

## **Game version for co-creatively planning a shuttle route with a diverse user group in Austria**

### Materials:

- Two maps as game boards (recommended in the format A0 or bigger) depicting the area in which the shuttle route should be deployed (see also download document: “How to create the game map with MS Office Software”)
- Cards for points of interest (POI) including stops (recommended minimum size: 5cm x 5cm and laminated so they can be reused and are easier to handle for the players)
  - The point of interests can vary depending on the planning area and the user groups involved. Some examples for POIs are:
    - pharmacy, working Space, municipal office, train station, bank, supermarket, meeting center, coffee shop, cinema, playground, school, nursery etc.
    - We recommend having some spare sheets of paper so that the user groups can add POI that are relevant to them
- approx. 20 clip photo holders for a better presentation of the POI on the game board
- piece of wool - in the length of the planned route in relation to the scale of the map/game board. So, players have a better sense for the length of the route and form the route together on the map/game board.
- Something to take notes on the discussed challenges, arguments, needs and requirements of the user groups for considering when planning the shuttle route afterwards.
- Pencils for adding POI
- People needed:
  - 1-2 game master per table
  - 1 person who is taking notes on the most relevant inputs from the user groups
- (Note: If you have an autonomous shuttle available show them the shuttle before the game starts. Most people were really interested in how it works.)
- Instructions for the game master (also see below).

### Instructions for the game session

#### Game preparation

- Set-up the game zones before arrival (ideally 3-6 players/table)
  - Place one game board, the POI, the clip photo holders, pencils and the piece of wool on the table or surface area where the game will take place.
  - Hang the second game board on a wall or holder so that people with walking aids or wheelchairs can easily access the map if wished.

## The game session

1. The game master starts the game with entry questions:
  - a. How do you usually travel? Which transportation mode are you using?
  - b. How do you feel about public transportation in „name of the area“
  - c. Are you familiar with the area?
    - i. Yes: What is your personal connection to the area?
    - ii. No: How do you feel about the public transport system in your residential area?

2. The game master explains...

...the goal; for example: *“Today we want to plan a route for a public automated shuttle in the area (name of the area) that represents a compromise of all the participants’ needs and wishes. You followed the invitation to engage in the route planning process and to help ensure that needs of citizens are included in the planning process.”*

...the setting; for example: *“When we talk about a public automated shuttle service, we are talking about a future scenario in which the vehicle is fully self-driving and on-board operator is no longer required by law.”*

...the rules of the game and the materials. The route should meet the following criteria:

- The route should not be longer than XX km represented by the piece of wool (the number of kilometers depends on your project)
  - There should be a minimum and a maximum of stops (e.g. 12 and 8) OR a concept for an on-demand service
  - If there are stops, the distance between two stops should be within a certain range (e.g. 300-500 m)
  - One-way streets should be considered.
  - Materials like the POI cards, the wool or the scale can be used, but it is not mandatory
  - The game ends when all participants agree on a route and find compromises if necessary (Note: collect arguments against or for a route in the documentation)
3. The game master answers open questions.
  4. The Serious Game should be a tool to facilitate the dialogue in planning processes. The role of the moderator therefore depends on the level of engagement of the participants. If the group starts a discussion immediately after the assignment is explained, the moderator only needs to intervene when necessary (participants deviate from the goal, misunderstandings of the rules etc.).
  5. If the group is having difficulties on how to start, here are some questions that the moderator can ask to guide the group in a productive discussion:
    - a. What POIs are relevant in the area and why? What are the priorities and preferences regarding the shuttle route? Where do you want to go with a



public automated shuttle? Where not? E.g., connections to other public transport modes, schools, nursery etc.

- b. For whom are the stops suitable, for whom not? How should the stops look like? What information do you want/ need at the stops?
  - c. How should an on-demand shuttle be designed so you would use it? Would you like dynamic stops? What do you think about flexible time schedules and routes for the public automated shuttle? How would you like to book the service?
6. The game ends once the group agrees on a route, on-demand service or time is up.
  7. If you want you can reflect on the game session together with the participants.