Master Thesis. Academic Year 23/24.

Título: Analyzing the use of mobile measurements to support telecommunication policies and regulation.

Tutora: Zoraida Frías, Departamento de Señales, Sistemas y Radiocomunicaciones

Fecha inicio: February 1, 2024

Remuneración: Posibilidad de beca de 700€/mes por 20h/semana

Requisitos: Estudiante de Máster de un título oficial de la ETSIT, preferiblemente MUIT.

Solicitudes: Enviar CV y expediente académico a <u>zoraida.frias@upm.es</u> antes del 7 de enero de 2024.

Background:

In recent years, the telecommunications industry has witnessed an exponential increase in the use of mobile measurements to assess network performance and user experiences. Despite the increased mobile measurement capabilities, the extent to which these measurements effectively inform evidence-based policy-making in the telecommunications sector remains uncertain. The vast amount of data derived from mobile measurements offers a unique opportunity to gauge network quality, coverage, and user satisfaction. However, the translation of this data into actionable insights that guide and shape telecommunications policies, especially concerning universal service provision, broadband state aids, and market regulation, poses a complex challenge.

Objectives:

This Master Thesis aims to investigate the relationship between mobile measurements and the efficacy of telecommunications policies, specifically focusing on universal service, broadband state aids, and market regulation addressing information asymmetries in different countries.

Methodology:

This research will adopt a comparative analysis approach. The approach will be primarily qualitative, involving desktop research to investigate how different regulators and policymakers are using mobile measurements to inform their policies. The research will be undertaken systematically to enable international comparisons.

Expected Outcomes:

The Thesis aims to provide empirical evidence and insights into how mobile measurements can inform and evaluate the impact of telecommunications policies and market regulation. The findings are expected to contribute to the understanding of the relationship between policy implementation, market regulation, and the credibility of mobile measurements in telecommunications decision-making processes.

The outcomes will contribute to a collaborative research project ongoing with research at MIT and the Technische Universität Berlin. For more information about the project, please refer to this <u>paper</u>.