

Research Studentships (PhD students)

Applications are open for one (1) Research Studentship(s), within the framework of project PTDC/GES-TRA/3353/2020 - “**Mobility as a Service and Socio-Territorial Inequalities**”, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Sistemas Urbanos e Regionais

Admission Requirements: *To be enrolled at a PhD.*

Workplan: MASTI will specifically research the relationship between Mobility-as-a-Service (MaaS) and Socio-Territorial Inequalities (STIs), where the Lisbon Metro Area (LMA) is the case study. The project will answer 2 main questions:

- 1) Is MaaS contributing to a reduction or an increase in existing STIs?
- 2) Can MaaS contribute to a reduction of STIs and support more sustainable travel patterns?

The candidate will contribute to answering both answers, more specifically on the following topics:

- Which socio-demographic and socio-economic groups are benefiting the most?
- What modal shifts are or will occur as a result of MaaS?
- What are the main attributes of a MaaS system that would succeed in reducing car usage?
- What is needed to support and implement a socially and spatially inclusive MaaS system?

The tasks to be developed will include:

- Literature review in modal integration between transportation modes, the concept of MaaS and the relationship with STI.
- Primary and secondary data collection, where the candidate will play a relevant role in the development of a dedicated travel survey (to be deployed online and CAPI), in which not only we will gather data on travel patterns but also on costs of the different travel modes, including aspects such as the cost of acquisition, maintenance, parking, tickets and fines, taxes, etc., fares systems, costs of exiting MaaS and associated service area.
- Discrete choice modelling to understand how people changed mobility patterns (if they did) before and after the shared mobility services (SMS) started operating in Lisbon, if there was a difference in the number of daily trips they made previously and after the availability of SMS, and which individuals and places have had changes. Based on the survey data, the candidate should be able to develop models that seek to explain subjective perception of accessibility by respondents, after the introduction of new transport service in the city.
- Participate on focus group activities to collect data with individuals and households from three municipalities from the Lisbon Metro Area (LMA), who have used or not MaaS (or transport services that relate to the MaaS concept). This qualitative approach will complement the quantitative approach.

- Participate on the interview and workshop organization to LMA's stakeholders, such as ensuing analytical procedures, to evaluate how policymakers and transport services operators perceive possible strategies and levels of MaaS integration from private and public sectors.
- Participate on the coordination and dissemination of the project results, by drafting and submitting academic papers to relevant conferences and journals (included in the Clarivate and Scopus citation systems).

These tasks will be part of the PhD research of the candidate who will focus on one research problem and objective of the MASTI project.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

Workplace: The work will be developed at CERIS (Civil Engineering Research and Innovation for Sustainability) of IST-ID, under the scientific supervision of Prof. Filipe Manuel Mercier Vilaça e Moura.

Duration: The research fellowship(s) will have the duration of 12 months. It's expected to begin in July 2021 and may possibly be renewed up to the maximum of 24 months.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<http://www.fct.pt/apoios/bolsas/valores>), the amount of the monthly maintenance allowance is € 1104,64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following:

- (1) Curriculum Evaluation - CE
 - a. It is mandatory that the candidate:
 - i. Has a Master Degree in Transportation or Civil Engineering (or equivalent degrees).
 - ii. Did his master dissertation in a topic related to transportation.
 - iii. Speaks and writes fluently in English.
 - iv. Has advanced skills in the use of descriptive statistics and inference tools, and econometric modeling.
 - v. Has published scientific papers in relevant journals of transportation (where journals of the Clarivate or Scopus citing systems will be better scored).
 - b. Teaching experience of the candidate will be positively valued, although not mandatory.
- (2) Motivation letter – ML
 - a. The candidate should explain compellingly why she, or he, has an adequate personal profile and CV to participate in the research project and she, or he, deserves to be selected more than other candidates.
- (3) Individual Interview - II
 - a. The English proficiency of the candidate will be tested and the candidates' knowledge in transport and modeling techniques will be evaluated.
 - b. The interview will be conducted in person at Instituto Superior Técnico, or via Zoom, in the case of candidates living outside the Lisbon Metropolitan Area, in a meeting to be scheduled at the jury's convenience.

Each evaluation component is scored between 0 and 100 points (inclusive), where the final score (FS) for seriation of candidates is: $FS = 70\% \times CE + 10\% \times ML + 20\% \times II$. The candidate with the highest final score will be selected.

Composition of the selection Jury: Filipe Moura (Associate Professor); Luís Picado Santos (Full Professor); José Neves (Assistant Professor)

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from 21 June until 2 July 2021.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD); v) motivation letter;

Applications must be submitted to the email: fmoura@tecnico.ulisboa.pt.