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Next steps in the area of CCAM infrastructure and traffic management as follow up of INFRAMIX and related activities

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INFRAMIX Project overview

Duration: 1 June 2017-31 May 2020

EC Funding: 5M €

Coordinator: AustriaTech

Consortium:

AustriaTech, ICCS,

Asfinag, Fraunhofer, Siemens Mobility,

Virtual Vehicle, Autopistas,

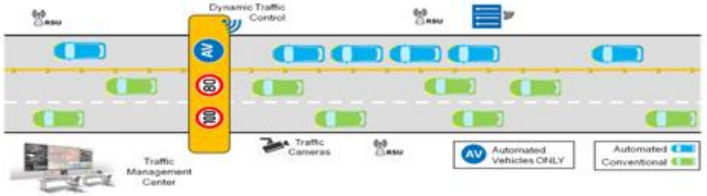
Enide, Technical University of Crete,

TomTom, BMW

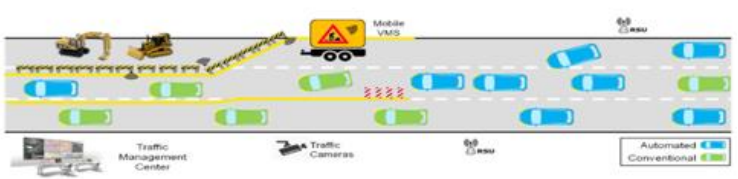
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723016.

Mixed traffic: 3 Scenarios – 3 key areas

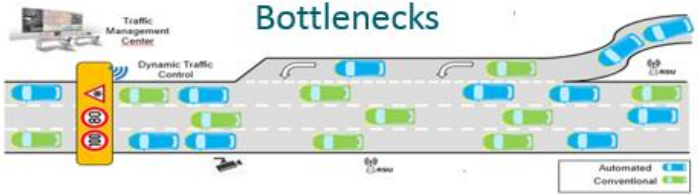
Dynamic lane assignment to automated driving



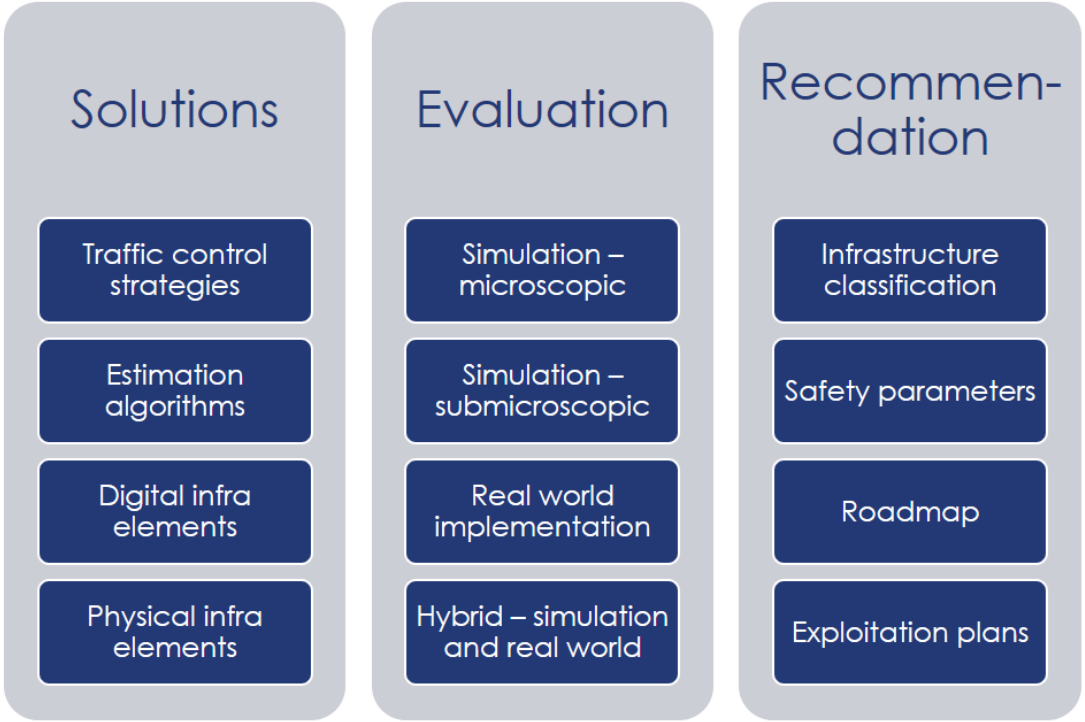
Roadworks zone



Bottlenecks

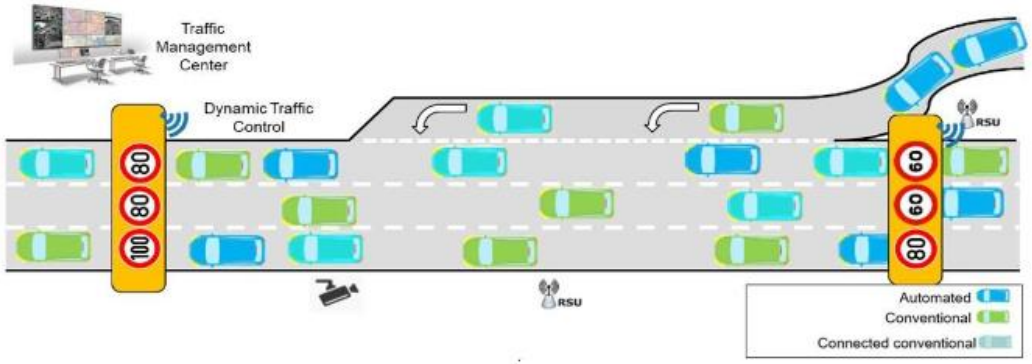


Approach


Solutions
Traffic control strategies
Estimation algorithms
Digital infra elements
Physical infra elements
Evaluation
Simulation – microscopic
Simulation – submicroscopic
Real world implementation
Hybrid – simulation and real world
Recommen-dation
Infrastructure classification
Safety parameters
Roadmap
Exploitation plans

Potential of infrastructure support

- Increasing penetration rate of automated vehicles without measures decreases traffic efficiency
- Positive impact in terms of safety for speed recommendations
- ACC time gap controller could improve efficiency in case of delays by some 50%.
- Speed advices could decrease delay times by 10 to 15%.
- Traffic estimation algorithms to capture mixed traffic situations



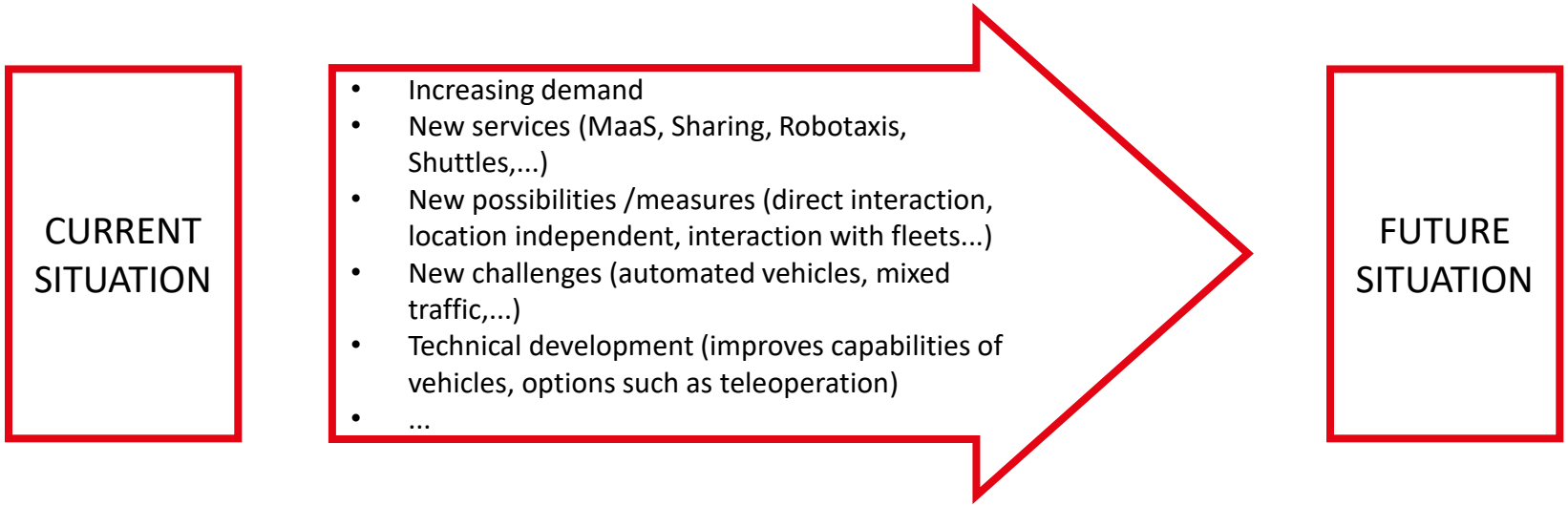
Detailed information is available in D5.3 Evaluation, impact analysis and new safety performance criteria

INFRAMIX next steps

- **Integration of technology** – integration with other solutions, ensuring security
- **Policy making / Standardisation** – legal framework, standards
- **Validation** – extend tests to different scenarios, countries, road types
- **Deployment** – application of INFRAMIX solutions
- **Coordination with stakeholders** – extend to further scenarios, combination with other measures

More information is available in INFRAMIX D.6.4 Roadmap towards fully automated transport systems

From the current situation to the future situation



Next steps

Common view, agreement, standardisation	•Cooperation between stakeholders; align different approaches, extend and combine solutions •Data: What is required for operation, what for evaluation, security, privacy, quality/trust •extend classification of infrastructure support •what are the measures, which will be needed anyway
Evaluation and impact assessment	•Show benefits; combination of solutions; include different elements and new services, •End user aspects •Align approaches, make activities comparable •further extend simulation capabilities •pilots and living labs
Legal requirements	•for different types of use cases, scenarios and measures •what is required •what is already in place
Business models	•Consider all relevant stakeholders •Deal with uncertainties (technical, legal, ...) •Consider different implementation timelines

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Questions & discussion

Thank you for your attention

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