

## Introduction

Dear readers,

Welcome to the second issue of the CONSENSUS Newsletter!

In this second issue of our newsletter, you will have the opportunity to read CONSENSUS results and achievements, past events as well as interesting publications.

Thank for your interest in our work! Enjoy the reading!  
 The CONSENSUS consortium

## What is CONSENSUS about?

CONSENSUS is a thirty-month FP7 project co-funded by the EC. The objective of the CONSENSUS project is to simplify, identify and visualise the consequences of decisions in the **policy making process**. At the core of the project is the **Consensus policy model**, which decomposes policies in a number of -often conflicting- objectives. Using the model in combination to **visualizations and data analysis**, allows the exploration of the design and objective space. As a result, CONSENSUS acts as a **decision support tool** for the policy making process, providing a visually appealing and **evidence-based analysis of the trade-offs** between the various alternative policies' implementations. In order to also count in the **citizens' view on the policies**, the project applies **analytics** and **gamification** techniques so as to first elicit their preferences and secondly incorporate them in the decision support process. A by-product of the gamification part allows also for the **education of citizens** in topics regarding policy making, allowing them to be able to assess the objective value of a policy decision and measure it against others, thus significantly contributing to the effort for transparency.

## Project Results

CONSENSUS is built upon the assumption that policy making can be deduced in a multi-objective optimization problem. This policy model allows for a quantitative and qualitative analysis of the impact of the multiple policy scenarios that evaluate the objective set.

Based on that, there are two main Consensus projects outcomes: the **CONSENSUS MOOViz** and the **CONSENSUS Game**. Both tools have been tested and validated by end users around Europe (citizens, policy makers, NGOs) in two different use case scenarios: 1) Transportation Networks, 2) Biofuels & Climate Change.



### CONSENSUS MOOViz

The CONSENSUS MOOViz is a tool that allows the end-user to set the assumptions that define a policy context and then explore the tradeoffs of the objective set that relates to this context. It is aimed to be used as a decision support tool by policy analysts and an arrow in the quiver of policy advocate by using

analytics, rich visualizations, and interactions in order to guide the decision making process until a decision is made.

### Features

- \* Simplify the projection of Pareto-optimal solutions
- \* Enables decision makers to create policy scenarios/projects.
- \* Illustrates different criteria and policy alternatives for Transport and Environmental real-world use-cases in a personalized environment.
- \* Incorporates rich visualizations for objectives' acceptability of the public that helps the decision making process until a decision is made.
- \* Runs with the most common browsers.



**CONSENSUS MOOViz is available here!**



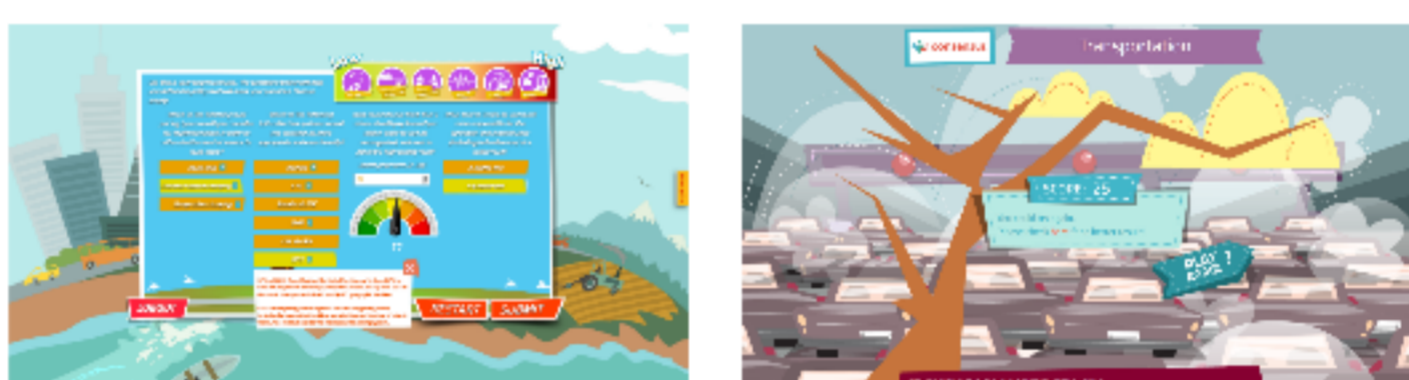
### CONSENSUS Game

The CONSENSUS Games is a web tool that aims at engaging people in order to educate them about policy making and at the same time capture the public opinions preferences on specific privacy policy alternatives. It employs the same policy model and uses a gamified approach to present the

solutions and the way they are ranked.

By participating in the game the user will be given the chance to make a decision about the policy implementation in the example scenario presented. Guidance about consequences as well as insights will be provided to the citizen before they submit their decision. The best policy implementation (according to pareto frontier algorithms and in future versions of the game, public acceptability and preference) among the policies selected is awarded with more score points.

Furthermore, the game will anonymously collect and synthesize the preferences of the users which will then be reported in the Analysis component.



### Features

- \* Gives the chance to make a decision about the policy implementation in the example scenario presented
- \* Intelligent scoring mechanism
- \* Runs with the most common browsers.

**CONSENSUS Game is available here!**

## Project News

Our new brochure presenting CONSENSUS results and achievements is now available online and available to download!

**Download here!**

## Upcoming Events

CONSENSUS will be presented at the 6th International Conference on Cloud Computing and Services Science, **CLOSER 2016**, April 23-25, Rome, Italy.

## Past Events



CONSENSUS has already participated in events, succeeding in raising the awareness of the project to its relevant stakeholders. An indicative list of these events can be found below.

**IEEE VIS 2014:** 9-14 November, 2014, Paris France

**Global Systems Science** cluster meeting along with other similar projects on ICT for Policy Modelling, 19 November, 2014, Brussels, Belgium

**Technical Conference on 'Current Advances in Road Infrastructure Safety Equipment'**, 12-13 February, 2015, Athens, Greece

**Pavement Preservation & Recycling Summit (PPRS Paris 2015)**, 22-25 February, 2015, Paris, France

**IVAPP 2015:** 6th International Conference on Information Visualization Theory and Applications, 11-14 March, 2015, Berlin, Germany

**Gaminomics event**, June 11, 2015, Cavendish Conference Centre, Tower Hill, London, UK

**RTStreams 2015:** 1st IEEE International Workshop on Real Time Data Stream Analytics, 20 August, 2015, Helsinki, Finland

CONSENSUS, along with other **Global Systems Science** projects, organised a Workshop titled "Enabling Effective Policy Making – Coupling the Power of the Data with the Wisdom of the Crowd", in the context of the **dual EGOV / ePart 2015 conference**, on 31 August 2015, in Thessaloniki, Greece. The main purpose of the Workshop was to disseminate the project's platform and up to date results to all participating stakeholders, as well as stimulate discussion on all participating projects. The workshop's proceedings are now available (open access) through CEUR Workshop Proceedings: <http://ceur-ws.org/Vol-1553/>

## Publications

Anna Xenaki, Konstantinos Tserpes, Theodora Varvarigou, "An adaptive score model for a policy-making education game", Proceedings of the 18th Panhellenic Conference on Informatics (PCI'14), October 2 -4, 2014, ISBN: 978-1-4503-2897-5, ACM 2014, pp. 1-2

Evangelos Psomakelis, Konstantinos Tserpes, Dimosthenis Anagnostopoulos, Theodora Varvarigou, "Comparing methods for Twitter Sentiment Analysis", In Proceedings of 6th International Conference on Knowledge Discovery and Information Retrieval (KDIR 2014), October 21-24, 2014, Rome, Italy, ISBN: 978-989-758-048-2, Scitepress, pp. 225-232

Johannes Fuchs, Dominik Jäckle, Niklas Weiler, Tobias Schreck, "Leaf Glyph – Visualizing Multi-dimensional Data with Environmental Cues", In Proceedings of the 6th International Conference on Information Visualization Theory and Applications (IVAPP 2015), March 11-14, 2015, Berlin, Germany, ISBN: 978-989-758-088-8, Scitepress, pp. 195-206

N. Zorbas, D. Zisis, K. Tserpes, D. Anagnostopoulos, "Predicting Object Trajectories From High-Speed Streaming Data", 2015 IEEE Trustcom/BigDataSE/ISPA, August 20-22, 2015, Helsinki, Finland, Volume:2, INSPEC Accession Number: 15635836, IEEE, pp. 229-234

K. Tserpes, "CONSENSUS Project: Identifying publicly acceptable policy implementations", Proceedings of the Workshop on Enabling Effective Policy Making 2015 - Coupling the Power of Data with the Wisdom of the Crowd co-located with 14th IFIP Electronic Government and 7th Electronic Participation Conference (eGOV 2015), August 31, Thessaloniki, Greece, 2015, Vol-1553, CEUR-WS, 2016

J. Fuchs, D. Jäckle, N. Weiler, T. Schreck, "Leaf Glyphs: Story Telling and Data Analysis Using Environmental Data Glyph Metaphors", Computer Vision, Imaging and Computer Graphics Theory and Applications, 10th International Joint Conference, VISIGRAPP 2015, Berlin, Germany, March 11-14, 2015, Revised Selected Papers, Volume 598 of the series Communications in Computer and Information Science, Springer International Publishing, 2016, pp. 123-143

Evangelos Psomakelis, Fotis Aisopos, Antonios Litke, Konstantinos Tserpes, Magdalini Kardara, Pablo Martínez Campo, "Big IoT and Social Networking Data for Smart Cities", 6th International Conference on Cloud Computing and Services Science, **CLOSER 2016**, April 23-25, Rome, Italy. **To be published.**

## Do you want to be part of it or know about it?

Contact us: [info@consensus-project.eu](mailto:info@consensus-project.eu)

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## Who are we?

### Contact information

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