

EUNOIA

CASA has a new EU (FP7: Future and Emerging Technologies) project called EUNOIA which is about Evolutive User-centric Networks fOr Intraurban Accessibility. Mike Batty is the PI and two RAs will be appointed for 24 months. The project will run from October 1st 2012 and is worth 268K Euros. It is part of a consortium led by Maxi San Miguel of the Institute of Interdisciplinary Physics and Complex Systems, University of the Balearic Islands, and involving five other groups including our erstwhile collaborators Marc Barthelemy (Institute of Theoretical Physics, Paris) and Kat Axhausen (Transport, KTH Zurich).

Incidentally *Eunoia* is the shortest English word containing all five main vowel graphemes. It comes from the Greek word εὔνοια, meaning ‘well mind’ or ‘beautiful thinking’.

About the project

Urban transport is essential for citizens to perform their daily activities, but it also constitutes a major source of pollution. The goal of EUNOIA is to take advantage of smart city technologies and complex systems science to develop new models and tools empowering city governments and their citizens to design sustainable mobility policies.

EUNOIA will pursue advances in three complementary directions:

1. Use of data. The massive penetration of ICT is modifying social relationships and travel behaviour, and at the same time is providing us with a huge amount of heterogeneous data: intelligent transport systems, Internet social networks, mobile phone call logs, e-transactions. EUNOIA will investigate how to exploit these data to characterise mobility and location patterns in different European cities.
2. Urban transportation models. EUNOIA will investigate the interactions between social networks and travel behaviour, e.g. the influence of social networks on the planning of joint trips. This will allow a more comprehensive assessment of mobility policies, particularly of new services emerging around the idea of a shared access to resources, such as car sharing. The new travel behaviour models will be integrated into state-of-the-art agent-based simulation tools.
3. Link between modellers, decision makers, and societal actors. The potential of urban simulation models is still little exploited in policy decision contexts. EUNOIA will develop tools, e.g. 3D visual analytics, allowing stakeholders’ interaction with the simulation results, as well as a methodology for collaborative, multi-stakeholder policy assessment. In order to ensure maximum credibility and usability of the project results, the models and methodologies developed by EUNOIA will be tested and refined through several case studies conducted in close cooperation with policy makers and mobility stakeholders from the three cities participating in the project: Barcelona, London, and Zurich.