Expectations of Research Co-operation for Transport

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IF

‘A Vision for a European Transportation System’

is

• to create a mode independent transportation system then, Governments, Academia, and Industry ought to be working together under a Common Strategic Initiative
Drivers

*Transport industries and operators* Must *meet conditions of*

- Maintaining leadership in a stiff global competitive environment
- Developing and assimilating new knowledge and technologies enabling the achievement of the multi-modal transport system
- Renewing, reviving and restructuring transport sectors
- Exploiting the potential of technologies to promote sustainable development

under *criteria* of

*enormous challenges, insufficient level of resources, effort, commitment and technological maturity*
Main Limitations of Current Planning Processes

• Need for enhancement of Consensus on European Transportation Strategy to guide congruent plans and systemic solutions from Research to Technology deployment for governments, industry and academia
• Need to encourage long-term outcome/“ambitious” goals to stimulate new ideas and promote innovation
• Short (10-year) planning horizon not sufficient for paradigm shift
• Predominance of modal-oriented transportation system (e.g., operations, programs, processes, investments and infrastructure)
• Extension of incentives for organizations to work together to identify and implement systemic solutions across the transport system.
Co-ordination Approach

- Build on European, National and Regional transport Policies, Science and Technology strategic planning efforts
- Take long-term, systemic view of transportation challenges and opportunities
- Build consensus within transportation community for vision
  - Role of Transportation (e.g., e-commerce, demographics)
  - Challenges (e.g., fatalities, congestion, emissions)
  - Goals (“ambitious”)
  - Opportunities (e.g. congruence between technology, innovative concepts, demo, piloting, commercialisation)
- Work together to implement
Enabling environment

• Political and Legislative foresight (e.g., white and green papers on transport and energy respectively, Lisbon (ERA), Barcelona (3%), Competitiveness Council (TP, OMC));

• RTD framework programmes (for FP6 Sustainable development, strengthening activities e.g., ERA-NET)

• National initiatives

• Regional measures
Multi-modal Transport Vision

ERRAC & ERTRAC?

Land (Road and Rail)

Maritime (Sea and inland waterways)

Aerospace (Air)

ACARE

EMRAC?

Sustainable Transport Area Development
Expected outcome

• Define Role of transportation in supporting future EU needs
  – economic
  – security
  – quality of life of its people

• Agreed Trends in transportation
  – What is the problem? - Where are we going?

• Achieve “Ambitious” goals

• Deploy Innovative technologies and concepts to address goals

• Supporting research, education and training requirements

• Synergistic Roles of partners (multi-stakeholder approach)
  – Governments + Industry + Academia

• Remove Barriers
  – Institutional - Legal and regulatory - Cultural - Political - Global
The Planning Process

• **Strategy**  
  - Define an integrated strategy for enhanced RTD co-operation

• **Planning, Programming and Budgeting**  
  - Express integrated plans, deliverables and budgets to achieve goals

• **Implementation**  
  - Combine (virtual) individual programmes and initiatives under the expressed strategy and plans

• **Evaluation** (for management and control)  
  – Quality/Self Assessments  
  – Program/Project Reviews  
  – Technology/System Assessments  
  – Peer/Independent/Expert Reviews
Some working principles

- Maintain long-term, system-level perspective of needs & opportunities
- Focus on customer & stakeholder needs (e.g., goals)
- Establish meaningful “ambitious” performance goals & targets
- Develop innovation system
  - “Cleaner, safer, accessible” applications through purposeful partnerships
    (private-public partnerships across the innovation chain)
  - World-class research
  - Human capital
- Leverage R&D investments
  - European
  - National
  - All sectors (*brown field/green field investments*)
- Capitalise on international trends & market opportunities
- Foster efficient & effective program implementation
- Ensure peer review evaluation
- Measure impact of R&D on system performance
- Co-operate on already agreed areas of common interest