

Our Programmes

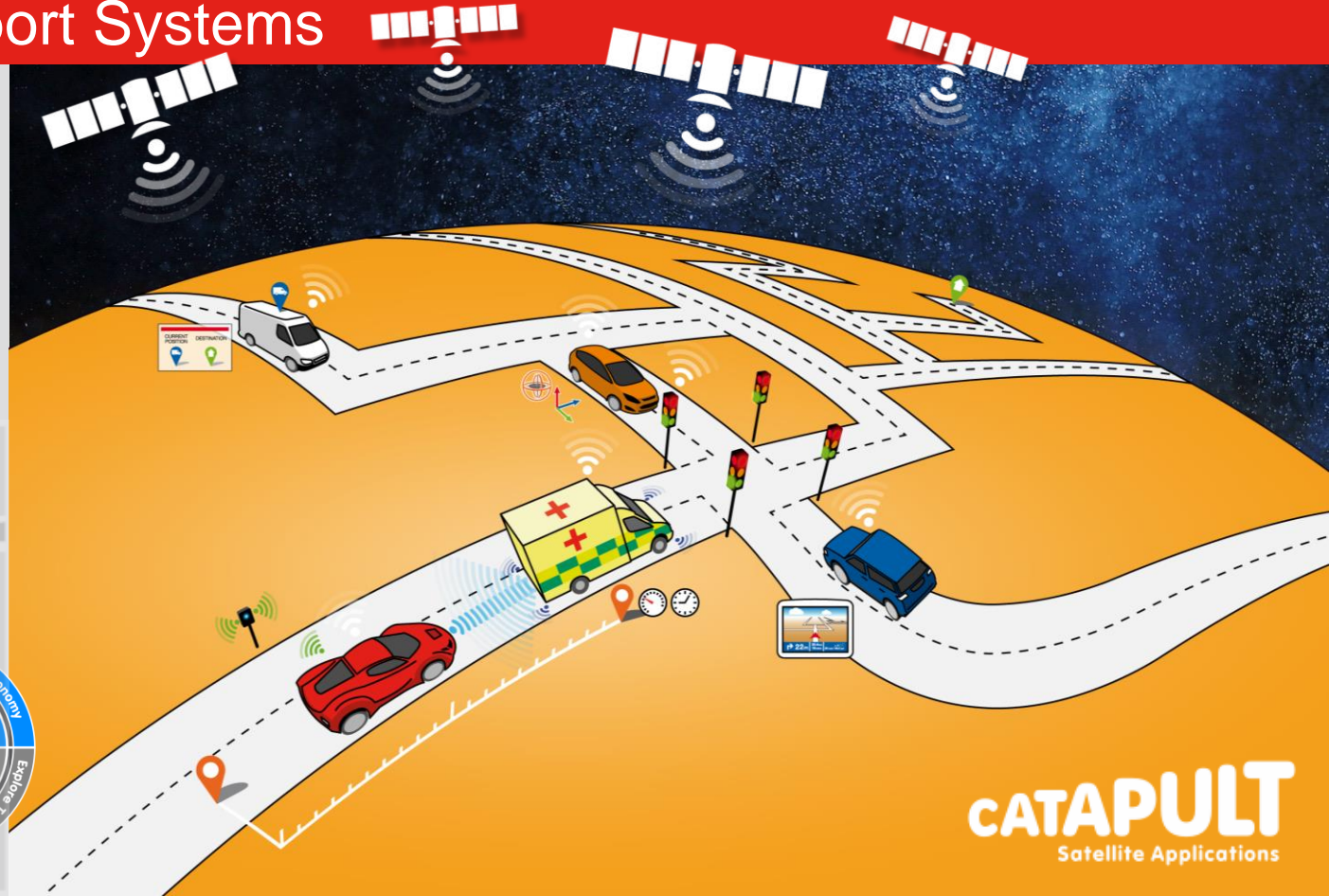
Programmes provide
direction and focus for
the Catapult

Engagement with user
community is
fundamental

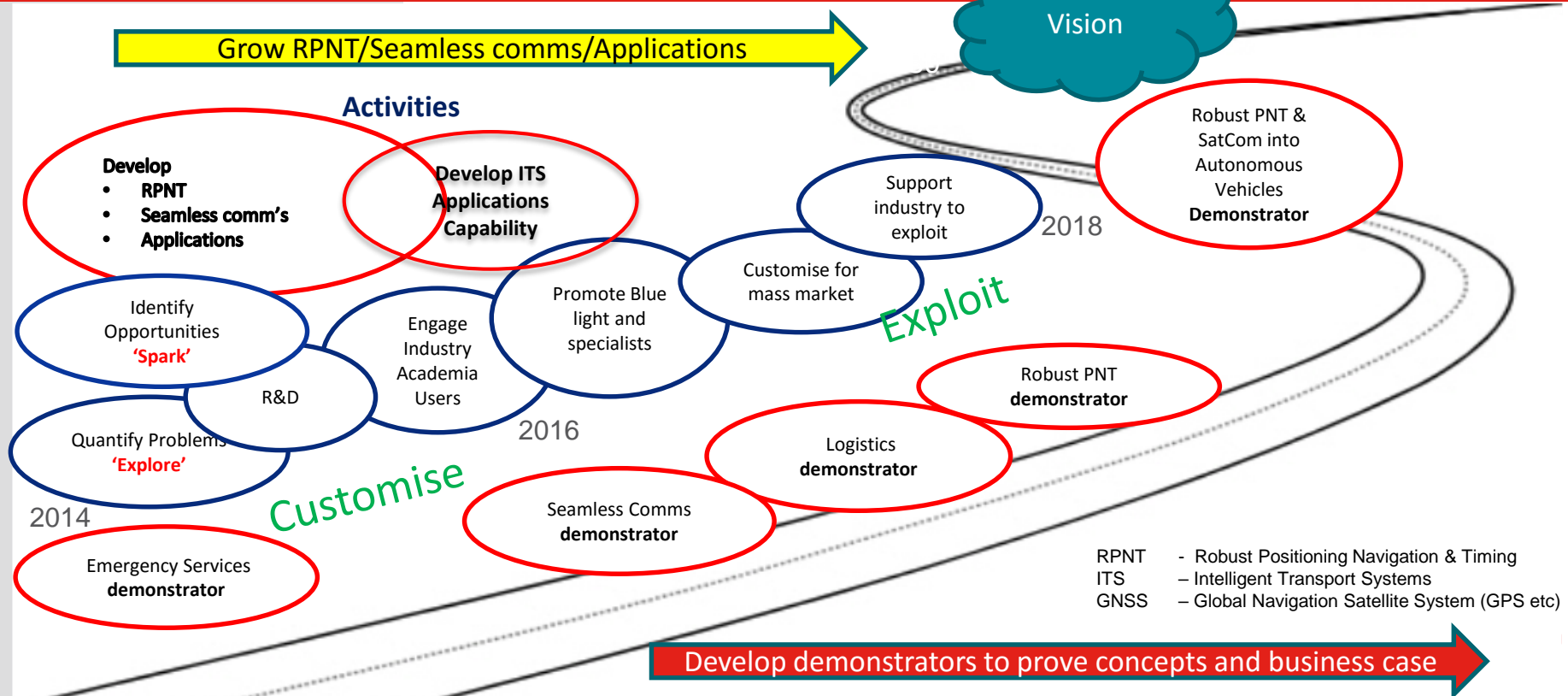


Intelligent Transport Systems

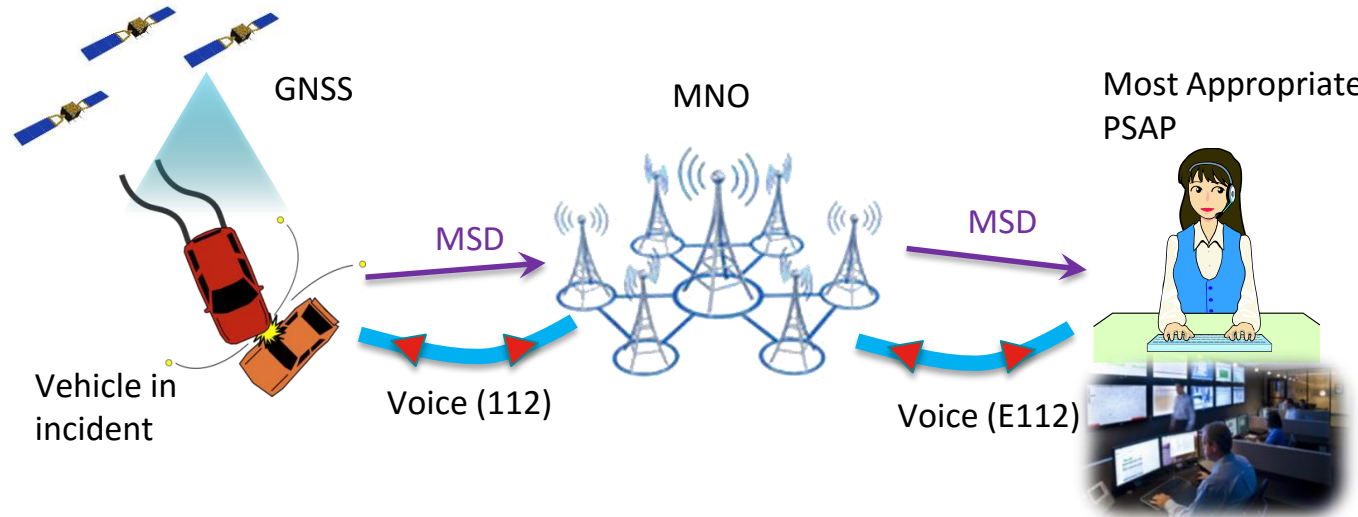
Increased exploitation of autonomous systems will require increased resilience in positioning, timing communications and information support systems.



Catapult Route Map Supporting The Transport Sector



Intelligent Transport Systems: Example EU-wide E-call



- Current eCall based on ETSI and CEN standards (>12 years ago) – uses in-band modem for eCall data in a CS 112 call
- Regulation (EU) 2015/758 – mandatory fitting of 112 based eCall in-vehicle system from 31st Mar 2018 onwards

Working across industries

Active collaboration
with the other
Catapults leverages
impact across sectors



LUTZ, an autonomous pod for two passengers trialled in Milton Keynes

CATAPULT
Future Cities

Large scale Geospatial Data Visualisation
for Bristol City Council

CATAPULT
Transport Systems



CATAPULT
Satellite Applications

Combining Satellite Communications and GPS

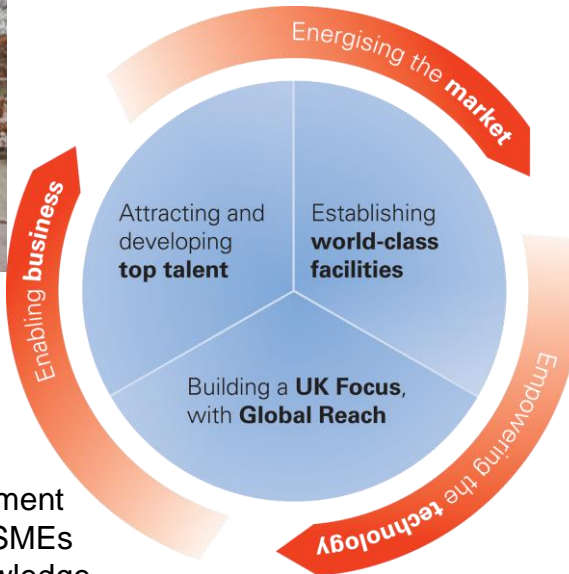
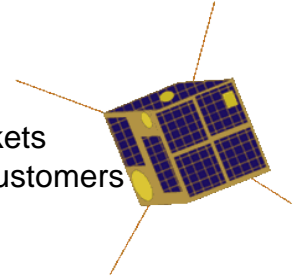


Business Advice

- Idea validation
- Legal and regulatory environment
- Support and signposting for SMEs
- Unbiased with specialist knowledge
- Creation of new businesses & services

Removing Market Blockers

- Workshops, ideas, collaborations
- Demonstrating satellite technology in markets
- Connecting applications developers and customers



Harnessing Disruptive Technology

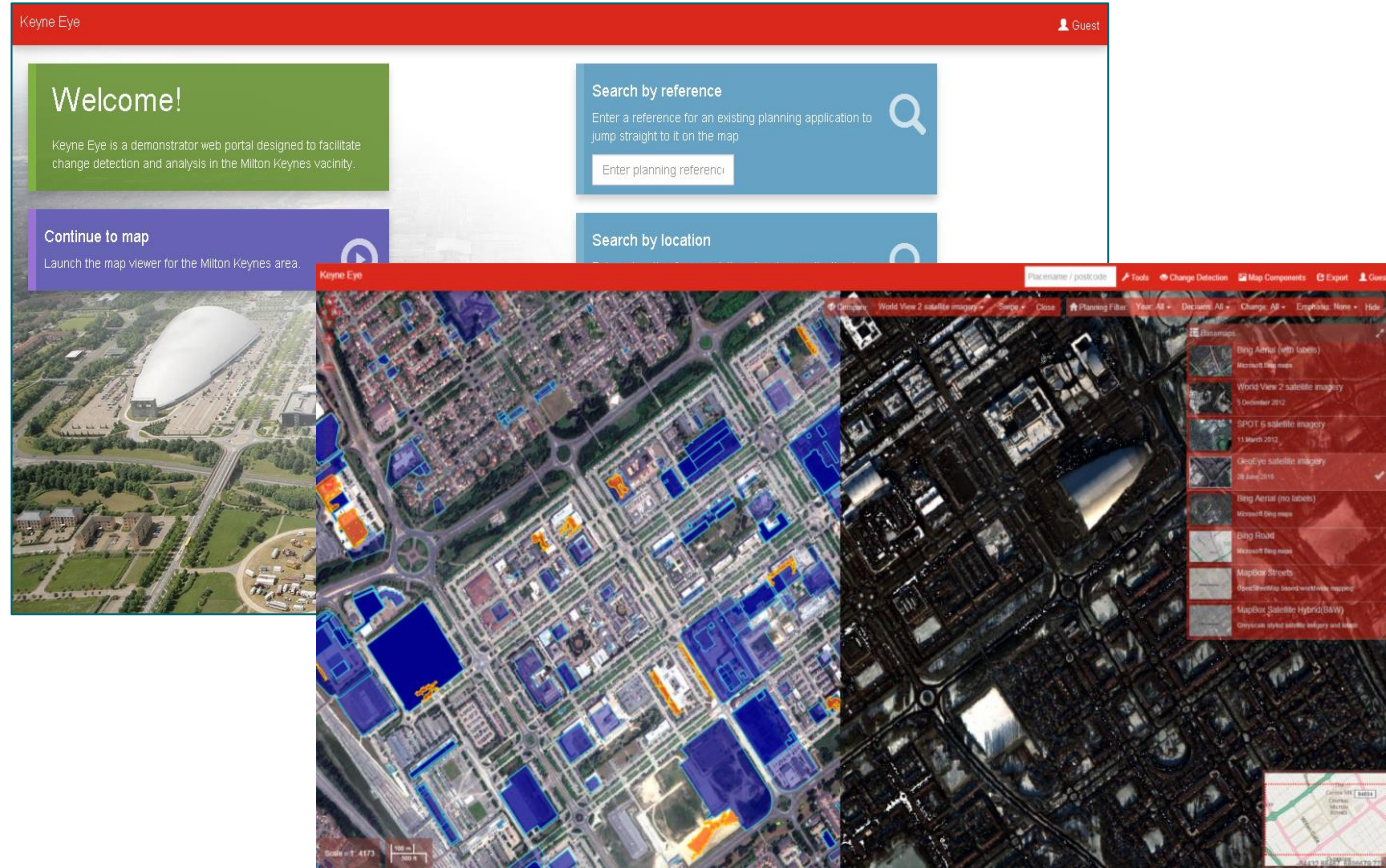
- Technology advice
- Platforms to unlock Markets
- Creation & dissemination of IP
- Stimulation of new applications
- Links to universities and R&D

Case Study - KeyneEye

KeyneEye Web Demo

Change Detection
from layered
satellite imagery
and existing
planning system

*Developed by the Satellite
Applications Catapult,
Sterling Geo, and Milton
Keynes Council*



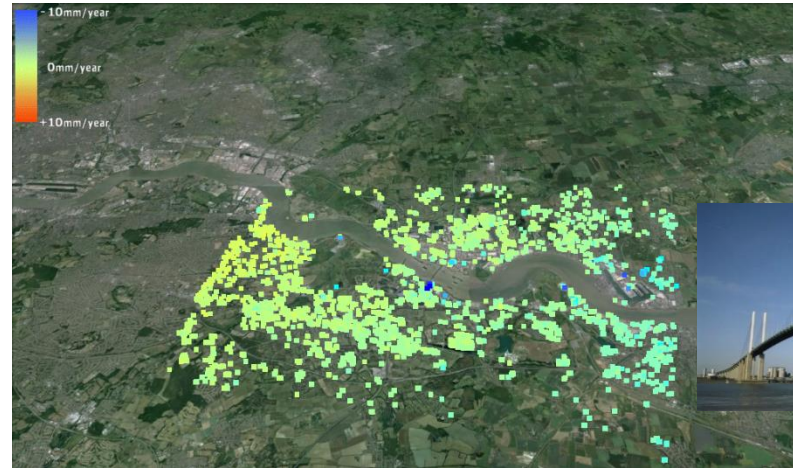
Case Study - Transport Infrastructure Management Service (TIMS)

- Demonstrating satellite technologies for transport infrastructure management
- An adaptive platform for seamless, cost-effective data communication based on integrated ground and satellite data sources.



Integration of:

- Satellite communication
- Earth Observation; I-SAR for ground deformation monitoring
- GNSS (GPS)
- Ground sensors – Tilt, crack, vibration, temperature



International Road Infrastructure Case Study - Nigeria

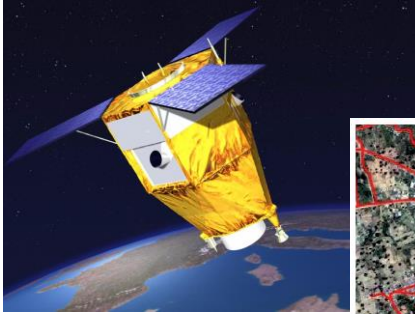


Image collecting survey vehicle

TranMon helped Nigerian DoT to monitor condition of roads in remote locations

- Combined satellite and ground data
 - Provided rapid decision support
 - Analysis over very large areas
 - Focused limited resources
-
- Fusing data from
 - EO
 - GIS
 - UAV's
 - Ground Sensors
 - Maritime

The Catapult Advises Leading Industry Organisations

The Catapult is independent and uses specialist 'Space' knowledge to support industrial projects



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



The Catapult Partners Businesses of all Sizes

- The success of the Catapult is measured by the support given to partners
- The Catapult wants to work with industry to create strong markets



Research Funding for Transport Projects

- Supporting industry and academia to access sources of R&D funding
- Actively exploring new national and global funding routes
- As an RTO, Catapult often 100% funded

Project topics include :

- Integrated & Multimodal Transport
- Connected Vessel
- Communications for buses
- e-Call (emergency services)
- GNSS Positioning – Autonomous vehicles



Science & Technology
Facilities Council



Innovate UK
Technology Strategy Board



CATAPULT
Satellite Applications