



Action Plan for the Future Mobility in Europe

Horizon 2020 - Coordination and Support Action

D5.10 – Workshop with expert committee on scenario evaluation

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1 The workshop series of the Multi-Actor Multi-Criteria Analysis

The workshop "Evaluation of scenarios" of the project Mobility4EU was held on 18 May 2017 in Brussels, together with external experts. It forms an integral step within the structured stakeholder consultation process, the Multi-Actor-Multi-Criteria Analysis (MAMCA) that is embedded in the project. Further information on the MAMCA can be found on the project website: <http://www.mobility4eu.eu/mamca-methodology/>. The MAMCA workshop series is structured as follows:

1st MAMCA workshop - scenario building	21 October 2016 (report available on project website)
Online questionnaire to identify stakeholders' criteria and weights	October 2016- May 2017
2nd MAMCA workshop - weighting of stakeholders criteria	22 November 2016
Evaluation of scenarios with international experts	April-May 2017
3rd MAMCA workshop - consensus building	October 2017

2 Evaluation of Scenarios

In the framework of the multi-actor multi-criteria analysis (MAMCA) (WP3), we have identified stakeholder groups relevant for the future transport system in Europe, their objectives and their unique set of criteria for evaluating the fulfilment of these objectives. We also co-created four broad scenarios for the future of transport in Europe encompassing a number of dominant societal trends, technological and organisational solutions that respond to these trends (<http://www.mobility4eu.eu/scenario-building/>). The next step of the MAMCA is to evaluate what impact these scenarios would have on the stakeholders' criteria.

The evaluation is carried out according to the following methodology:

1. As a first step, an internal evaluation of the impact of scenarios on the stakeholders' criteria was carried out within the research team (VUB). We grouped the stakeholders' criteria according to their thematic orientation and assessed their impact on a 7-point qualitative scale (Table 1). A justification to each decision (evaluation) is provided based on the literature or the evaluators' expertise.
2. The internal evaluation was validated by the international expert committee with experts representing all related fields (Table 2). We have assigned each stakeholder criterion to a specific theme. Depending on the theme 10 to 20 criteria were assigned to each expert. Experts were provided with the results of the internal evaluation including the justifications based on their thematic expertise. They were requested to critically assess the evaluation and propose changes and sources if necessary by filling in the evaluation forms (see in the annex).
3. The evaluations were finalised at the expert workshop reported on here where the final evaluation scores were agreed on by the invited experts.

Very negative	The scenario would have a very negative impact on the criterion compared to the situation today.
Moderately negative	The scenario would have a moderately negative impact on the criterion compared to situation today.
Slightly negative	The scenario would have a slightly negative impact on the criterion compared to situation today.
No change	The scenario would have no impact on the criteria compared to the situation today.
Slightly positive	The scenario would have a slightly positive impact on the criterion compared to the situation today.
Moderately positive	The scenario would have a moderately positive impact on the criterion compared to situation today.
Very positive	The scenario would have a very positive impact on the criterion compared to situation today.

Table 1 Explanation of the evaluation scores

Theme	Name	Affiliation
Economy - private vehicle production	Peter Wells	Cardiff University
Economy - infrastructure	James Odeck	Norwegian University of Science and Technology
Logistics	Susana Val	Zaragoza Logistics Centre
Social equity	Floriea di Ciommo	UPC, Barcelona
Environment	Sandra Wappelhorst	ICCT
Security and resilience	Dr Andrew Newton	University of Huddersfield
Safety	Angelos Bekiaris	CERTH/HIT
Customer and user acceptance - passengers	Dirk Lauwers	University of Gent
Public transport operations and manufacturing	John D. Nelson	Aberdeen University
Aviation	Marcia Urban	Bauhaus Luftfahrt

Table 2 List of the members of the International expert committee

3 Workshop Results and Outlook

The workshop started with an introduction to the Mobility4EU project. Thierry Coosemans (VUB) gave a brief overview about the aims, methods and expected outcomes of the project. Then Imre Keseru (VUB) explained the MAMCA methodology and summarised the scenarios. After that he outlined the instructions for the validation rounds that followed. In total, three rounds of validations were carried out to finalise all evaluations.

In order to evaluate all four scenarios on the criteria of the stakeholder groups, 384 evaluations were carried out. These were validated before the workshop by the international experts (732 validations in total). At the workshop, only those evaluations were discussed where there was no agreement between the evaluators and/or the validators. These evaluations were presented individually to the experts and a discussion followed until agreement was reached.

The evaluation sheet for each criterion was finalised based on the decisions at the workshop. The evaluations will now be entered in the MAMCA software together with the weights from the stakeholder survey to calculate the ranking of the scenarios for each stakeholder group to analyse synergies and conflicts. The 4th and final MAMCA workshop “Consensus building” will provide the opportunity for stakeholders to consolidate the results and to reach consensus on ideally one (realistically up to 3 versions of) scenario(s) that are preferred by all stakeholder groups. Depending on the outcomes of the MAMCA, the workshop will aim to combine solutions from the most preferred scenarios in order to create the final agreed scenario. This workshop will be held in October/November 2017. This preferred scenario will be one important building block for creating a vision for transport in Europe in 2030.

4 Agenda of the Workshop

10:00	Welcome, agenda	Dr. Imre Keseru
10:05	Tour de table	
10:10	Introduction to the Mobility4EU project	Dr. Thierry Coosemans
10:15	The MAMCA methodology and scenario building	Dr. Imre Keseru
10:30	Instructions for the validation of the evaluations	Dr. Imre Keseru
10:40	Validation round 1	Dr. Imre Keseru
12:00	Lunch	
12:45	Validation round 2	Dr. Elisa Gagatsi
14:15	Coffee break	
14:30	Validation round 3	Dr. Thierry Coosemans
15:45	Closing, conclusions	Dr. Imre Keseru
16:00	End of workshop	

5 List of Participants

Name	Institute
Chalkia, Eleni	CERTH
Coosemans, Thierry	VUB
di Ciommo, Florida	UPC, Barcelona
Gagatsi, Eliza	VUB
Hooftman, Nils	VUB
Keseru, Imre	VUB
Lauwers, Dirk	University of Gent
Message, Maarten	VUB
Nelson, John	Aberdeen University
Newton, Andrew	University of Huddersfield
Odeck, James	Norwegian University of Science & Technology
Urban, Marcia	Bauhaus Luftfahrt
Val, Susana	Zaragossa Logistics Center
Wells, Peter	Cardiff University

6 Annex 1: Validation template used at the workshop

Stakeholder group: Sxx								
Criterion: SxxCxx								
Indicator: +++								
	Evaluator	Validator 1	Validator 2	Validator 3	Comments	Workshop evaluation		
	Score	Score	Score	Score		Proposed Score	Final evaluation	Comments
Scenario 1	Choose an item.	Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.	
Scenario 2	Choose an item.	Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.	
Scenario 3	Choose an item.	Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.	
Scenario 4	Choose an item.	Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.	

7 Annex 2: Evaluation table – Mobility4EU

<i>Evaluator Please fill in name</i>				<i>Validator</i>	<i>Please fill in name</i>
Stakeholder group	Criterion	Indicator			
Scenario	Evaluation score	Justification	Sources	Validated score	Comment
<i>Scenario 1</i>	Choose an item.			Choose an item.	
<i>Scenario 2</i>	Choose an item.			Choose an item.	
<i>Scenario 3</i>	Choose an item.			Choose an item.	
<i>Scenario 4</i>	Choose an item.			Choose an item.	