

Work Programme 2011

Objective ICT-2011.6.7

Cooperative Systems for energy efficient and sustainable mobility

Challenge 6 (ICT for low carbon economy) explores how ICT can contribute to delivering a sustainable, low carbon society and help progress towards the Europe 2020 targets on climate and energy.



Objectives

ICT-2011.6.1 Smart Energy Grids

ICT-2011.6.2 ICT systems for energy efficiency

ICT-2011.6.3 ICT for efficient water resources management

EEB-ICT-2011.6.4 ICT for energy-efficient buildings and spaces of public use

ICT-2011.6.6 Low carbon multi-modal mobility and freight transport

ICT-2011.6.7 Cooperative Systems for energy efficient and sustainable mobility

GC-ICT-2011.6.8 ICT for fully electric vehicles

p.83-84, Work Programme 2011
ftp://ftp.cordis.europa.eu/pub/fp7/docs/wp_cooperation/ict/c-wp-201101_en.pdf

Challenge 6: ICT for a low carbon economy

ICT can assist in reshaping the demand side of our energy-dependant society, reducing energy consumption, and subsequently CO₂ emissions, in particular in electricity distribution, buildings and construction, transport and logistics, the public sector, rural areas and cities.

In its transport-related part, the Challenge focuses on the following:

- ICT for low-carbon multi-modal freight and logistics covering technologies and services for multi-modal freight and logistics as well as ICT for clean and efficient multi-modal mobility for further improving energy efficiency and reducing CO₂ emissions in all modes of transport for passengers and goods;
- Cooperative Systems for low-carbon multi-modal mobility covering cooperative applications and services for energy efficiency and eco-friendly mobility as well as a European Wide Service Platform (EWSP) for services leveraging those cooperative systems;
- ICT for fully electric vehicles advancing the development and integration of major building blocks of the Full Electric Vehicle (FEV), and integrating the FEV with infrastructures. Projects supported under this objective will contribute to the European Green Cars Initiative, a Public-Private-Partnership launched in 2008 as part of the European Economic Recovery Plan.

Objective ICT-2011.6.7 Cooperative Systems for energy efficient and sustainable mobility

TARGET OUTCOME

a) Cooperative Systems for low-carbon multi-modal mobility

covering cooperative applications and services for energy efficiency and eco-friendly mobility based on the harmonised European Communications Architecture and bidirectional vehicle-to-vehicle (V2V), road-to-vehicle (R2V) and vehicle-to-infrastructure (V2I) communication technologies:

- Design, development and testing of new cooperative and pro-active traffic and travel management and control strategies based on the availability of reliable real-time systemwide data, including handling of special events and recovery after incidents.
- Addressing the interaction between the driver, the vehicle and the infrastructure, user acceptance and deployment of cooperative energy efficiency services, taking into account the needs of Fully Electric Vehicles such as integration with charging networks.
- Liability, privacy, reliability, security and Human Machine Interaction should be addressed as well. The focus should be on road transport, as this sector presents the largest challenges. Projects could also address all transport modes according to the principle of comodality, and include smart urban mobility.

b) European Wide Service Platform (EWSP) for cooperative system enabled services

aiming at providing to the drivers and other users a large variety of energy efficiency, mobility, comfort and safety related services:

- Intelligent combination of wireless communication technologies, development of network and transport communication protocols and security and control mechanisms, and support to their standardisation.
- Development of the necessary EWSP subsystems for service development, discovery, provision and administrative operations

- Development of interoperable innovative services for the EWSP, based on Future Internet technologies and in coordination with activities under the Future Internet PPP of Challenge 1.

c) Coordination and Support Actions

- Dissemination of results, user awareness campaigns, assessments of socio-economic impact and training.
- In accordance with the specific cooperation agreements with Japan and the USA: active exchange of information and results, and international standardisation and harmonisation.
- The coordination and support actions should include relevant stakeholders in the domain.

EXPECTED IMPACT

- Decarbonisation of transport. Significant improvements in energy efficiency and environmental friendliness of transport and mobility in Europe
- Improving the competitiveness of the European transport industry as a whole, and enabling them to continue to address global markets successfully. World leadership of Europe's automotive industry in the area of Cooperative Systems.
- Opening new markets for mobility, safety, energy efficiency and comfort services in Europe. Ensuring market leadership by Europe's industry in green products and services.

Funding Schemes

a) and b): IP, STREP;
c): CSA

Indicative budget distribution:

- IP, STREP: EUR 37 million,
the objective is to support at least 1 IP under a) and 1 IP under b), in addition to STREPs

- CSA: EUR 3 million

Call FP7-ICT-2011-8