

Chemring Group

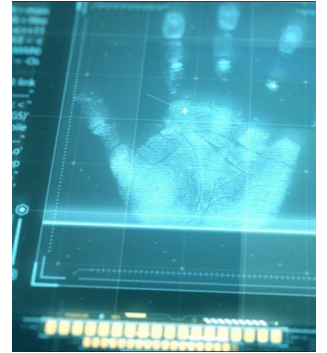
CEO Briefing
22 March 2019



Innovating to protect™

Ground To Cover

- Initial Assessment
- New Strategic Framework
- Actions Delivered
- Countermeasures & Energetics
- Sensors & Information
- Summary



Initial Assessment

Sound Foundations

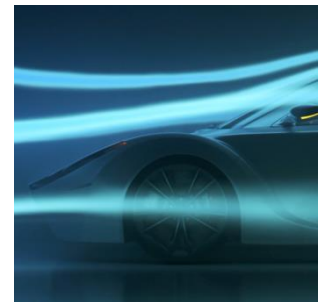
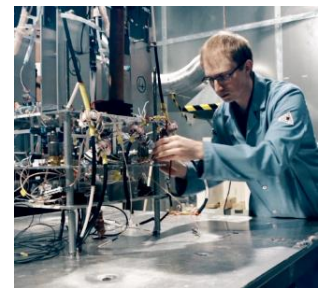
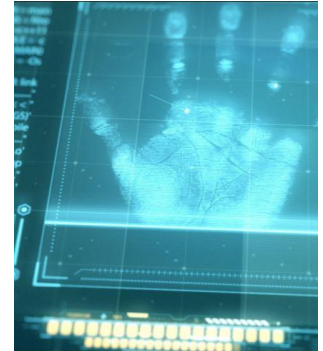
- Technology rich businesses in US, UK and Australia
- Niche supply positions for all businesses
- Excellent client base spanning defence, security and commercial

Opportunities for Improvement

- Overhaul organisational structure and business model
- Strengthen management teams
- Significant investment required in safety and modernisation
- Implement fit for purpose standards and processes

Platforms for Growth

- Exploit technologies and intellectual property in new markets
- Simplify the Group and align with target markets
- Improve the quality of the Group



New Strategic Framework

Build two high quality business sectors

- **Sensors & Information** and **Countermeasures & Energetics**

Focus on US, UK and Australian markets

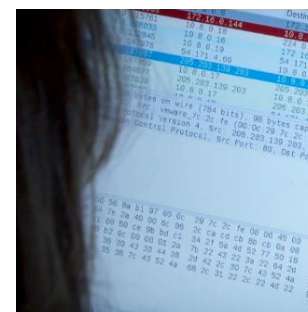
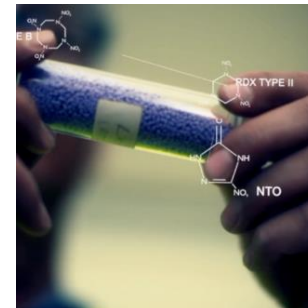
- Protect and grow across Defence, Security & Commercial

Operate in niches with sustainable competitive advantage

- Incumbent supplier status (often sole source)
- High barriers to entry
- Technology rich underpinned by Intellectual Property

Invest to improve safety and operational performance

Move both sectors to mid/high teen return on sales over the medium term



A business which continually innovates to protect its customers

Actions Delivered (1)

Group-wide safety review

Comprehensive review by ERM^{*}

- Commissioned prior to CCM UK incident
- Focus on Countermeasures and Energetics sites
- Significant improvement recommendations identified

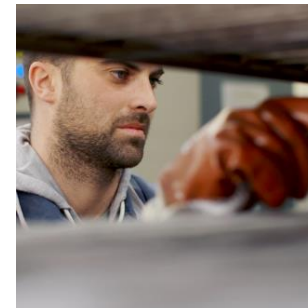
All improvement recommendations accepted

New Group Safety Strategic Plan implemented focussing on:

- Control of Major Hazards
- Injury Prevention
- Risk Management

Relentless commitment to safety as the Group's core value

^{*} ERM is a leading global provider of environmental, health, safety, risk, and social consulting services.



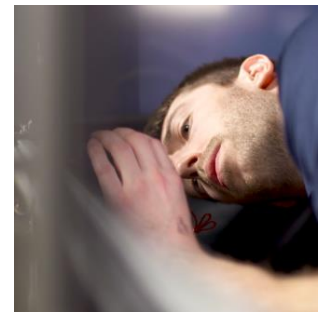
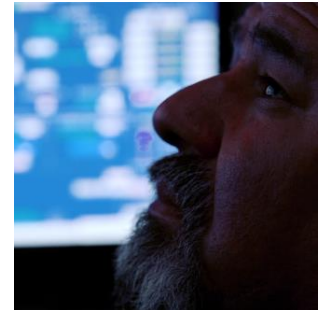
Actions Delivered (2)

Visited all major sites across UK, US, Norway & Australia

- Employee engagement at all levels
- Customer engagement across all businesses

Decision made to improve quality of the Group and exit commoditised energetics market

- Restructured into single operating company with two sectors
- Restructured Roke and CTS businesses to increase effectiveness of technology exploitation and reduce cost
- Curtailed numerous redundant products and projects



Actions Delivered (3)

Strengthened management teams

- New President Chemring USA
- New Presidents for CED, CSES and CCM US businesses
- New Managing Directors for Roke and CCM UK businesses
- New Group Operations Director
- New Group Chief People Officer
- CEO ownership of strategy

Strengthened Risk Management and Corporate Governance

- New Operational Framework implemented on January 1st
- New operational assurance processes implemented
- New risk management policy and procedures implemented



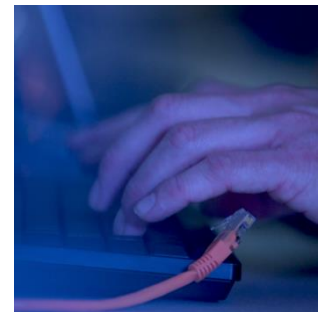
Actions Delivered (4)

Focus and structure applied to business growth

- Business Development Director appointed to lead Sensors & Information growth campaigns
- Business Development Director appointed to coordinate growth campaigns across US, UK and Australian countermeasures businesses

Avascent* commissioned to assist in building Sensors & Information growth plans

- Roke technologies and capabilities in US market
- Chemical and biological detection capabilities in Homeland Security



*Avascent is a leading independent strategy and management consulting firm serving clients in government-driven industries.

Countermeasures & Energetics Sector

We now operate in high quality niches with high barriers to entry

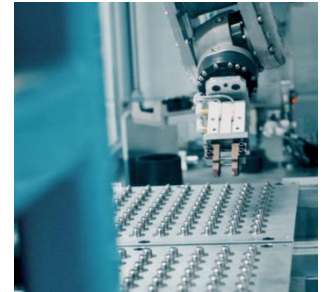
- Decision made to exit commoditised energetics businesses
- Long-term supply positions
- Unique product and manufacturing technologies

We are the #1 global supplier of countermeasures

- Fast jets, helicopters and transport aircraft all carry our products
- Countermeasures are essential in training and operational missions

We need to invest significantly in automation and modernisation to:

- Improve safety
- Raise barriers to entry
- Improve operational effectiveness and reliability
- Increase capacity



Countermeasures

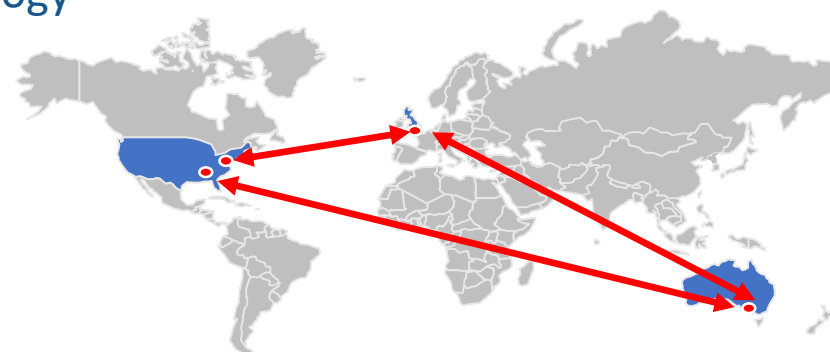
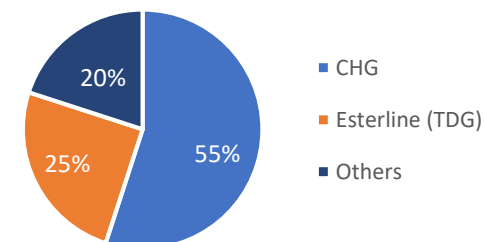
Protect and grow our #1 global supplier position

- Maximise F-35 opportunities
 - Tennessee site investment programme
 - Phase 1 increases capacity & Phase 2 modernises manufacturing
 - Australian facility being repurposed for F-35 manufacturing
- Restart then modernise CCM UK to serve UK, NATO & Middle East customers
- Invest in Special Material Decoy technology to maintain world leading position

Collaborate to improve our business

- Transfer product and manufacturing technology
- Optimise supply chains
- Improve manufacturing resilience

Addressable World Market Share



Energetics

Focus now on niche energetic devices and products

- Excellent commercial, space and defence client base
- Increasingly moving to longer term contracting arrangements

Sole source positions across defence, space and commercial

- Propellant and pyrotechnic products for Martin Baker
- Standard Initiators for NASA
- Metron devices for commercial aerospace and car industries



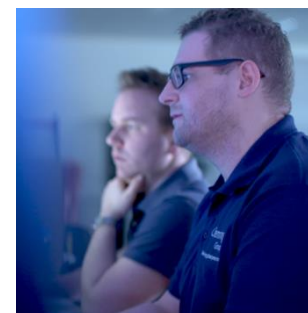
Sensors & Information Sector

Technology and innovation rich businesses in US and UK

- Complete life-cycle capabilities from R&D and consultancy to product delivery and support
- Operationally proven and customer endorsed technologies
- Incumbent supplier positions with blue-chip customers

Restructured Roke and CTS businesses to more effectively exploit sensor technology and to remove cost

Building a technology based strategy for growth beyond current programmes and contracts



Current US Programs of Record

Explosive Hazard Detection

HMDS

- **Sole source** position
- Entering FRP phase
- Further \$25m HMDS delivery order received since year end
- Expected to be worth **c.\$500m (10 years)**



Biological Detection

JBTDS

- **Sole source** position
- In customer testing phase
- Expected to be worth **c.\$400m (10 years)**

EMBD

- **Sole source** position
- In EMD phase
- Expected to be worth **c.\$100m (10 years)**



Chemical Detection

AVCAD

- **In competition**
- Two suppliers now in EMD phase
- Focus on building a technically and commercially winning solution
- **\$838m** IDIQ contract vehicle awarded
- DoD sourcing strategy post EMD to be determined



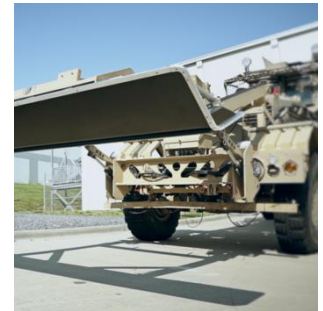
Beyond the Programs of Record

Building a technology based strategy for growth

- Avascent commissioned to assist in building growth options
- Chemical and biological detection capabilities in Homeland Security
- Build on progress made across international markets

Incumbent supplier status provides insight into US DoD's future detection requirements

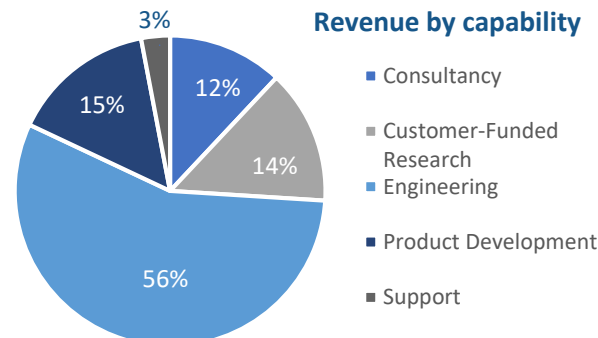
- Miniaturisation
- Detection speed
- Autonomy
- Connectivity



Roke

Extensive Technology and Intellectual Property portfolio

- Data Science
- Cyber Security
- Electronic Warfare
- Sensor Technologies
- Digital Resilience
- Digital Optimisation



Premium Client List

National Security



Defence



Commercial



Growth Focussed

- Continue to grow and leverage National Security and Defence businesses
- Drive growth in the Commercial sector
- Explore international growth options

Roke: Commercial Growth

Roke
Part of the
Chemring Group

RICARDO

A new approach to cyber security

Digital resilience

a partnership between Ricardo and Roke



Bringing together 160 years of innovative engineering experience. We are securing connected infrastructure across rail, automotive and energy, ensuring the safety of integrated digital and mechanical systems.

We offer:

- Test and fix – assess vulnerabilities that threaten existing systems
- Secure by design – link digital risk into the development lifecycle
- Assurance – validate systems against regulatory requirements and global standards

Summary

Sound Foundations

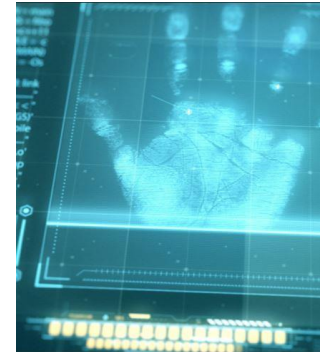
- Technology rich businesses in US, UK and Australia
- Excellent client base spanning defence, security and commercial
- Progress made to improve the structure and quality of the Group

Opportunities for Improvement

- Maintain relentless focus on safety
- Significant investment required in safety and modernisation
- Continue to attract and develop management talent
- Continue to strengthen risk management and governance

Platforms for Growth

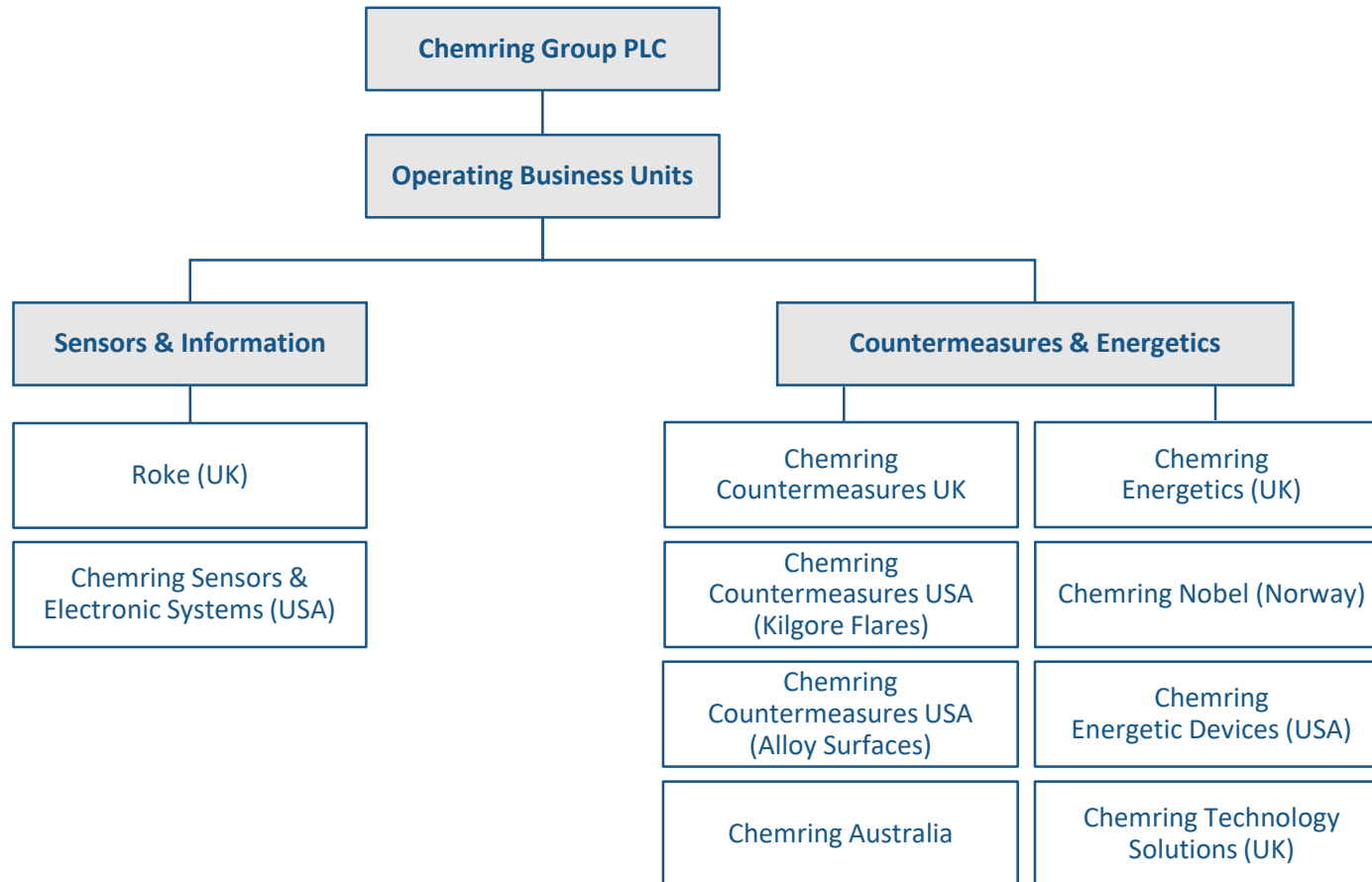
- Protect and grow existing defence and security businesses
- Exploit technologies and intellectual property in new markets
- Move both sectors to mid/high teen return on sales over medium term



A business which continually innovates to protect its customers

Appendices

Appendix 1. Organisation chart



Appendix 2. Glossary

Acronym	Meaning	Acronym	Meaning
AGPR	Advanced Ground Penetrating Radar	IDIQ	Indefinite Delivery Indefinite Quantity
APAC	Asia Pacific Region	IED	Improvised Explosive Device
AVCAD	Aerosol & Vapor Chemical Agent Detector	JBTDS	Joint Biological Tactical Detection System
CED	Chemring Energetic Devices	LRIP	Low Rate Initial Production
CHA	Chemring Australia	LTI	Lost Time Incident
CHG	Chemring Group	MJU	Multi Jettison Unit
CM	Countermeasures	MTV	Magnesium Teflon Viton
EMBD	Enhanced Maritime Biological Detection	NGCD	Next Generation Chemical Detector
EMD	Engineering and Manufacturing Development	NSA	Non-Standard Ammunition
EW	Electronic Warfare	POR	Program of Record
F-35	F-35 Joint Strike Fighter	PP	Private Placement
FRP	Full Rate Production	SMD	Special Material Decoy
HMDS	Husky Mounted Detection System	US DoD	United States Department of Defense

Disclaimer

2019 Chemring Group PLC

The information in this document is the property of Chemring Group PLC and may not be copied or communicated to a third party or used for any purpose other than that for which it is supplied without the express written consent of Chemring Group PLC.

This information is given in good faith based upon the latest information available to Chemring Group PLC, no warranty or representation is given concerning such information (express or implied), nor is any responsibility or liability of any kind accepted, by Chemring Group PLC with respect to the completeness or accuracy of the content of or omissions from this presentation, and the contents of which must not be taken as establishing any contractual or other commitment binding upon Chemring Group PLC or any of its subsidiary or associated companies.

Chemring Group PLC is under no obligation to revise, update, modify or amend the information in this document or to otherwise notify a third party recipient if any information, opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate regardless of whether those statements are affected as a result of new information, future events or otherwise.