

ICT for Governance and Policy Modelling

FP7

ICT Work Programme

EXTRACT FROM ICT WORK PROGRAMME 2009-2010

It is now recognised that on-line collaborations have the potential to trigger and shape significant changes in the way future societies will function. Extrapolation of the present exponential growth leads to scenarios where very large percentages of populations could, if equipped with the right tools, simultaneously voice opinions and views on major and minor societal challenges, and thereby herald the transition to a different form of dynamically participative 'eSociety'. While such scenarios are readily imaginable, it must be recognised that we currently do not have appropriate governance models, process flows, or analytical tools with which to properly understand, interpret, visualise and harness the forces that can be unleashed.

Research under the Challenge 7 should take into consideration relevant technologies and other results from successfully completed or ongoing projects.

Target Outcomes

a) Governance and Participation Toolbox

Advanced tools embodying structural, organisational and new governance models to empower and engage all types of societal groups and communities, enable them to utilise mass cooperation platforms and allow governments to incorporate their input

while safeguarding against misuse. These tools will enable the creation, learning, sharing and tracking of group knowledge that cuts across language and cultural interpretation. They should also facilitate transparency and tracking of inputs to the policy making process. The toolbox must include security, identity and access controls to ensure privacy and, where appropriate, the delineation of constituency domains according to the specific needs of government applications.

b) Modelling, Simulation and Visualisation

Real-time opinion visualisation and simulation solutions based on modelling, simulation, visualisation and mixed reality technologies, data and opinion mining, filtering and aggregation. This will encompass novel instruments which allow consideration of options based on the simulated behaviour and wishes of individuals, groups or communities (at local, regional and national levels) to understand the possible outcomes of government proposals, decisions and legislation. Tools and techniques will also help to understand, model, simulate and validate the next generation of public services as complex service systems in the environment of social networking and collaborative society, including the needs of the younger generation.

The focus is on advanced tools and technologies to perform societal simulations integrating all possible variables, parameters, interferences, scenarios necessary to forecast potential outcomes and impacts of proposed policy measures. The tools should exploit the vast reserves of Europe's public sector collective data and knowledge resources which are also developing dynamically. Underlying functions to be integrated include translation, process modelling, data mining, pattern recognition and visualisation as well as other gaming-based simulation, forecasting and back-casting as well as goal-based optimisation techniques. The solutions will also take into account, but not be limited to, state of the art techniques on dynamics methodology to analyse and model complex systems, cooperative vs. competitive systems, and «cloud» computing applications resources for large scale data analysis.

c) Roadmapping and Networking for 'participation, governance and policy modelling'

- (i) RTD roadmap to identify emerging technologies and potential applications. It will also consider emerging research directions and will include insight into research activities undertaken in non-EU countries.
- (ii) A dynamic 'Network' to encourage networking of relevant stakeholders and teams working in these areas and to encourage multidisciplinary constituency building;

Two CSAs are expected to be funded under c): one SA for 'roadmapping' (indicative duration of 12 months) and one CA for 'networking' (indicative duration of 24-36 months).

Expected Impact

- Improved empowerment and engagement of individuals, groups and communities in policy making processes. Increased trust of the citizens through transparency and feedback of their contributions.
- More efficient collection of feedback to continuously improve governance. Improved prediction of impacts of policy measures, with increased contribution and involvement of individuals and communities, and based on intelligent and optimised use of vast public sector knowledge resources.
- Strengthened competitive position of European industry in the fields of cooperation platforms, optimisation, simulation and visualisation tools.

Funding schemes

Areas a) and b): STREP; area c): CSA

Indicative budget distribution

- STREPs: EUR 14 million
- CSAs: EUR 1 million

Timing of the Call:

ICT call 4

- Call identifier: FP7-ICT-2009-4
- Date of publication: 19 November 2008
- Deadline: 1 April 2009

For further information:

<http://ec.europa.eu/egovernance>

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