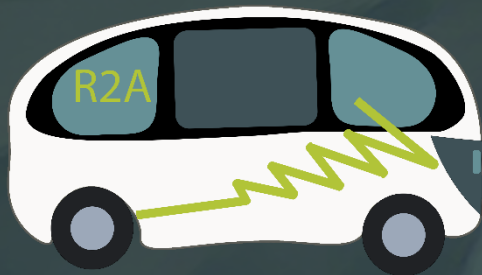


Activity 3 : Evaluation and Scalable Model

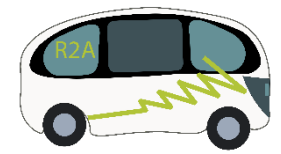
D4 : Scalable Model Toolbox

Workshop



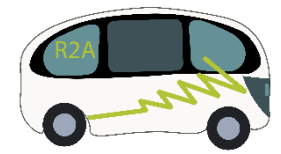
This project has received funding from the European Union's Directorate-General for Communications Networks, Content and Technology, 2020 Work Programme under grant agreement No. LC - 01632937





Agenda

- What is Scalable Model Toolbox?
- Pilot site-Challenges/issues
- Ideas behind the Scenarios
- List of Recommendations in the R2A toolbox
- Detailed recommendation plan(toolbox)
- Timing



Sub-activity 3.2. “Scalable model” toolbox

TIMETABLE FOR EACH STAGE OF THE ACTION SHOWING MAIN DATES AND EXPECTED RESULTS FOR EACH STAGE												
	Semester 1						Semester 2					
Activity	Month 1	2	3	4	5	6	7	8	9	10	11	12
Activity 3: Evaluation, scalable model (RC)												
3.1 (Evaluation)			→									
3.2 (Model toolbox)	→											

Objective : A toolbox (D4) informing on the outlay and maintenance costs, safety and security requirements, logistics concerns, affordability considerations, use case challenges and solutions, shuttle acquisition approach, engagement of key stakeholders and end users.

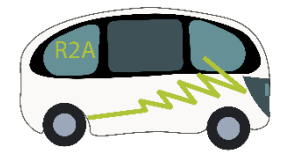
Sources : R2A pilots lessons learned and other sister projects

Means : Provide recommendations, advice on different elements

Ouput : Ride 2 Autonomy toolbox to be established as European reference for cooperative, connected and automated mobility shuttles realization

CONTENTS :

Pilot Challenges/Lesson learnt



Pilot site – Issues/Challenges

Potential delay in pilot launch due to the procurement process of the shuttle

Lack of Citizen engagement/communication

Changes in route due to ongoing construction work, and hence required to install additional telecommunication infrastructure in new route.

Delayed due to small fire incident while pilot preparation(Lack of Incident response plan)

Technical sensor and mechanical actuator issues with the shuttle



Due to problems in data collection system, the surveys were not recorded

Lack of coordination between different authorities

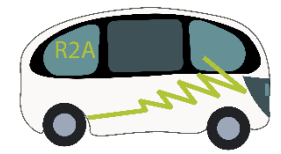
Problems with the vehicle 'reliability' and therefore, pilots were not comprehensive

vehicle robustness against weather elements

Issues obtaining the permissions from the local authorities to run the pilot

CONTENTS :

Ideas Behind the Scenarios



• Development of scenarios

Strengthening the public transport

Autonomous shuttle can use as a feeder to PT service which can transform into something that is more attractive, efficient

Mobility As A Service

AV shuttle will serve as a new mobility service into the city/areas where narrow streets are not easily served by traditional buses, and it can be worked as First mile-last mile connectivity

Safety

Autonomous vehicles can help reduce the road traffic accidents & fatalities because It will have advanced sensor and control features



Define the use case

Affordability & Reliability

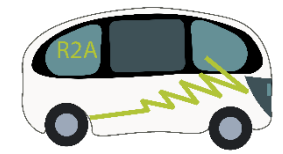
Shuttle services are expected to be more affordable, convenient, and attractive to a mass of users

Social Acceptance

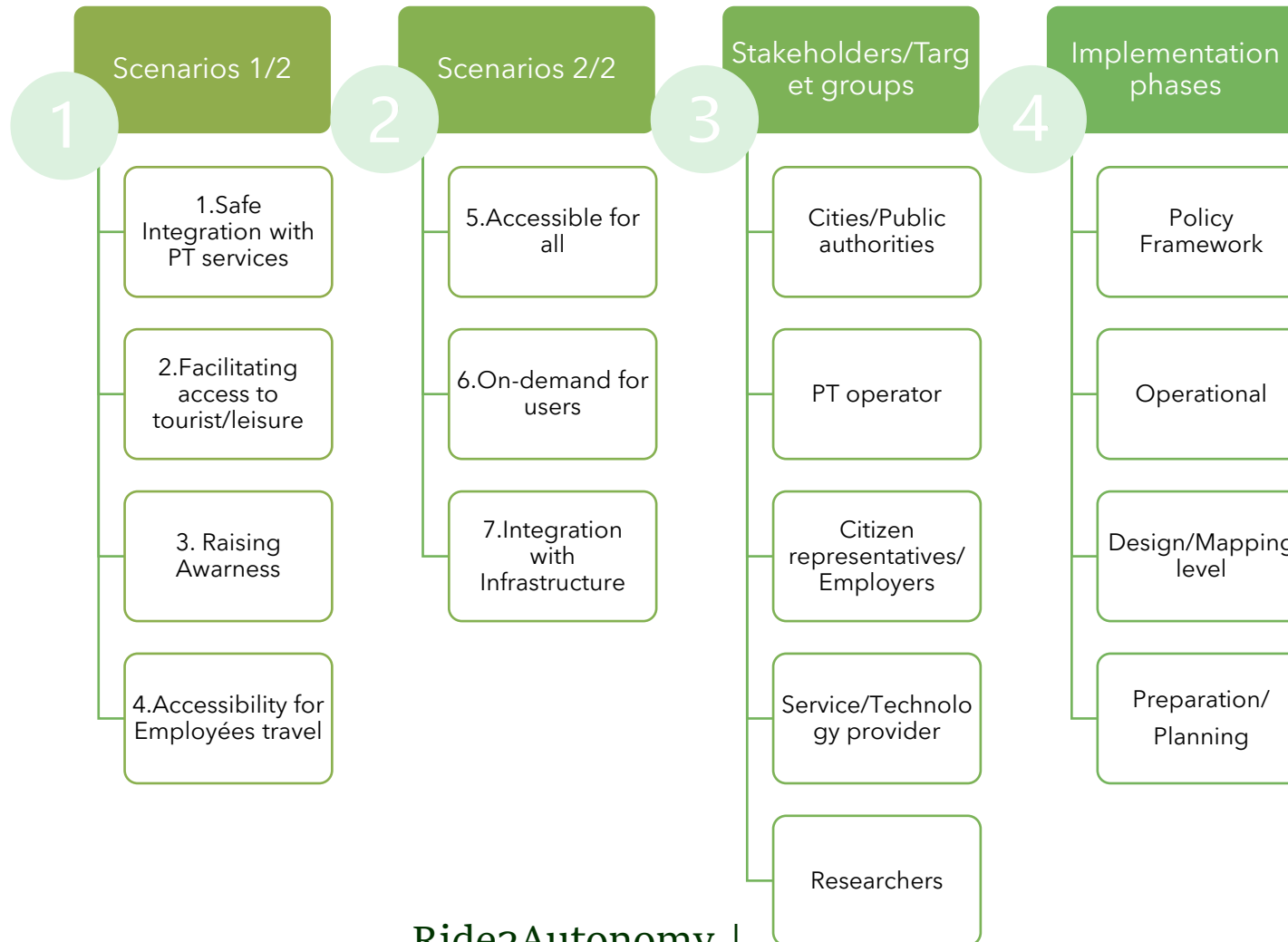
Identify the potential users and their needs ,create awareness through public engagement

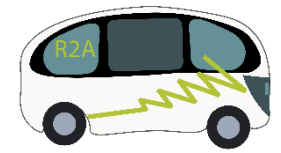
Technological Advancement

Data driven demand base (ITS) technologies with real time data sensors



Browsing on Ride2Autonomy Toolbox





Ride2Autonomy Toolbox

📁 Ride2Autonomy

📄 Recommendations Add recommendation

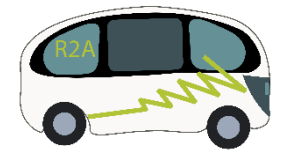
Ride2Autonomy

- 📄 Test 🗑️
- 📄 Enhancing the quality of service and more attractive shuttles for users 🗑️
- 📄 Fare integration within the Existing PT systems with Smart ticketing system 🗑️

🔍 Filters Add filter

Ride2Autonomy

- 🔍 Scenarios 🗑️
- 🔍 Stakeholders/Target Groups 🗑️
- 🔍 Implementation Phases 🗑️



Ride2Autonomy Toolbox Backoffice

← Back to Ride2Autonomy

Title *

First and Last mile Connectivity

Publish recommendation

No

Acronyms

Acronym	Meaning
---------	---------

[Add acronym](#)

Description

Paragraph **B** *I* [List] [List] [Quote] [List] [List] [List] [Link] [List] [List] [List]

Image

Choisir un fichier | Aucun fichier n'a été sélectionné

Scenarios

- Safe Integration irth PT services
- Facilitating acces to tourist/leisure
- Access to information for users
- Accessibility for Employee's travel
- Social Inclusive
- On-demand for users
- Integration with Infrastructure

Stakeholders/Target Groups

- Cities/Public authorities
- PT Operator
- Citizens representatives/Employers
- Service/Technology provider
- Researchers

Implementation Phases

- Policy Framework
- Operational
- Design/Mapping level
- Preparation/Planning

Example or good practice

Expected outcomes of recommendation

References & usefull links

Expertise

Quote the required level of expertise required for this recommendation

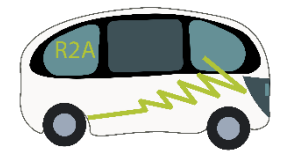
Public Policies

Infrastructure and technologies

ICT developments

User interest and local economy

CONTENTS : Recommendations



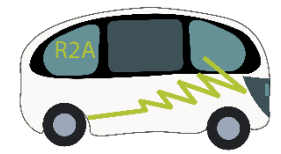
Recommendations

A recommendation is a suggestion or learning as to the best course of action, especially if one is put forward by an authoritative body.

The scope of the R2A toolbox is CAV acceptance and user awareness based on the Ride2Autonomy project work and beyond.

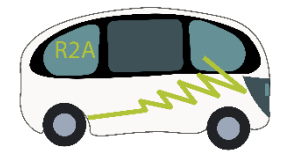
Recommendation From?

R2A Project	Sister Project
<ul style="list-style-type: none">• Project findings• User acceptance & awareness• Technological & methodological setup	<ul style="list-style-type: none">• SHOW• Fabulos• Arcade
Activity Leader(s)	Project Lead Partners



List of Recommendations:

- 01 Enhancing the quality of service and more attractive shuttles for users
- 02 Fare integration within the Existing PT systems with Smart ticketing system
- 03 Stakeholders' engagement for effective communication
- 04 First and Last mile Connectivity
- 05 Better network designing interlinking with existing routes.
- 06 Defining the standard monitoring framework and regular maintenance of shuttle
- 07 Special shuttle service with for tourist attraction
- 08 Offer citizens opportunities to familiarize with shuttle operation prior to actual use.
- 09 Development of low-cost high-quality technical solutions
- 10 Develop integrated and smart application for passengers
- 11 Provide standard framework for sharing and managing data real time data.
- 12 Monitoring and direct assistance for visually impaired
- 13 On-demand point to point service on unserved areas
- 14 Multi-Modal approach
- 15 Enlargement of service during nighttime .



List of Recommendations:

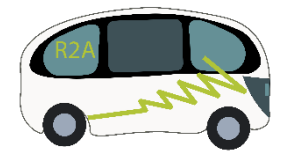
- 16 Service Accessible for all(disable, elderly people, children)
- 17 Safety & Reliability (More reliable journey times to reduce congestion)
- 18 Consolidate with station areas
- 19 Utilizing existing parking space for shuttle storage
- 20 Better accessibility to vibrant Public space(e.g., amusement park, public squares)
- 21 Capacity management/Space Efficiency
- 22 Use cost efficient strategies for community engagement
- 23 Standardization of operation through level of automation (e.g, Road condition ,weather detection, level of automation)
- 24 Promote training and education campaigns for how to interact with CAV
- 25 Timely Audit of CAV algorithms for shuttle
- 26 Develop transparency strategies to inform users about data collection & associated rights.
- 27 Ensuring safe interaction of Human with AV shuttle
- 28 Training of operators for the actual service
- 29 Roadmap from driving with steward to driving without steward

Writing recommendations

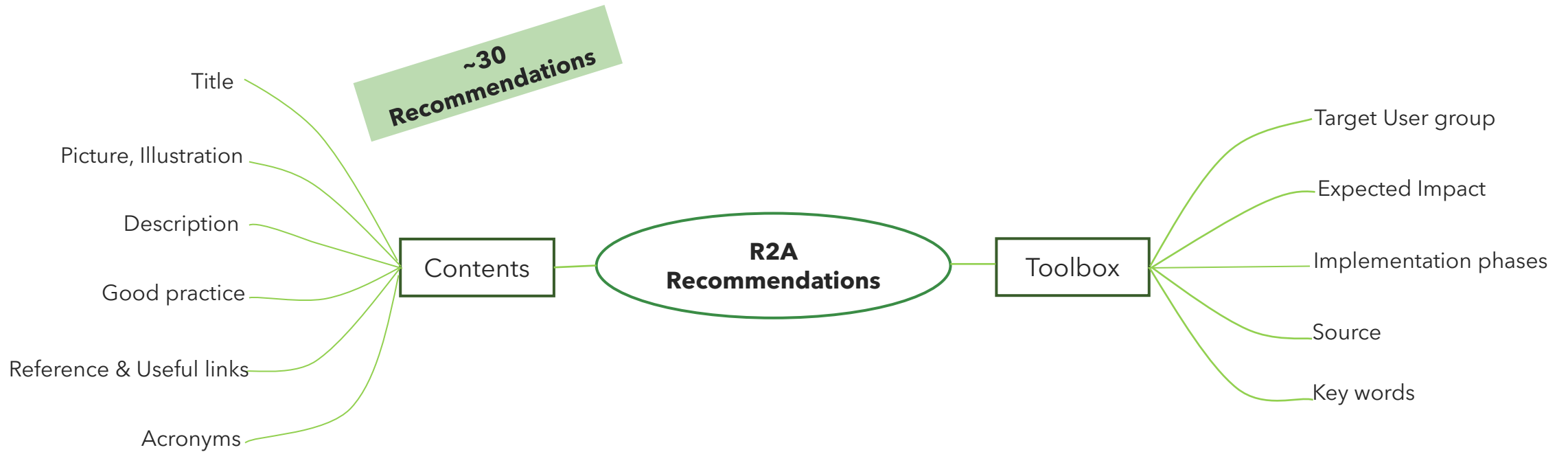
Proposal of recommendations
stemming from your project
activities :

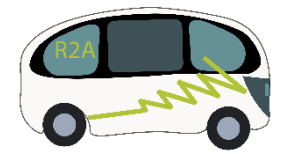
[report in the xls sheet for
mapping](#)





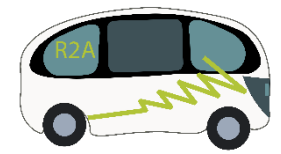
Recommmandations : template





Tips for writing recommendations

- Give direct instructions
- Write so as to relate directly to user acceptance and user behaviour in or near a CAV
- Target a type of users and meet their context, concerns and needs
- Be short, concise and easy to understand
- Highlight the significance or usefulness of the project findings.



Examples

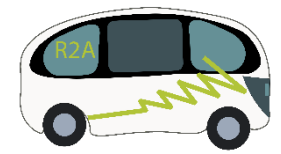
Use full Links:

- [Link to xls mapping sheet](#)
- [Link to recommendation template](#)
- [Link to recommendation example](#)
- The toolbox : www.ride2autonomy.eu



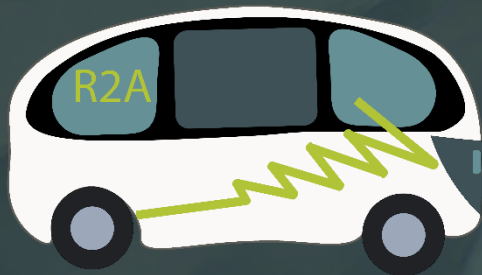
- MURAL exercise [LINK](#)





First Round			
Who	What	Deadline	Remarks
Activity Leader (LuxM)	Write a first recommendation	July 15 th	
All	Choose 1 recommendations in the xls table sheet	July 18 th	
All	Fill in recommendations template	Initially September 1st	Extension to Tuesday 6 th
All	Fine-tuning and discussion meeting	Mid-September (Date Tbd)	
Activity Leader (LuxM)	Reviewing Upload recommendations into the R2A toolbox	End of September	
Second Round			
Activity Leader (LuxM)	Choose 2 more recommendations in the xls mapping sheet	October 7 th	
All	Fill in recommendations template	October 12 th	
Activity Leader (LuxM)	Reviewing Upload recommendations into the R2A toolbox	Mid-November	

Thank you for your Attention! 😊



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