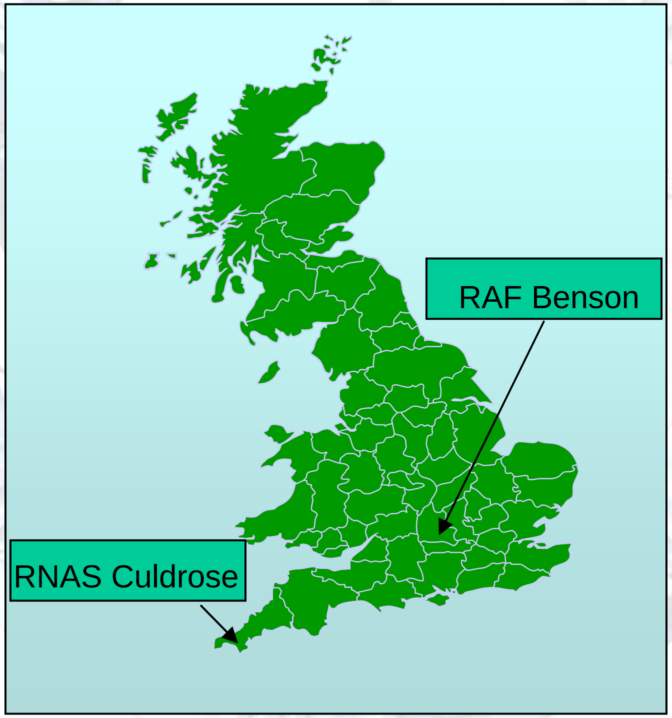
Integrated Merlin Operational Support

Merlin Background

Merlin Mk1 - Fleet

- Merlin Mk1 – 42 A/C
- Main Operating Base at RNAS Culdrose
- Comprises Merlin Air Vehicle (MAV) and Merlin Avionics System (MAS)
- 1st and 2nd line supported by Fleet
- LMA Prime System Integrator and Design Authority for MAS, providing spares availability at MOB and PDS support
- Agusta Westland Design Authority for MAV, providing spares inclusive R&O and PDS support



Merlin Mk3 - JHC

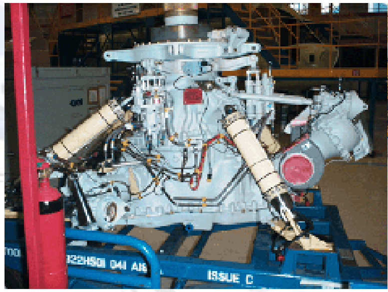
- Merlin Mk3 – 22 A/C
- Main Operating Base at RAF Benson
- Comprises Merlin Air Vehicle (MAV)
- 1st and 2nd line supported by JHC
- Agusta Westland Design Authority for MAV, providing spares inclusive R&O and PDS support

Current Merlin Support Chain

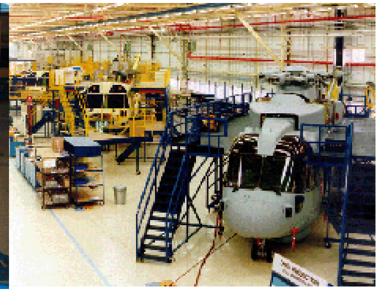
RNAS Culdrose - Mk 1

1st line + deployed 2nd line

2nd line ashore



3rd line



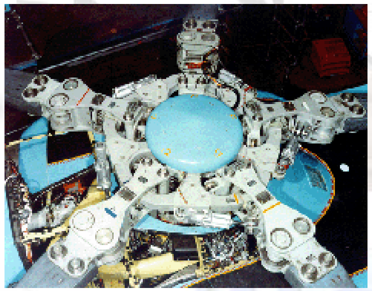
4th line

Incentivised Spares Availability Contract

Prime: LMASIC

RAF Benson - Mk 3

1st line + deployed 2nd line



2nd line

3rd line

4th line

Incentivised Spares Inclusive Repair and Overhaul Contract

Prime: AWIL

Challenges

- Reduce output costs without compromising delivery of support to the Frontline Customer
- Align MoD/Industry/Frontline Customer business model
- Optimise Platform (Vertical) vs commodity (Horizontal) approach to support provision
- Transfer of 2nd Line budgets and responsibilities to the DLO
- Develop incentivised service provision with gainshare
- Map operational output requirements to contracted service
- Provide improved business opportunities for industry to support risk transfer and increase their revenue streams
- Develop new skills sets in both MoD and industry

IMOS Procurement Strategy

- The Procurement Strategy concluded that a sole-source arrangement on WHL as Prime, with LMA and Agusta as sub-Primes, offered maximum opportunities to meet programme goals:
  - "Thin Prime" arrangement minimises overheads and improves flow down of risk and reward to supplier base
  - Development of common IOS elements - MIS, KPIs, incentivisation metrics, management arrangements - with other RW platforms provides for considerable value leverage
  - Exploits WHL's 25-year experience of EH101/Merlin
  - Maintains a strong linkage to current and future export customers facilitating exploitation of product development investment (inc US101)
  - Coherent with other RW support solutions (and developing MoD/AgWHL Partnering Strategy)
- Endorsed by DLO 1-Star Procurement Board

Integrated Merlin Operational Support

- A single contract to provide through-life support for the UK Merlin fleet (both marks)
- Industry/MoD interface moved forward to embrace “Depth”
- Support risk transferred from MoD to Industry in a carefully controlled and staged manner
- A means by which support provided to the FLCs can be significantly improved over today’s level
- A means by which Merlin support costs can be reduced progressively over life of the platform
- Coherent with, but not dependent on, E2E/Lean
- A direct link between CSA outputs required by FLCs and contracting mechanism with Industry

Integrated Merlin Operational Support

Contracting for Availability (CfA)

Single Contract incrementally outsourcing Depth Support:

- Combined Mk1 and Mk3 support
- Non-Deployed Repair and Overhaul
- Full Technical Services
- Obsolescence
- Reprovisioning
- Management of Sustainment Fleet
- Aircraft Repair and Overhaul
- Functional Tasking of Servicemen and Women

Incremental Implementation

(< 2years)

Contracting for Capability (CfC)

Enhancement of Initial Phase to incorporate:

- Outsourcing of Training Squadron Aircraft
- Responsibility for Aircrew and Maintainer Conversion Training
- Capability sustainment and upgrade

Incremental Implementation

Long-term contract vehicle: 25 years

2005

2010

Partnering in Support

Depth

Spares

Tech Support

LM Support Chain

Spares

Tech Support

WHL Support Chain

Spares

Tech Support

Ag Support Chain

Service Management

Re-Provis-ioning

Aircraft & Equip-ment R&O

Logist-ics Manag-ement

Integrated Engineering Authority and System Design Authority

On Site

Tech Support

Joint Fleet Planning

- Operating Fleet
- Sustainment Fleet

Spares

Sustainment

Tech Advice

Aircraft

Forward

Front Line Maintenance

Deployed Aircraft & Equipment R&O

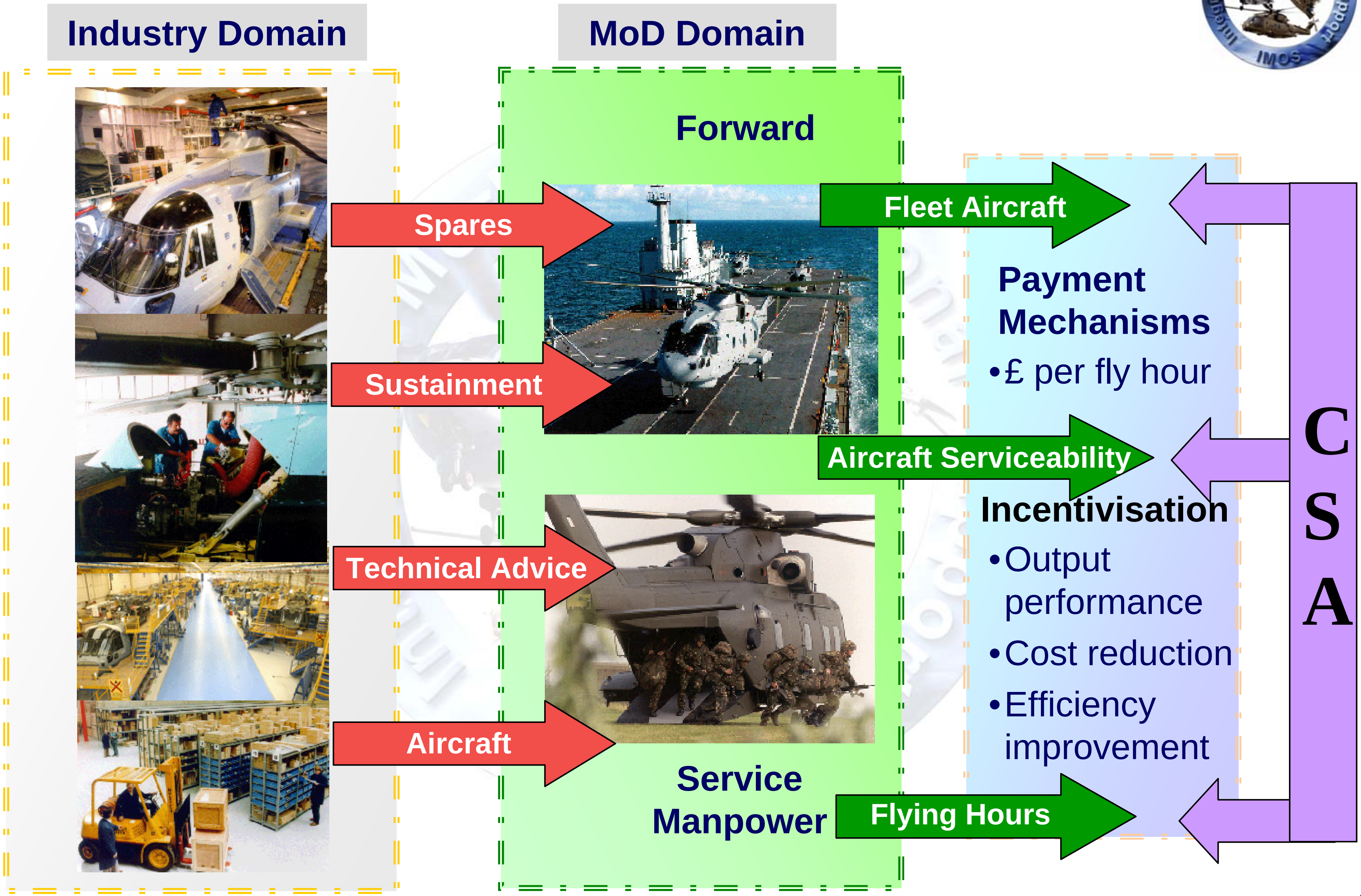
Fly Hours

A/c Serv

A/c Fleet

Industry | Wider Industry | Transfer to Industry | Joint | MoD | Customer

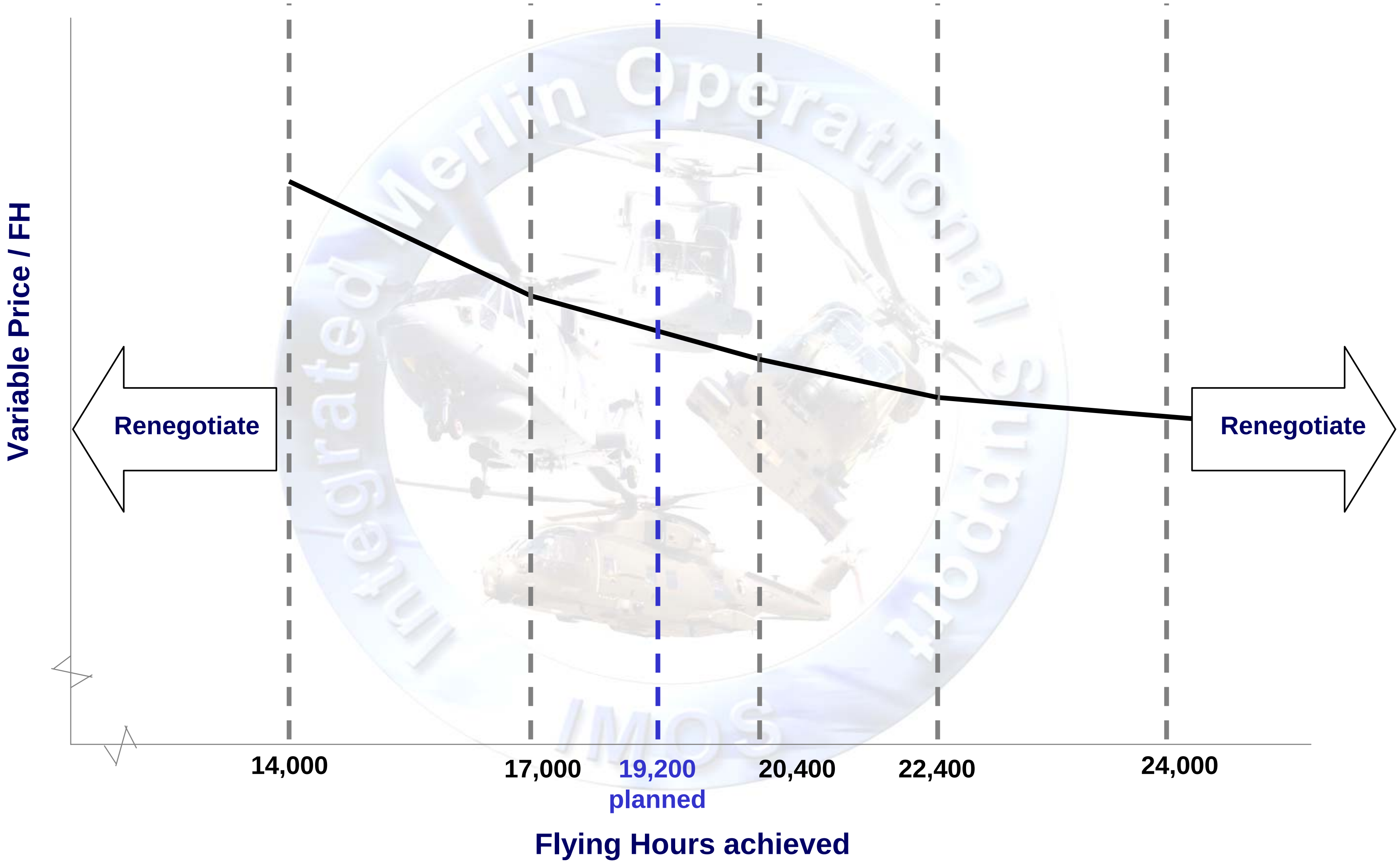
IMOS Contracting Arrangements



IMOS Commercial Key Features

- Overarching 25-year through life support contract to Platform OSD
- Only initial 5-Year period Firm Priced:
  - Conduct review at 3-year point – award 3-year contract extn (Yrs 6-8) – re-establish 5-year contract horizon
  - Thereafter enter rolling 5-year contract, with annual 1-year extns, based on previous performance and formulaic pricing
- Pricing linked to banded flying hours with fixed and variable elements identified
- Profit based on output performance achieved.
- KPIs:
  - UOF: penalty for less than 100%
  - Aircraft Operational Serviceability: +/- incentivisation
- Sub-KPI Measures of Effectiveness (MoEs) monitor key support deliverables under direct Industry control
- Gainshare mechanism established
- Obsolescence risk transfer integral with contract
- Provision for surge delivery within basic contract parameters

Commercial: flying bands



KPI's

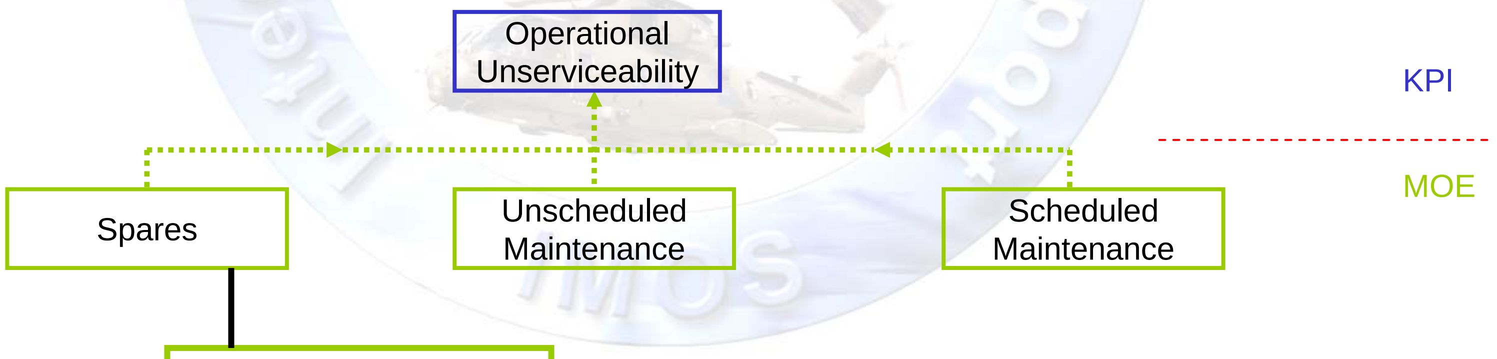
- 2 years before KPI's contractually impact Industry
- Industry will be penalised for failure on the Op Servicability (OS), UOF, MTS and Support to Other Platforms
  - OS is dominant KPI.
- Industry's profit will be reduced for performance failure against these KPIs
- No incentive payment for over performance except for OS
  - +ve only available from Year 3 onwards and is capped.
- Penalties on conventional LD-type basis, i.e. x% reduction in profit for y% performance failure

Weighting of KPIs

KPI	UOF	MTS	Support to Other Platforms	Op Serv
-ve	18%	5%	2%	75%
+ve	0%	0%	0%	Up to £1M pa

Operational Serviceability

- Industry will be incentivised and penalised on Operational Serviceability as a KPI
- Operational Serviceability will be measured on the MIS (AEMIS/JAEDI need early work to reduce subjectivity and improve consistency). EHUDS seen as solution from year 2 (needs to be able to 'capture' current MOD definition of OS)
- Operational Unserviceability would be due to Spares, Unscheduled Maintenance and Scheduled Maintenance.



Assumption: Excluding hostilities, deployments iaw CSA only

UOF

- Industry will be penalised if UOF numbers are not maintained
  - Mk1 30 ac and Mk3 15 ac
- Principle measure of effectiveness of Depth/Pulse line output
  - Works on basis of one ac in = one ac out
- MOE to measure servicing extensions being incurred if depth performance starts to drop off.
  - Dependency on FLC to feed ac in at appropriate time
  - Input/Output programme controlled by a Joint Fleet Planning Team (Both FLCs, MIPT and Industry)

Incentivisation Matrix

OP Serv	FH	UOF	Bonus	Penalty	Flying Hour Adjustment
Met	Met	Met	No	No	No
Exceeded	Met	Met	Yes(OS)	No	No
Not Met	Met	Not Met	No	Yes(OS+UOF)	No
Not Met	Not Met	Not Met	No	Yes(OS+UOF)	Yes
Met	Not Met	Met	No	No	Yes
Exceeded	Not Met	Met	Yes(OS)	No	Yes
Met	Not Met	Not Met	No	Yes(UOF)	Yes

Gainshare

- The Contract includes a Gainshare mechanism to incentivise the Contractor to identify opportunities for cost of ownership reduction across the life of the aircraft which cannot be achieved within the contract pricing.
- Managed through the production, by the Contractor, of individual business cases for each initiative.
- Assessment will be on a cash basis.
- The Gainshare will be based on the period over which the benefit accrues, not just the current pricing period.
- The risk and profit share will be assessed on a case by case basis and be determined by the level of risk and investment made by each party.
- Exit strategy considered case by case

Financial Flexibility and Control

- We will understand our full liabilities from the outset – firm price per flying hour
- Payment Mechanisms aim to both encourage Contractor performance <u>and</u> reward cost control/reduction
- Through-life contract priced in increments
  - Rolling renewal should avoid predatory pricing for later increments
- Cost growth contained by Government Profit Formula Firm Pricing arrangements; only exposed to unconscionable profit and loss
- Pre-negotiated pricing for wide variation in Merlin flying rate provides certainty for budgeting
- IMOS allows greater flexibility to respond to MoD/Customer directed changes (eg surge for operations, budgetary restrictions, etc)
  - Under IMOS, approx 50% cost varies with Flying Hrs
  - Under legacy contracts, approx 20% cost varies with flying hours

IMOS Limitations

- IMOS will not:
  - Correct current programme deficiencies (such as Mk3 DSP)
  - Deliver new Capability (unless funded/contracted for separately)
  - ‘Respond instantly’ to significant changes in output requirements
  - Resolve technical issues within the core price which do not affect aircraft availability.
    - These will still require separate STP funding.
  - Indemnify the MOD from <u>all</u> obsolescence issues and costs
    - Whole System obsolescence will remain a MoD responsibility
  - Absolve the FLCs from their responsibilities
    - IMOS is a FLC/MIPT/Industry 2-way partnership

MBC Schedule v. Aug 05