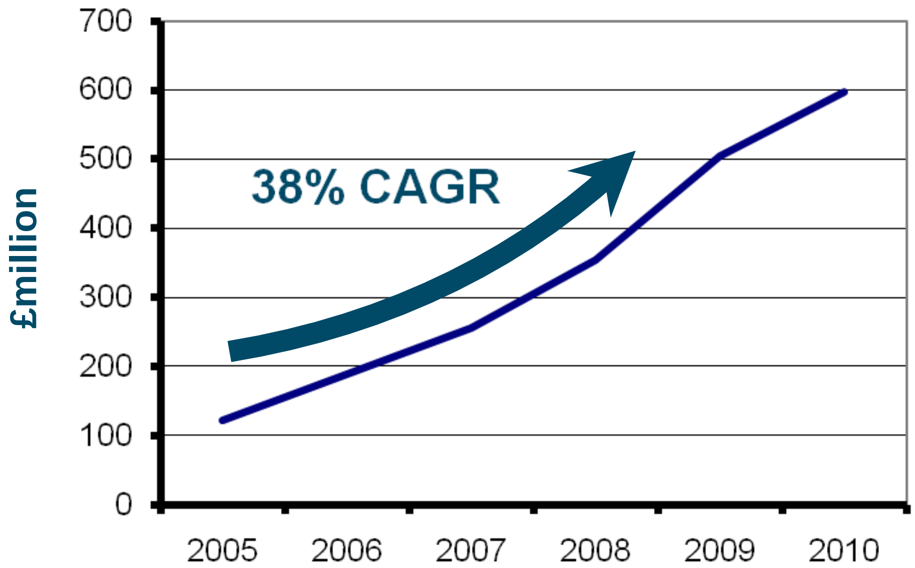
Introduction to Chemring
July 2011

CHEMRING GROUP PLC

Chemring Group

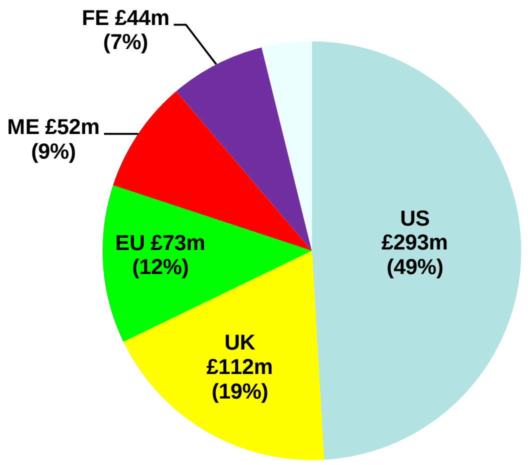
	Pyrotechnics	Counter-IED	Munitions	Countermeasures
Global Market	£1.6bn	£3bn	£10bn	£390m
Chemring Market Share	10-20%	c.4%	c.1%	47%



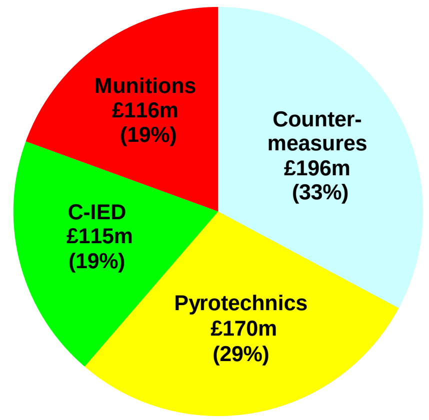
- 2010 Revenues: £597m
- 2010 underlying PBT: £117m
- 4,000 employees
- High margin, niche growth
- Sales to 80 countries around the world
- 21 facilities in 8 countries

Global Customer Base

Revenue by Destination



Revenue by Segment

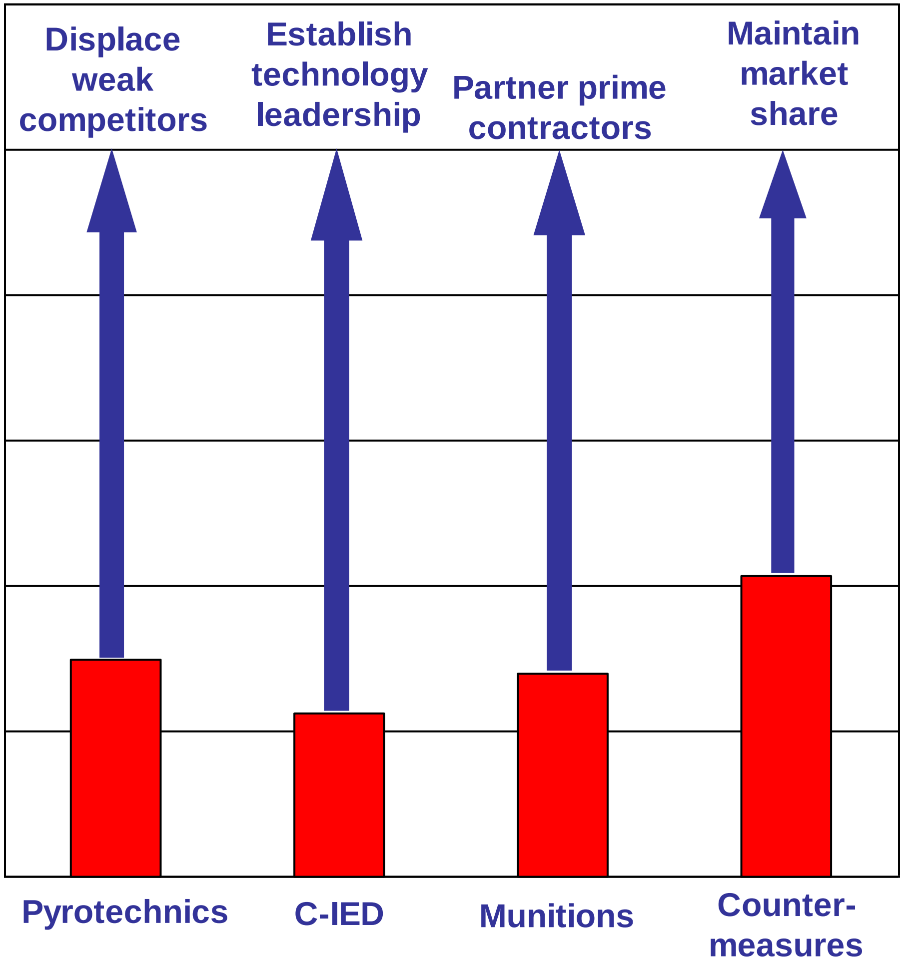


- **US DoD is Chemring's largest single customer; US Air Force is largest component**
- **Chemring is the principal supplier of flares to US DoD and UK MoD**
- **Chemring has extensive relationships with prime contractors**
  - ***BAE Systems***
  - ***ATK***
  - ***Saab Dynamics***
  - ***Raytheon***
  - ***General Dynamics***
  - ***Martin Baker***
  - ***Boeing***
  - ***Lockheed Martin***

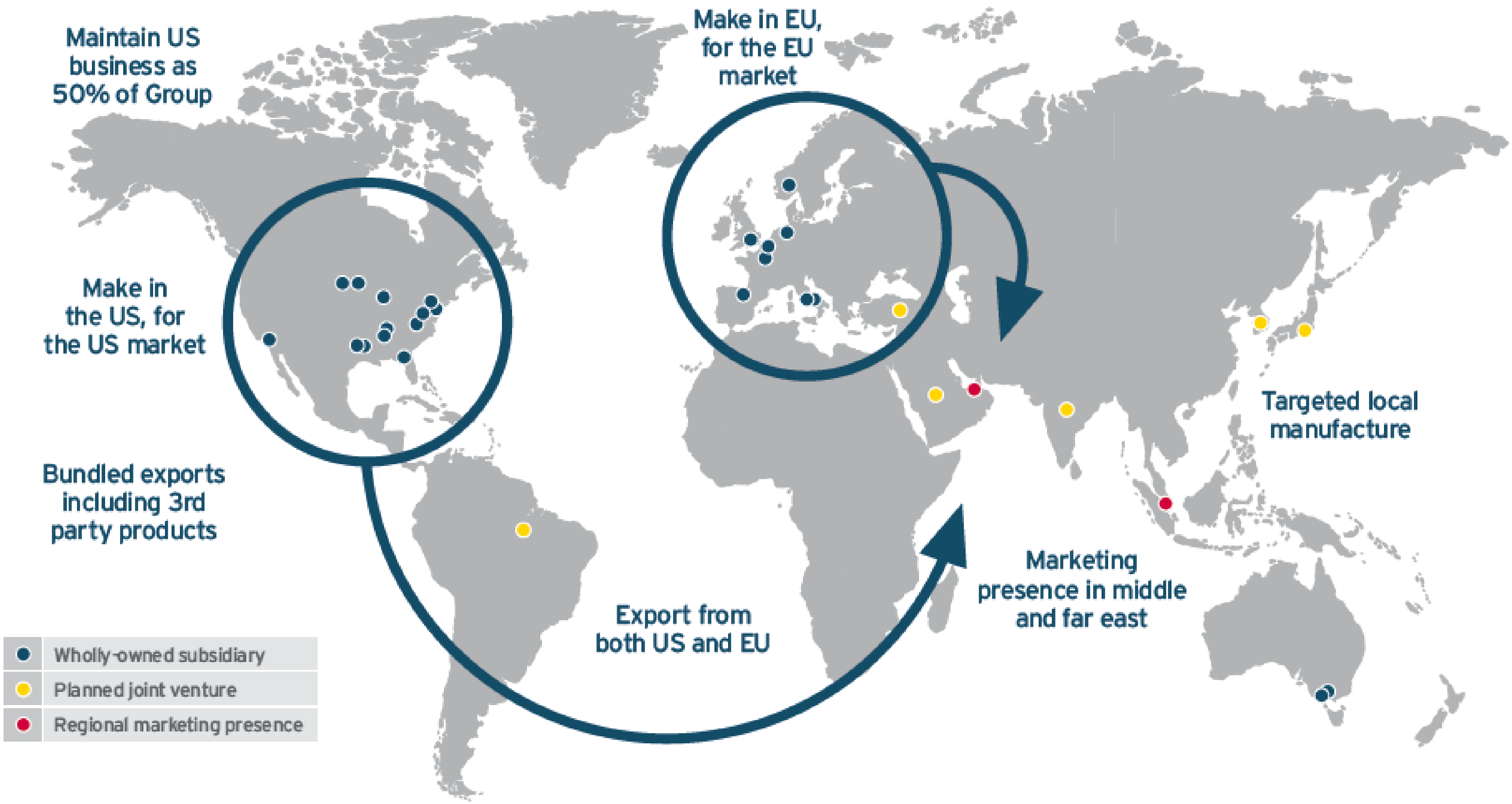
Core Strategy

Strategic Intent:

- Excellence in core competences
  - *Energetic materials*
  - *High product reliability and integrity*
  - *High volume manufacturing*
  - *Growing dependence on electronics*
- Balanced global geographic market profile
- Expand Pyrotechnics
  - *…become undisputed World Leader*
  - *…new products transform user operations*
- Counter-IED
  - *… be a World Leader in detection & neutralisation*
  - *…maintain lead in GPR and jamming technology*
- Develop a strong Munitions business
  - *…be a supplier of choice for Munition Primes*
  - *…be a niche Prime Contractor*
- Maintain world lead in Countermeasures
  - *…exploit lead in SMD, spectral & thrusted flares*
  - *…be the leader in naval launchers and rounds*
- Consolidation for synergy & critical mass



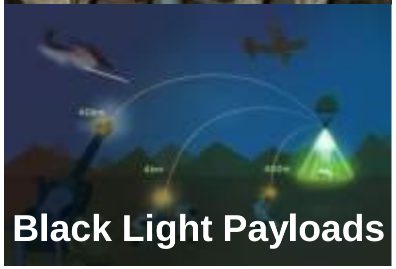
Geographic Strategy



Global Manufacturing Footprint

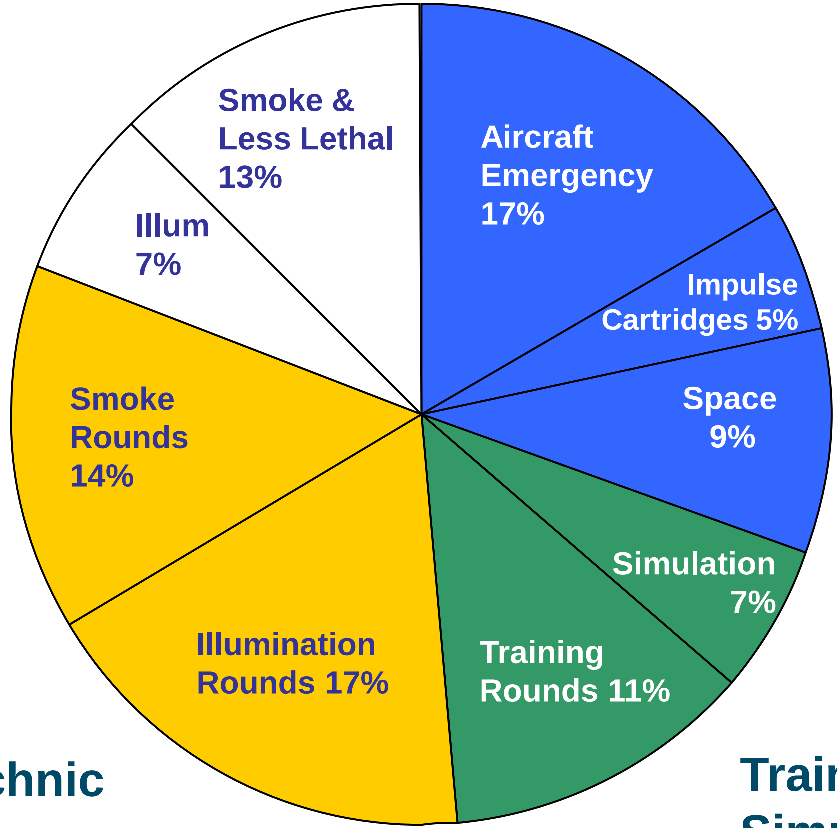
- Manufacturing operations in eight strong defence-spending countries
- Global manufacturing footprint provides flexibility to match customer orders
- Focussed programme of capital investment

Pyrotechnics Market – Global Market c.£1.6bn



Smoke & Illumination Products 20%

Pyromechanisms 31%



Pyrotechnic Rounds 31%

Training & Simulation 18%

Pyrotechnics Strategy

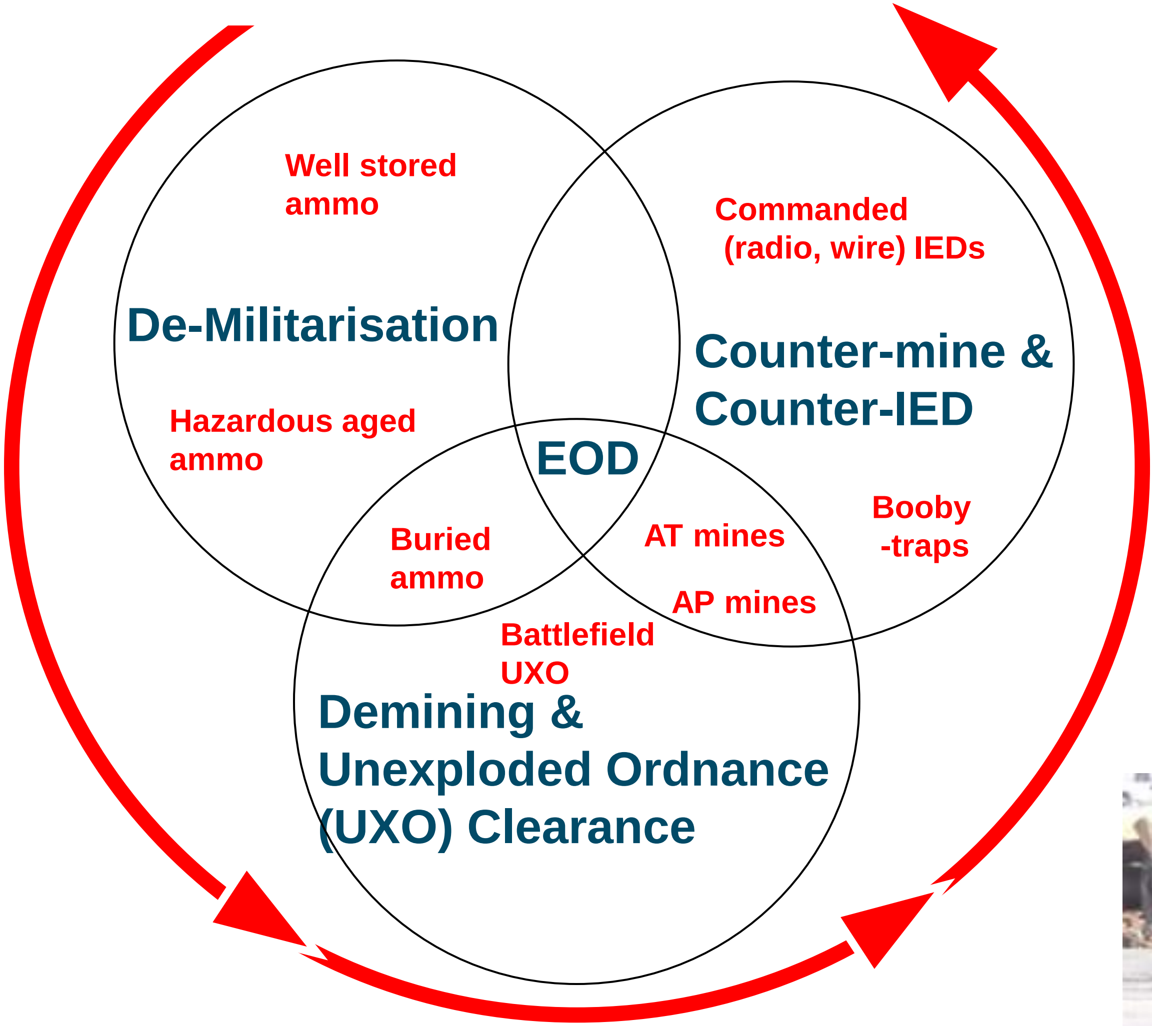
Pyrotechnics is a highly fragmented market

- Chemring has a 15% market share
- Large number of small competitors
- Not considered a priority market by large companies
- Many national champions with limited international access
- Often small or family-run businesses with:
  - *Manual manufacture and assembly*
  - *Low product investment*
  - *Aging technology*

Chemring strategy

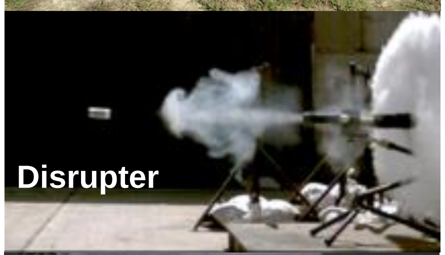
- Rapidly develop new products
- Displace current incumbents
- Establish position as cost-competitive second source
- Become world leader in pyrotechnics

Explosive Ordnance Disposal – Global Market c.£3bn



Increasing Operational Tempo

EOD Strategy



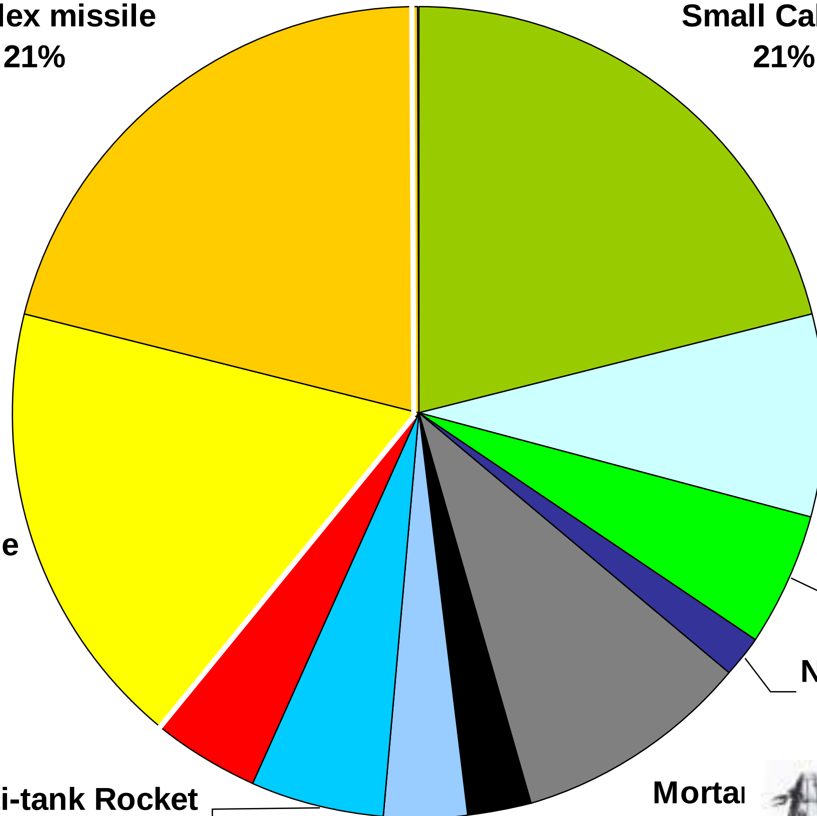
Highly fragmented market

- Large number of small players
- Users have a strong explosives background
- Fast technology cycle
  - *Rapidly evolving threat*
  - *Users need rapid prototyping*
- Constraints on sensitive technologies
- Electronics are a significant part of the market

Chemring strategy

- *Maintain world lead in:*
  - *Disrupter technology*
  - *Weapon carriers*
  - *Demolition stores*
- *Expand detection & jamming*

Munitions Market – Global Market c.£10bn



Munitions Subsystems Strategy

- **Propellants and rocket motors**
  - ***Complete qualification of 155mm Modular Charge System***
  - ***Build on NLAW position and expand relationships with missile primes***
  - ***Expand position on 70mm & 81mm rockets***

- **Fuzing**
  - ***40mm grenades – develop self-destruct fuze technology***
  - ***Mortars – complete development of cost competitive fuze products***
  - ***Medium calibre – establish position on US programmes***

- **Warheads**
  - ***Expand position on European missile programmes – start PAAMS production***
  - ***Complete work with Nexter on NTO IM technology***
  - ***Penetrate US and European markets with range of IM products (DPX series)***

- **Pellets & Primers**
  - ***Grow partnerships with leading prime contractors in US and Europe***

Munitions Strategy



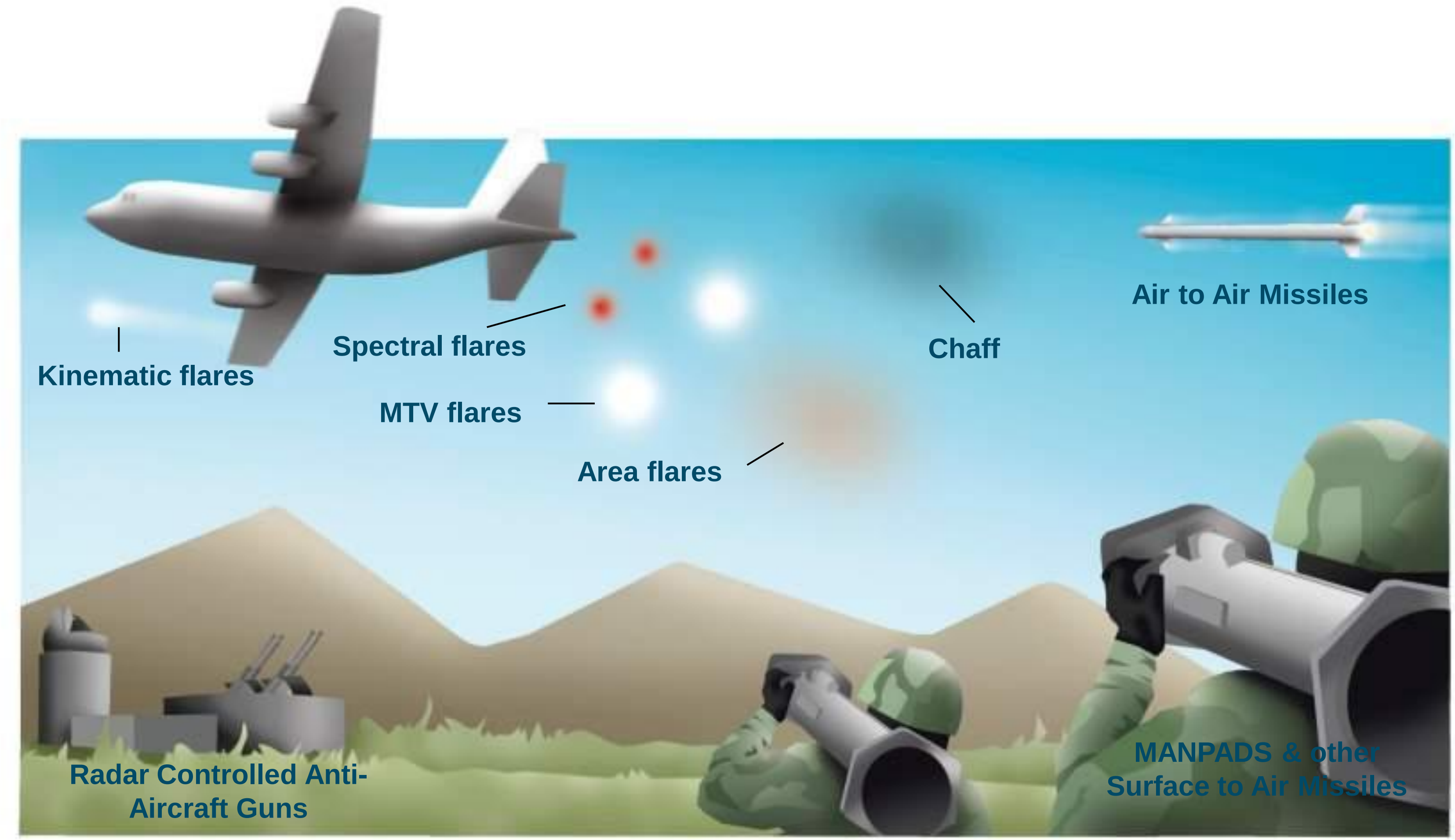

- **40mm Grenades**
  - ***Develop complete family of ammunition including pyrotechnic rounds***
  - ***Grow strategic supplier relationships with US prime contractors***
  - ***Introduce medium velocity technology to US and Europe***
  - ***Build position as major exporter***

- **Mortars – 60mm, 81mm, 120mm calibres**
  - ***Maintain BAE Systems partnership***
  - ***Develop GD relationship on lightweight mortar***
  - ***Develop pyrotechnic payloads for US market***

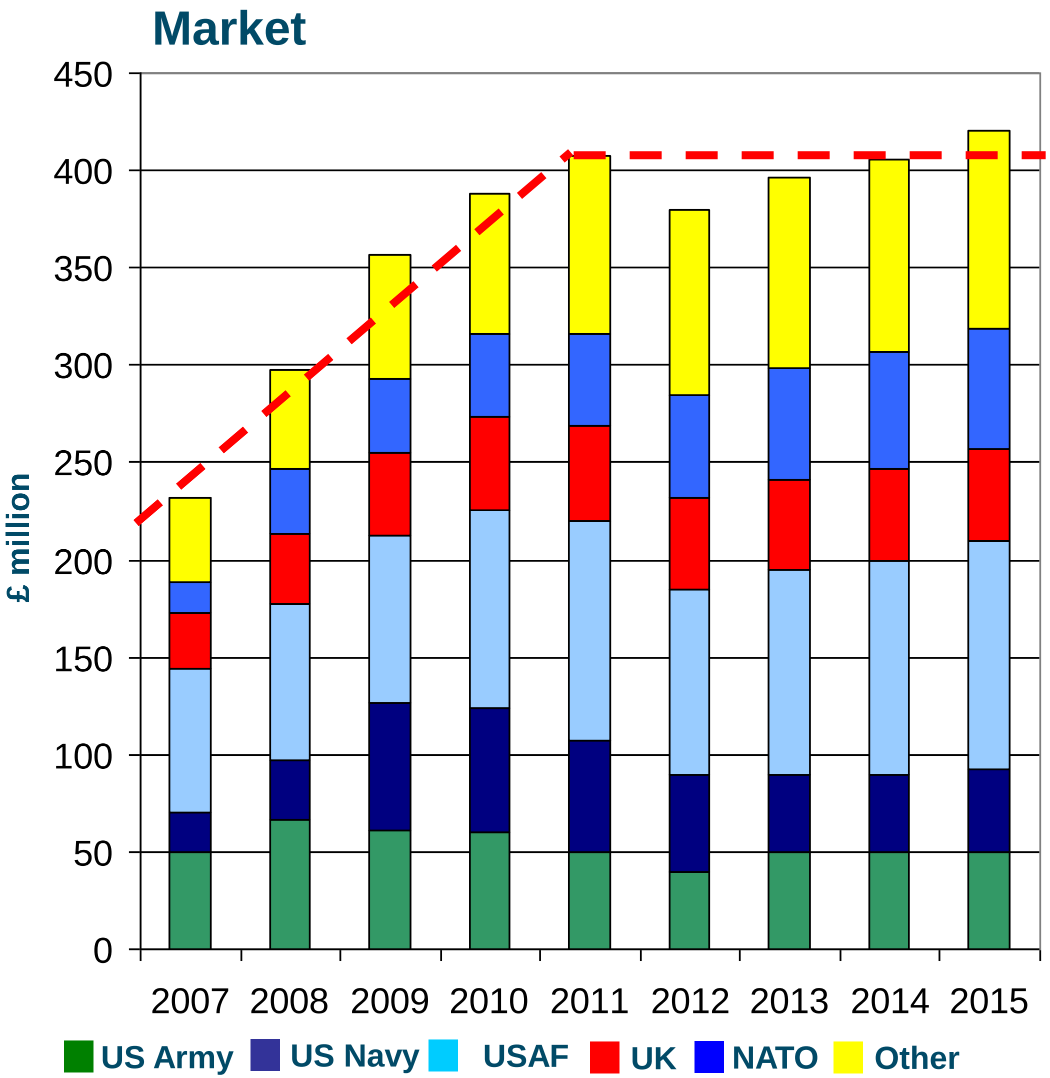
- **Naval ammunition**
  - ***40mm L60 & L70 – expand export market position, including US Air force***
  - ***76mm L62 – maintain position with key customers (NATO, Middle East, India)***
  - ***127mm L54 – complete development of IM, microwave fuze and PFF variants***

- **Tank ammunition**
  - ***Maintain niche prime contractor position***

Countermeasures – Threat



Countermeasures Market



Source: Internal estimates based on US program documentation to FY 2011 & export market knowledge

Market plateaus from 2011

- *2012 dip due to 2011 US budget squeeze*
- *but further DAS / Dispenser penetration*
- *and increased cost of advanced flares*

NATO & export market growth

- *Increased peacekeeping and training*
- *Typhoon delivery profile to EU & ME*
- *Growing demand for naval countermeasures*
  - UK, Australia, India, Turkey & South America

US Air Force growth

- *Advanced flares for air-to-air superiority*
- *Record order book for F-22 & B-52*
- *Production of flares F-35s starts in 2011*

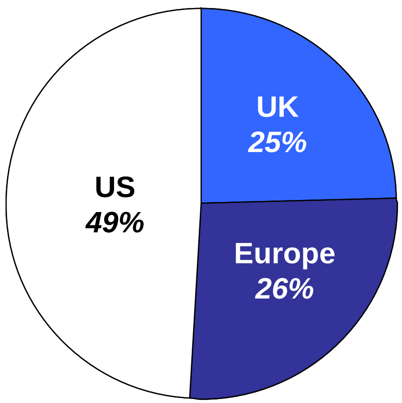
US Navy reduction

- *FY11 budget squeeze*
- *Growing interest in BoI/IR for F-18 & MV22*

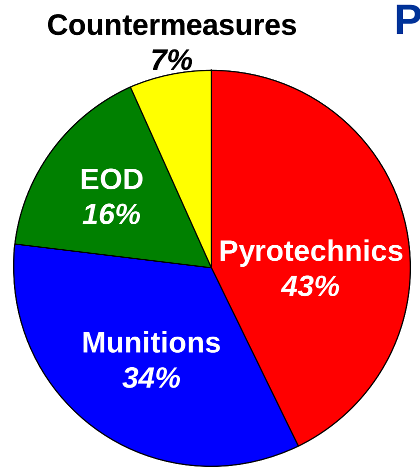
US Army reduction

- *FY11 budget squeeze*
- *Withdrawal from Iraq*
- *250 more helicopters in Afghanistan*

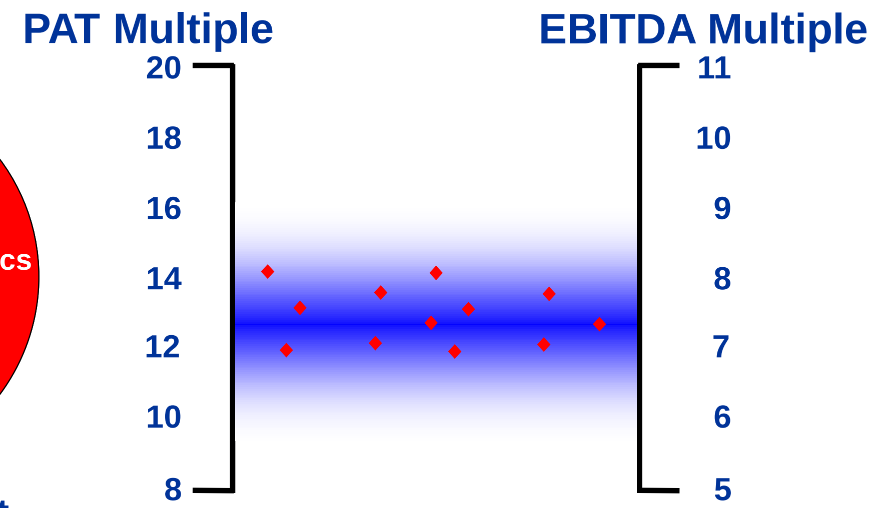
Acquisitions



Geographic Balance



Split by Segment



Valuations in the range 9-16 x PAT

Total investment on acquisitions from 2005 – 2010 c.£430m