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ΣΧΟΛΗ ΠΟΛΙΤΙΚΩΝ ΜΗΧΑΝΙΚΩΝ
ΤΟΜΕΑΣ ΜΕΤΑΦΟΡΩΝ & ΣΥΓΚΟΙΝΩΝΙΑΚΗΣ ΥΠΟΔΟΜΗΣ
ΗΡΩΩΝ ΠΟΛΥΤΕΧΝΕΙΟΥ 5 - 15773 ΖΩΓΡΑΦΟΥ
ΤΗΛ.: 210 772 1285, 210 772 1331 - email: transport@mail.ntua.gr

NATIONAL TECHNICAL UNIVERSITY OF ATHENS
SCHOOL OF CIVIL ENGINEERING
DEPT. OF TRANSPORTATION PLANNING AND ENGINEERING
HEROON POLYTECHNIOU 5 - GR-15773 ZOGRAFOU - ATHENS
Phone: +30 210 772 1285, +30 210 772 1331 - email: transport@mail.ntua.gr

www.transport.ntua.gr

TANGENT - Enchanced data processing techniques for dynamic management of multimodal traffic

Scientific Responsible
Professor **George Yannis**

The European transport faces major challenges in terms of safety, greenhouse gas emissions, traffic congestion and its derived costs. In addition, the development of disruptive technologies and emergence of new mobility solutions generate a revolution in transport network and traffic management. In this context, TANGENT aims to develop new complementary tools for optimizing traffic operations in a coordinated and dynamic way from a multimodal perspective and considering automated/non-automated vehicles, passengers and freight transport. TANGENT will research on advanced techniques on modelling and simulation, optimization techniques for balancing the demand flows between the means of transport and users travel behavior modelling. As a result, a set of applications for decision-making support will be delivered creating a framework for coordinated traffic and transport management, encompassing an enhanced mobility information service and dashboard with associated APIs and advanced functionalities with a two-fold approach: to provide real-time traffic management recommendations and to support Transport Authorities to design network-wide optimal strategies. The framework also aims at supporting a multi-actor cooperation approach for transport network management by enabling communication channels. In this way, the services target to different actors in traffic management. The results will be tested in three case studies and the impact will be assessed to reach the expected reduction targets due to a more efficient management.