



HORIZON 2020
EU COORDINATION AND
SUPPORT ACTION

ACTION PLAN FOR THE FUTURE OF MOBILITY IN EUROPE

SCENARIO BUILDING *WORKSHOP HANDOUT*

THIS HANDOUT INCLUDES:

PART #1	Project introduction	p.1
PART #2	The multi-actor multi-criteria (MAMCA) methodology	p.2
PART #3	Third Workshop on Scenario building	p.4

PART #1

PROJECT INTRODUCTION

KEY FACTS

CSA - COORDINATION AND SUPPORT ACTION
FROM JANUARY 2016 UNTILL
31 DECEMBER 2018

OBJECTIVES

MOBILITY4EU establishes the future vision of a transport system in 2030 in Europe by:

- Identifying and analysing societal drivers
- Developing an action plan and a road map
- Engaging relevant stakeholders and the general public in a participatory project

PROJECT WEBSITE

www.mobility4eu.eu

Mobility4EU is a Coordination and Support Action of the European Commission started in January 2016 and lasting for 3 years, until 31 December 2018. The project will deliver a vision for the European transport system in 2030 and an action plan including a roadmap to implement that vision. Recommendations for tangible measures in research, innovation and implementation targeted towards various stakeholder groups will be derived.

*The work towards that vision and action plan is based on the identification and assessment of **societal challenges** that influence future transport demand and supply and the compilation of a portfolio of promising cross-modal technical and organisational transport solutions.*

*The entire process from studying trends and options for solutions, developing a vision and finally the action plan will be organized within a structured **participatory approach** that aims to engage a broad stakeholder community into the consultation processes.*

*This will be achieved by employing a structured tool, the **Multi-Actor Multi-Criteria Analysis (MAMCA)**, and an accompanying story mapping process that supports the process in a more creative and interactive way.*

Mobility4EU engages a broad stakeholder community into the consultation processes of the project and in implementing its results.

Within the first phase of the project, societal challenges, requirements and needs that will influence the future transport demand and supply have been researched, assessed and discussed within an interactive workshop. This led to the creation of the context map which is the first part of the story map and is available on the project website. The second step was to compile a portfolio of promising novel and innovative transport and mobility solutions which was the topic of the second workshop. The finalization of this portfolio is still ongoing and will provide another piece of the story map, the opportunity map. The third workshop will now initiate the stakeholder consultation within the MAMCA.



PART #2

THE MULTI-ACTOR MULTI-CRITERIA
(MAMCA) METHODOLOGY

#INTRODUCTION TO MAMCA

In order to obtain a widely supported and consensus-based action plan the Multi-Actor Multi-Criteria Analysis (MAMCA) methodology is used to consult a broad stakeholder community representing the main societal actors in Europe. This stepwise and scientifically sound approach will allow the consortium of the MOBILITY4EU project to involve a large group of stakeholders in the process of identifying, evaluating and prioritising future user needs, new transport concepts, implications and potential societal resistance and adoption.

#MAMCA STEPS

MAMCA has seven steps: the process starts with the **consolidation of the large number of potential future solutions** identified in Work Package 2 into 4 scenarios that depict the future of the European transport system (**step #1**). Then a **stakeholder analysis** will map all stakeholder groups that are relevant for the evaluation and identify their objectives (e.g. mitigation of air pollution, reduction of traffic accidents, improving equity in rural areas (**step #2**). The objectives will be translated into **simple criteria** (e.g. reduction of traffic accidents = traffic safety) and each stakeholder group will attach weights to their criteria to express the importance of these criteria (**step #3**). Then **indicators and measurement methods** for each criterion will be identified with international experts (**step #4**). Indicators are used to measure the performance of a scenario i.e. how would a certain future scenario impact a criteria (e.g. air quality) compared to the baseline situation (present). After that, the **scenarios will be evaluated by international experts** based on their performance measured by the indicators or qualitative assessment (e.g. slight improvement, significant improvement, etc.) (**step #5**). Therefore the **impact of each scenario on each criteria will be assessed** to see e.g. how the scenarios affect traffic safety, greenhouse gas emissions etc. In the next step, the results of the evaluation will be produced by the MAMCA software in the form of the **ranking of scenarios for each stakeholder group (step #6)**.

The **results of the MAMCA will be discussed with the stakeholders** at a dedicated workshop where the outcome of the evaluation process will be presented to and discussed with them (**step #7**). Since MAMCA does not produce an ultimate ranking of the scenarios this **workshop will serve as a consensus-building platform** where all stakeholders will come to a consensus on the scenario that best represents their objectives for the future of transport in the EU. This scenario then will be taken forward



PART #2 MAMCA METHODOLOGY

#THE PLANNED SCHEDULE OF THE MAMCA PROCESS

21 OCTOBER 2016
Scenario building workshop (WS3), Brussels

OCTOBER-NOVEMBER, 2016
Online questionnaire to identify stakeholders' criteria and weights

22 NOVEMBER 2016
Weighting workshop (WS4) Brussels

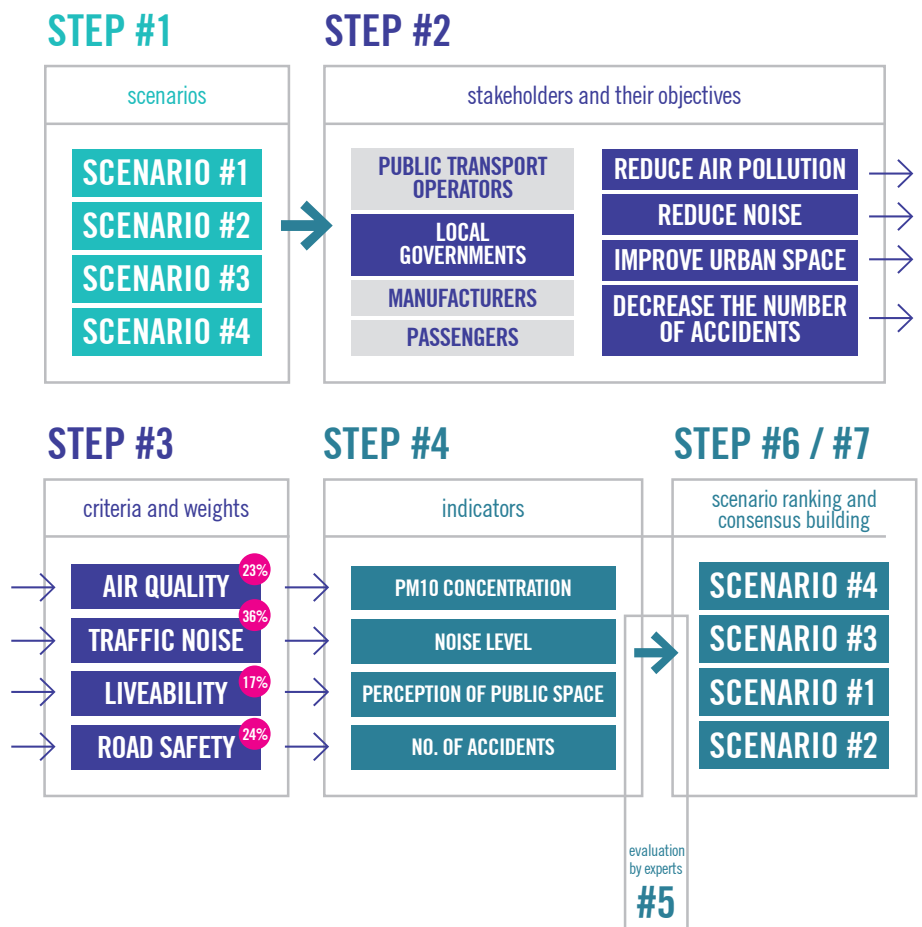
APRIL 2017
Evaluation of scenarios with international experts

OCTOBER 2017
Consensus building workshop

online decision making platform, i.e. the innovative MAMCA software providing an interactive method to weight stakeholder objectives, evaluate options and provide easy-to-understand visualisations of the evaluation outcomes.

The MAMCA processes will be complemented by a **number of workshops** to receive direct input from the stakeholder community in a **democratic way for the construction of the scenarios, validation of objectives, weighting of stakeholder criteria as well as the final consensus building and selection of the best-ranking scenario.**

These workshops will make use of **graphic visualisation techniques** and are **fully embedded in the story map process.** In addition, an international expert committee will provide unbiased input for the quantitative and qualitative evaluation of the scenarios.



PART #3 THIRD WORKSHOP

SCENARIO BUILDING

#OBJECTIVES

The aim of the workshop is to create four scenarios for the development of the transport system in Europe until 2030. Each scenario will be a description of future trends and emerging technical, organisational or policy-related solutions. Each scenario will be based on different assumptions representing different possible future development paths. As a preparation for the workshops we have created four preliminary scenarios that will be introduced at the workshop. They are not prescriptive, rather they provide a starting ground for discussion.

#INTERACTIVE SESSIONS

Session 1: *The aim of the first interactive session is to validate the preliminary scenarios which are based on the societal, economic, environmental and policy trends that were compiled during the previous months through desk research and consultation with the stakeholders (1st Mobility4EU Workshop, 2 May 2016, Berlin). Participants will work in small groups at the 'scenario stations' (boards with the scenario poster) with a facilitator. Their task is to further elaborate on the impacts of the trends on the future mobility system in the context of a particular scenario. The preliminary scenarios are displayed on posters indicating the development of the major trends for the environment, economy, society, policy and technology themes.*

Please use post-its and pens to add further, more detailed or missing impacts. Please draw arrows between trends and sub-trends (on Post-its) to indicate interdependencies in terms of cause and effect. *The aim is that each scenario reflects a possible future for 2030. In the first round, each group has 25 minutes to refine the scenario. Then the groups change to another scenario station and review the work of the other group. Modifications should be suggested if deemed necessary (3x15 minutes at each scenario station).*

Session 2: *In the second part of the interactive session participants will work again at the scenario stations. This time they will match the technological and organisational solutions with the scenarios and trends for each scenario. Solutions are printed on cards that can be attached onto the scenario boards. The aim is to select the most important solutions for each scenario and match them with the trends of that scenario.*

Please attach the selected solutions on the scenario board. *You can draw arrows between trends and solutions to indicate interdependencies in terms of cause and effect. In the first round, each group has 25 minutes to refine the scenario. Then the groups change to another scenario station and review the work of the other group. Modifications should be suggested if deemed necessary (3x15 minutes at each scenario station).*

PART #3 THIRD WORKSHOP

WORKSHOP AGENDA



MODERATION	Imre Keseru, VUB
10:00	Welcome from EC Ioana Adamescu, EC DG R&I Introduction to the Mobility4EU project Beate Müller, VDI/VDE-IT
10:15	Introduction to the MAMCA methodology Cathy Macharis, VUB
10:45	Overview of future trends and solutions Alain L'Hostis, IFSTTAR Beate Müller, VDI/VDE-IT
11:05	Preliminary scenarios for mobility in Europe towards 2030. Instructions for the interactive sessions Imre Keseru, VUB
11:30	Coffee Break
11:50	Instructions for the interactive sessions Imre Keseru, VUB
12:00	Definition of future scenarios Interactive session part 1
12:45	Lunch
13:45	Definition of future scenarios Interactive session part 2
12:45-13:45	Lunch
15:30	Conclusions and closing of the workshop
16:00	End of the event

PART #3 THIRD WORKSHOP

WORKSHOP LOCATION



U-Residence Vrije Universiteit Brussel
Free University of Brussels (VUB)
Campus

Generaal Jacqueslaan 271
1050 Brussels

Access by public transport:

Tram: Stop VUB (Lines 7 & 25), right in front of U-Residence

Metro: Station Petillon (Line 5, 12 minutes' walk)

Bus: Stop Etterbeek Station (Bus 95 from the city centre)

(more information: <http://www.stib-mivb.be/index.htm?!=en>)

Railway from/to Airport: Etterbeek Station (10 minutes' walk) direct trains to and from Brussels Zaventem Airport, every 30 minutes.

For the timetable please check <http://www.belgianrail.be/en>

Car: There is parking available under the U-residence.

Please enter the underground parking garage from Bld. Général Jacques.

PART #3 THIRD WORKSHOP**ATTENDEES**

Ioana Adamescu, DC, DG Research & Innovation

Daniel Hayes, LowCVP

Fabian Küster, ECF

Christoph Schneider, Munich Airport, ACARE

Armando Carrillo Zanuy, EURNEX

Oliver Lenz, Federation Internationale de l'Automobile (FIA)

Werner Marinelli, ABB

Emanuel Marreel, Siemens Belgium

Karin de Schepper, Inland Navigation Europe

Fernando Liesa, ALICE ETP

Frédéric Rooseleer, EUROCONTROL

Willie Swart, The Metropolitan Region Rotterdam

Khushboo Balwani, OUIShare

Christine Zeller, Siemens

Imre Keseru, VUB

Cathy Macharis, VUB

Beate Müller, VDI/VDE-IT

Annette Randhahn, VDI/VDE-IT

Stefania Grosso, Osborne Clarke

Yves Stans, Osborne Clarke

Eleni Chalkia, CERTH

Marcia Urban, Bauhaus Luftfahrt

George Holley-Moore, International Longevity Center –UK

Erzsébet Fördös-Hódy, MBE

Sonsoles Diaz, ICCT

Ineke van der Werf, Rover

Alain l'Hostis, IFSTTAR

David Storer, CRF

Linda Napoletano, Deep Blue

Alessia Golfetti, Deep Blue

Heikki Kanner, VTT

Lucile Mendoza, Humanist VCE