



EUROPEAN
COMMISSION

Community research



Transport in the 7th EU Research Framework Programme

2008





EUROPEAN COMMISSION

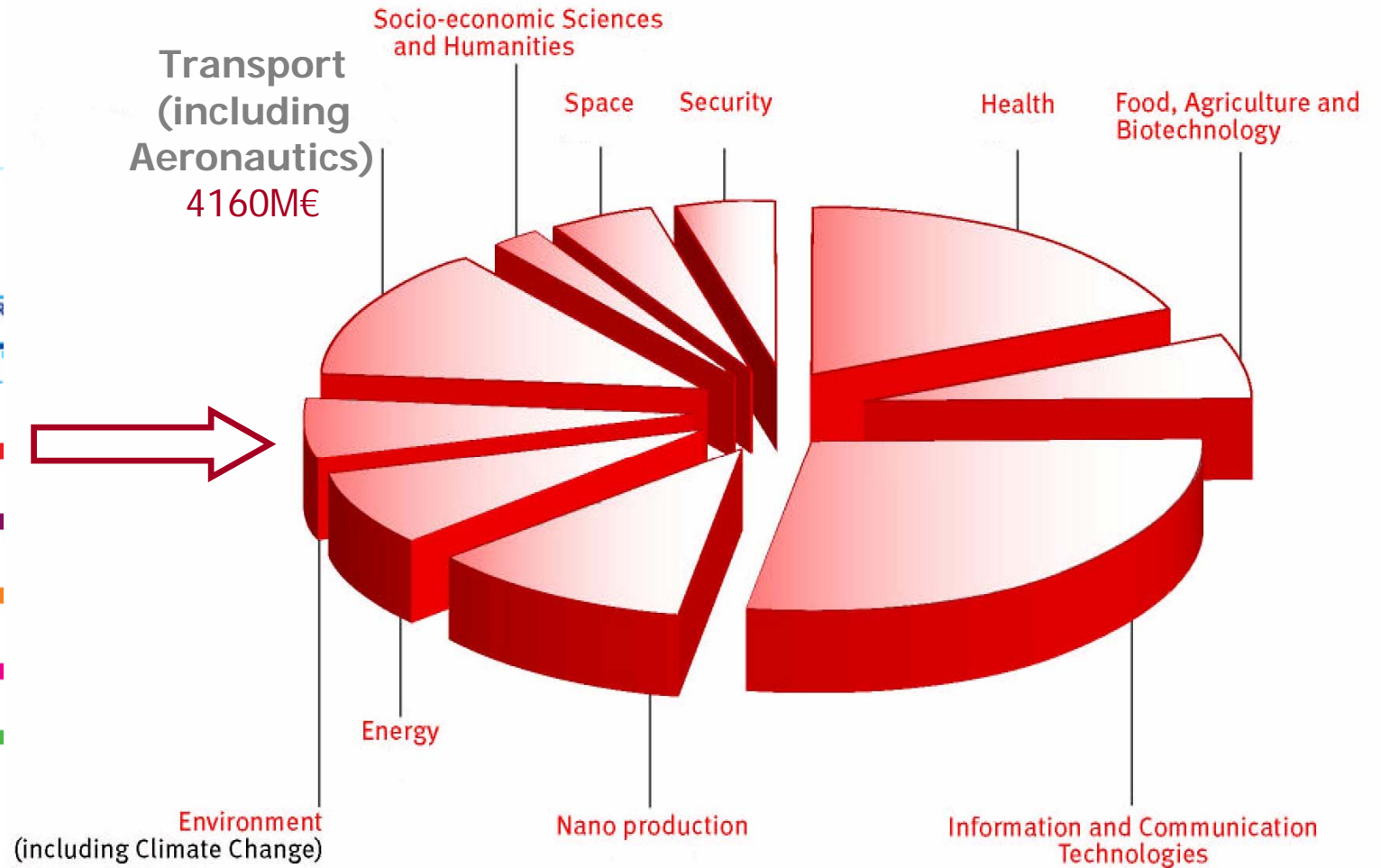
Community research



Community Research Programme



- PARTICIPATION -
COOPERATION
 PEOPLE
 IDEAS
 CAPACITIES
 EURATOM





EUROPEAN
COMMISSION

Community research

VINNOVA

Transport research in FP7 Global Objectives



- Develop *safer, greener* and *smarter* Transport Systems
 - Benefit for citizens and society
 - Respect the environment and natural resources
- Secure and develop the leading role of *European industry* in the global market



EUROPEAN
COMMISSION

Community research



Sustainable Surface Transport (SST)

- **Activities**

- **Greening** of surface transport
- Encouraging **co-modality** and **decongesting** transport corridors
- Ensuring sustainable **urban mobility**
- Improving **safety and security**
- Strengthening **competitiveness**

- embracing society needs and social change



EUROPEAN
COMMISSION

Community research



FP7 SST – 2008 calls

- **Date of publication: 30 November 2007**
- **Deadline: 7th May 2008 – 17H00.00**
- **Indicative budget:**
 - ➔ FP7-SST-2008-RTD-1: EUR 102,22 million (+ an amount from the 2009 budget)
 - ➔ FP7-SST-2008-TREN-1: EUR 36,00 million
 - ➔ FP7-TPT-2008-RTD-1: EUR 14,65 million
- **Topics are all new compared to the Work programme 2007**
- **Same funding schemes**
- **Evaluation: Intended starting date – 26/05/2008**



EUROPEAN
COMMISSION

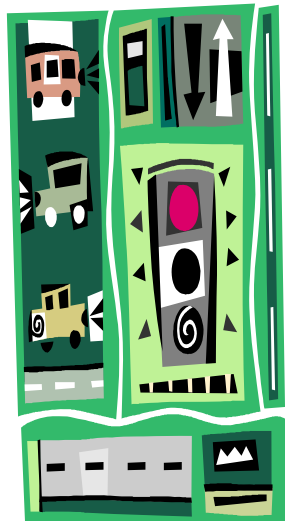
Community research



Activities/Areas/Topics FP7-SST-2008-RTD-1

GREENING

→ Greening of products and operations



- ◆ Clean and energy efficient gasoline and diesel power trains
- ◆ Electric-hybrid power-trains
- ◆ Holistic noise and vibration abatement
- ◆ Future light-duty vehicle engines for road transport
- ◆ Future power-trains for commercial vehicles



EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-SST-2008-RTD-1

CO-MODALITY

- Logistics and intermodal transport
 - ◆ Efficient interfaces between transport modes
 - ◆ Improved services in terminals
 - ◆ New generation of European freight train system

- Traffic and information management
 - ◆ Intelligent highways





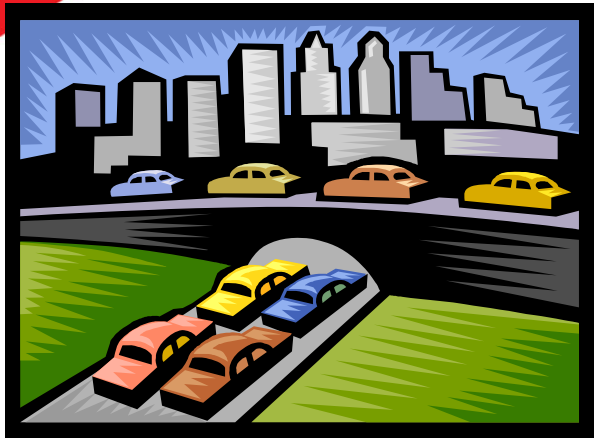
EUROPEAN
COMMISSION

Community research

VINNOVA

Activities/Areas/Topics FP7-SST-2008-RTD-1

URBAN MOBILITY



- New transport and mobility concepts

- ◆ New mobility concepts for passengers ensuring accessibility for all
- ◆ Intelligent mobility systems and multi-modal interfaces for transport of passengers
- ◆ New vehicle concepts for the delivery of goods
- ◆ Urban freight delivery systems
- ◆ Urban buses and delivery vehicles using second generation hybrid electric technology



EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-SST-2008-RTD-1

SAFETY & SECURITY

- Integrated safety and security
 - ◆ Safety and security by design
 - ◆ Human components
 - ◆ Integral system solutions for safety
 - ◆ Road safety of vulnerable road users in emerging economies





EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-SST-2008-RTD-1

COMPETITIVENESS

- Competitive industrial processes
 - ◆ Advanced and cost-effective infrastructure construction, maintenance and monitoring
- Competitive surface transport products and services
 - ◆ Innovative product concepts
 - ◆ Competitive transport operations





EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-SST-2008-RTD-1

Cross-cutting activities

- Stimulating participation of Small and Medium Size Enterprises (SMEs) through Regional Clusters
- Stimulation of International Cooperation within Surface Transport Research
- Encouraging step changes/ radical technology changes
- Analysis and dissemination of key national and regional transport research results
- Shaping the New Generation of Sustainable Surface Transport Mobility for Europe



EUROPEAN
COMMISSION

Community research



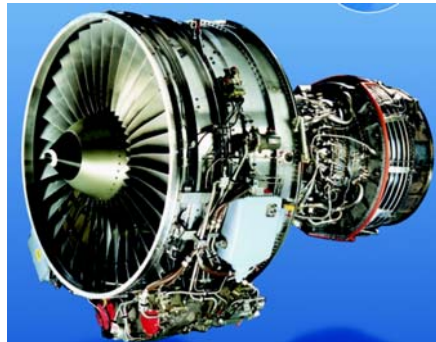
Scope of Aeronautics and Air Transport Aircraft

Drag reduction, noise, avionics, etc.



Engine

emissions, noise, etc.



Air Traffic

Management, Airports
4D trajectory, time efficiency, etc.

Helicopters

Payload increase, cabin noise, etc.





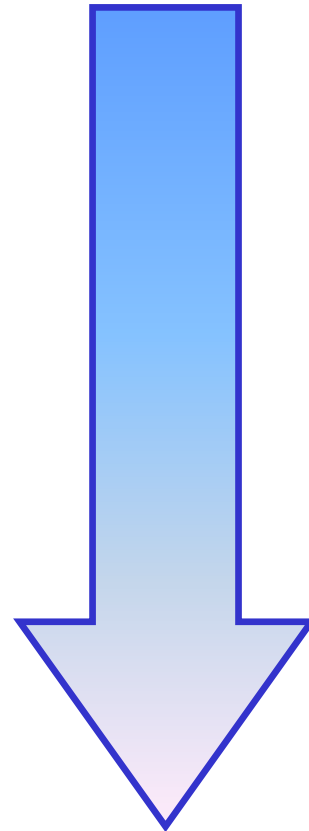
EUROPEAN
COMMISSION

Community research



A Policy Driven Work Programme

2000



2020

- 80% cut in NOx emissions
- Halving perceived aircraft noise
- Five-fold reduction in accidents
- Increased capacity of Air traffic system (handling 16 million flights a year)
- 50% cut in CO2 emissions per passenger/km
- 99% of all flights within 15 minutes of timetable



Strategic Research Agendas
Developed by the ACARE
(Advisory Council for
Aeronautics Research in
Europe)





EUROPEAN
COMMISSION

Community research



Work Programme 'Aeronautics and Air Transport' - AAT

- - The **greening** of air transport
- - Increasing **time** efficiency
- - Ensuring **customer** satisfaction and safety
- - Improving **cost** efficiency
- - **Protection** of the aircraft and passengers
- - **Pioneering** the air transport of the future



<http://www.galileoju.com>





EUROPEAN
COMMISSION

Community research

VINNOVA

Subjects for Focussed Research Collaborative Projects

(Level 1 or CP-FP) and
Support Actions (coordinating, CSA-CA)

- Flight Physics
- Aero-structures
- Propulsion
- Systems & Equipment
- Avionics
- Design Systems and tools
- Production
- Maintenance
- Airports
- Human Factors



These subjects are likely to remain for all the duration of FP7



EUROPEAN
COMMISSION

Community research

VINNOVA

Large Scale Integrated Research Projects : Integration and Validation (Level 2 or CP-IP)

- Lowering aircraft and engines external noise
- Seamless aircraft health management and permanent serviceable fleet
- Advanced avionics systems for new cockpit architectures and aircraft all-conditions operation
- Full virtuality in design and product development within the extended enterprise
- Network centric aircraft communications for global aircraft operations
- Integrated approach to air transport system security



EUROPEAN
COMMISSION

Community research



FP7 AAT – 2008 calls

- Date of publication: 30 November 2007
- Deadline: 7th May 2008 – 17H00.00
- Indicative budget:
 - FP7-AAT-2008-RTD-1: EUR 80,42 million
- Topics: for CP-FP small changes – for CP-IP new
- Same funding schemes



EUROPEAN
COMMISSION

Community research



Instruments

- **Collaborative Projects: Level 1**
(EC Grant < 6 M€)
 - ➔ Upstream research and technology
 - ➔ Up to validation at component or subsystem level
 - **Collaborative Projects: Level 2**
(6 M€ < EC Grant < 50 M€)
 - ➔ Downstream research and technology
 - **Coordination and Support Actions**
 - ➔ Coordinating research themes
 - ➔ Setting up mechanisms
 - ➔ Developing strategies
 - ➔ SME, Impact Assessment, JTI launch, etc.
- CP-FP
- CP-IP
- CSA-CA
- CSA-SA





EUROPEAN COMMISSION

Community research

Joint Technology Initiative (JTI) Clean Sky



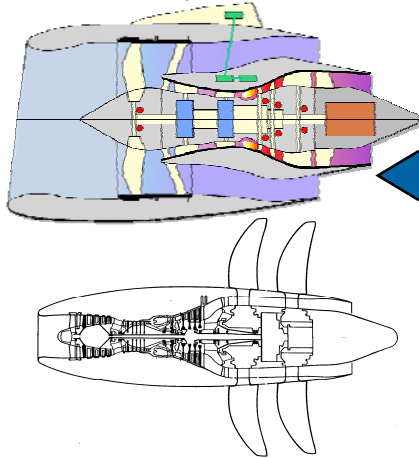
SMART Wing Aircraft
(Airbus, SAAB)



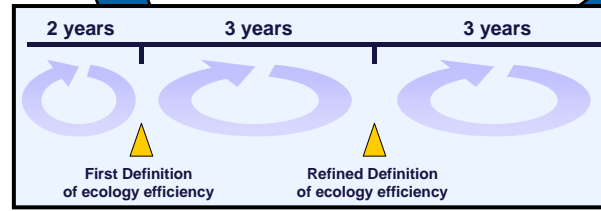
Systems for Green Operation
(Thales, Liebherr)



Green Engines
(Rolls-Royce, Safran)

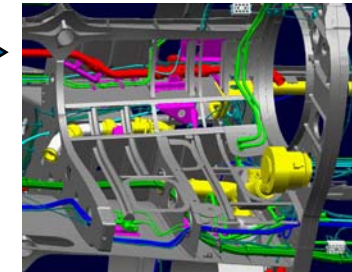


ATS Model



Simulator Platform AC, ATM, AP (flight segment)

Eco-Design
(Dassault, Fraunhofer)



Overall Budget:
1600 M€ for 7 years
(12% of the budget
dedicated to SMEs)



Green Rotorcraft
(Eurocopter, Agusta Westland)



Green Regional Aircraft
(Alenia, EADS-CASA)





EUROPEAN
COMMISSION

Community research



Tack för er uppmärksamhet!

Calls are Published on:

<http://cordis.europa.eu/fp7>





EUROPEAN COMMISSION

Community research



More information?



Cordis: <http://cordis.europa.eu/fp7>

Research: <http://ec.europa.eu/research/transport>

RTD info : <http://europa.eu.int/comm/research/rtdinfo/>






EUROPEAN
COMMISSION

Community research



TRA 2008 Conference

TRA 
Transport Research Arena
Europe 2008

**THIRD
ANNOUNCEMENT**

**INVITATION
FOR
PARTICIPANTS**

EARLY BIRD REGISTRATION


www.traconference.com


Ljubljana, Slovenia, 21 - 24 April 2008


Greener, Safer and Smarter Road Transport for Europe

- > CLIMATE CHANGE
- > ROAD SAFETY
- > URBAN TRANSPORT & URBAN MOBILITY
- > LONG-DISTANCE TRANSPORT

The Second European Road Transport Research Arena is jointly organised by:


Conférence Européenne
des Directeurs des Routes
Conference of European
Directors of Roads


European Commission


European Road Transport
Research Advisory Council





EUROPEAN
COMMISSION

Community research



TRA 2008 Programme

- European Road Research Needs and Agendas;
- Mobility of People & Transport of Goods;
- Safety and Security;
- Energy, Environment and Resources;
- Design and Production of Vehicles and Infrastructure;
- Integrated approaches.

MORE INFORMATION ON:

WWW.tra2008.si





EUROPEAN
COMMISSION

Community research

VINNOVA

Challenges for transport



- To offer a high level of mobility to people and business in Europe;
- To protect the environment, ensure energy security, protect the passengers and the citizens;
- To bring to market innovative solutions



EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-TPT-2008-RTD-1

Cross-cutting activities

- Assessing disruptive effects of extreme weather events on operation and performance of EU transport system.
- Lead markets for zero greenhouse gas emission transport systems.
- Impact assessment of transport research funding in Europe on the environment (air, water and soil).
- Techno-economic analysis per mode and combined to meet EU GHG emission reduction targets at time horizon 2020 and beyond.
- Optimisation and integration of R&D efforts for transport of passengers by “co-modality” .
- Support to Small and Medium Enterprises





EUROPEAN
COMMISSION

Community research



Activities/Areas/Topics FP7-TPT-2008-RTD-1

Cross-cutting activities (cont'd)

- Assessing, analysing and defining strategies for realising new Member and Associated States' potentials in transport research
- Prospective study on upcoming global competitors for European transport industry, targeting manufacturers and hi-tech service providers
- Exploring future technology paradigms beyond 2050
- New mobility/organisational schemes: interconnection between short and long-distance transport networks
- Fostering coordination between national and European RTD strategies and programmes on climate-friendly transport and mobility