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## **Background**

Follow on NPS project

Costing Operations & Support

Complexity/cost variance at early stage



### **Research Overview**

- Cost sharing in O&S
- Understand business models that work
- Characteristics of a good model
- Lessons learned & Implementation



## **Case studies**

#### **Programs**

• F-35 Lightning II (US/UK)	Super Hornet (US)
AV-8B/Harrier (US/UK)	Typhoon (UK)

#### **Technologies**

Carbon fiber	Computing
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#### Operational aspects – combat aircraft

• Land based • Sea based

Original Thinking Applied



## **Prior findings & assumptions**

- 'Interactions' drive costs
- Wide scope for cost variance in O&S
- Business models are <u>not</u> strategy
- Contingencies & change



## **Harrier GR.9**

- Driven by RTI
- More than UoR

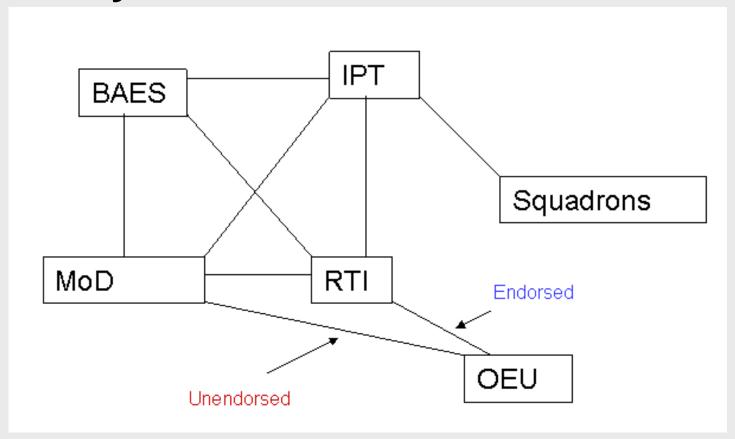


- Exemplary behaviors
- Team work/experience





## **BAE Systems Harrier Business Model**



Original Thinking Applied 7



## Harrier GR.9 SWOT analysis

Strengths	Weaknesses
Small team UK/BAE controlled RTI	Small programme – little political support BAE see 'Harrier way' as cheap, so profits low
Opportunities	Threats
JSF delay Combat use CVF integration trials	□Strategic decision to cancel Harrier MoD lose tacit understanding



## Typhoon 'Case White'

Consortium

EIS support



Staff re-deployed



## Typhoon 'Case White' SWOT analysis

Strengths	Weaknesses
Large programme High turnover/long timescale	Large Team Four nations – slow Complex systems
Opportunities	Threats
JSF delay New weapons/roles	□JSF capabilities Limited combat use



# **Interim findings**

- Business models deal with contingencies
- Success is in the implementation
- Constant learning
- Report June 2012

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## **Thank You**

Questions?