



CHEMRING GROUP PLC

Introduction to Chemring Group PLC

20 October 2006, Version 2

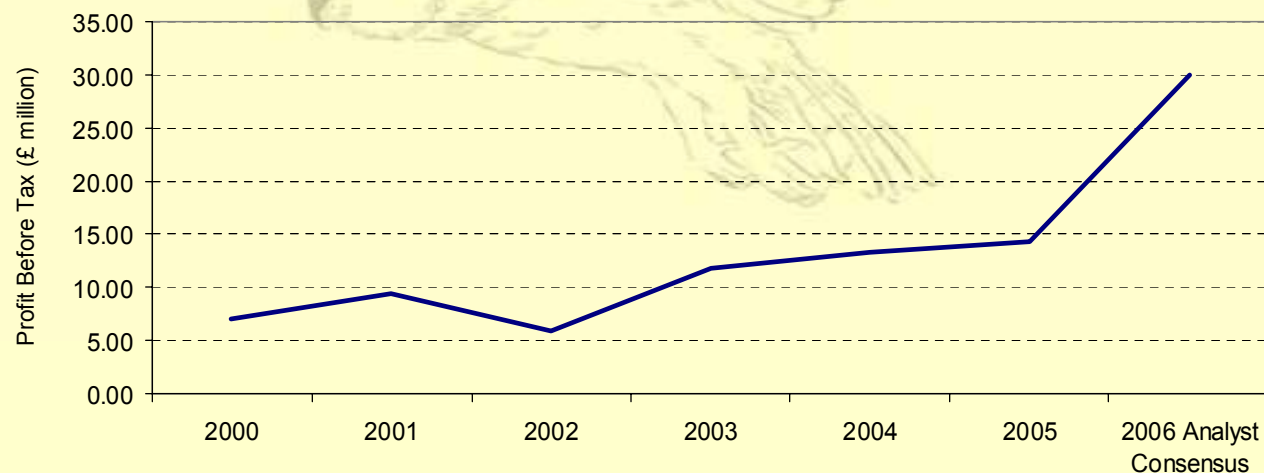
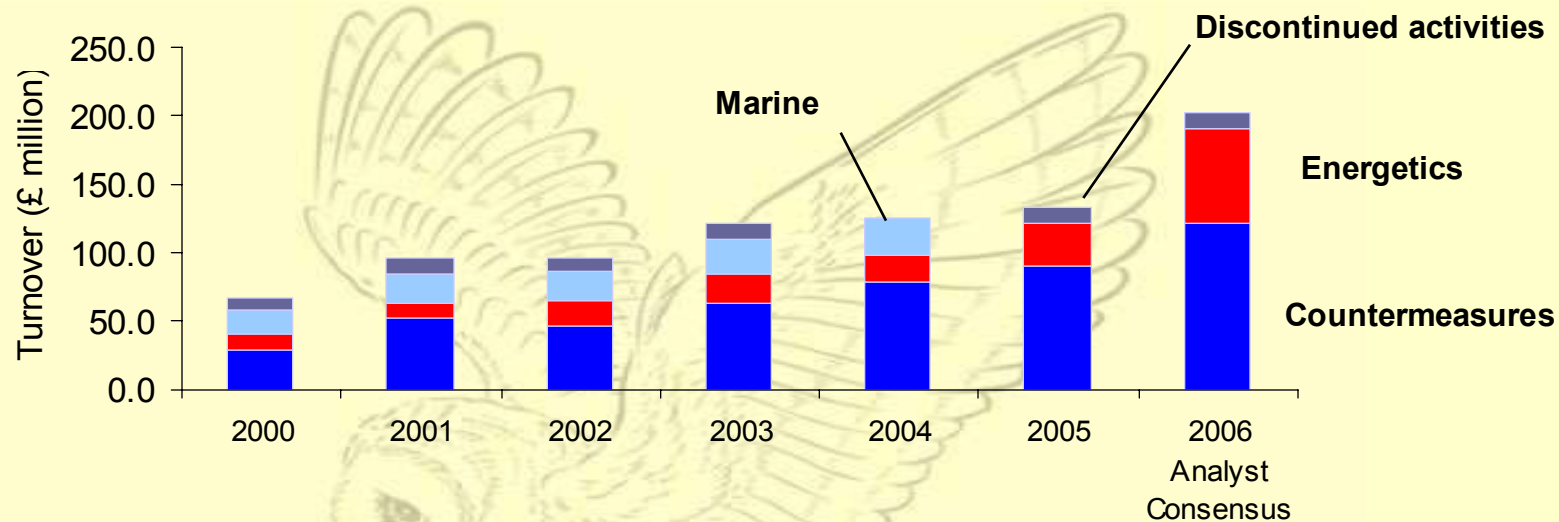
CHEMRING GROUP PLC



Chemring Group PLC

- **Chemring, a FTSE 250 company, has:**
 - *a market capitalisation in excess of £500m.*
 - *a compound underlying EPS growth rate of 14% for the last 6 years.*
 - *operations in UK, USA, Germany, Spain, France & Australia*
 - *successful market access to 70+ countries world-wide*
- **World Leader in expendable countermeasures.**
- **Core Competencies in:**
 - *the design & manufacture of energetic materials*
 - *high volume manufacturing*
 - *high reliability & safety*

Historical Performance





Our Vision

“....To be the leading producer of countermeasures & energetic materials for the global defence market.”

A strongly focussed company:

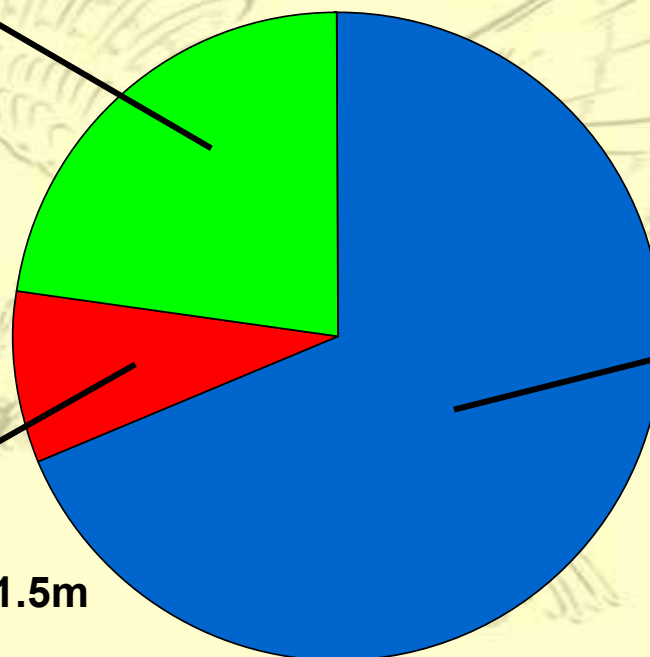
- *Priority to deliver above average shareholder returns*
- *Balanced US/European production*
- *Global supply to defence, government & law enforcement Customers*

Chemring Group PLC – The Company Today

Energetics £30.2m

- Initiators
- Gas generators
- Rockets & propulsion
- Smokes
- Flares & signals
- Cutting charges
- Demolition stores
- Law Enforcement

Sales by Division



Countermeasures £90.8m

- Air – IR & chaff
- Sea – IR, chaff & acoustic
- Land – Smokes, VDGs

Marine Electronics £11.5m

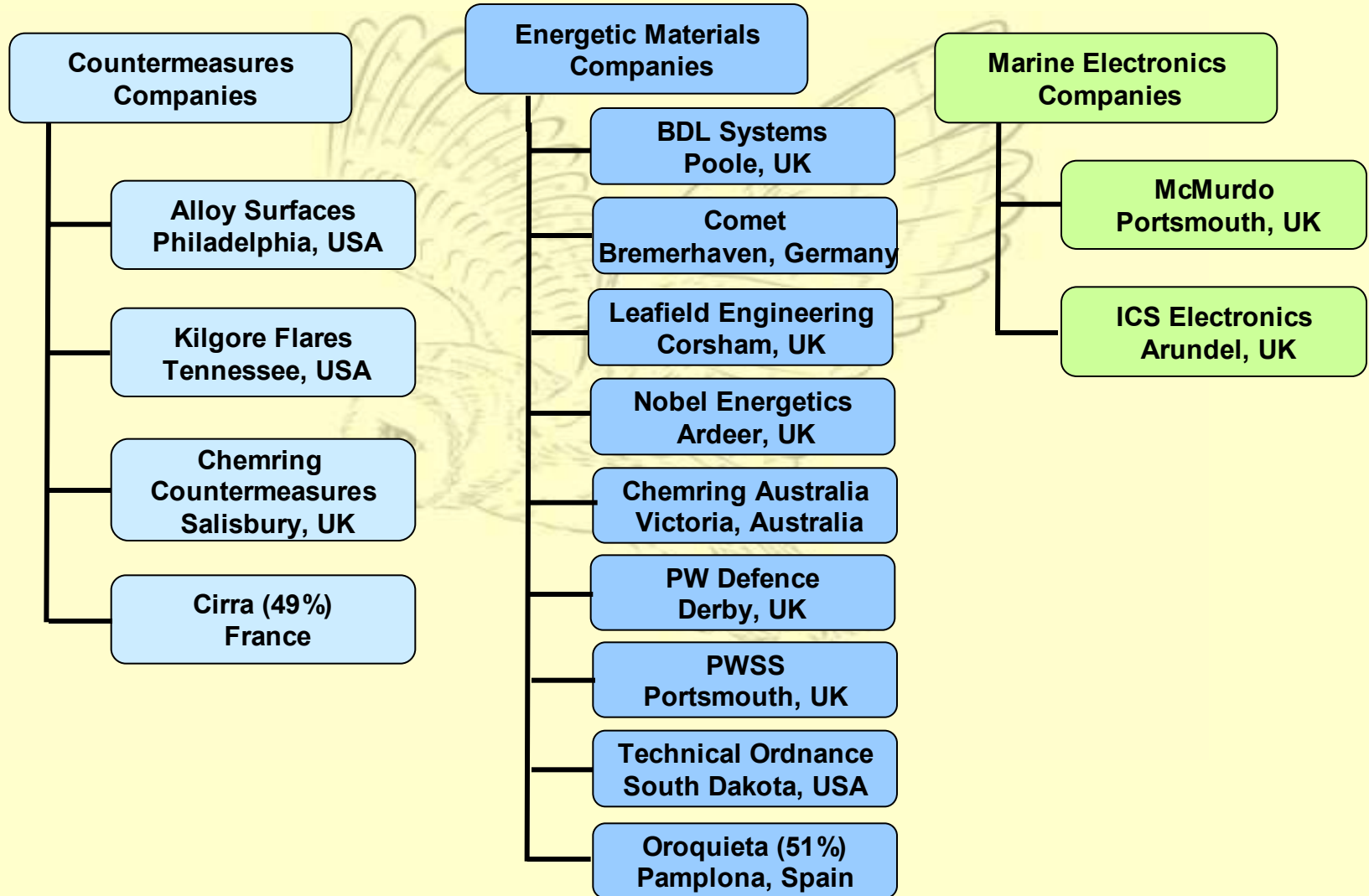
- Beacons
- Transponders
- Communications
- Weather systems
- Survivor location lights

**Total sales £132.5m
(2005)**

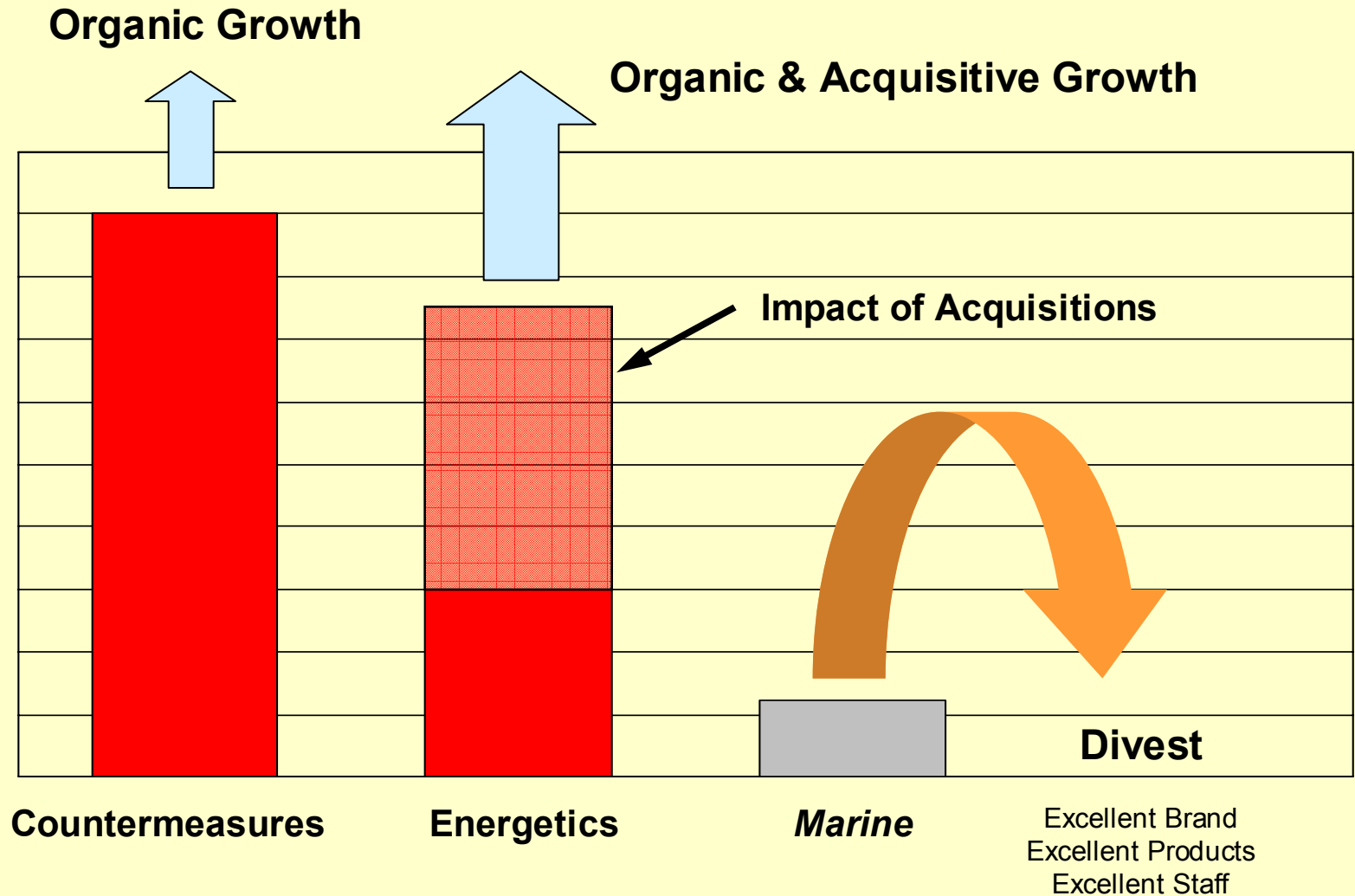


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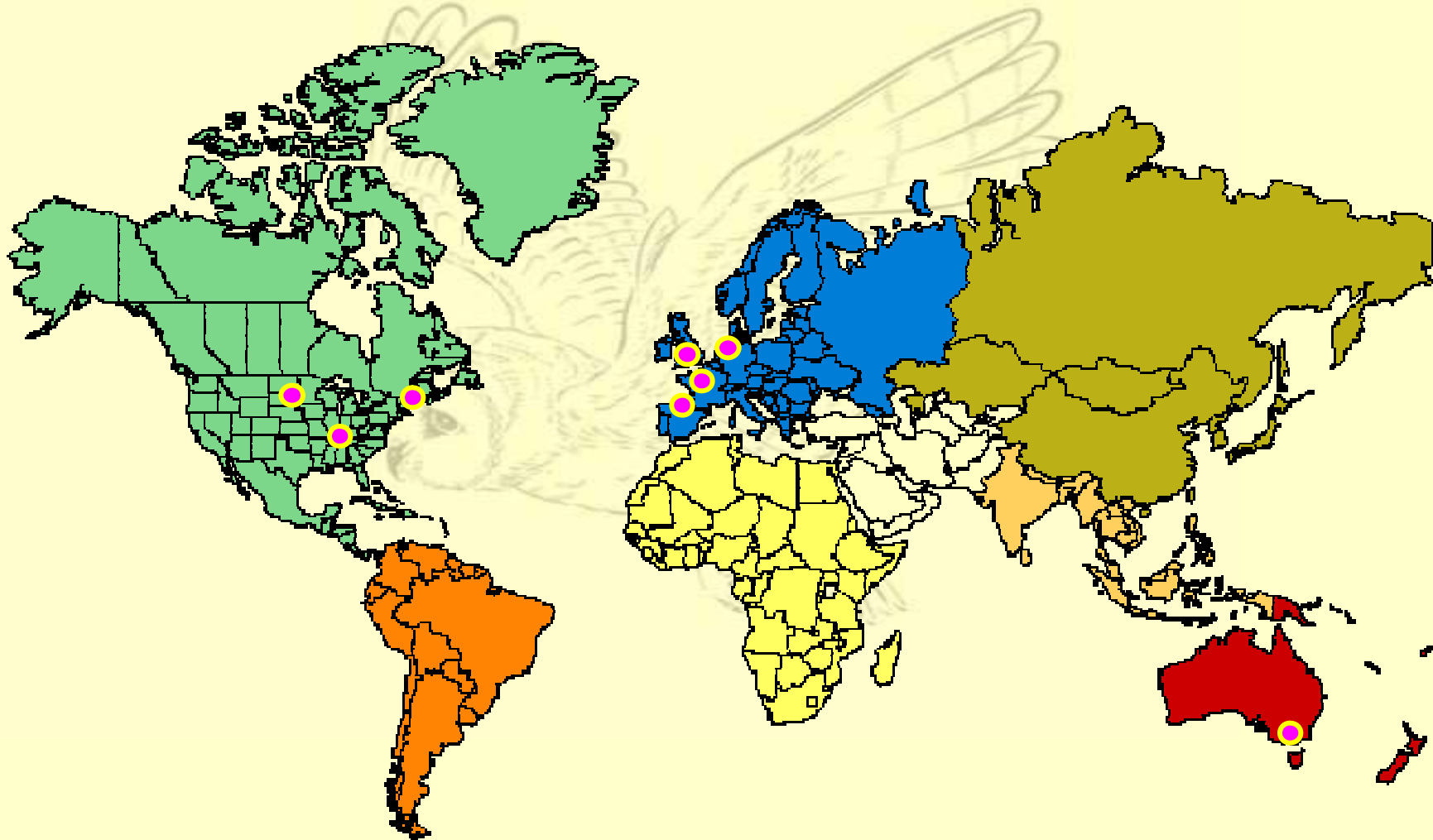
Operating Companies



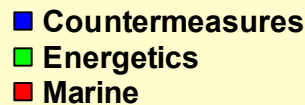
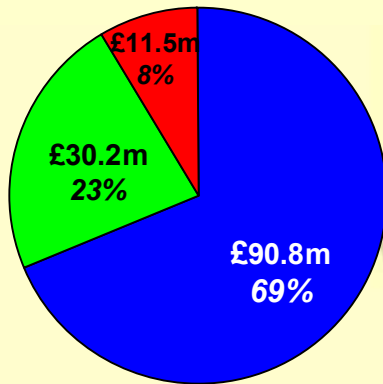
Corporate Strategy



Chemring is a Multi-domestic Group with Manufacturing in the USA, UK, Germany, Spain and Australia

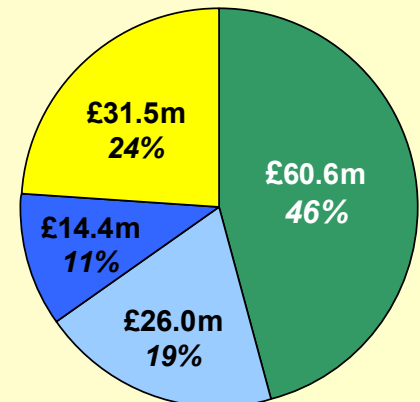


Analysis of Turnover

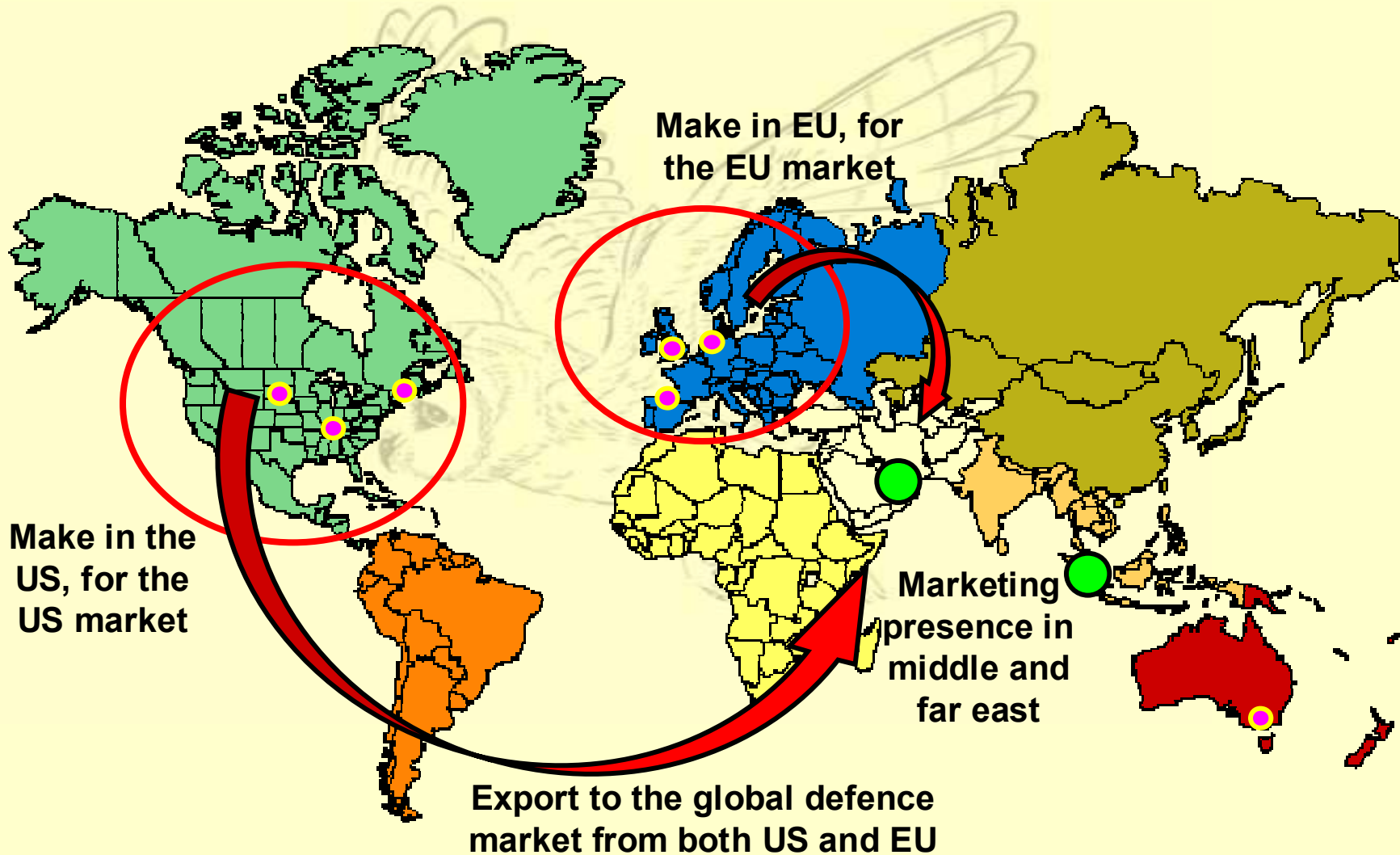


- Countermeasures remains dominant business.
- New acquisitions will enhance size of Energetics.

- US remains largest market at 46%.
 - US Airforce is largest Customer
 - US Army using more Special Material Decoys
- UK sales have grown from £21m to £26m
 - RAF using more Special Material Decoys
 - Chemring largest supplier to MOD

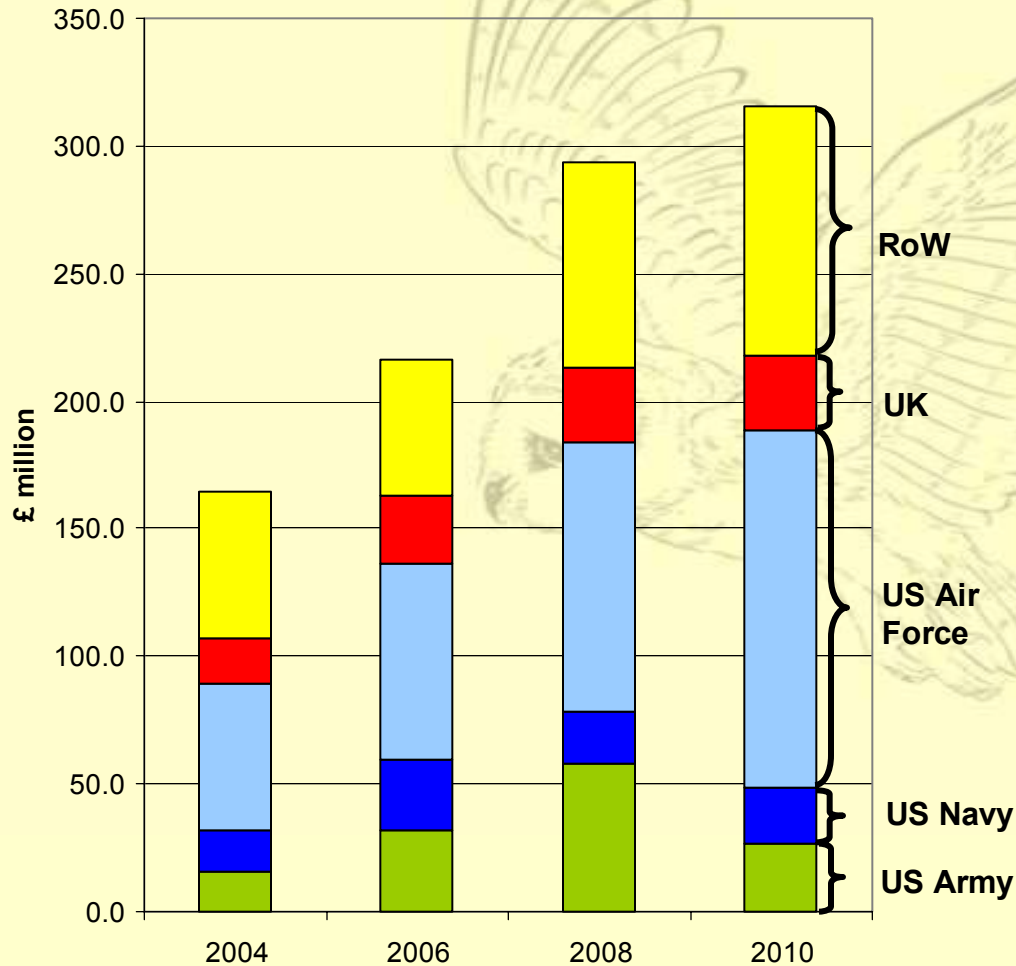


Geographic Strategy



The Global Countermeasure Market

Global Market (£m)



- Decoy market expected to grow steadily with ongoing threat
- UK deployment in Afghanistan increases decoy usage
- Typhoon flare suite adds to existing demand
- USAF largest user & plans to buy new products:
 - MJU-10
 - ALA-17 for B-52
 - F-22 advanced flares
 - JSF advanced flares
 - V-22 introduction

Source: Internal estimates based on US program documentation & export market knowledge

New Platforms

Helicopters:

- **Tiger** – France, Germany, Spain, Australia
- **NH-90** – Germany, France, Italy, Holland, Sweden, Finland, Norway, Australia, Greece, New Zealand, Spain
- **EH 101** – UK, US, Japan, Portugal, Canada, Italy, Denmark

Transport Aircraft:

- **V-22** – US, others?
- **A400m** – Germany, France, Spain, UK, Turkey, South Africa, Belgium, Malaysia, Luxembourg

Combat Aircraft:

- **F-22** – US, Japan(?)
- **JSF** – US, UK, Italy, Holland, Turkey, Canada, Norway, Australia
- **Typhoon** – UK, Germany, Italy, Spain, Austria, Saudi Arabia
- **Su-30** – India, Indonesia, Malaysia, Algeria



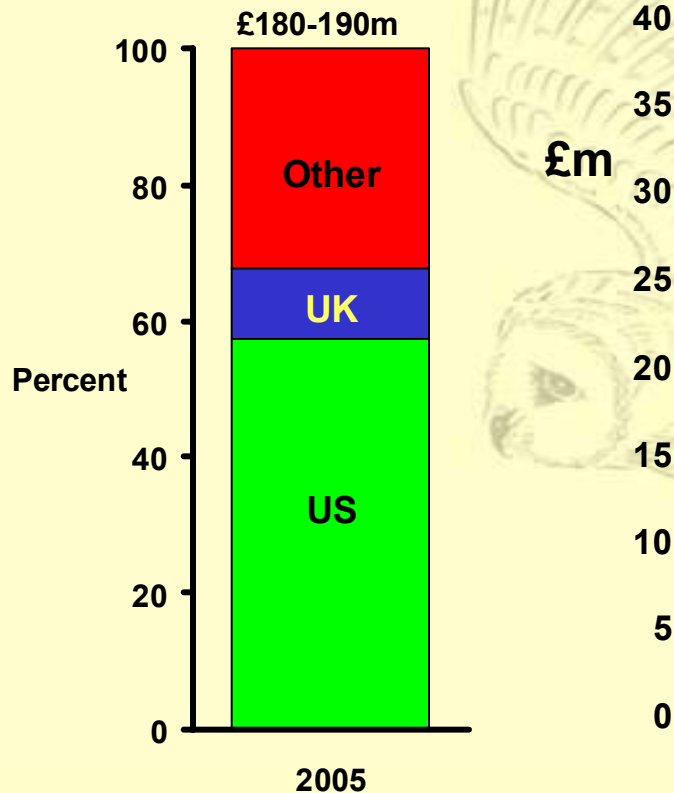
Growth in Helicopter Protection



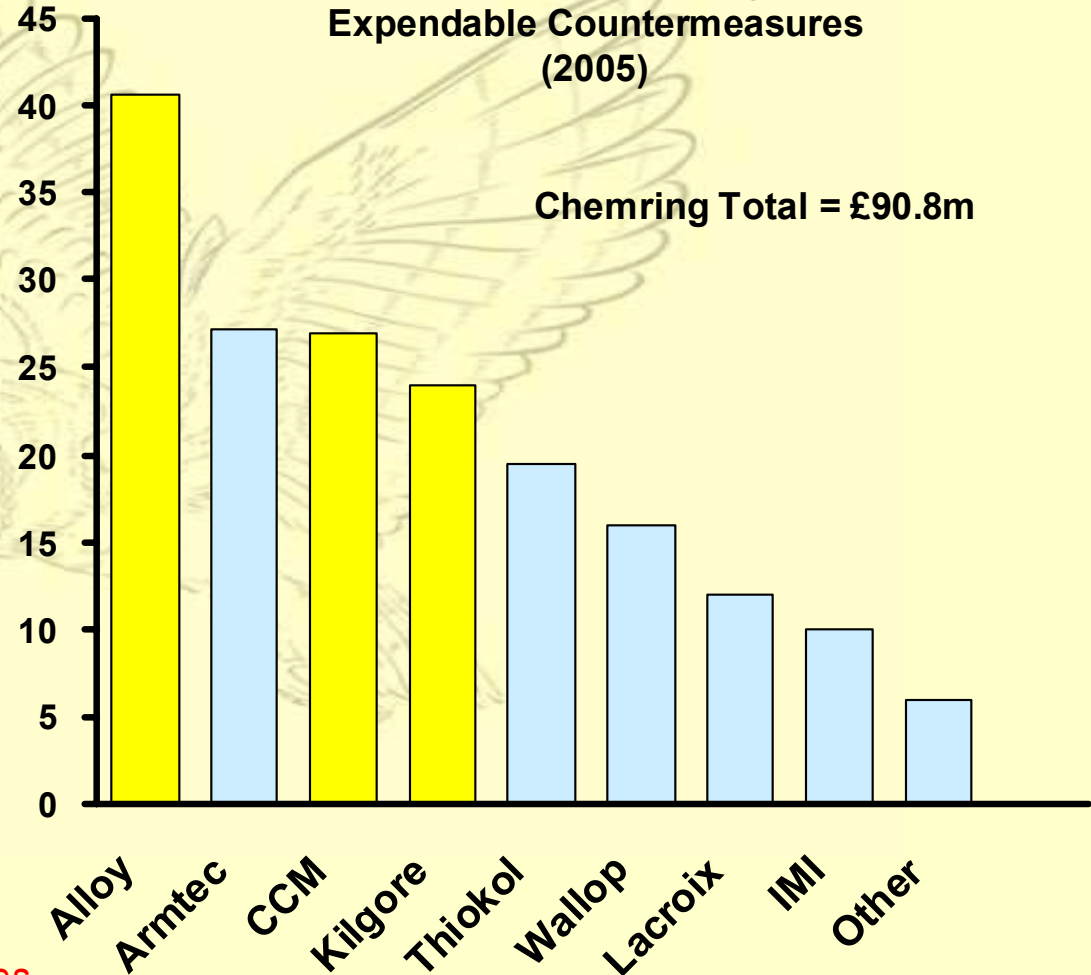
- Increasing threat to helicopter platforms
 - High profile target
 - Vulnerable to attack – low altitude, slow
- Development of helicopter Defensive Aids Suites (DAS) by major systems prime contractors
- Growth in helicopter fleet fitted with countermeasures dispensers
 - **Apache** – HIDAS upgrades for UK, Kuwait, UAE, Greece, Singapore, Saudi
 - **NH90 & Tiger** – DAS and countermeasure dispensers fitted as standard

The Countermeasures Market in 2005

Estimated Global Countermeasure Market (2005)



Estimated Revenues of Leading Suppliers of Expendable Countermeasures (2005)



Source: Chemring internal estimates

Countermeasures - Air



Decoys for Fixed Wing A/C



Decoys for Helicopters



Wide Range of Circular IR Flares



Countermeasures – Naval



Naval Rounds and Payloads

Energetics



Coloured Signaling Smoke



Large Caliber Primers



Stun Grenades & Explosives



Propellants



Pyromechanisms



Missile components



Electrical and RF Initiators



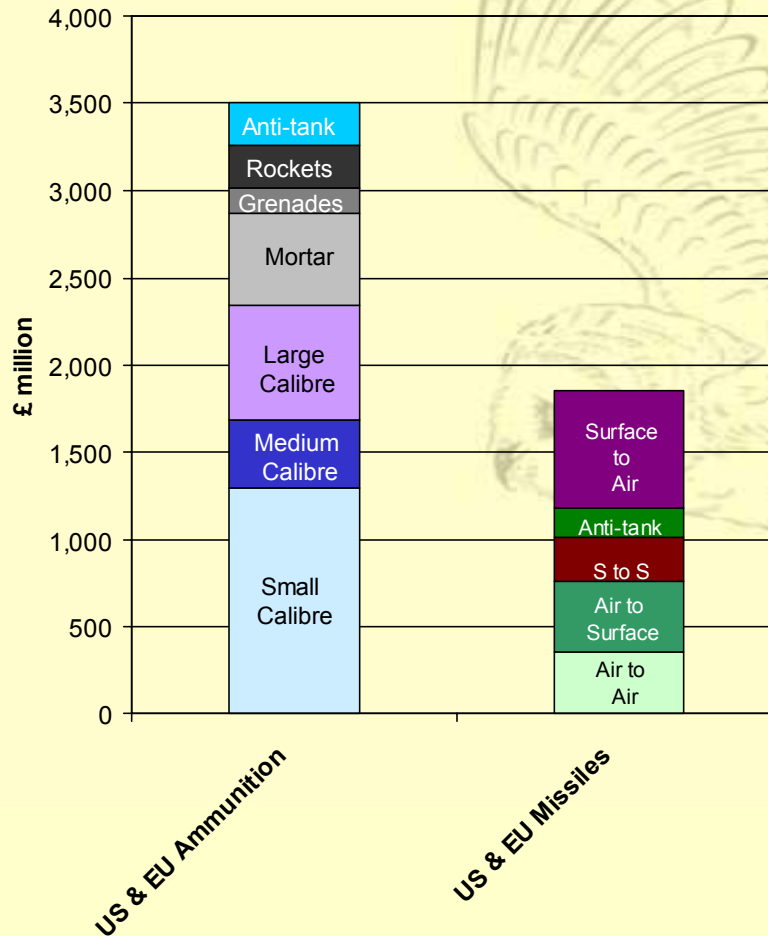
Battlefield Simulation



Illumination Flares

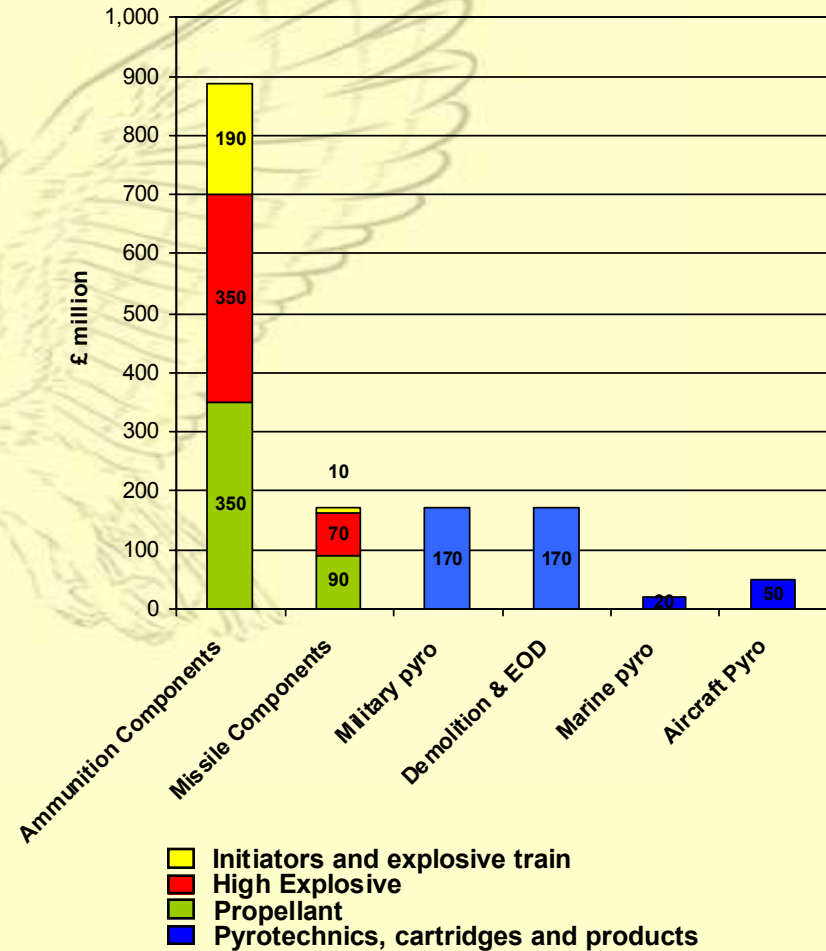
US & EU Energetics Market

US & EU Systems Market

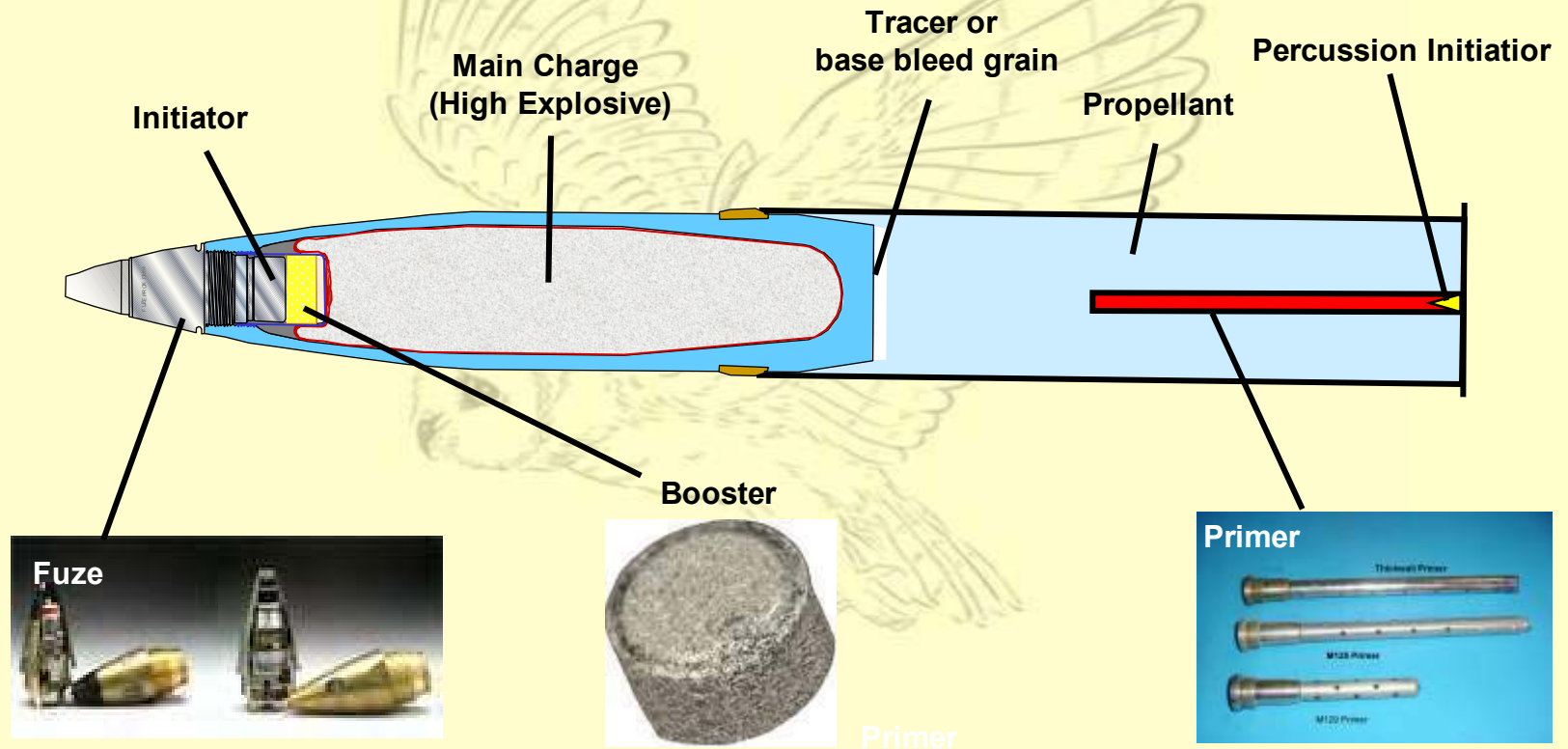


Source: Chemring internal estimates

US & EU Energetic Materials Market



Energetics – Ammunition Components

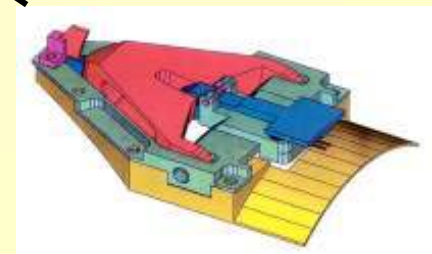


Energetics – Missile Components



Warhead

Fuze



Detent Actuator

Energetics – Military Pyrotechnics



Coloured Signaling Smoke



Stun Grenades and Cutting Charges



MANPADS Simulation



Vehicle Discharge Grenades



KC-25 Marine Location Marker



Battlefield Simulation

Energetics – Demolition Stores



Explosives



Detonators and stores



Shaped Charges



Electrical and RF Initiators



Mine Breaching

Energetics – Aircraft Pyrotechnics



Ejector seat and crew egress

- Seats
- Shaped cutting charges
- Fire suppression



Line cutters



Cartridge and flare squibs



Energetics – Marine Pyrotechnics



Handflares



Man Over Boards (MOBs)



Para rockets



Lifesmokes



Speedlines

Customer Strategy

Customers

**Defence
OEM**

**Defence
End User**

**Defence
Prime
Contracting**

Marine

Market
Segments

Segments

- Ammunition
- Missiles
- Military Pyrotechnics
- Aircraft Pyrotechnics
- Niche

Segments

- Countermeasures
- Ammunition
- Military Pyrotechnics
- Dem Stores, EOD IED
- Aircraft Pyrotechnics

Segments

- Countermeasures
- Ammunition
- Military Pyrotechnics
- Dem Stores, EOD IED
- Aircraft Pyrotechnics

Segments

- Commercial Marine
- Leisure Marine

Service /
Products

Products

- Sub Systems.
- Pyro mechanisms.
- Propellants.
- HE.
- Demolition Stores

Products

- Countermeasures
- Ammunition
- Military Pyro
- Demolition Stores

Products

- Chemring & Out
Sourced Products

Products

- Commercial Pyro.
- Leisure Pyro.