

## INTRODUCTION TO THE PATH FOR SUSTAINABLE MOBILITY AND INCLUSION

*In the context of the future and development of the transport network at national and international level, José Manuel Viegas, a professor of transport at the Instituto Superior Técnico and, most recently, secretary-general of the FTI (International Transport Forum of the OECD), accepted the invitation to talk to the students of José Saramago - Mafra Secondary School (ESJS-Mafra) on the morning of March 21st.*

A lecture was then held considering the theme of the project of the Erasmus + program taking place at ESJS-Mafra.

José Viegas conveyed to us the importance of the sustainable development of the transportation sector in Portugal, providing universal, safe, ecological and efficient access. Therefore, since Portugal belongs to the European Union, there is an increased need to adopt new alternatives to the means of transport that serve the population, such as micro-mobility.

The concept of micro mobility consists of the use of sustainable means of transport, for short distances, in urban centres. Micro-mobility includes small, usually electric, vehicles such as scooters and electric bicycles that can already be found in several Portuguese cities. The advantages and beneficial objectives that micro-mobility can bring to the population today include improving air quality by reducing carbon dioxide emissions, reducing congestion, which helps to save time on journeys, which also improves conditions accessibility for all social classes and increases road safety. According to statistics, an average of two people per day dies in Portugal in road accidents.

In addition to individual transportation, Professor José Viegas presented studies about other solutions, such as Taxi-bus and Shared Taxi. The idea of the Taxi Bus consists of the mobilization of eight to sixteen passengers in minibuses, with the maximum distance of 400 meters from the place of departure or arrival, to the Taxi-bus. The trips are direct and without transfers and must be requested at least thirty minutes in advance. As for Shared Taxi, the maximum number of passengers is six and the trips have a minimum limit of 3 km and a maximum of 12 km. Depending on the distance travelled, tariffs must be equal in both services to reduce competitiveness.

In order to efficiently use these transports, it is necessary to: develop a digital and personalized application, which will lead to greater telecommunications growth and Big Data; organizing urban planning through technological change. As a result of this change, there is a



reduction in the dependence of the private car in the cities and, also, a reduction of parking space (currently,  $4km^2$  in the city of Lisbon).

With the adoption of these measures, there will be positive changes, especially in the big cities, regarding the quality of life of the communities. Despite the benefits that micro-mobility brings to the population, it will be a challenge to adapt to this system. Governments and companies must act in a coherent and gradual way in creating conditions and then implementing these measures.

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