

Accessibility in urban modelling: from measurement to policy instruction

**NECTAR Cluster 6 workshop (18th and 19th of June 2018)
&
Urban Europe Research Alliance (UERA) (20th of June 2018).**

Lyon, France

18th, 19th and 20th of June 2018

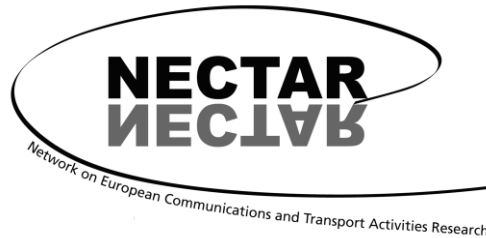
Call for papers for the NECTAR Workshop

It is our pleasure to invite you to the accessibility workshop of NECTAR Cluster 6 which will be held in Lyon, France, the 18 and 19th of June 2018. This workshop welcomes all works dealing with accessibility. The call for papers is detailed in the remainder of this document.

The workshop will be followed by an important meeting of the Urban Europe Research Alliance (UERA) (June 20th). This meeting of the Thematic Group "Accessibility and connectivity" of the UERA, will focus on developing the research agenda initiated in the first meeting in Trondheim in autumn 2017. Keynote speeches will also be proposed on topics related to accessibility and connectivity and are already identified.

Main topic

Accessibility is a key concept in urban modelling. Since the seminal work of Hansen (1959), accessibility has constantly evolved over the course of research. Initially defined as the potential of opportunities for interaction, accessibility has expanded its scope to include the explicit interaction between space, networks, and society. Therefore, accessibility is, in some way, a measurement of interaction. At the same time, the main objective of urban models is to understand urban interactions. Urban models, simple by nature, try to capture the complexity of urban life through the prism of interactions and interrelations between different agents. The inclusion of accessibility in urban modelling has therefore been a logical step. Nowadays, accessibility has become an essential component of many urban modelling approaches. Accessibility plays a double role; it can be at the same time an explanatory variable of urban phenomena and an output indicator to instruct policy makers.



In this Nectar accessibility meeting, we welcome all contributions that address, directly or indirectly, the role of accessibility in urban models. The meeting will be roughly organized over four axes:

- Accessibility measurement;
- Accessibility as a dependent/independent variable in urban models;
- Theoretical and methodological renewal of accessibility;
- Accessibility and policy evaluation.

Accessibility can be specified in many ways, from a simple cost function to a complete log-sum formulation. However, the characterization of accessibility is often subject to data availability and estimation capacity of complex formulations. Today, with the increasing availability of urban data (open source databases, big data, etc.), this constraint is relaxed, at least in theory. This session will be an opportunity to expose new measuring methods of accessibility, their data sources, their theoretical and methodological contributions, and their limits.

The question of the measurement raises the question of the integration of these indicators in urban models. How to include accessibility in our equations? What is the contribution of such an inclusion? Putting accessibility in a mathematical equation is not straightforward due to the fact that accessibility is not an intuitive concept. Papers dealing with this issue are welcome.

The renewal induced by new data sources brings to light a need for a renewal of our research methods. In this context, the methods applied so far are empirical and need a theoretical backing. Literature review of the last years is abundant of new methods dealing with new data and constructing new indicators. Still, theoretical contributions that can enlighten the relevance of such approaches are scarce. Researchers with such contributions are invited to submit their work.

Finally, the use of accessibility is not limited to models and their internal logic. Accessibility, by its very nature as a potential of interaction is a valuable candidate to appraise urban policies. In this context, many works have relied only on the cost part (in time or money) to assess urban policies. The other components of the concept of accessibility related to space (location of opportunities, their nature, their competing demand), to individuals (age, education, physical capacities), or to time (time constraints, time tables) are often overlooked. Contributions dealing with urban policies and their assessment from this comprehensive point of view are also invited to share their findings.



Topics of interest

The workshop will focus on the following topics:

- Accessibility measurement;
- Accessibility as a dependent/independent variable in urban models;
- Theoretical and methodological renewal of accessibility;
- Accessibility and policy evaluation.

Abstract submission for the NECTAR workshop

We are seeking for 20 participants. If you are interested to participate in this workshop, please send an **abstract** of your presentation (about 500 words) including author names and affiliations and keywords, to *Ouassim Manout* (ouassim.manout@entpe.fr) and *Ioannis Baraklianos* (ioannis.baraklianos@entpe.fr), before **February 15th**.

The notification of abstract acceptance will be distributed **mid-March 2018**.

Venue

- The NECTAR workshop on accessibility will be held at the ENTPE engineering school (<http://www.entpe.fr/>) located in Vaulx-en-Velin (8 km from Lyon city center), France.
- The UERA meeting will be held the 20th of June in the IFFSTAR's office (09:00--17:00 room Jules Verne) in Lyon, Bron.

Participation and fees (Only for the NECTAR workshop 18th and 19th)

NECTAR membership for the year 2018 (€70 or, for those under the age of 30, €40) is required in order to attend the meeting. Non-members can find details on how to join the association on the 'Membership' page of NECTAR's website: <http://www.nectar-eu.eu/membership/>.

This workshop is funded by the University of Lyon, ENTPE, LAET and NECTAR. With this co-funding, we will be able to fund lunches and coffee breaks during the two days, social events, and accommodation for (at least) one night for one author per paper.

Organizing committee

- *Ouassim Manout*, University of Lyon, ENTPE, LAET (Workshop organizer)
- *Ioannis Baraklianos*, University of Lyon, ENTPE, LAET (Workshop organizer)
- *Louafi Bouzouina*, University of Lyon, ENTPE, LAET (Workshop organizer)



- *Patrick Bonnel*, University of Lyon, ENTPE, LAET (Workshop organizer)
- *Aura Reggiani*, University of Bologna, Italy (NECTAR CL6 Coordinator)
- *Juan Carlos Martín*, University of Las Palmas, Spain (NECTAR CL6 Coordinator)
- *Pierre Zembri*, Université Paris-Est, Marne-la-Vallée, France (NECTAR CL6 Coordinator)
- *Karst Geurs*, University of Twente, the Netherlands (NECTAR Chair)
- *Anne Ruas*, IFSTTAR, Paris (UERA initiative)
- *Alain L'Hostis*, IFSTTAR, Paris (UERA initiative)

NECTAR is a European-based scientific association. The primary objective is to foster research collaboration and exchange of information between experts in the field of transport, communication and mobility from all European countries and the rest of the world. It is a multidisciplinary social science network. It brings together a wide variety of perspectives on transport and communication problems and their impacts on society in an international perspective. For further information see: <http://www.nectar-eu.eu>

UERA (Urban Europe Research Alliance) is bringing together the research performing organisations and aims to strengthen, expand and optimise coordination activities and research planning in Europe in order to avoid fragmentation and optimise resources in the field of urban research and innovation capabilities. UERA is one of the key initiatives of JPI Urban Europe. Currently UERA brings together around thirty European research organisations from thirteen different countries. We are creating a community of researchers, professors, and PhD students. Together this community will be able to conduct work which will advance scientific excellence in the field of urban research. This community is bound by research which uses approaches that are integrated, systemic, environmental, and socio-economical in their consideration. For further information see: <http://jpi-urbaneurope.eu/stakeholders-partners/uera>.