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# D6.3

# Networking and Engagement activities plan

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| Dissemination level | | |
| PU | Public | X |
| PP | Restricted to other programme participants | |
| RE | Restricted to a group specified by the consortium | |
| CO | Confidential, only for members of the consortium | |

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| | | | |

# Legal Disclaimer

# Abbreviations and Acronyms

| Acronym | Definition |
|---|---|
| EC | European Commission |
| PO | Project officer |
| GA | Grant Agreement |
| WP | Work Package |
| OEM | Original Equipment Manufacturer |
| ICT | Information and Communication Technology |
| KPI | Key Performance Indicators |

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# Executive Summary

Nowadays, the functionalities for automated driving and the potential interactions with vehicles and infrastructure are evolving in a very dynamic way. Interactions between road infrastructure and vehicles of various automation levels (e.g. conventional, highly automated) and communication capabilities are complex. In such a complicated environment, there are a lot of different stakeholders involved. Therefore cooperation is vital for development and implementation of solutions for mixed traffic scenarios.

The purpose of this document is to describe the approach for networking and engagement activities carried out within the INFRAMIX project, as a basis for effective and efficient interactions with stakeholders so as to get involved.

Two versions of this deliverable will be provided within the project. The first version is due in M9 and a final version will be provided in M34. In the first version, mainly the approach and first findings are presented. In the second and final version the final approach as well as a description of the networking and engagement activities will be provided.

The objective of the activities described in this document is to involve all related INFRAMIX stakeholders to exchange information, experiences and best practices and efficiently disseminate project results. Accordingly, an INFRAMIX End Users Group will be established and continuously expanded during the project runtime. The group will be open to join and will facilitate receiving information or active involvement in INFRAMIX deployment. The latter will comprise the core members of the End Users Group. These core members will be requested to provide direct feedback (i.e. through participation at INFRAMIX Stakeholder Workshops), to assist the INFRAMIX consortium to efficiently evaluate the proposed technologies and perform the required corrections according to the End User needs and expectations.

# 1. Introduction

## 1.1 Aim of the project

INFRAMIX, a H2020 project, helps to prepare road infrastructure for mixed traffic and aims to support the community and stakeholders through the infrastructure classification scheme. Its main target is to design, upgrade, adapt and test (in simulation and in real-world) both physical and digital elements of the road infrastructure, to enable the coexistence of automated and conventional vehicles, ensuring an uninterrupted, predictable, safe and efficient traffic. The key outcome will be a “hybrid” road infrastructure able to handle the transition period and become the basis for future automated transport systems.

INFRAMIX will address the major novel traffic management opportunities arising from the emergence of a variety of automation and connectivity capabilities with various penetration rates. Design and implement novel traffic estimation, monitoring and control strategies dynamically adapted to

- the different penetration levels of automated vehicles,
- the infrastructure equipment and
- the overall traffic status.

To achieve its objectives INFRAMIX selects a bottom-up approach. It builds on three specific high value traffic scenarios, namely “dynamic lane assignment”, “roadworks zones” and “bottlenecks”. Although INFRAMIX is targeting mainly highways its key results can be easily transferred to urban roads.

## 1.2 Purpose of Document

The purpose of this document is to describe the networking and engagement activities carried out in the INFRAMIX project. The detailed description of these activities and the clustering of stakeholder groups and areas of interactions will be the basis for effective and efficient interactions with stakeholders.

## 1.3 Intended audience

The intended audience for this deliverable is primarily the INFRAMIX project partners but also all organizations with are interested in networking and user involvement activities of INFRAMIX.In order to have effective interactions with stakeholders, a common approach is developed in Task 6.3 and presented in this document. This will be the basis for networking and engagement activities in INFRAMIX.

## 1.4 Document overview

The document starts by describing the approach and objectives of networking and engagement activities in Chapter 2. Within the same chapter, the confidentiality aspects and also the link to INFRAMIX dissemination activities are cited. Specific project topics which are of high importance for the networking and user engagement activities have been identified and presented in Chapter 3. The stakeholder groups which benefit or have the knowledge or interest to these topics are also listed in Chapter 3. On this basis, the INFRAMIX End User Group is set up and the stakeholder engagement process is defined. In Chapter 4, the targeted interactions with projects, groups and networks are described. In Chapter 5 the key performance indicators for the assessment of networking and user engagement activities are specified and finally, a summary of the document is provided in Chapter 6.

# 2. Objectives and approach of networking and engagement activities

## 2.1 Objectives

The main objective of the Task 6.3 is the interaction with different stakeholder groups to ensure knowledge exchange and interoperability of developed systems.
The objectives are to:

- accelerate INFRAMIX developments by knowledge exchange, avoid duplication of work, align developments and ensure heading in the right direction.
- increase the impact of INFRAMIX through:
    - fostering the adding value of INFRAMIX developments by identifying the needs of the various stakeholder groups and giving them due consideration,
    - allow others to build on INFRAMIX results,
    - and align with other activities: Integration of INFRAMIX developments in the European ITS long-term strategy.

## 2.2 Approach

To gain the necessary feedback from each stakeholder group (a list of stakeholders can be found in chapter 3.2) there will be different ways of interaction based on each stakeholder's expertise, established liaison processes and dissemination activities, location etc.

An efficient interaction with stakeholders depends strongly on the expected output of the interaction and the topic to be addressed. Consequently, the following key aspects will be considered in every networking and engagement activity:

- objective of the interaction ("What is needed from others" e.g. input of developments of other projects, input of future plans and problems to be addressed, inputs of the view of the users, alignment of activities, evaluation proposed technologies, support in performing corrections),
- stakeholders to be addressed and the role of each stakeholder (involved in the development, decision makers, etc.),
- way of interaction (questionnaire, meetings, specific activities of INFRAMIX partners like international conferences, workshops, etc.) and
- timeline/schedule (defined specific month of the project based on the respective tasks, etc.,)

The way on interaction with stakeholders is clearly distinguished by the two categories of stakeholders:

- the INFRAMIX End Users Group and
- Liaison activities with projects, platforms, groups and networks.

While the aim of the INFRAMIX End Users Group is to address stakeholders which are directly affected by the developments of INFRAMIX, the aim of liaison activities is the strategic exchange and collaboration with projects, platforms, groups and networks. The networking and user engagement activities for both categories of stakeholders are described in the chapters 3.2 and 4.

Furthermore, dissemination and communication to the community will be done through

- presentations and demonstrations in various conferences and events,
- special sessions, workshops and meetings in the framework of international events,
- publications in scientific journals and industrial magazines,

- the project's website and
- through the INFRAMIX main events
    - INFRAMIX Stakeholder Workshop (there will be one stakeholder workshop on each demonstration site – in Girona, Spain in M24 and in Vienna, Austria in M29) and
    - INFRAMIX Final Event and demonstration in M36.

Within the scope of these possibilities, INFRAMIX partners can call attention to the project and set the course for future cooperation.

This deliverable will be provided in two versions: The approach and the initial carried out activities are presented in version 1 (due in M09) and a detailed description of the networking and engagement activities for the whole project duration as well as adaptations on the approach defined at the beginning, will be provided on the second version of the deliverable in M34.

## 2.3 Confidentiality aspects

Depending on the topic and the stakeholders involved, modes of interaction will be elaborated to allow an exchange of information. The main mechanisms which should be used to involve the target groups of INFRAMIX in the user engagement process are described in a table in D5.1 which can also be found in this document in Annex C. In this table, five different modes of engagement are characterized: communication, consultation, dialogue, partnerships, collaborations and monitor.

The way of collaboration and the resultant confidentiality aspects will be decided based on strategic considerations with the involved partners. If, subsequently, the exchange of non-public data/information is necessary, a respective agreement between all involved organisations will be elaborated on each occasion individually.

## 2.4 Link to INFRAMIX dissemination activities

The activities carried out in Task 6.3 "Networking / Users' involvement" are closely linked to the dissemination activities in the INFRAMIX project, particularly to Task 6.1 "Communication, dissemination and exploitation", Task 6.2 "Dissemination and communication to community", and Task 6.4 "Business ecosystem definition and exploitation of results". These tasks and their links to Networking / Users' involvement are presented below:

**Task 6.1 Communication, dissemination and exploitation**

Task 6.1 manages the dissemination and communication strategy as well as the preparation of dissemination materials. For the strategy, it will be necessary to establish bidirectional communication with Task 6.3 to align both visions (general and focused communication) as well as to detect potential actions; while in the second case, it will be necessary to produce specific materials for the activities in Task 6.3.

**Task 6.2 Dissemination and communication to community**

In the case of Task 6.2, as it is responsible for the preparation and coverage of the dissemination actions, it will be highly coordinated with Task 6.3 in order to detect and organize common activities so as to maximize the impact, as in the case of:

- Events, sessions, technical meetings
- Stakeholder workshops

- Final event demonstration

**Task 6.4 Business ecosystem definition and exploitation of results**

The dialogue between Task 6.3 and Task 6.4 will be of key importance for first defining and finally validating the results of this task (D6.4 Roadmap towards fully automated transport systems and D6.5 Exploitation plans). Particularly the following aspects are important in this regard:

- To define the role of each member (of the End User Group) in the context of hybrid infrastructure for autonomous driving (ecosystem)
- To fully understand objectives and motivations as well as potential concerns and risks
- To increase the user acceptance of the INFRAMIX concept as well as to ensure its wide market penetration

# 3. Key topics for networking and relevant stakeholder groups

As described above, the different stakeholder groups will be addressed specifically according to the topics addressed and the specific questions to be answered. In this section, the topics relevant for interaction with stakeholder groups will be presented followed by an overview of the stakeholder groups relevant to the INFRAMIX project in general. A mapping of topics and relevant stakeholder groups will be elaborated and provided in the final version of the deliverable.

## 3.1 INFRAMIX key topics for networking

Within Task 6.3 every task in the INFRAMIX project will be analysed in order to identify important topics for interaction with stakeholders. A first proposal of topics relevant for exchange with stakeholder groups or projects, platforms or initiatives is listed below:

- Bidirectional communication between infrastructure and automated vehicles
- Traffic estimation algorithms, traffic management and control measures and algorithms
- Digital road infrastructure and electronic horizon
- New forms of visual and electronic signalling
- Classification of road infrastructure
- Roadmap guidelines and safety criteria
- User appreciation

Although the most important topics for stakeholder interactions have been identified already, further analysis should ensure that all areas which could benefit from stakeholder interactions can be addressed within Task 6.3. The result of this analysis will be the basis for the detailed definition of stakeholder interactions as described in the chapters 3.2 and 4. Information on the results of this analysis will be provided in the final version of this deliverable.

## 3.2 Groups of stakeholders relevant for interaction with the INFRAMIX project

One of the core activities of this task is to establish the INFRAMIX End User Group by involving all related INFRAMIX stakeholder groups (see Table 1). Thus exchanging information, experience and best practices with the project partners and efficiently disseminate project results will be possible within this group. End Users are all those who are affected by the developments of INFRAMIX e.g. by using INFRAMIX control strategies and/or outputs. The project technical results and findings will be primarily disseminated through presentations and demonstrations in various scientific and industrial conferences and other events. To this end, road infrastructure, autonomous driving, ITS and transport related conferences and congresses will be targeted for raising project awareness and presenting technical project advances. INFRAMIX special sessions, workshops, technical meetings, exhibitions etc. will be organised in the framework of renowned international events. INFRAMIX partners will use these occasions to approach the right stakeholders,

- inform them about the projects progresses,
- gain information and feedback from these stakeholders,
- work directly with them to ensure their concerns are fully understood and considered in decision making
- partner with or convene a network of stakeholders to develop mutually agreed solutions and actions,

- collaborate (e.g. data exchange between a partner and an End User)

These stakeholders who actively collaborate with the project will be called INFRAMIX End Users Core Group. Depending on the topics and the needed output within each task those core members will be addressed with factual tasks in order to assist the INFRAMIX consortium to efficiently evaluate the proposed technologies and perform the required corrections according to the end user's needs and expectations.

The way of collaboration and confidentiality aspects will be decided depending on the strategic reasons and after consultation with partners. The INFRAMIX End User Group will be continuously expanded during the project runtime through the use of several channels. For these reasons, the user engagement activities will be carried out according to the process defined in Task 5.1. An initial list of stakeholder groups relevant for interaction with the INFRAMIX project is provided below in Table 1. This list is intended to be updated throughout the project duration (see Deliverable D6.1 Communication strategy and Plan).

**Table 1: INFRAMIX stakeholder groups**

| Stakeholder groups | Description of the stakeholder group |
|---|---|
| **Industry** | • OEMs / vehicle manufacturers<br>• Vehicle technology suppliers<br>• Infrastructure technology suppliers<br>• Other ICT solution providers |
| **Infrastructure and road authorities** | Organisations (public or private) responsible for the correct managing of the road infrastructure. It includes both individual organizations and/ or associations (ERF, CEDR, ASECAP, ERTRAC, BASt, etc). |
| **Public administration** | Decision makers, city planners and other public authorities at different geographical levels (e.g.: urban areas, regional administrations, countries and different country clusters). They can be responsible for the design, construction, operation and/or legislation of road transportation in public infrastructures. |
| **Scientific and research community** | The results of the project will be broadly disseminated to the scientific community through participation in the most important academic conferences and related events. |
| **Standardisation bodies** | The focus will be on entities as European Telecommunications Standards Institute, ETSI, or Society of Automotive Engineers (SAE). |
| **Groups and networks** | Relevant projects, platforms and initiatives which take place at the same time as INFRAMIX |
| **European and international organisations and technical communities** | This is a wide group of individual associations (i.e. industry associations as EUCAR, OICA, ACEA, VDA, ANFAC, SAE; other relevant EC/national projects; ETP's such as ERTRAC; technology groups as FEHRL, ERTICO, Amsterdam Group, C2C-CC, , ADASIS Forum, NDS Association, AASHTO, |

| | |
|---|---|
| | FHWA, AUVSI, TRB and the Trilateral EU-US-Japan Automation Working Group in Road Transportation) at European, national and international level, which have significant multiplier potential as associations representing transport authorities and members of the industry. |
| **EC staff/politicians** | This group includes EC staff/politicians, relevant European organizations, policy advisors and key opinion creators.<br><br>An exchange with this group will facilitate a solid overall understanding of the topic and consequently will provide an evident support for decision making activities at high level.<br><br>This group includes standardization fora and initiatives where the results and project recommendations will be communicated. |

## 3.3 Stakeholder engagement process

After the identification of all the important topics relevant for exchange with stakeholder groups or projects, platforms or initiatives, each topic will be elaborated by Task 6.3 together with the leaders of the related tasks in order to define:

- the kind of the required input (e.g. technical feedback, answer to questionnaire, conversation etc.),
- a key list of stakeholders across the entire stakeholder spectrum (identify sources who may have important knowledge about or perspective on the issues) and
- the timeline of the interaction.

Having obtained this information each topic will be discussed with all partners in order to supplement the right stakeholders within the required stakeholder groups. Depending on the targeted stakeholder to be addressed the establishment of contact and the exchange of information with each stakeholder will be carried out in coordination with task 6.3 (ATE) and the task leader who is directly involved in the topic to be addressed. ATE leads the process behind stakeholder engagement and will elaborate each topic individually with the involved task leader and organise the first contact.

The confidentiality aspects as described in chapter 2.3 will also be discussed during the stakeholder engagement process. All these measures are intended to ease initial contact and the possibility of future cooperation.

Interactions with stakeholders have been started. In addition to discussions of single partners with relevant stakeholders, first ideas of the INFRAMIX infrastructure classification scheme have been presented to a group of important stakeholders at the AVS 2017 in San Francisco. At the ITS World Congress 2017 in Montreal the INFRAMIX approach has been presented together with the two other ART-05 projects, CoEXist and TransAID to an audience of ITS experts from several stakeholder groups. Furthermore, the INFRAMIX project was presented during the TRA 2018 in Vienna during the session “Connected and Automated Transport – Automated transport enabling methods and technologies” by ICCS. Topics such as automated driving, digitalisation and innovations in infrastructure were presented to an audience of scientific, EC and EU stakeholders. In addition, AustriaTech presented important aspects of INFRAMIX with regard to automated driving and digital infrastructure as a panellist in the session on “Managing the transition to greater automation”

at the TRA 2018.

These performed activities have been an opportunity for INFRAMIX partners to reach out various stakeholders and exchange ideas, get feedback and engage them. Even more important was the exchange with other projects in order to submit these common sessions.

In the final version of this deliverable, an overview of the interactions with the stakeholders of the INFRAMIX End User Group will be presented.
A tabular overview of the interactions with stakeholders is presented in Annex A.

## 3.4 Planned next steps

- The topics where stakeholder interactions will be carried out (see also Section 3.1) and linked to the required stakeholder groups (see Section 3.2).
- On this basis, the way of interaction with these stakeholders will be elaborated based on the respective topics and the stakeholders to be addressed (see Section 2.2).
- User engagement activities for the evaluation of the users' appreciation of INFRAMIX developments will be defined in D5.1 (starting in M12) and be described in the second version of this deliverable in M34.
- Required workshops will be planned together with Task 6.1 (see also D6.1 Chapter Communication and Dissemination Plan)

# 4. Interaction with projects, platforms, groups and networks

## 4.1 Objectives for liaison activities

Liaison activities with projects, platforms, groups and networks are carried out in addition to the interaction with the different stakeholders within the INFRAMIX End User Group. The aim is to benefit from past findings, to align activities if possible in order to integrate INFRAMIX in the big picture of the activities in the field of automated driving. Particularly the results of INFRAMIX shall be provided to relevant projects and platforms and shall be proposed to standardisation bodies.

The way of interaction depends on the topics to be addressed and the organisations involved. The concrete way of interaction will be elaborated with the involved task leaders and the partner for specific projects, platforms, groups and networks.

A short list (carefully selected) of targeted projects, platforms and initiatives which are interesting for knowledge exchange or even for collaboration with INFRAMIX, is provided below. This list will be updated when new relevant projects or initiatives are identified.

**First proposal of targeted stakeholders groups list:**

- ARCADE, https://connectedautomateddriving.eu/arcade-project/
- AutoMate, www.automate-project.eu
- CoEXist, www.h2020-coexist.eu
- ConVeX, www.qualcomm.com/news/onq/2017/02/24/accelerating-c-v2x-toward-5g-autonomous-driving
- interACT, www.interact-roadautomation.eu
- L3Pilot, l3pilot.eu
- MAVEN, www.maven-its.eu
- PROVIDENTIA, www.fortiss.org/forschung/projekte/providentia/
- TRAMAN21, www.traman21.tuc.gr
- TransAID, www.transaid.eu
- TrustVehicle, www.trustvehicle.eu
- CEDR, http://www.cedr.eu/
- EUCAR, http://www.eucar.be/
- ASECAP, http://www.asecap.com/
- FEHRL, http://www.fehrl.org/
- Amsterdam Group, https://amsterdamgroup.mett.nl/
- C2C-CC, https://www.car-2-car.org/
- ERTRAC, http://www.ertrac.org/
- TM2.0 Platform, http://tm20.org/
- Trilateral EU-US-Japan Automation Working Group in Road Transportation

- relevant TRB Committees and Sub-committees
- AUVSI, https://www.auvsi.org/

With some of the above-listed projects, platforms, groups and networks interactions have already taken place, others need to be contacted to find out if they are interested to interact with INFRAMIX and to elaborate potential ways of exchange of information or collaboration. In several of them, INFRAMIX partners are involved, so that a first link is established through a common partner already.

Besides bilateral discussions from INFRAMIX partners, following interactions with other projects/platforms/initiatives have been carried out:

- ART05 projects: Several discussions with CoExist and TransAID to prepare common sessions at congresses, as well as discussion about use cases for automated driving (with TransAID) have been carried out.
- Discussions with the Austrian Light Vehicle Proving Regions for Automated Driving (ALP.Lab) have been carried out.
- European Transport Safety Council has expressed its interest in joining the End Users Core Group.
- INFRAMIX has expressed its interest to be part of the following working groups, which have been set up at the H2020 ART workshop on 12.12.2017:
  - use cases,
  - physical and digital infrastructure and
  - connectivity.
- Standardisation activities: A change request concerning an extension of C-ITS messages has been submitted to ETSI.

For a structured presentation of these activities, see also Annex A.

## 4.2 Planned next steps

- The list of projects, platforms, groups and networks will be updated in case e.g. new projects are launched or platforms are set up.
- Based on the needed information and the identified links to the relevant topics, the projects, platforms, groups and networks for in-depth interactions will be complemented and a detailed process for the interactions will be defined. This includes interactions carried out on project level, but also interactions carried out via INFRAMIX partners who are also partners in platforms or projects.
- Workshops will be planned together with Task 6.1 (see also D6.1 Chapter Communication and Dissemination Plan).

# 5. Key performance indicators for assessment of networking and user engagement activities

The following performance indicators have been selected to assess the elaborated networking and users' involvement approach. The assessment will be carried out after the end of each period, so that the developed approach and procedures can be adapted early, if it turns out that they are not effective enough.

**Table 2: KPIs for assessment of networking and user engagement activities**

| Activity and criteria (KPI) | Expected performance |
|---|---|

| | | Year 1 | Year 2 | Year 3 |
|---|---|---|---|---|
| **Networking/ User engagement activities** *(Task 6.3)* | No. of **End User Group participants** | ≥ 20 | ≥ 60 | ≥ 100 |
| | No. of **industry representatives** involved | ≥ 5 | ≥ 10 | ≥ 15 |
| | No. of **associations & organisations** involved | ≥ 3 | ≥ 5 | ≥ 6 |
| | No. of **projects** contacted | ≥ 8 | ≥ 8 | ≥ 10 |
| | No. of **liaison activities** performed | ≥ 5 | ≥ 10 | ≥ 10 |
| | No. of **discussions in fora, committees & organisations** | ≥ 5 | ≥ 5 | ≥ 5 |
| | No. of **Standardisation bodies** reached | ≥ 2 | ≥ 2 | ≥ 2 |

The basic purpose of the task 6.3 is to involve all related stakeholders for the exchange of (bilateral) information, experiences and best practices and efficiently disseminate project results. In order to achieve this goal the opportunity to access materials of the project, provide direct feedback in discussions, workshops, conferences and through partnerships and collaborations will be evaluated as listed in Table 2.
Information on the strategies to reach these numbers is provided in D6.1 Communication Strategy and Plan in M6 as well as in in M18 and M36 in a revised and updated form. Based on these numbers the networking and users' involvement will be assessed and if needed modified.

The next steps of networking and user engagement activities to be carried out are described in sections 3.4 and 4.2.

The results of this assessment will be provided in the final version of this document in M34.

# 6. Summary

The interactions between road infrastructure and between automated, connected and conventional vehicles are very complex. There are a lot of different stakeholders involved and both, the functionalities for automated driving and potential interactions with vehicles and infrastructure are developed currently in a very dynamic way. Therefore cooperation is vital for the development and implementation of solutions for mixed traffic scenarios. Different topics for interaction with stakeholders have been identified and are listed in this document and an approach for the interactions and next steps has been defined. Several networking and users' involvement activities have been carried out up to now. An evaluation of these activities will be provided in the final version of this deliverable in M36.

# Annex A: Overview of interactions with stakeholders

**Table 3: Overview of interactions with stakeholders**

| Nr. | Date | Type of event | Description/Title | Audience | Geographical allocation | Partner |
|---|---|---|---|---|---|---|
| 1 | Jun'17 | H2020 WS | Participation at the workshop on Infrastructure Cloud – Operation and Services. As a result of this ATE will participate in the following groups:<br>- use Cases<br>-physical and digital infrastructure<br>-Connectivity | EC Projects | European | ATE |
| 2 | several discussions starting already before Jun'17 | discussions with ART05 projects | Several discussions with CoExist and TransAID to prepare common sessions at congresses, as well as discussion of use cases for automated driving | EC Projects | European | ATE, ICCS, ASF, VIF |
| 3 | Jul'17 | AVS 2017 | Break-out session - Infrastructure classification scheme | Industry, Technical, Scientific | Global | ICCS |
| 4 | Oct'17 | ITS World Conference | Presentation of INFRAMIX approach with CoExist and TransAID | Industry, Technical, Scientific | Global | ICCS |
| 5 | Jan'18 | TRB 2018 | TRB Annual Meeting: an overview of Automated Driving Research in Europe | Industry, Technical, Scientific | Global | ICCS |
| 6 | February '18 | bilateral discussion | European Transport Safety Council (ETSC) is aware of the project and has expressed its interest in providing feedback and participating in dedicated meetings | EC&EU stakeholder | European | ICCS |
| 7 | Mar'18 | discussions | several discussions with the Austrian Light Vehicle Proving Regions for Automated Driving (Alp.Lab) have been carried out | Scientific | Austria | ATE, ASF, ICCS, VIF |
| 8 | Apr'18 | TRA2018 | TRA invited session with CoExist and TransAID | Industry, Technical, Scientific, EC&EU stakeholders | European | ICCS, ATE |
| 9 | Apr'18 | TRA2019 | TRA paper for INFRAMIX & session | Industry, Technical, Scientific, EC&EU | European | ICCS, FOK, VIF, ATE |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | stakeholders | | |
| 10 | Apr'18 | TRA2018 | presentation of INFRAMIX in the session "Connected and Automated Transport - Automated transport methods and technologies" | Industry, Technical, Scientific, EC&EU stakeholders | European | ICCS |
| 11 | Apr'18 | TRA2018 | Participation as a panelist in the session "Managing the Transition towards higher Automation" - to contribute on the topic of automated driving from the perspective of the infrastructure requests. | Industry, Technical, Scientific, EC&EU stakeholders | European | ATE |
| 12 | Apr'18 | TRA2020 | Distribution of INFRAMIX brochure at booths of AustriaTech, ASFINAG and Siemens | Industry, Technical, Scientific, EC&EU stakeholders | European | ASF, ATE, SIE |
| 13 | Apr'18 | CARTRE Symposium | Participation at the poster session at the CARTRE Symposium | Industry, Technical, Scientific, EC&EU stakeholders | European | ATE, ASF |
| 14 | Apr'18 | CARTRE Symposium | Distribution of INFRAMIX brochure at the symposium | Industry, Technical, Scientific, EC&EU stakeholders | European | ATE, ASF |
| 15 | Aug'18 | CEDR/ ERTRAC | CAD workshop on a joint understanding of the interaction of SAE/ODD/ISAD | Industry, Technical | European | ASF |
| 16 | Aug'18 | CEDR | CAD TG meeting concerning infrastructure support levels and traffic flow management in mixed traffic conditions | Industry, Technical | European | ASF |
| 17 | Aug'18 | Information exchange | Trilateral workshop of NRAs on CAD | stakeholders | AUT/ SLO/ HUN | ASF, ATE |
| 18 | Sept'18 | ITS World Conference | Presentation at the session "Road infrastructure support levels for automated driving" | Industry, Technical, Scientific | Global | ASF |
| 19 | Sept'18 | ITS World Conference | Participation at the workshop „TM 2.0 and hybrid infrastructure as enablers for MaaS in the context of automated transport" | Industry, Technical, Scientific | Global | ICCS, AAE |
| 20 | Sept'18 | ITS World Conference | Participation at the joint session "How road infrastructure can support the transition to automation and | Industry, Technical, Scientific | Global | ATE |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | the coexistence of conventional and automated vehicles on the same network" | | | |
| 21 | Sept'18 | ITS World Conference | Presentation at the session "ICT serving automated road transport" | Industry, Technical, Scientific | Global | ICCS |

# Annex B: Thematic cluster for stakeholder interaction

This table shows a first cluster for stakeholder interactions based on the identified topics from chapter 3.1. This thematic cluster is intended to be updated throughout the project duration. It is provided as an orientation tool for each task leader to identify the targeted stakeholders for each topic.

**Table 4: Thematic cluster for stakeholder interaction**

| Stakeholder | Use Cases / Business Models | Physical Infrastructure | Digital Infrastructure / Sensor-technologies | Traffic management (C-ITS services) | Infrastructure Classification scheme | Others / to be extended during the project |
|---|---|---|---|---|---|---|
| STRIA | x | | | | | |
| ODD/ ISAD | x | | | | | |
| Connecting Austria | x | | | x | | |
| MAVEN | x | | | x | x | |
| TransAID | x | | | x | x | |
| ICT4CART | x | | x | x | | |
| MANTRA | x | x | x | | | |
| STAPLE | x | x | x | | | |
| DIRIZON | x | | x | | | |
| AUTO-NOM | x | x | x | x | | |
| 5G-Carmen | x | | x | | | |
| L3 Pilot | x | | x | | | |
| aFAS | x | | | | | |
| VIA-AUTONOM | | x | x | | | |
| VEGAS | | x | | | | |
| AUTONOM | | x | | | | |
| CARTRE/ ARCADE | | x | x | | | |
| AG Platooning | | x | | | | |
| Providentia (A9) | | | x | | | |
| TF Niedersachsen (DLR) | | | x | | | |
| IMIS Trailer | | | x | | | |
| FoKo C-IST | | | | x | | |
| C-Roads | | | | x | | |
| Nordic Way | | | | x | | |
| ETSC | | | | | x | |
| TM2.0 | | | | | x | |
| CEDR | | | | | x | |
| ERTRAC | | | | | x | |
| CoExist | | | | | x | |
| Others / to be extended during the project | | | | | | |

# Annex C: Modes of engagement from D5.1

The following table describes the main mechanisms that should be used to involve the target groups of INFRAMIX in the user engagement process:

**Table 5: Modes of engagement from D5.1 (on 2nd October 2018)**

| Objective | Communication | Commitment | Examples of engagement approach | |
|---|---|---|---|---|
| **Communicate** | Inform or educate stakeholders | One-way: INFRAMIX to stakeholder | 'INFRAMIX will keep you informed' | Marketing Communication |
| **Consultation** | Gain information & feedback from stakeholders to inform decisions made internally | Limited two-way: INFRAMIX asks questions and stakeholders reply | INFRAMIX will keep you informed, listen to your concerns, consider your insights and provide feedback on our decisions' | Customer Contact Centre<br>Web-based surveys<br>One-to-one meetings |
| **Dialogue** | Work directly with stakeholders to ensure their concerns are fully understood and considered in decision making | Two-way or multi-way: between INFRAMIX and stakeholders | 'INFRAMIX will work with you to ensure your concerns are understood, to develop alternative proposals and provide feedback about how stakeholders' views influenced our decision making' | Forums<br>Roadshows<br>Seek input into communication strategies<br>One to one meetings |
| **Partnerships** | Partner with or convene a network of stakeholders to develop mutually agreed solutions and actions | Two-way or multi-way: learning, negotiation | 'INFRAMIX will look to you for direct advice and participation in finding and implementing solutions to shared challenges' | Projects<br>Memorandum of understanding |
| **Collaborations** | Agreed upon collaboration between stakeholders to speed up developments. | | E.g. data exchange between DGT & University of Zaragoza concerning signalling and new signs. | |
| **Monitor** | Monitor stakeholders' views | One-way: stakeholder to INFRAMIX | 'INFRAMIX will monitor your views' | Research<br>Media coverage |