

# **A Satellite Applications TIC**

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# SatApps TIC - goal

*‘generating growth across the economy  
through new satellite enabled business’*

- ***Note : overall TIC strategy goal***
  - accelerating the commercialisation of innovative technologies

# **Out of scope**

- **Space science**
- **Space exploration**
- **Manned space flight**
- **Expendable rocket launchers**
- **Astronomy**

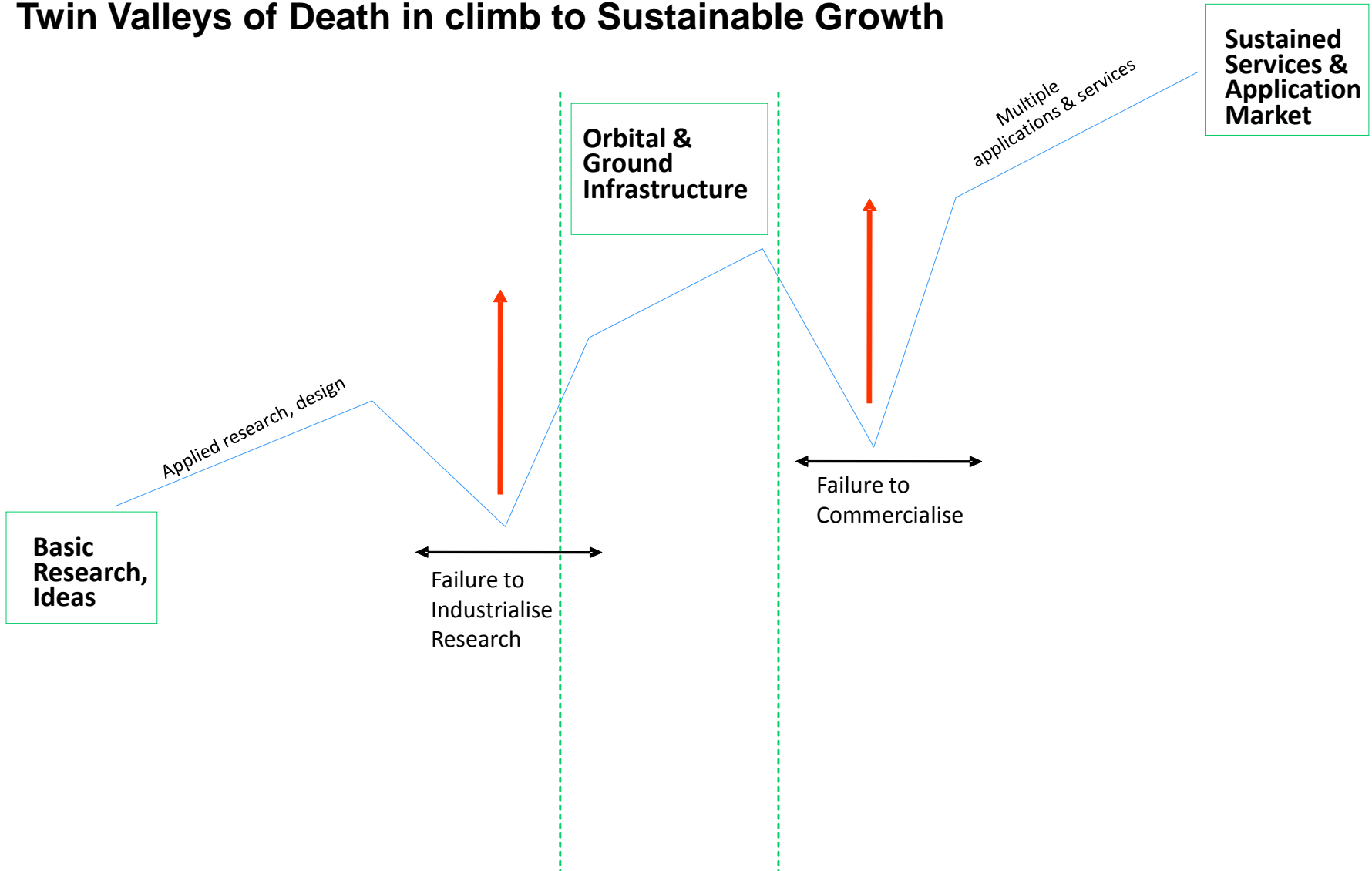
# **Market size forecast - 2020**

- **Satellite build and satellite services**

**\$200 – 300 bn**

## The challenge

### Twin Valleys of Death in climb to Sustainable Growth



# What does industry need from the SatApps TIC ?

- **Risk reduction**
  - *Prove that new solutions are robust in order to leverage investment and open new markets*
- **Lead time reduction**
  - *Help get new products and services to market quickly*
- **Step change cost reductions**
  - *Provide an environment for the development of disruptive solutions that can change the market*

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## SatApps TIC aims to provide end-to-end capability, with access available to all



**Benefits: Risk reduction**

**Shorter time to market**

**Capability demonstrations for new customers**

**SME access and connections to new players**



## Concurrent Design facility

Infrastructure for carrying out  
rigorous feasibility studies

Facility

Software

Methodology

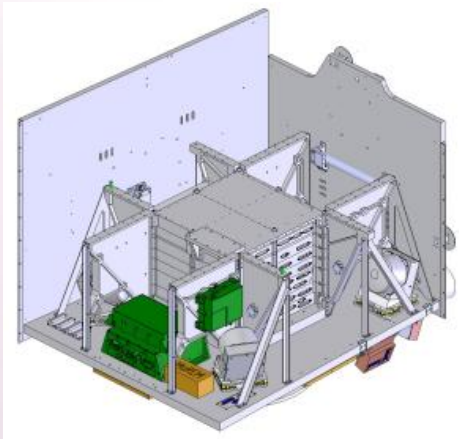


Photo : ESA

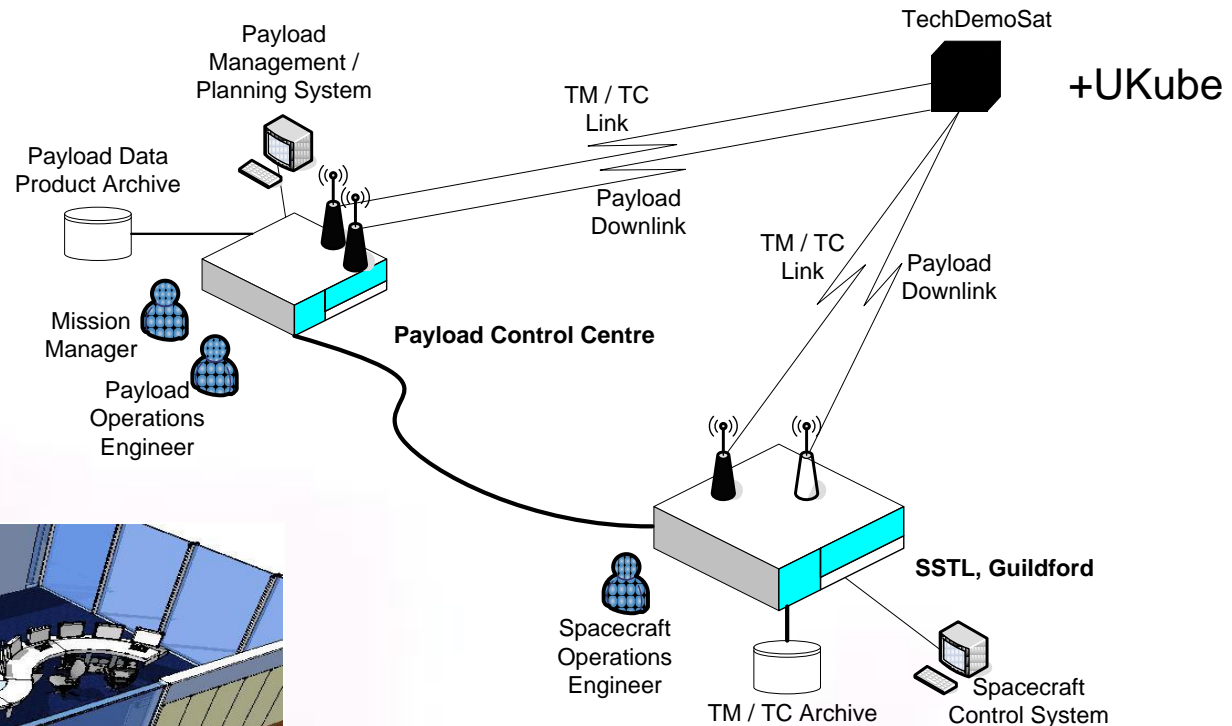
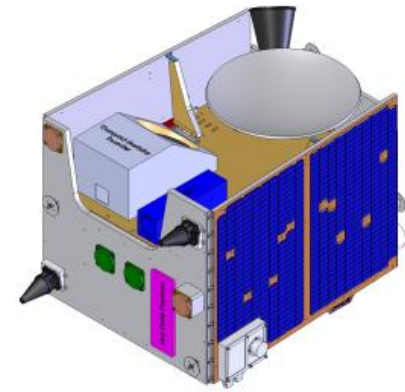
**A new way to carry out design studies - successfully used by ESA**



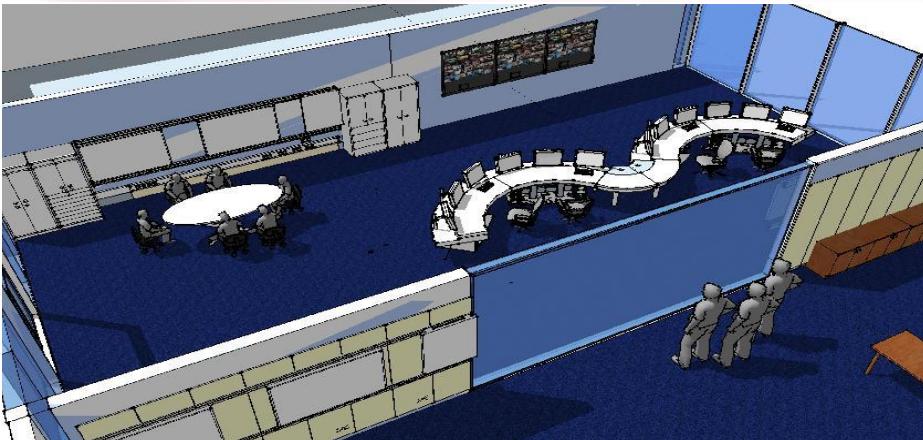
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# Technology Demonstration - in orbit



# Satellite Operations Centre



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## Application and Service Demonstration – on the ground



# Industry involvement – building on the Innovation and Growth Team

- **Established Space companies**
  - e.g. Astrium (Satellites and Geo Information Services), SSTL, Inmarsat, Avanti
- **Niche Space companies**
  - e.g. COMDEV Europe, SciSys, Magna Parva, Nottingham Scientific Ltd, ARGANS, ABSL, ClydeSpace, STAR-Dundee
- **Large multi-sector companies looking to exploit growth in the Space sector**
  - e.g. Logica, BAE Systems, Finmeccanica, Qinetiq, SEA, Cobham, Magellium, e2v
- **SME's looking to grow in the Space sector**
  - e.g. Helveta, OpTIC Glyndwr, MESL Microwave, Reliance Precision, In Touch Ltd, TISICS, BMT Argoss, eCityRisk, LivingPlanIT, 4 Links, ARGANS
- **New ventures and start ups**
  - e.g. Newton Launch Systems, Reaction Engines, Imperative Space, GeoSeren, G2way
- **Non space organisations**
  - e.g. Google, Microsoft, IBM, Willis Re, SGI, Rockwell Collins, Met Office, NATS, NPL

# Potential core competencies

- Centre for Climate and Environmental Monitoring from Space (CCEMS) (for UKSA)
- Centre for Earth Observation Instrumentation (for UKSA)
- Centre for Calibration of Satellite Instrumentation (STFC)
- Mobile Sat Comms Applications Centre (Inmarsat)
- Air Traffic Management demonstration centre (Inmarsat)
- Autonomous and Intelligent Systems Facility (SciSys)
- Disaster Relief & Emergency Communications (Avanti)
- Maritime Safety Data Centre (exact Earth)
- Sea Ice Services (Vega Space)
- Satellite Propulsion Centre of Excellence (Qinetiq)

# **Decision making – next steps**

- **8 Dec – TSB Exec team recommendation reviewed by TSB Governing Board**
- **Dec – announcement of TIC network name**
- **Dec/Jan – announcement next TIC areas (schedule to be agreed by BIS)**

# **What if SatApps TIC is selected for implementation?**

- **TSB issue call for Expressions of Interest**
  1. To run the TIC
  2. To work with/use the TIC
- **Anticipate a single industry led bid to run the TIC**
  - ISIC + other Space industry + non Space industry + universities/public sector
  - Industry bid team established (TSB likely to fund)



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*'The UK Space sector is at a crucial time in its development with potential for significant growth. A T&IC focused on Space systems and applications could give the UK real competitive advantage, enabling industry to quickly access and commercialise world class research from our knowledge base.'*

CEO, Astrium

*'BMT has long recognised the value of earth observation data from satellites..... We would like to bring our particular combination of global market knowledge, business expertise and innovation to support the further growth of the commercial downstream satellite businesses.'*

Chief Executive, BMT Group

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[www.innovateuk.org](http://www.innovateuk.org)

