

# CulturalRoad: Cultural, regional and societal factors to overcome barriers to connected, cooperative and automated mobility deployment

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## Research Significance

GOAL: Leveraging participatory planning to incorporate cultural and geographical diversity into more equitable Cooperative, Connected and Automated Mobility (CCAM) deployment strategies and increase societal acceptability across different regions in Europe and Worldwide.

**Co-create:** CCAM deployment plans that are tailor made to the local needs, for national, regional, and local realities

**Demonstrate:** Five demonstration sites, at a national, regional, and local level: West Midlands (UK), Karlsruhe (Germany), Catalunya (Spain), Eilat (Israel), Ljubljana (Slovenia).

**Measure:** Rating system to measure transport equity in CCAM systems according to: a) safety, b) inclusivity, c) network status, d) acceptance and e) psychological factors.

**Develop:** New planning tools that allow starting from the current user needs, predict future scenarios and allow to effectively evaluate multiple CCAMs services that interact in the network.

CulturalRoad proposes to solve this problem by addressing two interconnected challenges

1. The project will develop new guidelines for CCAM implementation that intrinsically consider diversity in all its aspects.
2. Cultural Road leverages participatory planning methods to involve local communities, region /cities and governments develop tailor-made strategies to meet their specific and unique mobility needs.

Achieving these challenges will ensure that CCAM services promote equity in mobility.

## Research Objectives



**CCAM Readiness Report:** Aggregate results from existing studies and projects to identify the state of the practice for CCAM acceptance within and outside the European Union.



**Integration into Deployment Roadmap:** Integrate findings from the co-creational framework into deployment roadmaps and Sustainable Urban Mobility Plans (SUMP) at local, regional, and national levels.



**Diversity Identification:** Identify cultural and geographical factors shaping diversity at local, regional, and national levels in Europe.



**Co-Creation Framework Implementation:** Implement the Two-Step co-creation framework in diverse social environments and cultural contexts across Europe.



**Co-Creation Framework:** Develop a Two-Step co-creation framework involving all relevant stakeholders to define deployment guidelines for maximizing societal acceptability and uptake of CCAM.



**Extension of Holistic Framework Results:** Utilize the developed holistic framework to extend results to different geographical areas, especially by developing maps and matrices capturing patterns in Europe.



**Holistic Methodology Design:** Design a holistic methodology analysing cultural and geographical diversity across regions, considering transport demand, and supply aspects related to transport inclusivity, safety, psychological factors, network optimization, and acceptance.



**Knowledge Transfer Mechanism:** Generate a knowledge transfer mechanism translating regional strategies to both local and national levels.

## Methodology

The project will target **geographical diversity, cultural diversity, and exogenous aspects**. To do so, we will focus on different target groups.

Given a target group and the three types of diversity (cultural, geographical), **five pillars** will fully explain mobility equity in relationship to diversity, namely **safety, psychological factors, network optimization, transport inclusiveness, and user acceptance**

## Measured Outcomes

1. Report on **CCAM readiness**.
2. **Geographical Tool:** Utilize a map-based website.
3. **Key Performance Indicators** for each pillar (50 total) measured in each demonstration site.
4. A framework for participatory planning facilitating the identification of **target groups**.
5. **Planning toolkit** for Public Authorities, Technology Companies, and Transport Operators on creating fair and equitable CCAM.
6. **Development of planning tools** such as deployment roadmaps, business model canvas, and CCAM deployment .
7. **Conduct 5 workshops, 10 focus groups, engage** with more than 60 stakeholders and 10 target groups.
8. **Roadmap/strategy** for the fair deployment of CCAM across Europe.
9. Implement a **one-level-up/one-level-down strategy** facilitating communication between planning authorities at different levels.

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