Sustainable Surface Transport (SST) Call Content
FP7-SST-2011-RTD-1

FP7 Info Days – Surface Transport
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1.

General Aspects
THEME 7.2
Sustainable Surface Transport
*SST 2007-2013*
for PEOPLE and GOODS

towards greener transport

...a guided tour through the Work Programme 2011
SST FOUNDATIONS

**SST 2007-2013**

- **BUILT ON**
  - **Experience** and existing activities, impacts, RTD results, consultation including Member States
  - **Industrial dimension** input from Technology Platforms
    - ERTRAC
    - ERRAC
    - WATERBORNE
    - EIRAC
  - **Flexibility** to cope with emergencies
SST GLOBAL OBJECTIVE

Address to **European Transport System (s)**

- Develop greener, smarter and safer Surface Transport System (s)

- Secure the **leading role** of EU transport industry in the global market
Approach

**SST 2007-2013**

- Integrated **Surface Transport System(s)** (3 modes)
- Integrating the **components of the system:**
  - Vehicle/Vessel
  - Infrastructure
  - Users
  - ...interactions, interfaces, logistics, Transport Networks & Services

- Integrating stakeholders, disciplines, activities, etc
- Integrating discipline and activities: **5 Activity Lines; CROSS CUTTING** + European GREEN CARS initiative
Research characteristics

**SST 2007-2013**

- Basic and applied research
- Breakthrough research/Incremental research
- Development of innovative solutions for surface transport products, processes, operations and services
- Large and Multi-disciplinary demonstration
- Socio-economic research
- Structuring European surface transport research (ERA)
- Supporting programme implementation (SMEs, international cooperation, communication, citizen awareness and support to new policies related to transport, etc)
Call emphasis

2011:

- 3 research challenges
- For each, a **budget** has been earmarked
- For each, “**group of topics**” have been defined:
  - Efficient railways services (Group of topics N°1, € 26 million)
  - Eco-innovations in shipbuilding and waterborne transportation (Group of topics N°2, € 26 million)
  - The European Green Cars Initiative (Group of topics N° 3, € 30.25 million)

Also

- Untapped research potential and filing gaps (Group of topics N° 4, € 9 million).
2.

Work Programme 2011
with reference to:

- FP7 Specific Programme Cooperation
- THEME 7 – TRANSPORT
- SUB-THEME 7.2 - Sustainable Surface Transport (SST)
- Call: FP7-(SST)-2011-RTD-1

Budget: 91.25M€

Open date: 20 July 2010
Closure date: 2 December 2010

Legal basis:

**Annual SST Work Programme**

Call text and Call Fiche
Work Programme organised by ACTIVITIES

- 5 activities in line with the strategic objectives, to ensure impact and facilitate visibility and understanding
- +1 cross cutting activities in support of SST

Activities are sub-divided in AREAS

- Research areas are broad domains of investigation, stable during the coming years, and whose expected impacts are indicated

Areas are addressed by TOPICS

- Identification of research contents to be addressed by proposals to be submitted in the call.

Topics are either Level 1 or Level 2

- According to the degree of specification in the WP

Topics are in groups of topics Since 2010
Level 1 *(GENERIC)*

- Define broad fields of activity
- Normally common to all modes
- Encourage synergies between modes
- Proposal do not need to cover all the topic content

Level 2 *(SPECIFIC)*

- Mission oriented
- Explicit in their formulation
- Mostly specific to one mode
- Proposals need to cover all aspects of topic content

THE FOLLOWING TOPICS ARE FOR LEVEL 1

1. **SST 2007.1.1.** Promoting the use of diesel and alternative biofuels.

   New technologies and innovative solutions for the progressive introduction of biofuels and alternative biofuels.

   Proposals will cover one or more of the following subjects:
   1. Adaptation and optimisation of existing power trains (diesel, engines) systems (including after-treatment, components and materials).
   2. New power train concepts with emphasis on efficiency and environmental impact, covering power range for all transport modes.
   3. Effective and novel delivery of these fuels at distribution points.

   The following cooperation with Brazil, USA and India is suggested.

   Funding scheme: Collaborative Projects small or medium-scale research, development and demonstration projects.

   Open in Call: **FP7-SUSTAINABLE SURFACE TRANSPORT (SST)-2007**-RTD-1

THE FOLLOWING TOPICS ARE FOR LEVEL 2

1. **SST 2007.2.1.** Advanced diesel and petrol-based.

   Demonstrates the full potential of natural gas when applied to a custom-designed light duty engine (including, for instance, higher or variable compression ratio) integrated with specific after-treatment systems delivering more efficiently and at a lower cost than current technology with the reduction of methane emissions in addition to the other pollutants already treated by these catalytic systems. Advanced storage systems and vehicle architectures, as well as multi-grade fuel resistance and fuel flexibility are additional features to be considered.

   The research will lead to increased efficiency by 10% compared with diesel engines of today (2006), particularly at part load, and ultra low emissions (lower than EURO 6 and US Tier 2).

   Funding scheme: Collaborative Projects large scale integrating projects.
PROPOSALS apply to TOPICS

Each **TOPIC** (SST. 2011. x.y.z.) refers to an Activity (x), an Area (y) and specifies the type of proposal in terms of:

- **S&T Content**
- **Scale**
  - **Since 2010**
    - Small Scale: EC funding less than 3 M€
    - Large Scale: EC funding more than 3 M€
- **Funding scheme**
  - Collaborative Projects: CP, CP-IP, CP-FP, CP-SICA
  - Coordination and Support Actions: CSA-CA, CSA-SA

Topics are either **Level 1** or **Level 2**

According to the degree of specification in the WP

**Since 2010** **Groups of topics (4 groups)**
Calls Specifications

FP7-SST-2011-RTD-1

- Date of publication: 20th July 2010
- Deadline: 2nd December 2010
- Total indicative budget RTD-1: 91.25 M€

Funding schemes:

- CP: Collaborative Projects - Call RTD-1
  - Small & medium scale < 3M€ EC funding
  - Large scale > 3M€ EC funding
- CSA: Coordination Support Action
  - Coordinating (Also CP’s): min 3 partners, from different MEM or AS states.
Activities

- Competitiveness
- Greening
- Green Car
- Modal Shift
- Urban
- Cross Cutting
- Safety
7.2.1.1 Products and Operations

Environmentally friendly transport through the greening of transport products and operations.

**Expected impact**

- Contribution to CO$_2$ reduction emissions: 30% by 2020, 60% to 80% beyond 2050
- Reduction of exhaust and local emissions in view of compliance with future legislation
- Increased share of bio-fuels and alternative hydrocarbon fuels with improved efficiency
- Support the introduction of hydrogen and fuel cells
- Reduction of external and interior noise and vibration
- At least neutral impact to climate change
7.2.2.1 Logistics and intermodal transport

Better transport efficiency between modes while recognising complementarities

*Expected impact*

- Improve the interfaces between transport modes
- Maximize cargo capacity
- Optimize logistics services within global supply chains
- At least neutral impact on climate change
ACTIVITY 3: Urban Mobility

7.2.3.1 New Transport and Mobility Concepts

**Expected impact**

- Introduction of new urban transport solutions and technologies
- Inclusion and better access for all
- Reduction of CO2, pollutant emission and noise
- Increased safety and energy efficiency
- At least neutral impact on climate change
7.2.4.1 Integrated Safety and Security

Technologies and solutions to improve safety and security in transport operations and protect vulnerable users

**Expected impact**

- Increase the level of safety and security of the transport system and its components in order to reduce the number of fatalities and the level of injuries caused by transport accidents
- Decrease the level of human error and increase the safety performance of the infrastructure through positive interactions between pilot/infrastructure/vehicle
- Maintain the level of safety and security in transport, whilst contributing to mitigation of GH effect and reduction of CO₂ emission
- At least neutral impact to climate change
ACTIVITY 5: Competitiveness

7.2.5.1 Industrial Processes

Cost effective processes to strengthen competitiveness.

*Expected impact*

- Reduction of development lead time
- Reduction of manufacturing and construction cost
- Reduction of maintenance cost
- Increase employment levels, create new skills and improve working conditions
- Emergence of new high-tech SMEs
- At least neutral impact on climate change
- Strengthening of global competitiveness of European Industries
ACTIVITY 5: Competitiveness

7.2.5.2 Products and Services

Product and system concepts meeting end-user needs, ensuring quality and services strengthening European competitiveness.

Expected impact

- Maintain market-share for large cruise ship production
- Develop the new generation of surface transport products
- Decrease CO2 emissions and other pollutants
- Create new niche markets
- Improve the quality and competitiveness of surface services
- Reduce maintenance and inspection costs
- Create economic development, jobs and new skills with a special focus on green technologies
- Emergence of new high-tech SMEs
- At least neutral impact on climate change
ACTIVITY 6: Cross Cutting

7.2.6 For Sustainable Surface Transport

Support an integrated surface transport system across SST’s strategic activities

*Expected impact*

- Support programme implementation
- Structure European Research
- Creation of a SST ERA
- Support existing and emerging EC policies
- Considering at least neutral impact to climate change
- Achieve SST expected impacts and ensure at least a neutral impact on climate change
7.2.7 The European Green Car Initiative

Research for improved combustion engine heavy duty vehicles, electric & hybrid vehicles, intelligent transport systems together with logistics and mobility.

*Expected impact*

Defined for each topic
The European Green Cars Initiative

2010:

- Focus on electric vehicles and optimal integration of electric and electronic components
- Joint call on electric storage electrochemistry

2011:

- Three pillars are covered
  - Long distance transportation: heat recovery, future power trains concepts
  - Electrification: light duty vehicles, integrated thermal management, specific safety issues
  - Co-modality: urban/interurban shipments, travellers information systems, exploiting capacity, supply chain management
- Joint call on electric storage manufacturing and eco-design
- ERANET+ Electromobility
Final Information
RTD Surface Transport Team

FP7-SST-2011-RTD1
Get connected with Surface Transport!!

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Further information


- Transport web site:


- Call for experts (evaluators and reviewers): http://cordis.europa.eu/emmfp7
Thank you for your attention!