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## **INDICATIVE CALENDAR**

- **Calls open:** 20 July (to be checked against official text)
- **Calls close:** 1 December (to be checked against official text)

**DRAFT****INDICATIVE BUDGET FOR WP 2012**

<b>Sub-theme / call</b>	<b>Million €</b>
<b>Aeronautics &amp; Air Transport</b> (AAT call, L0 open call, Japan & joint call)	150
<b>Sustainable Surface Transport</b> (SST call inc. Green Cars, ERA-NET, joint call & MOVE call)	150
<b>Horizontal Activities</b> (TPT call, MOVE call)	13
<b>Total</b>	<b>313</b>

# INNOVATION IN WP 2012

## Common approach

### Enhancing the innovation potential of projects

- **Basic/application research balance** - Inclusion of more topics closer to application, which includes the exploitation of new knowledge, in particular by SMEs
- **Scope of activities** - Increased emphasis on the transformation of research outcomes into new products & services:
  - inclusion of pilot, demonstration & validation activities
  - efficient dissemination of knowledge & results
- **Exploitation support** - Provision of support services to project consortia to enhance their knowledge exploitation capabilities


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<b>European Commission - DG Research</b>	<b>2012 (million EUR)</b>
FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2012-RTD-1	136.04
FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2012-RTD-L0	5.00
FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2012-RTD-JAPAN	4.00
FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2012-RTD-BIOFUELS	5.00
FP7-SUSTAINABLE SURFACE TRANSPORT (SST)- 2012-RTD-1 (including the EGCI)	114.04
FP7-2012-GC-MATERIALS	10.00
FP7-ERANET-2012-RTD	3.00*
FP7-TRANSPORT (TPT)-2012-RTD-1	10.00
<b>Total for calls for proposals</b>	<b>287.08</b>

<b>European Commission - DG Mobility and Transport</b>	<b>2012 (million EUR)</b>
FP7-TRANSPORT-2012-MOVE-1	26.00
<b>Total for calls for proposals</b>	<b>26.00</b>

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## INDICATIVE BUDGET FOR WP 2012



<b>Sub-theme / call</b>	<b>Million €</b>
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# AERONAUTICS & AIR TRANSPORT

- **I.1. Context**
  - Specific approach (Levels), introducing Level 0 (open call), coordinated call with Japan, 'Clean Sky' and 'SESAR'
  
- **II.1. Content of calls for 2012**
  - **Structure:** challenges, activities, areas & topics
  - **Areas where no topic is open in 2012:** text has been eliminated but not the titles, for the sake of clarity and avoid confusion
  - **Reference numbers of areas (7.1.X.Y):** same as in previous WPs
  - **Reference numbers of topics (AAT.2012.X.Y-Z):** same except year (even if some of them do not appear in the text because they are not included in the 2012 calls)

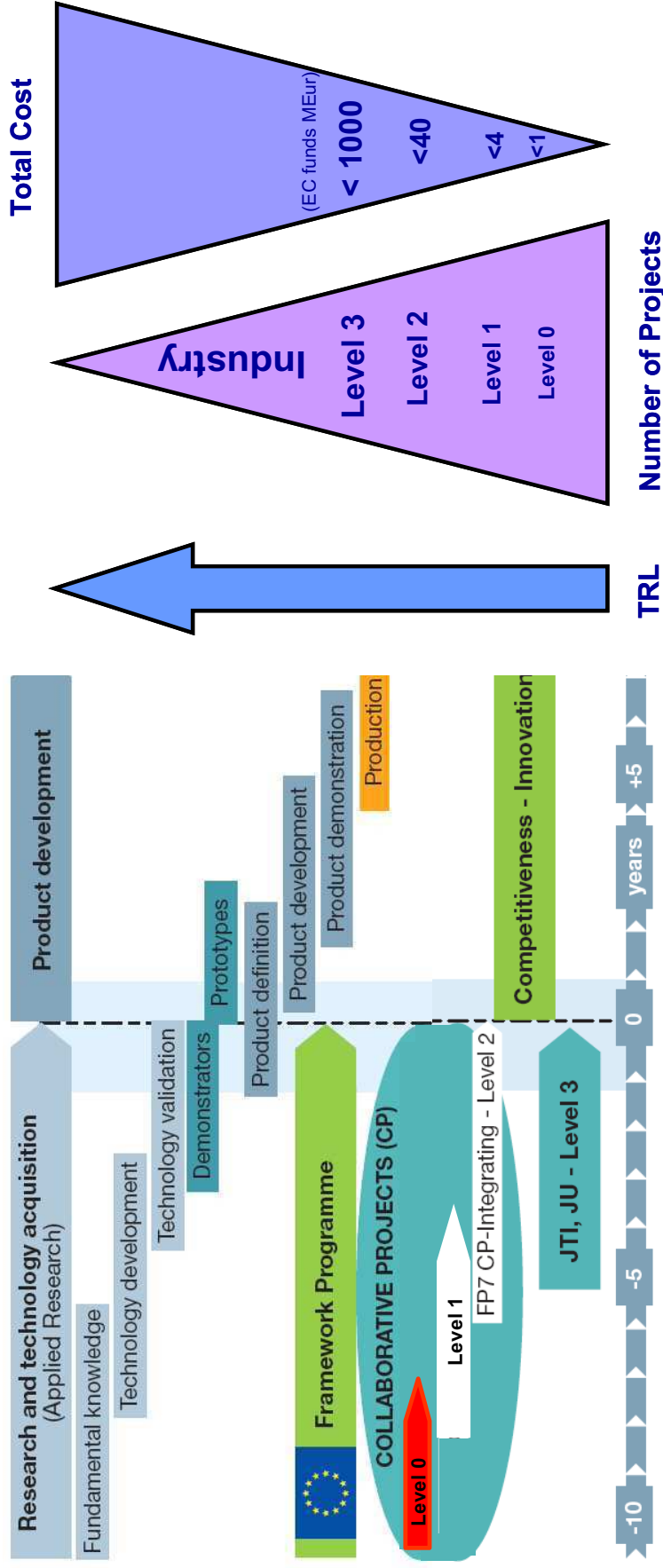
# Budgets 2012-2013

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- 2010: Only L1s
- 2011: Focussed on L2s
- 2012:
  - L0s (new level, 5 M€)
  - L1s (68 M€)
  - L2s (65 M€)
  - CSA-SA (3 M€)
  - JAPAN (4 M€)
  - ENERGY-BIOFUELS (5 M€)
- 2013: Focussed on L2s + funding for L1s
- Global goal: Funding for L1 ~ Funding for L2

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# From Research to Product Development



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## LOs

- Limited to Pioneering (2nd half of the century)
- 10 MEur for 2012 – 2103 (5 + 5)
- 4 closing dates over 2 years: 15/10/2012, 15/03/2012, 15/10/2012, 15/03/2013
- Max 0.6 M€ requested contribution per project, recommendation for a compact partnership (< 7) and duration (<24 months)
- Widely opened Topics
  - . *Breakthrough and emerging technologies*
  - . *Radical new concepts for air transport*
- 20 pages maximum per proposal (excluding tables)
- Evaluation criteria weighting: S/T, 70%; Implementation, 10%; Impact, 20%

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	Flight Physics	Aero-structures	Propulsion	Systems & Equipment	Avionics	Design Systems and Tools	Production	Maintenance Repair Disposa	Flight Air Traffic Managemen	Airports	Human Factors	Noise and Vibration
<b>The Greening of Air Transport</b>												
Green Aircraft	O	O	O*	O	O							
Ecological Production and Maintenance						O	O					
Green Air Transport Operations					X			O	O	O		
<b>Increasing Time Efficiency</b>												
Aircraft Systems and Equipments ...				X	X			X				
Time Efficient Air Transport Operations								X	O*			
<b>Ensuring Customer Satisfaction and Safety</b>												
Passenger Friendly Cabin		X*		O		X						O
Passenger Friendly Operations							X			O		
Aircraft Safety		O	O	O							O	
Operational Safety						O		O	X	O	O	
<b>Improving cost efficiency</b>												
Aircraft Development Cost		O		O	O	O	O					
Aircraft Operational Cost		O	O*	O*			O					
ATS Operational Cost						O		X	X	X	O	
<b>Protection of the aircraft and passengers</b>												
Aircraft Security		O		X	X							
Operational Security									X			X
<b>Pioneering the air transport of the future</b>												

Max 5 M€ contribution per Topic

In yellow, areas opened in previous WP

\* L2 in WP2011

- Core Engine (Greening, Propulsion)
- Small Aircraft Engine (Development Cost, Propulsion)
- Human-centred cabin (Customer, Aerostructures)
- Actuation (Operational Cost, Systems )
- Smart Airframe (Operational Cost, Aerostructure)
- Total Airport (Time, Airport)

# L1 Main Call WP2012 Matrix (table corrigendum)

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## COMMENTS TO THE TABLE IN THE PREVIOUS PAGE

- L1 topic on Aircraft Safety – Propulsion (**particle ingestion**)
- L1 topic on Aircraft Safety – Helicopter safety **introduced**
- L1 topic on Pioneering – Step changes... **Building agility and resilience of the ATM**

# L2s

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65 M€ total budget

5 Topics, Min 5 M€ (eligibility) Max 30 M€ (expected)

## ACTIVITY: 1 THE GREENING OF AIR TRANSPORT

- AAT.2012.1.4.2 Demonstration of breakthrough sub-systems enabling high overall pressure ratio engines

## ACTIVITY: 3 ENSURING CUSTOMER SATISFACTION AND SAFETY

- AAT.2012.3.5.1 Integrated approach to safe flights under icing conditions
- AAT.2012.3.5.2 integrated approach and demonstration of safe operations under crew peak workload / reduced crew configuration

## ACTIVITY: 4 IMPROVING COST EFFICIENCY

- AAT.2012.4.4.1 Integrated approach and demonstration of efficient propulsion and related aircraft systems for small-size aircraft
- AAT.2012.4.4.2 Integrated approach and demonstration to lean manufacturing of composite and hybrid aircraft / engine structures

# Gap Analysis L2s

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	Greening	Time	Customer (incl. safety)	Cost	Protection
Flight Physics				Lean Manuf. Aero	
Aerostructures			2011 (Cabin) 2011 (Airframe)	MAAXIMUS (2007)	
Propulsion	DREAM (2007) Breakthrough sub-systems			Small AC engines /comp.	
Systems- Equipments			Ice Crystals	2011 Actuators	HIRF-SE (2007)
Avionics		ALICIA (2008)	SCAP Cockpit /crew	SANDRA (2008)	
Design Tools Production				CRESCENDO (2008)	
Noise	OPENAIR (2008)				
Maintenance					
Flight Manag					
Airports		2011 Total AP			
Human Fact					

# INCO

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Principle: Mutual Benefits

Topics for Joint Call: always identified jointly

## Ongoing Initiatives:

- Russia: Joint Call in 2010
- China: Aerochina II (e.10/2009) - Joint Call in 2010
- Aero-Ukraine (e.03/2011)
- Aero-Africa-EU (e.01/2011)
- Coopair-LA (e.09/2010)
- Cooperate-US

## In WP2011

- Canada
- Japan

## WP2012

- Joint Call with Japan
- Recommend collaboration on specific topics (e.g. safety, security)

# L1: Coordinated Call with Japan

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## History

- 2008 (end): EU-Japan Workshop
- 2010: 2 EU-Japan Meetings  
+ contacts between industry associations in (ASD / SJAC)

## WP2012

- Level 1, max. requested EC contribution 1,4 M€
- 4 M€ EC + 4 M€ Japan
- 5 Topics: advanced aircraft communication, ceramic bearings, heat exchanger (engine oil-fuel system) + blade cooling, anti-icing technologies, high speed aircraft

# List of topics AAT “INCO”

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Topics	Targeted country/region
Area 7.1.3.3. Aircraft safety	ICPC and/or other countries
Area 7.1.3.4. Operational safety	ICPC and/or other countries
<b>AAT.2012.1.1-1. Flight physics</b>	<b>Latin America</b>
<b>AAT.2012.1.3-2. Airports</b>	<b>Latin America</b>
AAT.2012.2.2-3. Enhancing strategic international cooperation with in the field of aeronautical communications	Japan
AAT.2012.3.3-6. Enhancing cooperation with in the field of anti-icing systems	Japan
AAT.2012.3.5-1. Integrated approach to safe flights under icing conditions	ICPC and/or other countries (e.g. )
AAT.2012.4.1-6. Enhancing strategic international cooperation with in the field engine component cooling	Japan
AAT.2012.4.1-7. Enhancing strategic international cooperation with in the field of engine ceramic bearings	Japan
AAT.2012.6.1-5. Enhancing strategic international cooperation with in the field of high speed aircraft	Japan

**Note: special support can be provided to entities interested in LAC & Japan INCO topics**

# CSA-SAs

3 M€ total budget, Max 600 0,6 M€ per topic/proposal

- *AAT.2012.7-1. European Air Transport System scenario elaboration and trend assessment capability.*
- *AAT.2012.7-8. Attracting young Europeans to future careers in the field of aeronautics.*
- *AAT.2012.7-9. Supporting organization of conferences and events of special relevance to Aeronautics and Air Transport research.*
- *AAT.2012.7-25. Assessment of the potential insertion of unmanned aerial system in the air transport system.*
- *AAT.2012.7-26. Efficient airports for Europe.*
- *AAT.2012.7-27. Airport centred co-modality and intermodality.*
- *AAT.2012.7-28. Facilitating access to aircraft for disabled people.*

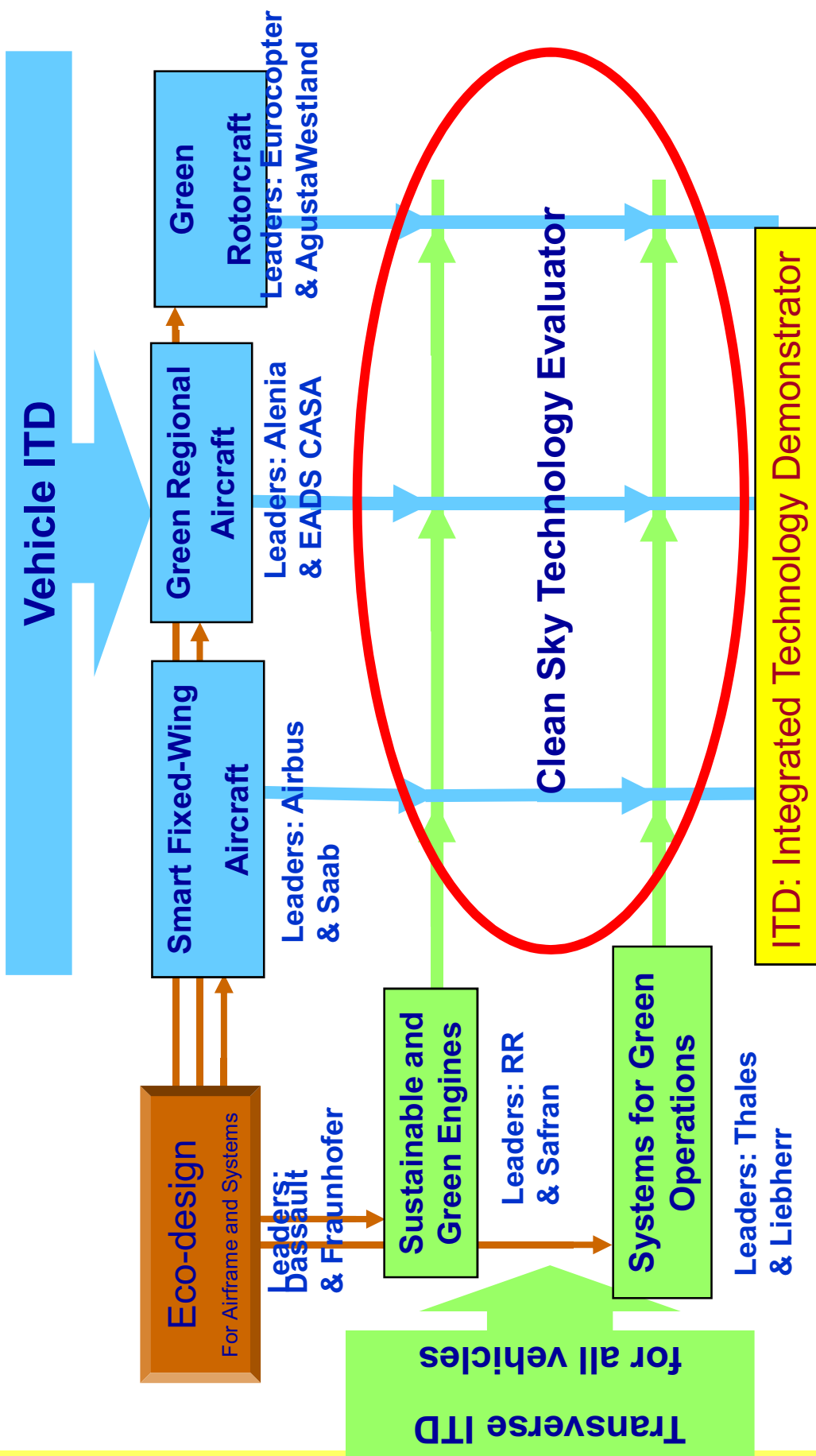
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# Joint Call with ENERGY on Sustainable Alternative Fuels for Aviation

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- 5 M€ AAT + 5 M€ ENER = total budget of 10 M€
- Topic: Energy.2012.3.2-2 / AAT.2012.1.1-6 Development and testing of advanced sustainable aviation biofuels
- Up to 1 project is expected to be funded

# Short update on Clean Sky



# Short update on Clean Sky

## - **Convocatoria para socios actualmente abierta (8ª), cierra el 3/5/11:**

SFWA: 12 *topics*, 7'4M€ financiación máxima disponible.

GRA: 6 *topics*, casi 1M€ financiación máxima disponible.

SGO: 5 *topics*, casi 1'28M€ financiación máxima disponible.

SAGE: 18 *topics*, 15M€ financiación máxima disponible.

GRC: 5 *topics*, casi 2'36M€ financiación máxima disponible.

ED: 12 *topics*, casi 4'81M€ financiación máxima disponible.

**58 *topics* en total, financiación máxima total: casi 32 M€**

## - **Otras dos convocatorias para socios estimadas en 2011:**

28 de abril (convocatoria 9) y 13 de julio (convocatoria 10).

Más información: [www.cleansky.eu](http://www.cleansky.eu)

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## INDICATIVE BUDGET FOR WP 2012



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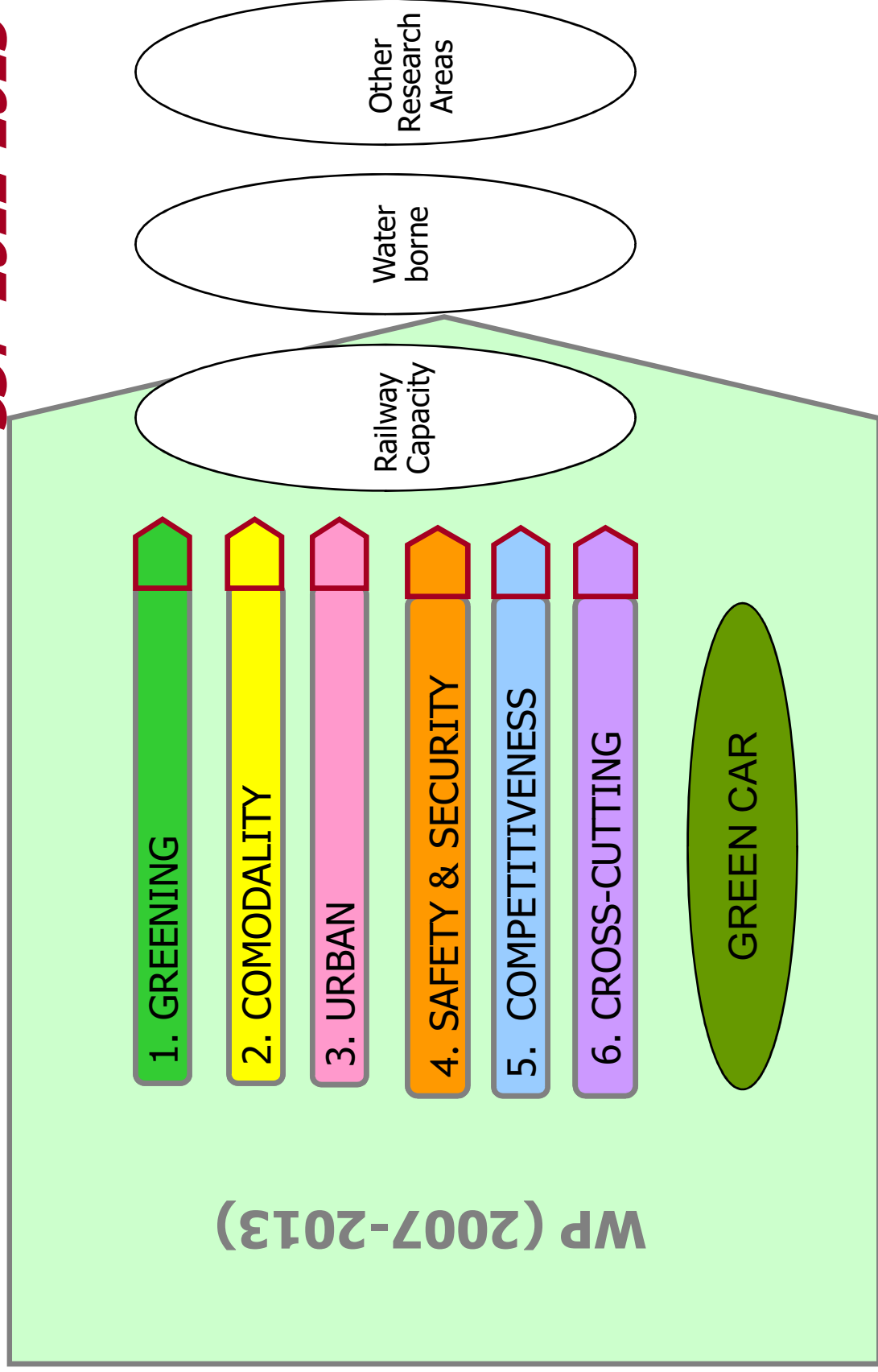
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# SUSTAINABLE SURFACE TRANSPORT

- **I.2. Context**
  - Specific approach (Levels, groups of topics)
  - European Green Cars Initiative
- **II.2. Content of calls for 2012**
  - **Structure:** challenges, activities, areas & topics
  - **Areas where no topic is open in 2012:** text has been eliminated but not the titles, for the sake of clarity and avoid confusion
  - **Reference numbers of areas (7.2.X.Y):** same as in previous WPs
- **Topics still divided in L1 (generic, proposers choose bullets to be targeted) or L2 (specific, all bullets must be addressed). Then further divided in CP-FP (up to 3 M€ requested contribution) and CP-IP (more than 3 M€ req. cont)**

# WP STRUCTURE

**SST 2012-2013**



Activities are sub-divided in Areas and Topics

# INDICATIVE BUDGET FOR SST call WP2012 (RTD-SST part)

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Group of topics	Mio €
<b>N°1: Increasing Railway Capacity</b>	<b>24</b>
<b>N°2: Ensuring safe, green and competitive waterborne transport</b> Including: topics of a Co-ordinated Call within the framework of "Ocean of Tomorrow"	<b>32</b> 6
Including: CSA Support to early implementation of JPI "Healthy Oceans"	2
<b>N°3: Implementing research for Green Car Initiative</b> Including: Joint call on innovative materials and automotive electrochemical storage applications Cross-thematic joint call on 'Advanced manufacturing processes for batteries and electrical components'	<b>65</b> 10
<b>N°4: Activities and research areas of cross-cutting character (including topics on urban mobility, ITS, safety)</b>	<b>27</b>
<b>ERA Net Transport</b>	<b>3</b>
<b>Total</b>	<b>154</b>

# Group of topics No 1: Increasing Railway Capacity

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## → **Priorities for 2012:**

- ◆ Increase railway capacity to enhance the attractiveness to users (reliability and convenience)
- ◆ Removing capacity bottlenecks
- ◆ Improving rail system management
- ◆ Interoperability
- ◆ Efficient rolling stock and infrastructure
- ◆ Standardization in the field of signaling
- ◆ International cooperation on rail research

## → **9 topics are open in 2012 (€ 24 Mio)**

# Group of topics No 1: Increasing Railway Capacity

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Activity	Topics	Funding scheme	Level
Greening	SST.2012.1.1-2. Management of energy in railway systems	CP-IP	2
Modal shift	SST.2012.2.4-1. Planning and rail towards 2050	CP-FP	1
Modal shift	SST.2012.2.4-2. The role of rail in the European transport system in response to major disruptions to it and improving the performance of urban and regional rail networks in case of incidents	CP-FP	2
Modal shift	SST.2012.2.4-3. Efficient rolling stock and train operations for competitive rail freight service	CP-FP	2
Modal shift	SST.2012.2.5-1. Rail system interoperability (regulatory and non-legislative interoperability based on technological innovations)	CP-FP	1
Modal shift	SST.2012.2.5-2. Europe to Asia: Rail research collaboration	CSA-CA	1
Competitiveness	SST.2012.5.2-1. Tools and conditions for an attractive, efficient and competitive Single Wagonload traffic and its interaction with road and intermodal transports	CP-FP	1
Competitiveness	SST.2012.5.2-2. Next generation tools for optimized infrastructure asset management	CP-FP	1
Competitiveness	SST.2012.5.2-4. Innovation and standardization in the field of signalling to accelerated a European ETCS rollout	CP-IP	2

## Group of topics No 2: Ensuring safe, green and competitive waterborne transport

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- **Priorities for 2012:**
  - ◆ Eco-friendly ship concepts (Green vessels)
  - ◆ Innovative materials and systems for ships
  - ◆ Safety aspects
  - ◆ E-guided vessels
  - ◆ Facilitation of e-Maritime solutions
  - ◆ Inland waterways transport: support NAIADES action programme
- **7 topics are open in 2012 (€ 25 Mio)**

## Group of topics No 2: Ensuring safe, green and competitive waterborne transport

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Activity	Topics	Funding scheme	Level
Greening	SST.2012.2.2-1. Innovative fleet for efficient logistics chain	CP-FP	1
Greening	SST.2012.2.2-2. Towards an implementation of the NAIADES Action Areas	CSA-CA	2
Safety	SST.2012.4.1-1. Human element factors in shipping safety	CP-FP	1
Safety	SST.2012.4.1-2. Safety of ships in Arctic conditions	CSA-CA	2
Competitiveness	SST.2012.5.2-3. Innovative structural and outfitting materials for ships including inland ships	CP-FP	1
Competitiveness	GC.SST.2012.5.2-5. E-guided vessels: the "autonomous ship"	CP-FP	2
Competitiveness	GC.SST.2012.5.2-6. E-maritime in support of compliance management	CSA-CA	2

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# Co-ordinated Call within the framework of "Ocean of Tomorrow"

Topics	Funding scheme	Level
SST.2012.1.1-1. Assessment and mitigation of noise impacts of the maritime transport on the marine environment (Coordinated call within the framework of the Ocean of Tomorrow)	CP-FP	2
SST.2012.1.1-3. Support to the early implementation of the JPI 'Healthy and Productive Seas and Oceans' (Coordinated call within the framework of the Ocean of Tomorrow)	CSA-SA	2

→ **2 topics are open in 2012 (€ 6 Mio)**

## Group of topics No 3: Implementing research for EGCI

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### → **Priorities for 2012:**

All three major research avenues are covered

- ◆ **Electric vehicles:** lightweight materials, innovative electrochemical storage, smart charging infrastructure, research on rare materials, range extenders, urban freight electric vehicles
- ◆ **Heavy duty vehicles:** complete vehicle energy management (design of auxiliaries, vehicle aerodynamics), low rolling resistance tires, demo of heavy duty vehicles running with methane
- ◆ **Logistics and comodality:** new organisational e-freight solutions, green hubs enabling comodal network design,...

### → **14 topics are open in 2012 (€ 65 Mio)**

# Group of topics No 3: Implementing research for EGCI

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Activity	Topics	Funding scheme	Level
	<b>Electric Vehicles</b>		
EGCI	<b>GC.NMP.2012-1.</b> Innovative automotive electrochemical storage applications based on nanotechnology	CP-FP	-
EGCI	GC.SST.2012.7.1-1. Innovative materials for the next generation of environmental friendly cars and commercial road vehicles	CP-IP	-

**GC.SST.2012.7.1-1.** Innovative materials for the next generation of environmental friendly cars and commercial road vehicles. **Additional Eligibility Criterion: The EU contribution [must be at least EUR 4 000 000 and] must not exceed EUR 10 000 000.**

# Group of topics No 3: Implementing research for EGCI

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Activity	Topics	Funding scheme	Level
	<b>Electric Vehicles</b>		
EGCI	GC.SST.2012.7.1-2. Smart infrastructures and services for electric vehicles in the urban grid and road environment	CP-FP	1
EGCI	GC.SST.2012.7.1-3. European strategy for rare materials and their possible substitution	CSA-SA	2
EGCI	GC.SST.2012.7.1-4. Modelling and testing for improved safety of alternatively-powered vehicles	CP-FP	2
EGCI	GC.SST.2012.7.1-5. Integration and optimization of range extenders on EVs	CP-FP	2
EGCI	GC.SST.2012.1-6. Advanced energy simulation and testing for Fully Electric Vehicles (FEV)	CP-FP	2
EGCI	GC.SST.2012.7.1-7. Demonstration of urban freight Electric Vehicles for clean city logistics	CP-IP	2

## Group of topics No 3: Implementing research for EGCI

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Activity	Topics	Funding scheme	Level
	Heavy duty vehicles		
EGCI	GC.SST.2012.7.2-1. Extreme low rolling resistance tyres	CP-FP	1
EGCI	GC.SST.2012.7.2-2. Complete vehicle energy management	CP-IP	2
EGCI	GC.SST.2012.7.2-3. Demonstration of heavy duty vehicles running with compressed or liquefied methane	CP-IP	2

## Group of topics No 3: Implementing research for EGCI

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Activity	Topics	Funding scheme	Level
	<b>Logistics and Co-modality</b>		
EGCI	GC.SST.2012.3-1. Towards sustainable interconnected logistics: a seamless integration of transport logistics, from sourcing, production and distribution	CP-FP	1
EGCI	GC.SST.2012.3-2. Improve capturing and sharing of transport data in support of innovative freight transport schemes	CP-FP	2
EGCI	GC.SST.2012.3-3. Platform for continuous intermodal freight transport strategic research and innovation	CSA-CA	2
EGCI	GC.SST.2012.3-4. Green hubs enabling co-modal network design	CP-FP	2

# Additional information for EGCI: NMP topic (not part of FP7-Transport)

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## **GC.NMP.2012-1. Innovative automotive electrochemical storage applications based on nanotechnology**

**Technical content/scope:** Volume production plans for large-capacity Li-ion rechargeable batteries are being made one after another around the globe, targeting electric vehicles (EVs) and other applications. However, most car manufacturers would agree that lithium ion **technology** is still not satisfactory for long distance EV use. More energy density, power density, cost and safety improvements are needed. Although **the** development of second generation Li-ion batteries delivering roughly double the energy density (200Wh/kg to 300Wh/kg) is in progress (with a target implementation of 2015 to 2020), post Li-ion rechargeable batteries – solid-state, Li-S, or metal-air batteries, for example – are expected to provide a long term solution to current range and cost issues.

Projects shall exclusively address the development of innovative materials and technologies for battery components, material architectures and systems for automotive electrochemical storage at cell level within a responsible, sustainable and environmental-friendly approach looking at the entire life cycle. Activities shall focus on the understanding of the phenomena which affect the battery properties at the nanoscale across a full cell, including modelling and simulation. Research shall focus on innovative technologies, architectures and chemistries and should address the following issues:

- performance, safety, recyclability and cost;
- potential for fast charging without significant life reduction;
- effect of bidirectional flow at charge stations;
- availability of constituent materials;
- eco-design and material production;
- characterisation, standardisation and synergies with other applications.

Proof of concept in terms of product and/or process (not necessarily reaching the industrial scale but convincingly proving scalability towards industrial needs with cells of automotive size) is encouraged as is participation from the manufacturing industrial sector within strong interdisciplinary consortia.

Proposals for electrochemical capacitors are excluded, as these have been extensively covered in a previous Green Cars call. **Funding Scheme:** Small or medium-sized collaborative projects.

**Additional Eligibility Criterion:** [Given the upstream nature of the topic,] the EU contribution must not exceed 3 M€

**Expected Impact:** (i) High energy densities with respect to the state-of-the art (i.e. higher than 400 Wh/kg); (ii) Overall performance, safety, recyclability and life-cycle sustainability; (iii) A minimum lifetime of 3000 cycles in a 80% DoD window in typical automotive conditions over 10 years; (iv) Establish and maintain world-class status for the European automotive battery industry.

## **Additional information for EGCI: FP7-ICT topics (not part of FP7-Transport)**

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- **Call title: "ICT for Green Cars"-2012**
- **Call identifier: FP7-2012-ICT-GC**
- **Date of publication: 30 July 2011. Deadline: 2 December 2011**
- **Indicative budget: EUR 30 million**
- **Expected impacts:**
  - Improved energy efficiency and extended driving range of the FEV
  - Reduced costs of the electronic components and the overall FEV at increased performance
  - Mitigated constrains for the user of the FEV versus the Internal Combustion Engine vehicle
  - The FEV seamlessly implemented in the smart grids and existing infrastructure
  - Significant improvement of FEV's safety, comfort and new information and comfort services for FEV users.
  - Strengthened global competitiveness of the European automobile, ICT and battery sectors. Market penetration of key components of FEVs.

# Additional information for EGCI: FP7-ICT topics

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- **Topics: GC.ICT.2011.6-8 PPP GC: ICT for fully electric vehicles**

- e) Electric Drive and Electronic Components**

Partitioned and highly efficient power electronics devices, converter and inverter and electrical interconnects that simplify packaging and cooling, EMI-EMC designs, the management of high voltages, currents and temperatures and hardware-in-the-loop technology for algorithm and component testing. Projects should target the level of integration between the drive and the motor while maximising the efficiency of the drive over a wide range of operation of the motor as well as in relation to temperature excursions and voltage variability and fail safe tested components.

- f) Integration of the FEV in the cooperative transport infrastructure**

ICT-based interaction between the driver, the vehicle and the transport and energy infrastructures, for FEV trip planning and optimization including energy use and charging. In order to compensate for the limited autonomy range, gains in energy efficiency, charging strategies and route optimisation by using of traffic information are needed to turn the FEV into a mass market product. Adaptive strategies, algorithms and operation modes are needed for the charge and discharge management of the FEV's that balance, predict the range and adapt to the energy needs of the user in respect of the properties of vehicle's battery and the grid. Research should also address opportunities for improving energy efficiency provided by automated driving and driver training.

# Additional information for EGCI: FP7-ICT topics

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- **Topics: GC.ICT.2011.6-8 PPP GC: ICT for fully electric vehicles (cont’)**
- g) Functional Safety and Durability of the FEV**  
Electrical and electronic components affect vehicle dynamics, safety and durability. Failsafe concepts are an essential element of the system. Requirements and standards related to electromagnetic compatibility and health impacts of electromagnetic fields should be developed. Continuous improvements are expected against low frequency electromagnetic fields as well as on local sensing of currents and electromagnetic fields, on safe and robust components and subsystems. Research will also address adaptation and improvement of in-vehicle active safety for FEVs, integrated driver-vehicle – infrastructure safety, protection of vulnerable road users, and FEV emergency handling procedures. Moreover, test methods will be required .

## **h) Coordination and Support Action “FEV made in Europe”**

One action for the coordination of a FEV Strategic Research Agenda for ICT, components and systems, for the clustering of R&D projects in the field, and for training, education and dissemination activities. The agenda should also investigate new usages for the FEV (e.g. last mile delivery and mobility for the elderly and disabled); it should cover standardisation measures; it should propose measures for harmonisation of national research policy measures and programmes, and also propose actions for international collaboration. The action should involve relevant electrical vehicle stakeholders.

## Additional information for EGCI: Key information sources

- [www.fp7greencars.es](http://www.fp7greencars.es)
- [www.ict4fev.eu](http://www.ict4fev.eu)
- [www.capiire.eu](http://www.capiire.eu)
- [www.green-cars-initiative.eu](http://www.green-cars-initiative.eu)
- ...

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## Group of topics No 4: Activities and research areas of cross-cutting character

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### → **Priorities for 2012:**

- ◆ Topics on urban mobility, ITS and road safety are included
- ◆ **Urban mobility:** improve accessibility of urban transport systems, design of efficient urban passenger infrastructures, develop advanced automated clean city vehicles
- ◆ **ITS:** large event mobility management, assess impacts of ITS on vulnerable road users
- ◆ **Road safety:** research to better understand behavior of road users in normal conditions and accidents, setting priorities and roadmap for road safety research in Europe,

### → **9 topics are open in 2012 (€ 31 Mio)**

# Group of topics No 4: Activities and research areas of cross-cutting character

**DRAFT**

<b>Activity</b>	<b>Topics</b>	<b>Funding scheme</b>	<b>Level</b>
Urban mobility	SST.2012.3.1-1. Research actions regarding the accessibility of transport systems	CP-FP	2
Urban mobility	SST.2012.3.1-2. Innovative design and operation of new or upgraded efficient urban transport interchanges	CP-FP	2
Urban mobility	SST.2012.3.1-3. Take-up of transport innovation in urban and regional transport	CSA-SA	2
Urban mobility	SST.2012.3.1-4 Automated electric vehicles	CP-IP	2
Urban mobility	SST.2012.3.2-1 Coordinating innovation for efficient bus systems in the urban environment	CSA-SA	2
Safety	SST.2012.4.1-3. Large scale naturalistic driving observations for safe and sustainable transport	CP-IP	2
Safety	SST.2012.4.1-4. Impacts of Intelligent Transport Systems on vulnerable road users	CP-FP	2
Safety	SST.2012.4.2-1. Priorities for road safety research in Europe	CSA-SA	2

# List of topics SST "INCO"

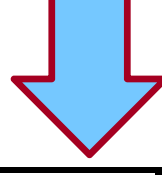
**DRAFT**

Topics	Targeted country/region
SST.2012.2.5-2. Europe to : Rail research collaboration	Europe-Asia route countries, including those with a joint border to EU Eastern border as well as Russia and China
SST.2012.3.1-3. Take-up of transport innovation in urban and regional transport	Accession countries and neighbourhood countries
SST.2012.3.2-1. Coordinating innovation for efficient bus systems in the urban environment	Accession countries, neighbourhood countries and ICPC
SST.2012.4.1-2. Safety of ships in Arctic conditions	Arctic States, including Canada, USA and Russia

**DRAFT**

## INDICATIVE BUDGET FOR WP 2012

<b>Sub-theme / call</b>	<b>Million €</b>
<b>Aeronautics &amp; Air Transport</b> (AAT call, L0 open call, Japan & joint call)	150
<b>Sustainable Surface Transport</b> (SST call inc. Green Cars, ERA-NET, joint call & MOVE call)	150
<b>Horizontal Activities</b> (TPT call, MOVE call)	13
<b>Total</b>	<b>313</b>



# HORIZONTAL ACTIVITIES (TPT)

**DRAFT**

PRELIMINARY INFO: CHANGES EXPECTED, CHECK UPDATES/PUBLISHED VERSION

<b>1. Socio-economic research &amp; technology foresight</b>	
TPT.2012.1-1. <b>Forum</b> to help implementing the future orientation of the overall transport system as defined by the White Paper	CSA-SA
TPT.2012.1-2. Transport <b>infrastructure impact</b> on international competitiveness of Europe	CSA-SA
TPT.2012.1-3. <b>Prospects on transport evolution</b> : challenges for the competitiveness of the European transport sector in the long term	CSA-SA

# HORIZONTAL ACTIVITIES (TPT)

**DRAFT**

<b>2. Integration of transport modes &amp; cross-cutting research</b>	
TPT.2012.2-1. Strategic high-level transport model	CSA-SA
TPT.2012.2-2. Reduction of the vulnerability of the European Transport System to extreme weather events & natural disasters	CSA-SA
<b>3. Strengthening the European Research Area, encouraging participation, and fostering innovation</b>	
TPT.2012.3-1. Coordination of national & European research & innovation strategies & programmes	CSA-CA
TPT.2012.3-2. Bringing innovative products & services to the market: analysis of pathways & best conditions for innovation	CSA-SA

# List of topics TPT “INCO”

**DRAFT**

<b>Topics</b>	<b>Targeted country/region</b>
TPT.2012.2-2. Reduction of the vulnerability of the European Transport System to extreme weather events and natural disasters	ICPC or other countries (e.g. , )

SUB-THEME	ACTIVITIES / GROUP OF TOPICS	BUDGET (M€)	NUMBER OF TOPICS			
			CP-FP	CP-IP	CSA	TOTAL
<b>DRAFT</b> <b>AAT</b>	Level 1	68	35			35
	Level 2	65		5		5
	Cross-cutting	3			7	7
	Level 0 (open call)	5	2			2
	Coordinated call with Japan	4	5			5
	Joint call on biofuels	5		1		1
	<b>Total</b>	<b>150</b>	<b>42</b>	<b>6</b>	<b>7</b>	<b>55</b>
	Rail (GT-1)	24	6	2	1	9
	Waterborne (GT-2)	26	5		2	7
	EGCI (GT-3)	37	8	1	2	11
<b>SST</b>	Cross-cutting (GT-4)	27	2	2	3	7
	Joint call on materials	10	1			1
	ERA-NET Transport III	3			1	1
	<b>Total</b>	<b>127</b>	<b>22</b>	<b>5</b>	<b>9</b>	<b>36</b>
<b>TPT</b>						
		<b>10</b>			<b>5</b>	<b>5</b>
<b>DG MOVE</b>						
		<b>26</b>	1	2	4	7
<b>TOTAL</b>		<b>313</b>	<b>65</b>	<b>13</b>	<b>25</b>	<b>103</b>

**DRAFT**

## **KEY DATES**

- **Ljubljana, SEETRANS FP7-Transport Brokerage Event (first of such events for this call), 12-13 April: PowerPoint presentations, Project ideas, Organisation presentations... available at <http://www.transslo-plus.si/en/>**
- **Budapest, ICT Proposers Day (including ICT for Fully Electric Vehicle): 19-20 May  
[http://ec.europa.eu/information\\_society/events/ictproposersday/2011/index\\_en.htm](http://ec.europa.eu/information_society/events/ictproposersday/2011/index_en.htm)**
- **Brussels, 3rd Workshop on Research for the Fully Electric Vehicle: 1<sup>st</sup> June**
- **Madrid, FP7-Transport Info-day (planned, still to be confirmed): 27<sup>th</sup> June**
- **Brussels, PPP Info Day (including Green Cars): 11-12<sup>th</sup> July**
- **Brussels, FP7-Transport Info-day: 18-19 July**
- **Valladolid, Jornada Nacional FP7-Green Cars: 5<sup>th</sup> October**