THE ISSUE

Traffic - Health - Environment.

Intelligent Solutions Sustaining Urban Economies.

Professor Alan Wells, Project Scientific Adviser.
Regions of Knowledge

The European Commission’s Regions of Knowledge 2010 Call.

Cooperation between regional research-driven clusters.

“Co-ordinated action to support economic sustainable development by boosting the competitiveness of transport-related economies.”

Proposals from “Triple Helix” regional research clusters from three or more European Member States.
Call Opened, July 2010
THE ISSUE Selected, April 2011
Start, December 1 2011
Duration, 3 years
Value, 2.7M€
Project Coordinator, Leicester City Council.
Science Lead, University of Leicester.
Targeted Development Areas For Regions of Knowledge

• Intelligent Transport Systems

• Transport impacts on urban mobility.

• Transport greening.

• Intermodal regional transport

• Associated economic, health and environmental impacts.

• Safety and security of citizens.
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Project Aims

Coordination of Research and Technology Development (RTD) programmes in transport-related areas across partner regions.

Policy impacts of innovative transport technology on regional & urban economies.

Co-operation between research-driven clusters in areas relating to Traffic, Health and Environment.

Wider application of space and ICT technologies (especially GMES and GNSS) in the transport sector.
DNA of Triple Helix Structures
Knowledge Exchange and Coordination

Intelligent Solutions for Sustaining Urban Economies

Working together in research-driven regional clusters.

Traffic
Health
Environment

THE ISSUE Launch Event. Leicester.
January 18 2012
Partner experience and links with space technologies.

(Traffic)

Urban and regional transport and infrastructure planning.

Management and safety of transport infrastructure.
Computer intelligence solutions and real-time satellite navigation data integrated into existing operational traffic management systems.

Real-time journey planning for public transport users.

Mobile phone services linked to ITS.
Partner experience and links with space technologies. (Health)

Space and in-situ measurements of urban air quality.

Mitigate risk to citizens’ health from traffic-induced air pollution, reduce carbon emissions, other environmental impacts.

Partner experience and links with space technologies. (Environment)

GIS and database developments for transport and infrastructure planning supporting regional authorities.

Economic and social considerations of congestion charging.

Green technology hydrogen powered vehicles.
Technology demonstration and pre-operational trials in the urban environment.
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Economic Objectives

EO1: Utilise Intelligent Traffic Management, incorporating new technologies to boost the competitiveness of transport-related economies at urban, regional and local levels.

EO2: Identify market opportunities and commercial exploitation for mature RTD applications.

EO3: Deliver innovative solutions to traffic management operations. Economic benefits will accrue to regional authorities through improved transport efficiency.

EO4: Deliver innovative solutions to reduce traffic emissions and improve air quality locally.
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Scientific Objectives

STO1: The generic scientific objective for THE ISSUE is the application of intelligent traffic management systems in regional transport, health and environmental matters.

STO2: Identify the development path for uptake of Intelligent Traffic Management solutions.

STO3: Achieve modal shift towards public transport to reduce urban congestion and shorten journey times.

STO4: Study of applications of road charging in other European urban traffic systems.

STO5: Transfer Computer Intelligence technology to operational users.
STO6: To provide regional planners with comprehensive databases of transport infrastructures to support regional strategic planning.

STO7: To introduce active air pollution monitoring and mitigation into regional transport and environmental strategies.

STO8: Support development of green transport technologies and evaluate implications of regulatory frameworks.
Audit and coordinate R&D activities (in THE) in partner regions.

Review and audit regional transport strategies and economic growth plans (in THE) in partner regions.

Align future R&D activities to economic and strategic priorities of partner regional authorities.


Open the consortium to affiliated regional partners (e.g. via NEREUS & new regions) to help establish new regional research clusters.
Examples of Funding Opportunities Relevant for Regional Authority end-users in R&D-led Projects.

NEW TRANSPORT AND MOBILITY CONCEPTS

HIGH QUALITY PUBLIC TRANSPORT

Coordinating innovation for efficient bus systems in the urban environment.

INNOVATIVE STRATEGIES FOR CLEAN URBAN TRANSPORT.

- EUROPEAN GREEN CAR INITIATIVES
  - Smart infrastructures and innovative services for electric vehicles in the urban grid and road environment.

- SPACE THEMES
  - Urban Air Quality
  - Heat Island Impacts.
Regions of Knowledge create favourable opportunities for partners for future R&D, innovation, commercial exploitation and market delivery.

8 or more new regions enabled to join THE ISSUE partnership.

Academic Industry Partnerships meet many national technology innovation strategies
  ◦ Intelligent Transport; Space; Green economy (low carbon, energy saving).

Economic development between international partners in areas aligned with regional transport, health and environment policies.
Thank you for listening.

I welcome questions.
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Timeline

- Regional R&D and Transport Policy Audit.
  - Coordination and knowledge exchange between on-going R&D projects.
  - RTD Priorities for Regional Authorities.

- Joint Action Plan for future R&D.
  - Business Plan
  - Future Funding Opportunities, EC, National, Regional.
  - Delivery to end users.

- Engaging and mentoring new research clusters in affiliated regions.
  - New member regions can apply join THE ISSUE consortium. Target-at least 8 new affiliated regions.
  - Secondments and staff exchanges.

  - Pre-project studies
  - Special Interest group
  - Joint Proposals.