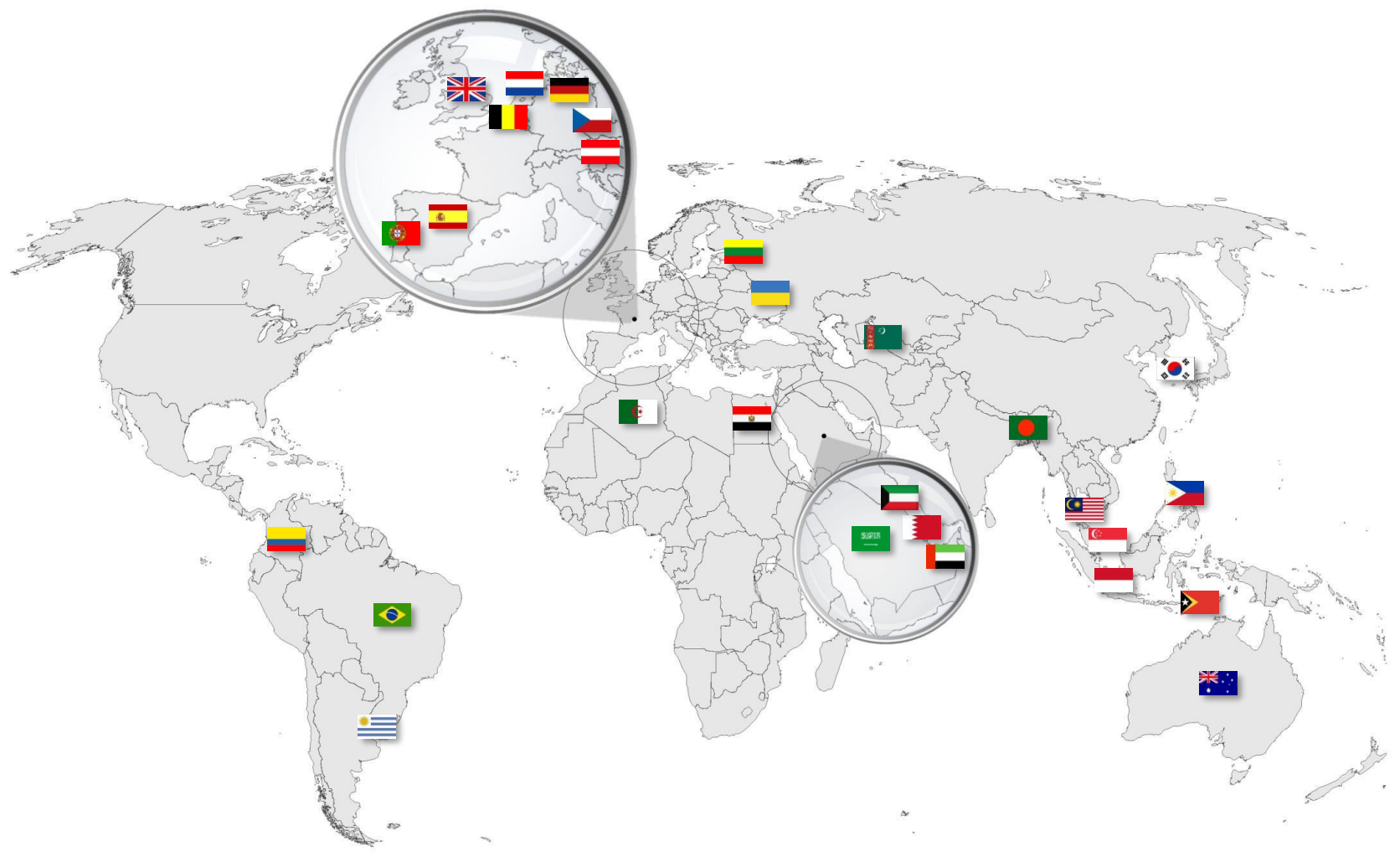
- Cohort owns a controlling stake, has agreement to move to 80%
- Remainder held by Portuguese government agencies



- Quality Management System and security clearances for European and NATO customers
- Workforce: 140 people, most of them electronics & software engineers



- **Strong customer demand**
- **Technically advanced products**
- **Highly competitive prices**



- Acquisition brings EID's markets, customers and technology to Cohort
- Strengthens EID's UK position and relationships

- **Naval communications**
- **Tactical communications**
- **Field communications**
- **Messaging**
- **Systems integration**

ICCS provides **powerful and sophisticated** tools to enable a single operator to manage the ship's communications resources.

- ✓ **Flexible distribution of voice and data** signals, either plain or secure.
- ✓ Powerful **internal communication** capabilities including point-to-point and conference circuits.
- ✓ **Remote control** of the integrated communications equipment, including **real-time status monitoring**
- ✓ **Embedded training facilities**
- ✓ Gateway to the Combat Management System



- ✓ ICCS was first deployed in 1985, on board a Portuguese Navy frigate
- ✓ The system has been continuously improved (in functionality and underpinning technology) and is now in its 6th generation (and counting...)
- ✓ Since the mid-1990's, all new ships of the Portuguese, Dutch and Spanish navies have been equipped with ICCS
- ✓ Over 140 systems sold to 11 navies

ICC-201



- Integration of communications in armoured vehicles, small vessels and shelters
- Up to 15 crew members, 6 radios and 4 computers

ICC-251



- A compact solution for main battle tanks, light armoured vehicles and fast patrol boats
- Up to 7 crew members, 3 radios and 2 computers

Main Customers: Portuguese, Egyptian, Algerian, Indonesian and Malaysian Armies; German, Singapore, UAE and East Timor Navies

- **2500** systems supplied, of which 2100 for the international market

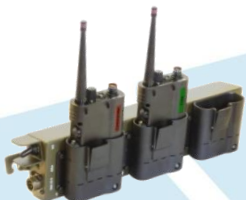


- Encrypted high quality voice and data with GPS
- Low probability of interception
- Up to 2km range
- Automatic retransmission mode (up to 4x range)
- Software upgradeable



Main Customers

- Egyptian and Turkmenistan armies, Portuguese, Spanish, Indonesian and Malaysian navies



CD-116/IP Switchboard

- Up to 64 Analogue telephones
- Internal call manager
- IP, ISDN and analogue networks;
- Built-in IP router & switch



BLC-201 Field Telephone

- CB, CBS or LB operation
- Up to 35Km
- Rugged and lightweight

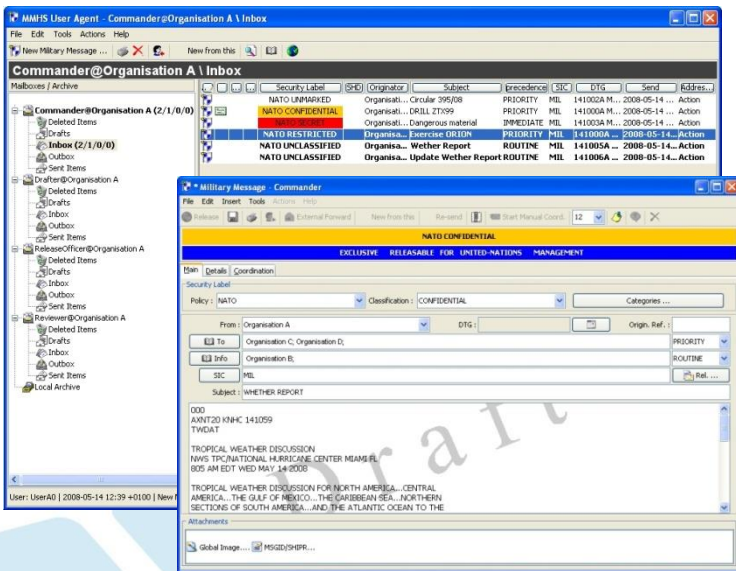


Main Customers

- Armies of Australia, Bahrain, Bangladesh, Brazil, Egypt, Malaysia, Saudi Arabia and UAE
- Over 500 switchboards and 10 000 telephones supplied

Integrated messaging solutions for strategic & tactical environments

- 30 years of experience in military messaging, from development to logistic support
- Sole supplier to the Portuguese Armed Forces



MOST4 MMHS

- Compliant with NATO standards
- Gateways to email and other systems
- “Microsoft Outlook like” user interface

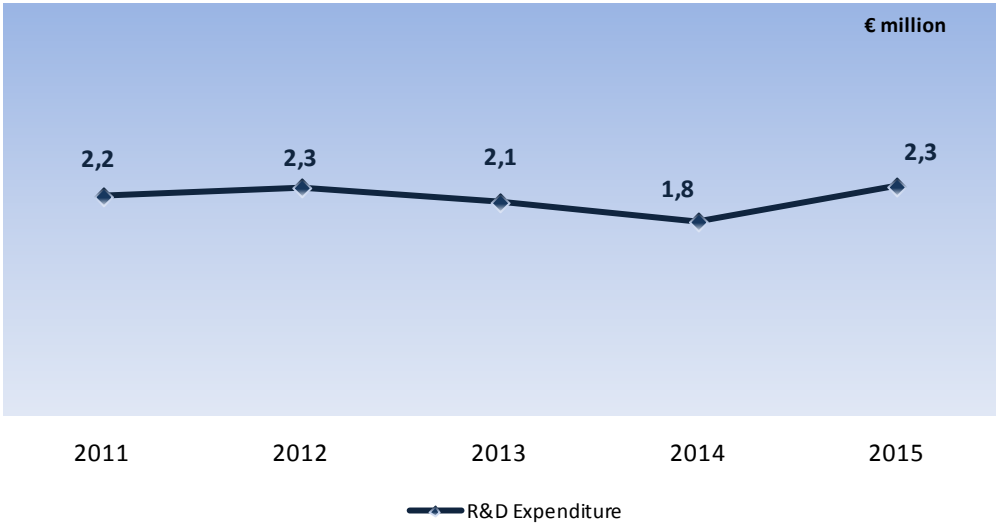
- Strategic communications systems for Portuguese armed forces
- Broadcast and Ship-Shore data communications systems
- Military Messaging systems (Strategic & Tactical)
- HF radio systems for Air Traffic Control
- Vessel Traffic Systems



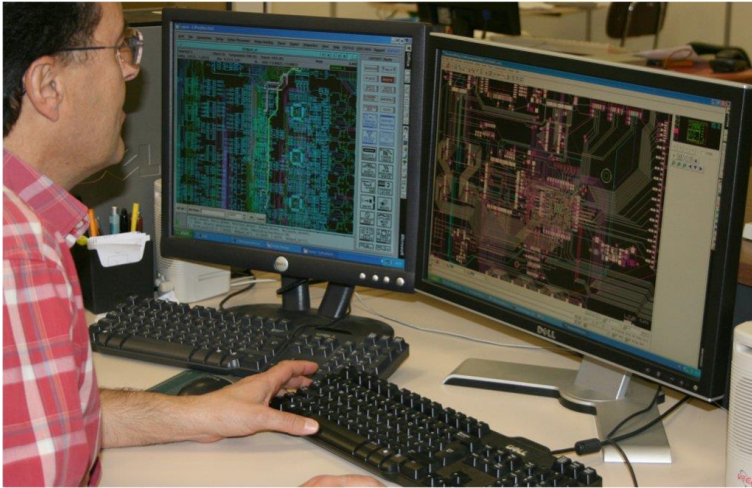
Our technology development road map includes:

- **A new generation naval communications system**
- **An enhanced, state-of-the-art intercom system, targeting the most sophisticated customers**
- **A fully fledged personal radio in the UHF range, with higher power output**
- **New messaging software, in line with emerging NATO standards**

Historic R&D spend

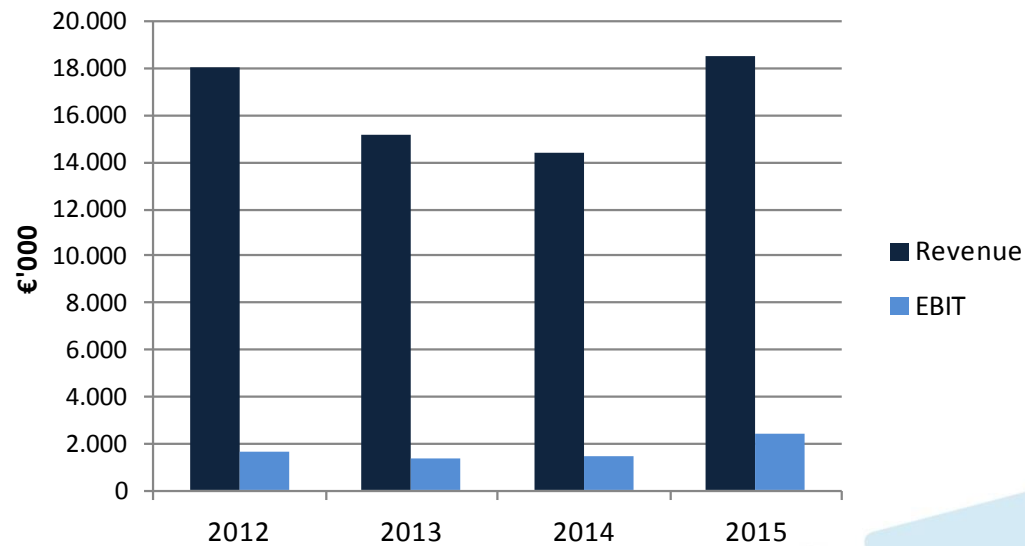


The average R&D investment is 13% of sales



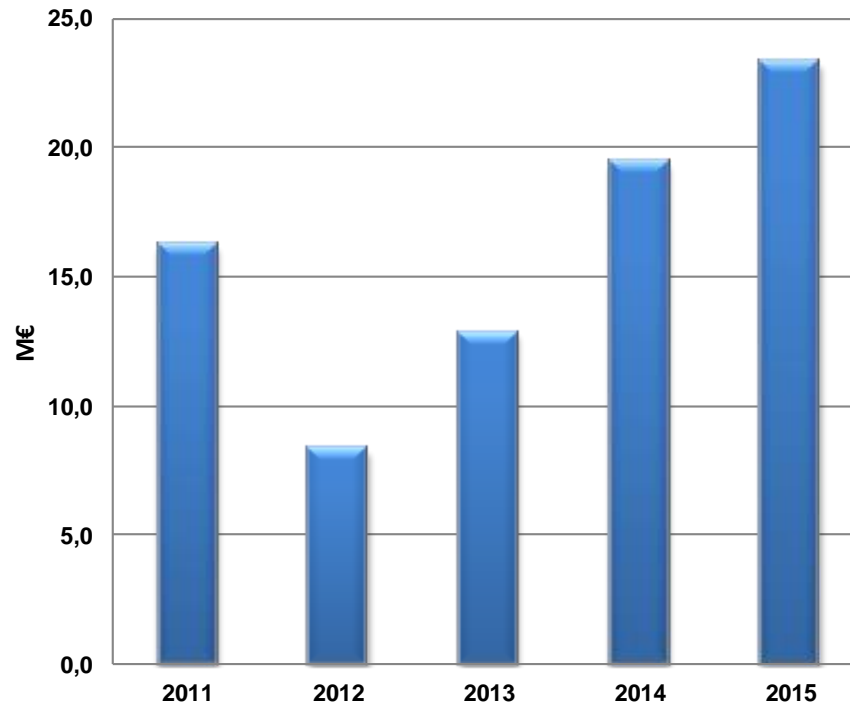
- **Modern CAD facilities**
- **High-spec electronics manufacturing**
- **Automated inspection and test**

Revenue & EBIT evolution



Average EBIT: 10% of the revenue

Order intake



- **An innovative and agile defence communications business**
- **Strong export performance demonstrates both technical edge and price competitiveness**
- **Order intake has grown rapidly and in-year order cover is strong**
- **Cohort Group membership brings greater strength in UK, new market opportunities and strong financial backing**