



Transport Systems Catapult Update

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Transport Knowledge Transfer Network

The TSB Toolset

Range of Tools with different objectives / characteristics

Smart

SBRI Government challenges.
Ideas from business.
Innovative solutions.

Collaborative R&D

_connect

Knowledge
Transfer
Partnerships



eurostars™

Knowledge
Transfer
Networks



MISSION 2012
24 - 31 March

CATAPULT®

Launchpad

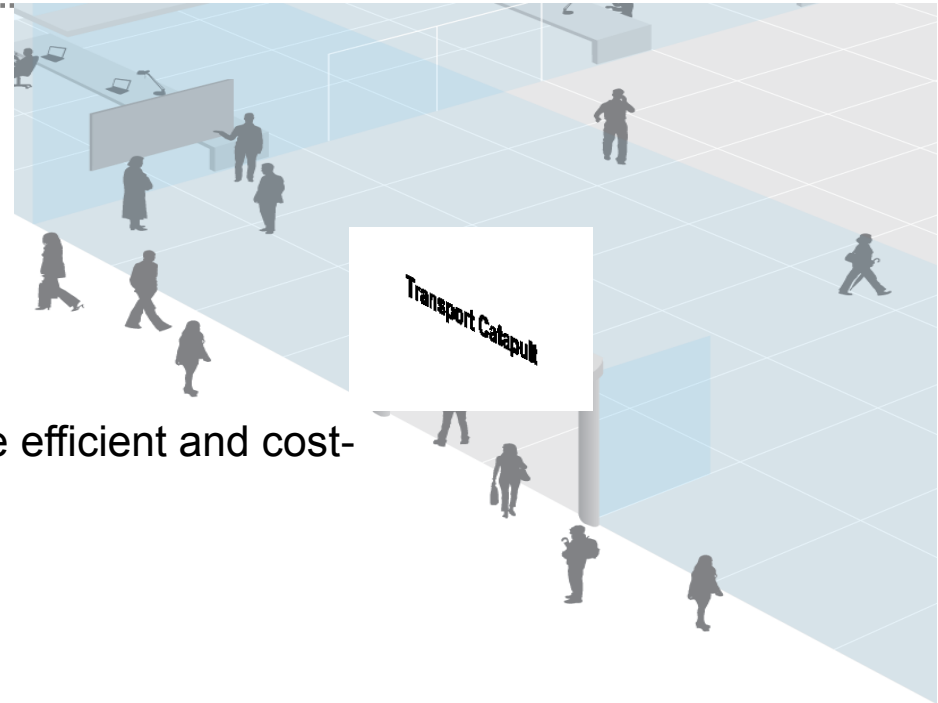
Transport Systems Catapult

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‘Driving economic growth from the efficient movement of people and goods and creating a global centre of excellence’

Transport Systems Catapult Vision

- Driving economic growth in the UK from the efficient and cost-effective movement of people and goods
- Collaboration, coordination and integration
- Unlocking latent capacity
- Developing new market for transport systems and selling UK expertise globally

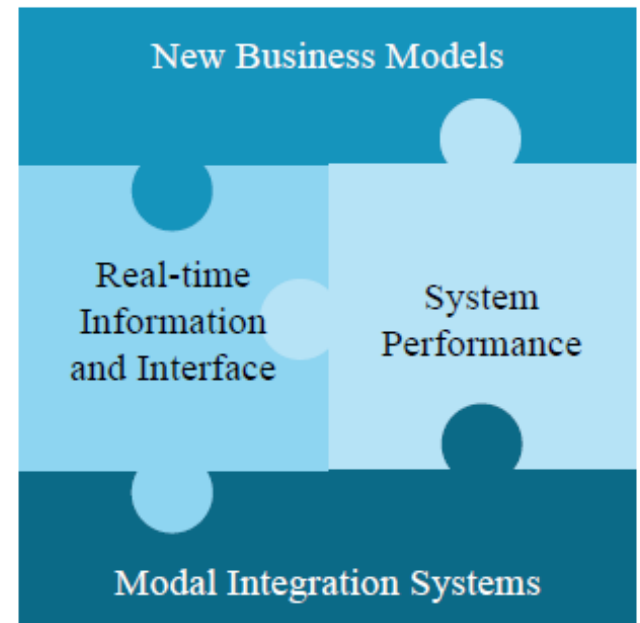


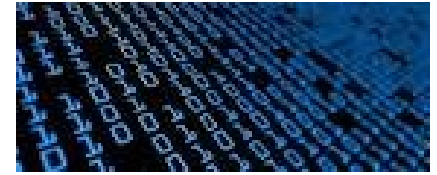
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Key Projects

○ Four key themes

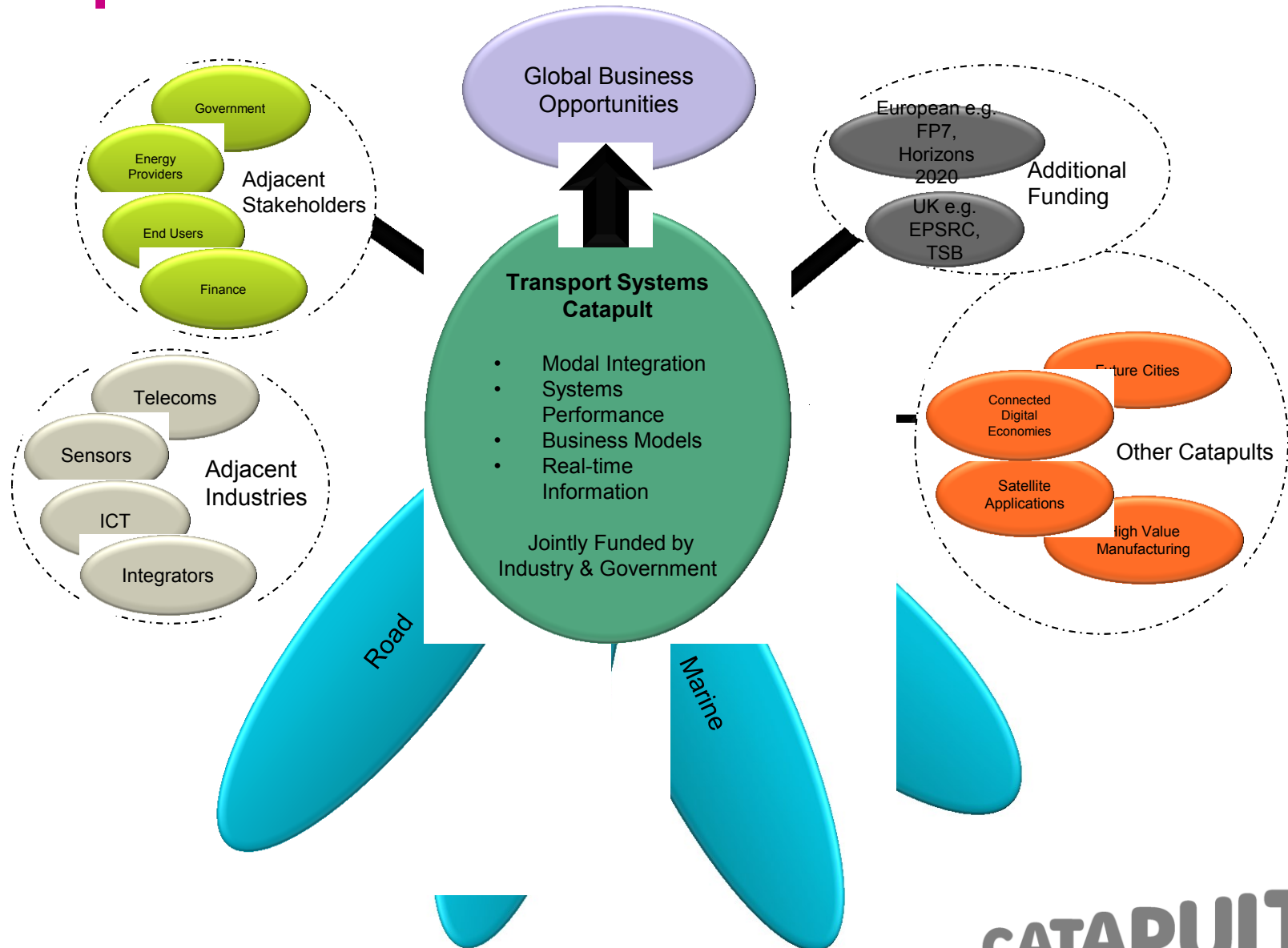
- New Business Models
- Real-time Information
- System Performance
- Modal Integration





Modal Integration	System Performance	Business Models	Real-time Information
Infrastructure design optimisation	Health monitoring and diagnosis	Economic modelling	Transport data and information systems
Modal convergence	Demand management systems	Ownership vs use business models	End to end journey assistance
Infrastructure integrity	Reliability management	Planning for multi modal systems	Journey planning
Connected vehicles	Infrastructure security		Ticketing
Intermodal transfer	Traffic control systems		Real time journey advice
Seamless journey	Positioning and tracking		Freight logistics
	Passenger management		

Catapult Interactions



Who will participate?

Companies in a wide range of markets will see the Catapult as an invaluable resource to help them develop their business. This will include:

Major Transport companies.

Supply chain companies, particularly SMEs,

Consultancies and research organisations

Academia

Governments (both national and local)

Infrastructure Managers

Adjacent Industries

IT companies

Key Projects and Enabling Activities

Transport Systems Catapult

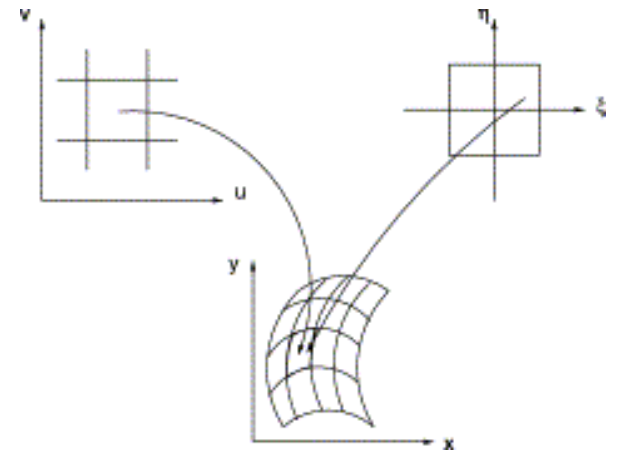
New Capabilities / New Opportunities

- National Transport Systems Modelling Facility (NTSM)
- Virtual Test Environment (VTE)
- Future Transport Systems Demonstrator



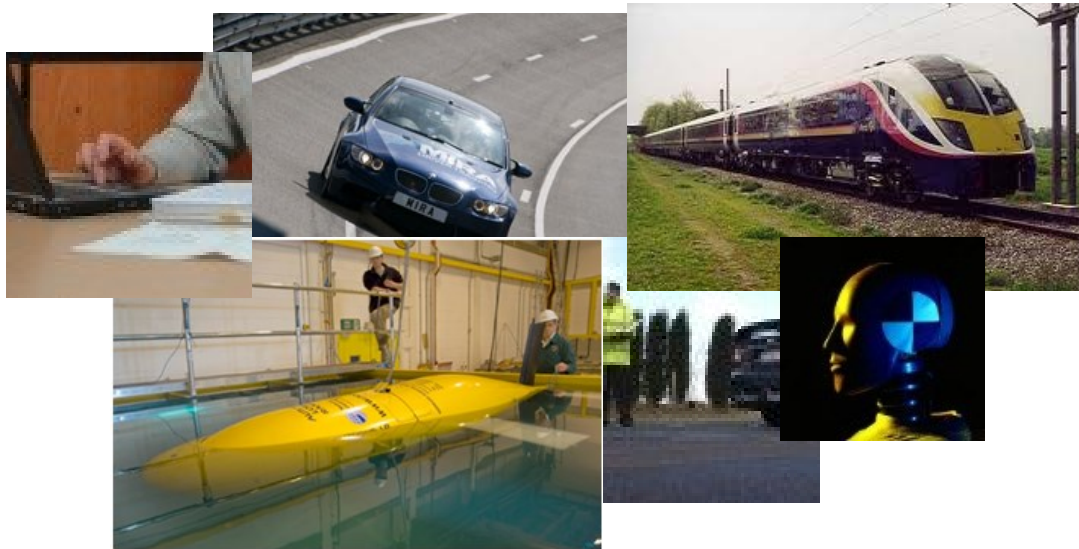
National Transport Systems Modelling facility (NTSM)

- Linking existing models
- Open access and architecture
- Datasets to include
 - Vehicles
 - Infrastructure
 - Usage
 - Condition
- Scenario modelling and planning
- Constant update



Virtual Test Environment (VTE)

- Linking existing world-class facilities
- Cross-modal
- Physical-Digital
- Enabling complex demonstrators and experiments



Future Transport Systems Demonstrator

- De-risk technology & business development , e.g.
 - Autonomous Transport
 - Logistics
 - Transport Efficiency
- Across transport modes & related areas, e.g.
 - Health
 - Education
- Link to other Catapults, e.g.
 - Future Cities
 - Satellite Applications
 - Connected Digital Economy
- Validate with VTE & NTSM

The Catapult Centre

Permanent physical centre

- Incubation
- Modelling and virtual testing
- Networking and workshop facilities

Diverse Community

- Permanent staff provide stability and over-arching continuity
- “Itinerants” ensure agility of culture and constant refresh of ideas

Financing

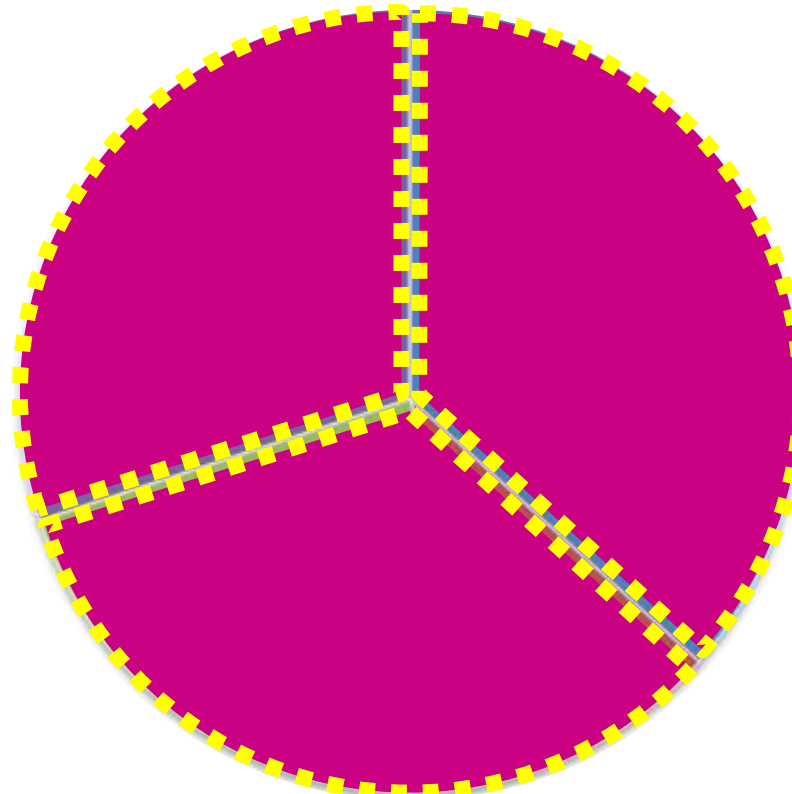
Core

- TSB initial investment
- DfT support

Public/private sector collaboration

- EU funding
- TSB

Commercial activities



The Transport Systems Catapult

- National centre
- Neutral space
- Develop wholly new systems and approaches
- Generating growth

NOW

- Recruiting CEO
- Scoping and requirements for key projects
- Progressive, proportional engagement
- Location options

Think

Lead

Advise

Plug

Stretch

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Facilitate

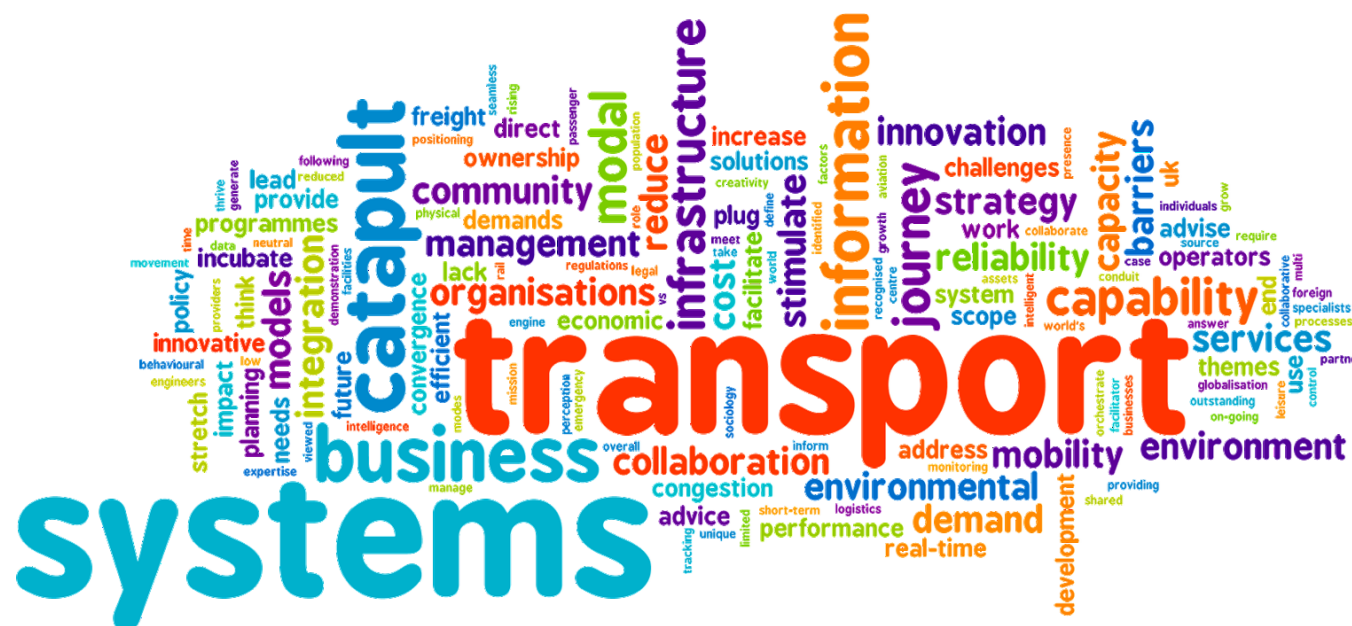
Stimulate

Incubate

Accelerate

Driving the efficient movement of people and goods

Creating a global centre of excellence



CATAPULT
Transport Systems

Knowledge
Transfer
Network

Transport

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Thank You