1. Challenge

How can we gather, structure and exploit valuable information on forms of mobility in the Basque Country in order to assist in defining and drawing up action plans?

2. Subsidiary challenges

- How can we transform existing information (in its different formats) on forms of mobility into data in an automated way and in real time?
- How can we optimise the process of structuring, collating and processing the data obtained?
- How can we make use of the data gathered in a format that will allow us to draw conclusions for decision-making purposes?

3. Possible solutions that can be applied

- Big data applied to the integration of existing information on mobility.
- Advanced analytics on mobility data to obtain valuable information.
- Platforms based on artificial intelligence and machine learning to make it possible to take real-time decisions on mobility.
- Others: sensors applied to mobility...

4. Context

The Basque Energy Agency (EVE) is responsible for devising the Basque Country's energy policy and developing projects and initiatives in line with these policies, some of which directly affect mobility, with a focus on promoting more sustainable mobility based on using more efficient modes of transport, promoting the use of public transport, using more efficient vehicles and using them rationally, as well as encouraging the use of alternative fuels and technologies.

In this context, EVE has identified the need for reliable information on mobility in the Basque Country, information that could serve as a basis for developing the aforementioned strategies, planning initiatives and carrying out projects in this field.

There is a great deal of information available nowadays, but it is scattered across a number of sources that are managed by a wide variety of managers, which makes it difficult to collate it and apply it as valuable information.

The main problem is related to the structuring and consequent gathering of information on a huge amount of unstructured data, which is available from a variety of sources. In this regard, there are or could be different sources from which to extract this data, such as: traffic counting stations, traffic management cameras, MOT test centres, car parks, real-time location and route definition systems, etc., which are considered to be sufficient for characterising mobility in the Basque Country and could serve as primary sources for EVE. However, as mentioned above, there is no defined mechanism for sharing this information that would make it possible to collate, process and use it for decision-making purposes.

5. Objectives

- To understand the characteristics of mobility in the Basque Country from an integral perspective, i.e. mobility elements in general (cars, buses, bicycles, electric scooters, etc.) and in real time.
- To characterise mobility in the Basque Country by mobility element based on multiple variables such as its type, fuel used, number of passengers, goods or passenger vehicles, kilometres travelled, historical data, MOT, etc.
- To develop a scalable tool for analysing mobility in the Basque Country with the potential to be open to other public and private entities and to the general public.