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ARCADE Y1 Deliverable D3.7

Society-related thematic areas

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Work Programme

Topics

- Introduction to Deliverable D3.7
  - What is the Deliverable/Task about
- Which Thematic Areas that are part of this Task
- What are the prioritized actions per TA and why
- What are the major conclusions/outcomes of this deliverable for Y1

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What is Deliverable D3.7 about

Scenario A: Disruptions through market driven services

Scenario B: Authority driven with focus on collective transport

- Bottlenecks and challenges
- Enablers to speed up process
- Relations to ongoing activities outside of ARCADE
  - EU Projects
  - Ongoing initiatives
- Key actions, prime actors and priorities
- Conclusion and recommendations

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Involved Thematic Areas

- Policy and Regulatory Needs, European harmonization
- Socio-Economic Assessment and Sustainability
- Safety Validation and Roadworthiness Testing
- User Awareness, Users and Societal Acceptance and Ethics, Driver Training

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Prioritized Actions per TA-1

Policy and Regulatory Needs, European harmonization

- Flexible AD regulation, enabling different solutions, within the boundaries of safety
- Learn from adaptation of regulation, work towards common approach
- Build common CAD framework
- Make cross-border testing easy
- Develop models on co-habitation of private shared and public mobility
- Focus technical regulation on public transportation rather than private passenger cars

Prioritized Actions per TA-2

Socio-Economic Assessment and Sustainability

- Promote common methodologies and guidelines: FESTA Handbook, Trilateral impact assessment framework, ethics guidelines for trustworthy AI by the High-Level Expert Group on AI
- Organise both large-scale pilots (low level TRL) and FOTs (high level TRL) to assess the impact of the new technology and related services in different environments
- Study the implications of land use policies on impacts of CAD
- Develop new evaluation methods for the indirect longterm impacts of CAD

Prioritized Actions per TA-3

Safety Validation and Roadworthiness Testing

- Develop a common EU testing and validation methodology
- Ethics evaluation based on technology understanding
- Development of commonly available (validated) AV simulation and other evaluation tools
- Development of EU-level databases to allow more reliable scaling up (data on accidents, mileage, etc. including ODD aspects, with sufficient details and granularity)
- Alignment of vehicle regulation (and type approval) and corresponding assessment tools & procedures
- Determine proper combination of virtual testing, closed test track and open road testing of AVs
- Share and harmonise driving/traffic scenarios and best practices
- Study expected life-time costs of CAVs and related infrastructure up keeping
- Consensus building with respect to validation of methodologies, including Data-labelling standards
- Develop procedures to manage validation of vehicle updates during the whole vehicle lifetime

Prioritized Actions per TA-4

User Awareness, Users and Societal Acceptance and Ethics, Driver Training

- Secure privacy for mobility users
- Study the impact on driver/users and operator training
- Perform societal needs and positive risk analysis from user and society perspectives
- Allow a successful transition of responsibility from the user to the automated system (robot, manufacturer, supplier, etc.).
- Develop regulation regarding collection, use, re-use, of data and compliance to GDPR
- Research on long-term indirect impacts of automation, equity etc.)
- Roles and liabilities over automated mobility should be clarified and consolidated
- Investigate how the role of operators and professional drivers will change with higher levels of vehicle automation

What are the major conclusions/outcomes for Y1

- EU Member States should share best practices and learn from those that already updated their regulation
- Sequence of studies from technical pilots towards more and more extensive field tests with real users of all kind and in different environments are needed
- Ensuring functional and operational safety will play a decisive role in convincing users that CAVs are safe
- Privacy issues should be clarified and understood by users while at the same liability regimes should eliminate any legal uncertainty in case of an accident

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Thank you for your attention

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