

Aerospace Industry Outsourcing in Two 'Clusters' in Wales, UK

IKINET Project

FOURTH SCIENTIFIC WORKSHOP

February 23-25, 2006

**Centre for Advanced Studies, Cardiff University,
Room 1.17, 44-45 Park Place, Cardiff, UK**

Oliver Ehret & Philip Cooke

Centre for Advanced Studies, Cardiff University

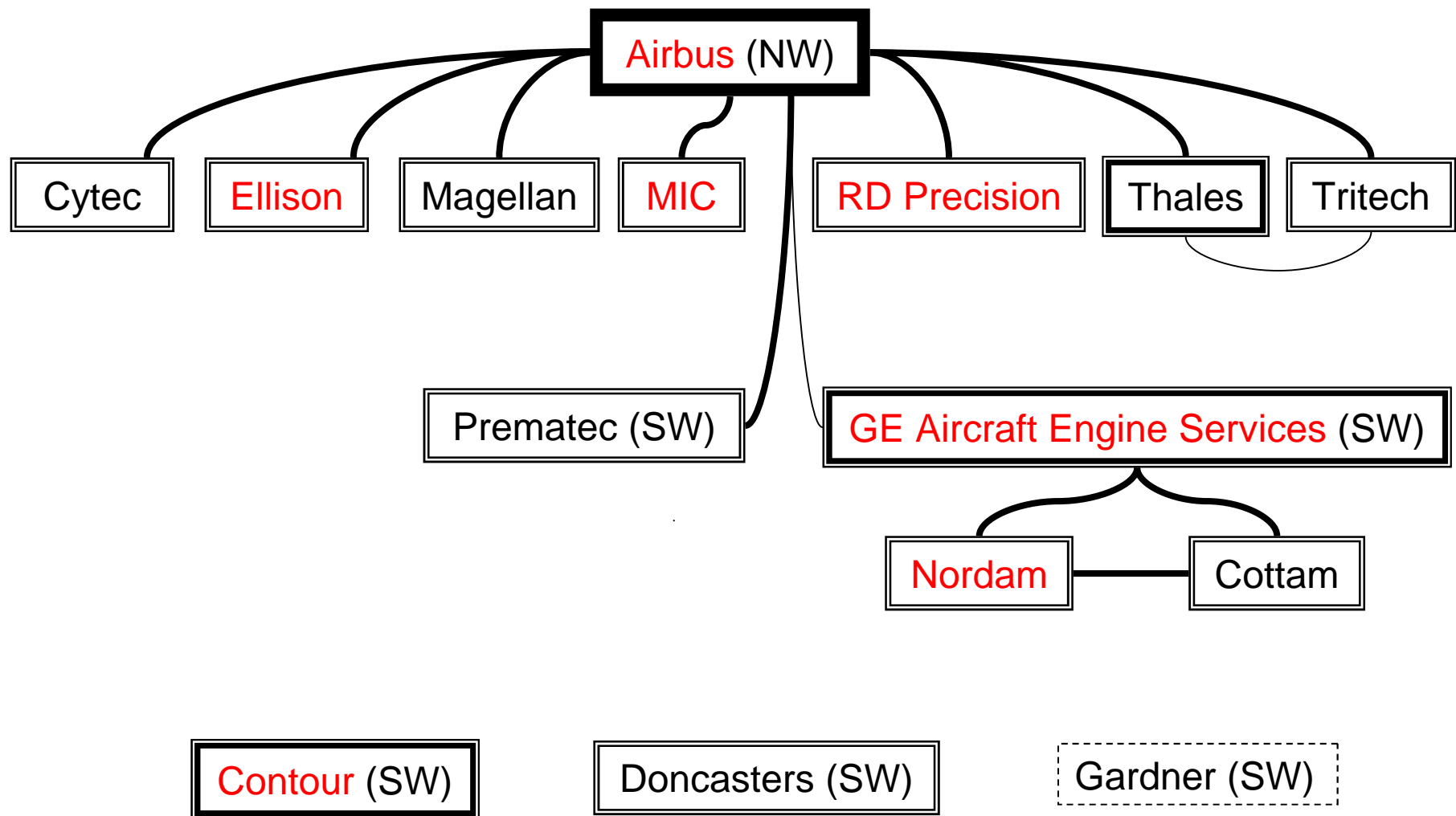
Research Questions

- 1) To what extent do Welsh aerospace companies source regionally and outside of Wales, respectively?
- 2) What role does the regional, or extra-regional, availability of knowledge play in explaining the direction of outsourcing?
- 3) Could an upgrading of regionally available skills help to improve the position of Welsh aerospace, as compared to competing and more advanced European regions?
- 4) What more specific policy implications arise from this?

The Welsh Aerospace Sector

- Welsh aerospace sector, comprising of over 150 firms, displays a north-south divide
- North Wales dominated by an **aircraft manufacture** supply chain to wing producer Airbus at Broughton
- South Wales loosely structured; and more involved in **Maintenance, Repair and Overhaul**, R&D, and training
- Apart from Airbus that sources significantly in the region, Welsh aerospace firms buy only few supplies in Wales
- Supply chains at least UK wide, but mostly international

Aerospace Sector in North and South Wales: Map of Interviewed Firms



Airbus Broughton and its North Wales Supply Chain

- Airbus Broughton produces **metal wings** for all current Airbus aircraft and will assemble **composite wings** for future planes
- While supply chains of whole **Airbus SAS** are of a **global nature**, Welsh suppliers are important for Broughton plant
- Airbus suppliers (MIC, RD Precision, Ellison) gained business largely due to expertise in producing or processing metal wing components
- The fact that only few suppliers have skills in composites that will largely replace metal threatens longer-term viability of supply chain
- Airbus suppliers only source few supplies in Wales, due to absence of technological capabilities and OEMs' approval requirements

Aerospace Agglomeration in South Wales

- Only weakly connected to North Wales and Airbus manufacturing, the main focus of aerospace in South Wales is MRO
- GE Engine Aircraft Engine Services is the largest MRO firm in Wales, servicing aircraft engines, followed by British Airways Maintenance Cardiff maintaining airframes of large Boeing planes
- GEAES has just 2 suppliers in Wales, but sources from 900 firms around the globe, e.g. in the USA and Singapore
- This is because GEAES must buy many parts from engine OEMs or use approved suppliers, firms that are not often based in Wales
- Most other SW aerospace companies source even less in Wales, due to problems with skills and equipment of potential suppliers

Outsourcing and Knowledge in Wales

- Apart from Airbus Broughton, aerospace firms in both North and South Wales source only few supplies regionally
- Whereas the metal expertise of Airbus suppliers in NW is key to their current success, the lack of composite skills is a serious threat
- Especially in SW a lack of technological knowledge and related MRO capabilities explains much of the weakness of regional sourcing
- Wales is a **competitive EU aerospace region**, but an upgrading of skills especially regarding composites would still improve position
- While Welsh policy-makers are taking steps in the right direction by promoting skill development, composites require more attention