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RESEARCH CENTRE FOR TERRITORY TRANSPORTS AND ENVIRONMENT

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RECENT PUBLICATIONS

Bigotte J, Antunes A, Krass D, Berman O (2014) The relationship between population dynamics and urban hierarchy: evidence from Portugal, International Regional Science Review, 37, 149-71.

Coelho M, Fontes T, Bandeira J, Pereira S, Tchepel O, Dias D, Sá E, Amorim J, Borrego C (2014) Assessment of potential improvements on regional air quality modelling related with implementation of a detailed methodology for traffic emission estimation, Science of the Total Environment, 470-1, 127-37.

Dias D, Tchepel O (2014) Modelling of human exposure to air pollution in the urban environment: a GPS-based approach, Environmental Science and Pollution Research, 21, 3558-71.

Jorge D, Correia G, (2013) Carsharing systems demand estimation and defined operations: A literature review, European Journal of Transport and Infrastructure Research, 13, 201-20.

Pita J, Adler N, Antunes A (2014) Sociallyoriented flight scheduling and fleet assignment model with an application to Norway, *Transportation Research Part B: Methodological*, 61, 17-32.

Pita J, Antunes A, Barnhart C, Menezes A (2013) Setting public service obligations in low-demand air transportation networks: application to the Azores, *Transportation Research Part A: Policy and Practice*, 54, 35-48

Pita J, Barnhart C, Antunes A (2013) Integrated flight scheduling and flight assignment under airport congestion, *Transportation Science*, 47, 477-92.

Tchepel O, Dias D, Costa C, Santos B, Teixeira J (2014) Modelling of human exposure to benzene in urban environments, *Journal of Toxicology and Environmental Health*, *Part A* (forthcoming).

COMMUNICATIONS IN CONGRESSES

Correia G (2014) Optimizing use of electric vehicles in a regional car-rental fleet, Transportation Research Board 93rd Annual Meeting, 12-16 January, Washington.

EDITORIAL

Dear Reader,

As previously announced (in our site and elsewhere), in the next couple of months our Centre will host two international conferences: from 3 to 6 July, the 21st International Seminar on Urban Form - ISUF 2014 on *Our common future in urban morphology*, evoking the role of the environment in urban morphology; and later, in October 23-24, a joint event under the common theme of *Bridging the implementation gap of accessibility instruments and planning support systems*, coupling our 7th CITTA Annual Conference with the final conference of the COST Action TU1002. This COST Action on Accessibility Instruments for Planning Practice in Europe has been successfully chaired by one of our CITTA's members, Cecília Silva, that is also taking the lead in the organization of this joint event.

The ISUF 2014 is a major international conference we are proud to organize, thanks to the important role played by Vítor Oliveira in the ISUF, and in launching and steering the Portuguese Language counterpart, the PNUM, Portuguese Network on Urban Morphology. Judging by the number of abstracts received so far (over 500), and already accepted (430), coming, virtually, from all over the world, this year's event is likely to constitute the largest ISUF conference to date. All the LOC members are doing their best to make it not just the largest conference but also one of the most successful, ever organized by ISUF.

In this 15th edition of our newsletter, CITTA's Deputy Director António Pais Antunes provides a brief account of the recent activities carried out within the remit of the Transport Analysis and Planning Unit. The report is quite impressive revealing a rather dynamic research group involved in a wide range of projects able to feed a continuous stream of quality papers in prestigious journals.

At national level, the most relevant news is that the country will soon be out of the special programme of financial assistance. In any case, at the time of writing, the exit process of the 'bailout programme' is still a matter of discussion between those in favour or against the search for some sort of precautionary credit line after the exit. Three years under the 'troika' creditors - the EC, the IMF and the ECB, and under drastic and unprecedented austerity measures, Portugal seems to have finally restored the international financial credibility. However, this credibility has been paid (and is likely to continue to be paid) at very high economic and social costs, hitting, in particular, the pensioners, the unemployed and the public sector workers. It is now time to change, to recover and expand the economy and to steadily reduce the social unbalances and injustices created by the government's austerity policies.

This same government has been quite prolific, in recent months, to prepare the new package on the so-called Strategic Infrastructure Investments, a set of modest albeit fairly consensual projects, and pass new legislation on Environmental Impact Assessment and on Urban Rehabilitation, not to speak of the new all-embracing framework law on Land Policy, Spatial Planning and Urbanism, approved by the Parliament. Bearing in mind that all this recent legislative production on Planning and Planning related matters was conceived and prepared during severe austerity times, one may wonder if the legislators and politicians had envisioned that, contrary to present times and the recent past, the new challenges ahead shall have a very different, if not opposite nature, from containment and contraction policies to developing and expansion policies (and strategies). This necessary shift, requiring vision and ambition, is not, and should not be, incompatible with keeping balanced accounts and the national debt under control. Only creating wealth again, can we honor our commitments, paying back our debts (with or without renegotiations).

Paulo Pinho

PROPOSALS/RECENT CONTRACTS

EMSURE - Energy and Mobility for Sustainable Regions (CENTRO-07-0224-FEDER-002004). Funding: QREN. 2013-2015.

InfoCrowds - Social Events Web Information Retrieval for Crowds Mobility Management (PTDC/ECM-TRA/1898/2012). Funding: FCT. 2013-2015.

InnovShare - Viability analysis of different carsharing system configurations through an innovative large scale agent based simulation model (PTDC/ECM-TRA/0528/2012). Funding: FCT. 2013-2015.

SoMoMUT - Soft Mode Modelling in Urban Trips (PTDC/ECM-URB/1407/2012). Funding: FCT. 2013-2015.

SCIENTIFIC MEETINGS ORGANIZATION



21st International Seminar on Urban Form - Our Common Future in Urban Morphology, 3-6 July 2014, FEUP, Porto.



7th CITTA Annual Conference - Bridging the Implementation Gap of Accessibility Instruments and Planning Support Systems, 23-24 October 2014, FEUP, Porto.

RESEARCH UNIT 3

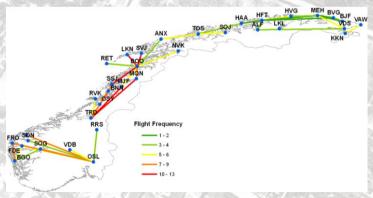
Recent months have been extremely busy for the Transportation Analysis and Planning (TAP) group of CITTA and all its 29 members. In addition to the research and service work briefly described below, we were strongly involved in three activities of great potential importance for the future of our group: the preparation of the activity report and plan for the on-going FCT Evaluation of R&D Units; the development of a large test-bed research application (involving 90 researchers from IST, FEUP, FCTUC and MIT) in the framework of the MIT Portugal 2013 Call for Proposals; and the preparation of a COST Action on 'Air Transport and Regional Development' involving 18 countries.

On the research front, after the completion of several MIT Portugal projects where the group was deeply implicated and of the PhD theses carried out in their framework, this has been a time for the take-off of several projects: InnovShare (Viability Analysis of Different Carsharing System Configurations through an Innovative Large Scale Agent Based Simulation Model), InfoCrowds (Social Events Web Information Retrieval for Crowds Mobility Management), and SoMoMUT (Soft Mode Modelling in Urban Trips), all funded by FCT; and EMSURE (Energy and Mobility for Sustainable Regions), funded by QREN. It was also a time for the launch of 5 new PhD theses, raising to 14 the number of PhD students currently involved in the TAP group. The inception stage of research activities is always very demanding, as it requires the refinement of work plans and the hiring of new people. At this point, such stage has been overcome, and the projects and theses are now running at cruise speed. Significant research results are expected from them in the near future, covering all the key subjects currently pursued by the group: intercity transport analysis and planning (with a focus on air transport); urban transport analysis and planning (with a focus on shared mobility and public transport); and transportenvironment-health interactions.

With respect to service, three main activities have been performed within the TAP group in recent times. One of these activities was the development of a demand forecast and simulation model for a carsharing system carried out under contract with MobiAG. Another one was a study made in collaboration with IDAD (U. Aveiro) to analyse the transport costs of the Valorsul waste management system in the present configuration and for some of its possible evolutions. The third activity consisted in an indepth investigation of the SATA Air Açores network structure conducted with a detailed integrated fleet assignment and flight scheduling model in view of the change of Public Service Obligation requirements that will take place October 2014.

Our future will undoubtedly be shaped by what we did these last months and, in particular, by the outcome of the FCT Evaluation of R&D Units. If our expectations are realized, the next few years will certainly see an increase of the contribution of CITTA's TAP group to the advancement of knowledge in the field of transport analysis and planning.

António Pais Antunes



Air transport network design in low-demand regions: Results of a study for Norway