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Smart City Expo World Congress

LINKING TALENT FOR MOBILITY

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> inLane project



Navigation systems:

- Provide drivers with reliable guidance.
- Reduce last-minute breaking or lane changing, which cause:
 - Accidents
 - Traffic jams
- Make drivers being more relaxed

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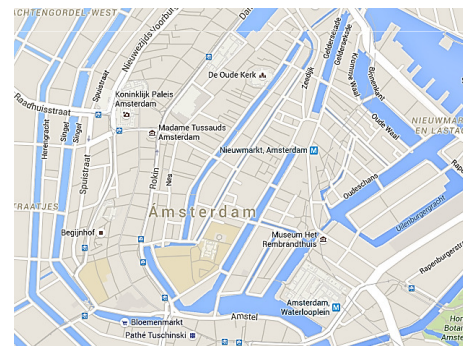
Current navigation systems only based on GNSS and actual cartography has not lane level accuracy, only road level.



Severe simplification of road description

Information not based on vehicle's real position

Cartography at lane level Update Problem



> inLane project: objectives

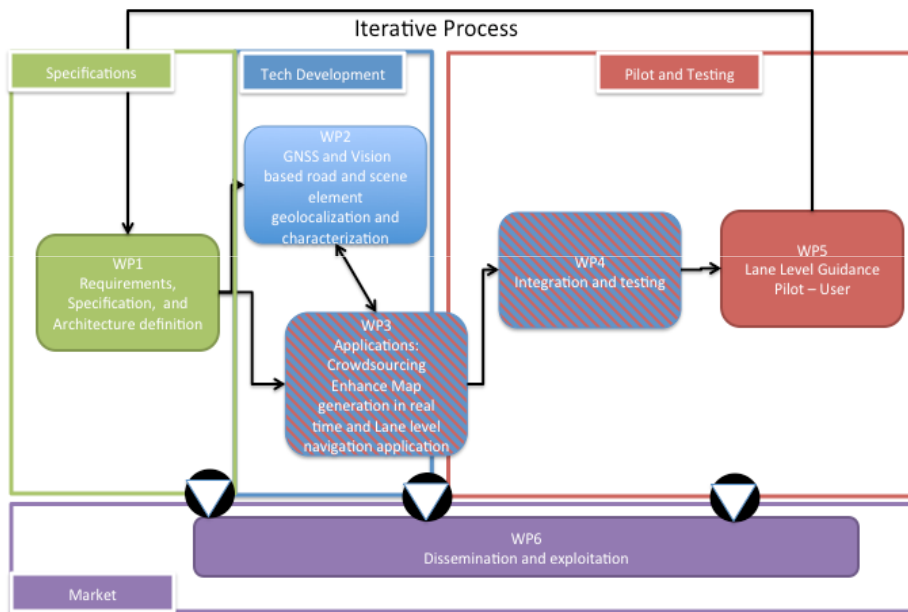


- The objective is to develop a, low-cost, lane-level navigation application through the fusion of EGNSS and Computer Vision technology.
- This will enable a new generation of enhanced mapping information with real-time updating based on crowdsourcing techniques.

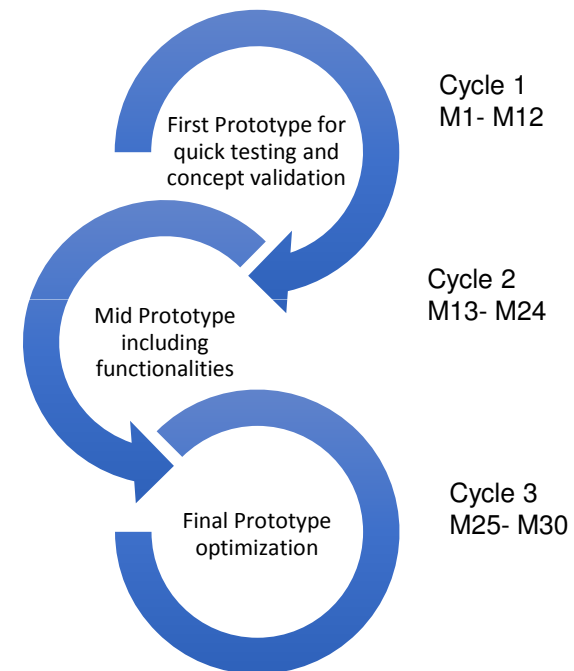


> inLane project: approach

Work Plan



Development Cycles



> inLane project : results



- First prototype integrated and tested.
- All basic functionalities included in the first prototype.
- Encouraging results obtained.
- About to carry out the second prototype that will run in a user friendly TomTom app.



> inLane project: user survey



- 33 questions in 4 clusters of questions: profile, use of navigation systems, acceptance of lane level navigation system, knowledge of Galileo and other GNSS
- 900 answers
- Available in 4 languages: English, German, Catalan and Spanish
- Disseminated through WebPages, intranet and social media etc



> inLane project: user survey



- The Smartphone is the most used platform. But the preferred one would be the integrated in the car.
- Route guidance is what the user focuses most attention on in unfamiliar areas and traffic information in familiar ones.
- The loss of signal is the biggest annoyance of the users with current navigation devices.
- The fact that the user is not sure whether he is positioned in the right lane is the main reason why he considers he missed an exit on a highway and when he is not well positioned before a traffic light.

> inLane project: next steps



- Final user tests planned in Barcelona (June 2018).



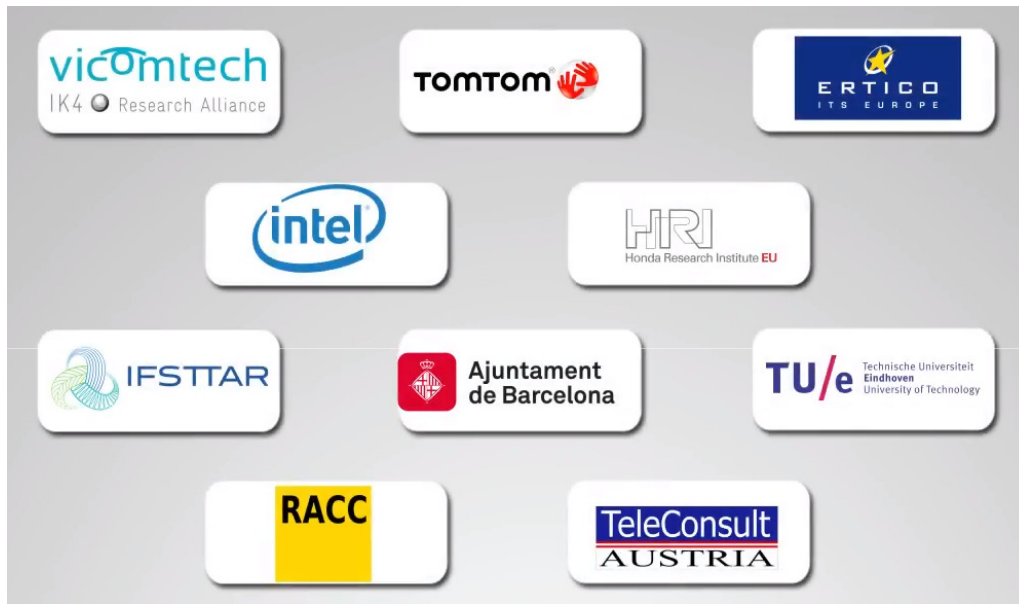
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> inLane project: consortium



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