TITLE: The East Midlands Business link

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Astrium is a wholly owned subsidiary of EADS:

- Astrium Space Transportation (launchers and orbital infrastructure)
- Astrium Satellites (spacecraft and ground segment)
- Astrium Services (development and delivery of satellite services)

The GEO–Information Business Division of Astrium Services:

- Infoterra companies, Spot Image and Spot Image subsidiaries
- Provides EO imagery and geo–information products & services worldwide
- Portfolio spans the entire geo–information value chain
Mastering industrial production:

- Dedicated production and project management organisation
- ISO certified and quality oriented
- Production team includes 250 multi-skilled engineers and technicians
- The latest equipment and software
- Large storage capacity and network infrastructure

Allows the Division to manage large industrial data projects and service delivery initiatives
Our take on THE ISSUE

- **IAP** – Connecting expert communities and combining systems
- **G–STEP** – Knowledge exchange hub
- **TSB** – Bringing together independent but inter-related organisations
- **GMES** – Evolving from R&D to operational service delivery
Integrated Traffic Management and Air Quality Control using Space Services (iTRAQ):

- Offers an integrated solution in relation to both air quality and traffic management issues
- Highly innovative implementation of computational intelligence

Our role within iTRAQ:

- Overall system architect – design and deployment of an operational system
- Leader of the ‘Viability Assessment’ activities
- Leader of the ‘Implementation Roadmap and Recommendations’ activities

Developing action plans for commercial implementation and service provision
Our project experience cont’d..

- Climate and Environmental Monitoring from Space (CEMS):
  - Greater exploitation of the potential value-added market for EO-derived climate services
  - Provision of an infrastructure to support this service delivery
  - To make these data accessible to both the public and private sectors

- The relevance of CEMS:
  - A partnership of industry, research and national government
  - To boost capabilities and skills in climate science, data management and service delivery
  - To work with existing capabilities
  - To recognise gaps and build new infrastructure

- Identifying the development path for widespread uptake of EO climate applications
GetGEO:

- A framework approach to deliver a fusion of geospatial services (imagery, vector layers and other relevant information streams)
- Data sourced from Astrium GEO’s own internal archives and catalogues as well as potentially from 3rd party data services and data sets.
- Delivered through a dynamic and customisable web interface
- Base capabilities can be enhanced to provide business-specific solutions

The relevance of GetGEO:

- Focussed on providing enhanced solutions for the urban environment
- Taking an application concept and turning it into a commercial service
- Understanding user requirements and delivering business solutions
- An integrated approach with potential to involve a range of technologies

Boosting the competitiveness of regional economies
Our project experience cont’d..

- Catapult centre in space applications:
  - Dedicated to the development of new space applications
  - Aims to find the next ‘big’ idea that can be turned into an economic success story
  - Astrium GEO is a key contributor in the definition of the Centre

- The relevance of the Space Catapult:
  - Provides business with access to facilities to support the development and demonstration of new technologies
  - Traffic management and urban planning are mentioned specifically
  - Provides a potential mechanism for exploiting existing research
  - Provides a potential incubator for genuine commercial service opportunities

- Contribute to the delivery of innovative solutions to reduce traffic emissions and improve air quality
Our project experience cont’d..

- Other ‘THE ISSUE’-related initiatives:
  - FiReControl
  - ESA’s Service Coordinated Interface (+ GEST)
  - Other IAP initiatives:
    - Land Border Control
    - De-mining
    - Civil Resilience
  - GMES Long Term Scenarios
  - SKAPE
- Experience of integrated service definition
- Experience in operational service delivery
- Experience in the built environment
What does Astrium GEO bring?

- The perspective of UK industry – 1 link in the ‘triple helix’
- An understanding and appreciation of the requirement to move from R&D activities to operational service provision
- Experience of operational service provision
- System engineering capabilities to operationalise and commercialise service concepts
- The ability to identify and exploit market opportunities
- The ability to develop action plans for commercial implementation
- Support for the Steering Group and Joint Action Plan
Priorities within the project?

- **EO2** – To identify market opportunities for mature R&D applications and develop action plans for commercial implementation
- **EO4** – Deliver innovative solutions to reduce traffic emissions and improve air quality locally within nationally defined targets
- **STO2** – To identify the development path for widespread uptake of Intelligent Traffic Management
- **STO5** – To transfer Computational Intelligence technology to operational users
- **STO7** – To introduce active air pollution monitoring and mitigation into regional transport and environmental strategies
Thank you.