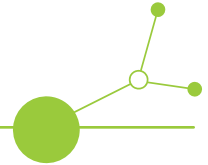# UPDATE PARKPAD TOOL

Deliverable 1.1.1

Version 1
11 2023

A. About ParkPAD

ParkPAD stands for Parking Policy AuDit. It is an instrument enabling municipalities to evaluate and improve the quality of their local on-street parking policy and partly also of the off-street parking policy. Off-street parking is excluded in cases where it is private owned and run since a city / municipality has only limited options to influence private use. However, co-operations are analysed and established wherever this is possible – especially when it comes to developing the parking action plan.

ParkPAD analyses the strengths and weaknesses in current policy and gives clear indications for future improvement. The idea of the ParkPAD questionnaire is based on the successful BYPAD approach which has its origin in European best practice in cycling policy. In BYPAD measures and areas of action necessary to improve cycling policy can be derived directly from the audit results. Repeating the audit regularly (once every two or three years) will indicate progress in the municipality's cycling policy. ParkPAD follows this general approach, but the methodology has been adapted to reflect the greater complexity of parking.

ParkPAD was developed within the European funded H2020 project park4SUMP by the authors of this deliverable. The scheme was tested in practice during its development phase. Following the slogan 'Learning by doing and developing', the intention was to apply the audit scheme in different municipalities and cultures. This has been done in 16 cities / municipalities in several European countries. The idea for the long-lasting existence of ParkPAD was / is to set up a network of ParkPAD auditors all over Europe who should carry out as many audits as possible in the oncoming years.

B. The ParkPAD methodology

ParkPAD regards parking policy as a dynamic process where different components must fit together to achieve a well-balanced sustainable parking policy and above that of smart use of public space. This includes a wider range of activities – not only parking – leading to a change of mobility behaviour. It applies an integrated approach of parking management, moderating the attractiveness of car traffic, with providing and promoting sustainable mobility in functional urban areas. The need to green mobility stems from a wide range of challenges connected to the dominance of car passenger traffic in the Central Space territory today. And parking is a one of the areas (besides the not-so-accepted access restrictions incl. Congestion charging) to tackle with the highest impact on car-drivers behaviour.

Because each step in this policy process has its own characteristics, ParkPAD distinguishes 6 modules, which determine the quality of the parking policy.

Each module is put on a ladder of development (see below), which indicates the quality level of the parking policy. Based on this ladder of development, the municipality can set objectives and thus it will be possible to follow the evolution of its parking policy.

Module 1: Parking Policy

Module 2: Parking Operation

Module 3: Parking innovation

Module 4: Parking Information & Promotion

Module 5: Parking Enforcement

Module 6: Parking Data

Figure 1: ParkPAD „6 modules of development"

The 6 different modules form three main groups: the planning of the parking policy, the real actions in practice, and the evaluation of the planning and actions. This shows that ParkPAD not only focuses on results, but also on how parking policy is embedded in the political and administrative structure and culture. For each of the modules, a list of questions and typical answers is given which determines the quality level of each module.

The quality of each of the questions of the modules is determined separately by assigning a quality level on the four-stage ladder of development to almost each of them. At a glance, the ladder of development shows the strengths and weaknesses of a parking policy. For each module, quality objectives for the future parking policy can be defined separately, and it is possible to monitor its evolution. When auditing the local parking policy, each question and therefore also each module is given a score based on the answers to the ParkPAD-questionnaire. ParkPAD distinguishes four quality levels. Each level represents a further step on the ladder of development – thus representing further progress of the local parking policy. Quality improvement is basically climbing up the ladder of development stepwise.
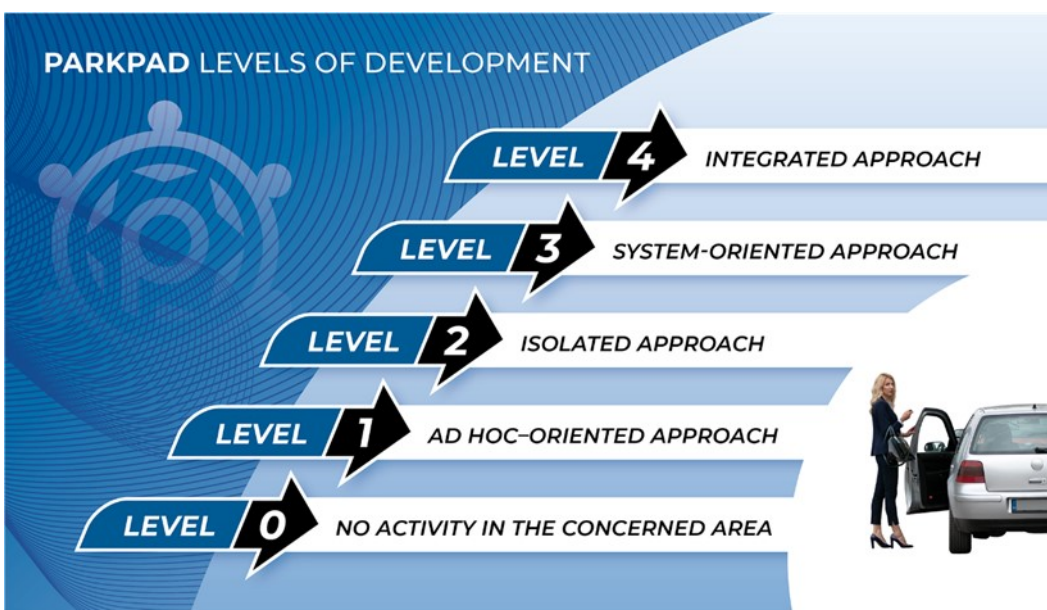
PARKPAD LEVELS OF DEVELOPMENT

LEVEL 4 INTEGRATED APPROACH

LEVEL 3 SYSTEM-ORIENTED APPROACH

LEVEL 2 ISOLATED APPROACH

LEVEL 1 AD HOC–ORIENTED APPROACH

LEVEL 0 NO ACTIVITY IN THE CONCERNED AREA

Figure 2: Ladder of development   Source: park4sump.eu

C. The ParkPAD instruments

To analyse the parking policy in a city / municipality three different instruments have been developed.

A checklist form on surveying facts and figures – the so called „background information". There is a policy and data questionnaire is a form that should be filled in by the one person at the city with the best overview of parking management operations and policy. It includes a brief summary of the policy documents as well as all the facts on parking such as number of available parking spaces, number of paid parking spaces, tariffs, regulations, standards, legal possibilities for improvements etc.

The ParkPAD questionnaires which exists in two versions.

- The full questionnaire is the main instrument in the ParkPAD methodology for an audit. This questionnaire is usually filled in by only one person (the one with the best knowledge on parking policy and operation in the city).

- The evaluation group is filling in their own questionnaire which contains only a limited number of questions from the entire questionnaire, it is the evaluator's questionnaire.

D. The people involved - roles and target groups

It is important that the various actors in their specific roles systematically assess the parking policy in order to have an objective and holistic view of its quality. The assessment process needs to involve not only the politicians and administration / authorities but also the users and the local representatives of stakeholders and lobby groups. For more details see deliverable D.1.3.1.

As municipalities tend to present themselves in the most positive way, stakeholders, lobby groups and other organisations can help to bring about a more objective view of the local parking policy.

Therefore, there are representatives of three parties involved in the ParkPAD evaluation group (all called evaluators):

- The politicians, who are responsible for forming the local transport and parking policy;

- The administration / authorities who prepare and execute the parking policy but also those ones from other city departments that deal with land-use planning, green space, environment. Health, social issues, economics etc.;

- The stakeholders, representatives of the local lobby groups and transport organisation, local economy, investors, citizens …

Auditor

ParkPAD is designed as an instrument for self-auditing, e.g. municipalities screen the local parking policy themselves but are supported by a trained ParkPAD auditor. Having this external (neutral) auditor is vital in the ParkPAD-method.

This auditor leads the session, debate and evaluates the questionnaires. It is this auditor who creates together with the parking working group the strategic document of a Parking and Mobility Action Plan.

The auditor is responsible for maintaining a balance in the assessment sessions between a cognitive approach (giving scores), a learning approach (the auditor gives his or her 'expert' opinion) and encourages a conversational approach (discussion between actors) with regard to how parking policy should develop.
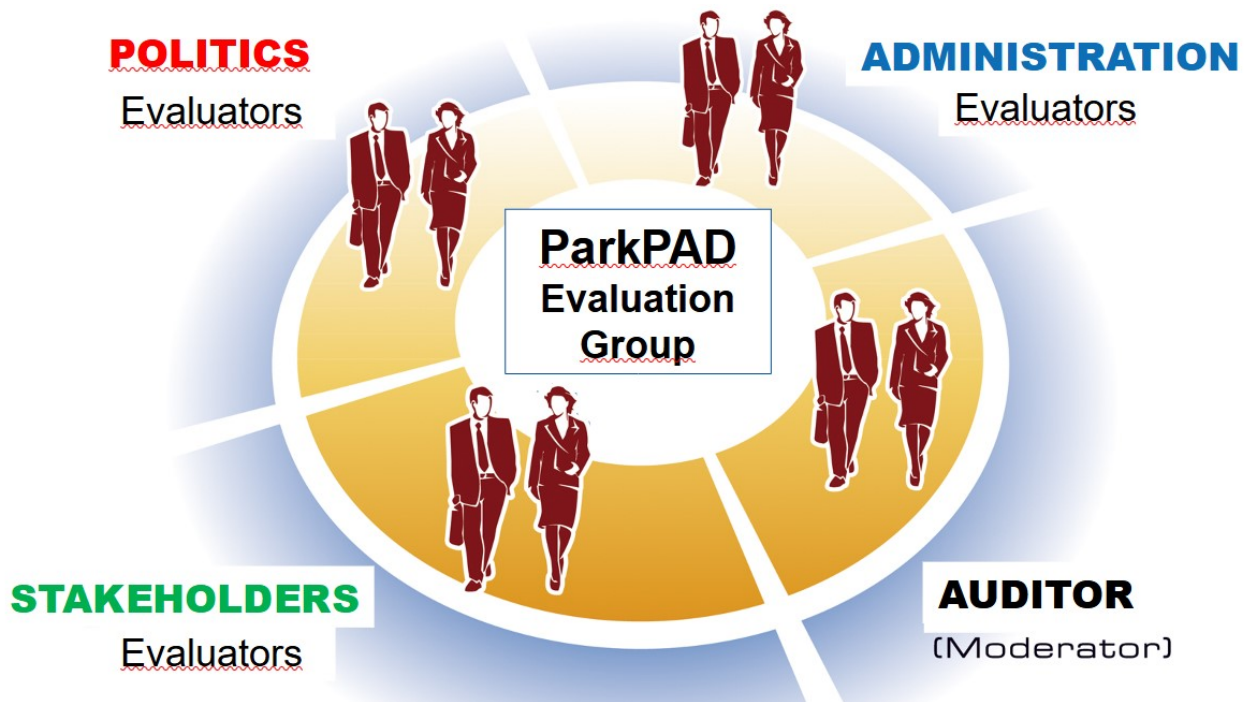

Figure 3: The ParkPAD Evaluation Group

E. The process – the ParkPAD Sessions

The ParkPAD process is carried out in 3 main phases.

Phase 1 contains the collection of background material. This includes all kind of policy documents (city / regional development plans, sustainable urban mobility plans SUMP (or other transport plans), cities parking strategies and plans, facts&figures on available parking spaces, locations / zones, tariffs, possibility to define parking fees and tariffs, possibility to use parking revenues for own ideas, measures already implemented etc.). This information is analysed and summarised and presented to the evaluation group at the first ParkPAD session meeting (phase 2).

The core of phase 2 is the first ParkPAD session meeting. This is the so called „consensus meeting". Here the evaluation group meets for the first time to discuss the results of the individual assessment of the parking policy of the city / municipality / functional region. The aim is to understand the different points of view regarding quality of parking, the parking policy and parking operation among different representatives of the above mentioned stakeholders and core actors. Based upon these individual assessments, a consensus should be established and further on the priorities for an improvement of the parking policy should be defined (read more about the consensus phase in D.1.4.1. Report on ParkPAD: Phase 1 Assessment state of play and consensus building).

The aim of phase 3 is the creation of the Parking and Mobility Action Plan. In this phase – which is the core aim of the second ParkPAD meeting of the evaluation group - measures for action for each defined priority area will be selected and agreed. In the Parking and Mobility Action Plan these measures will be listed according to their readiness for implementation with rough information on resources frameworks, timelines,

single activities, responsibilities etc.). This Parking and Mobility Action Plan is a strategic document and forms the basis for the Parking and Mobility Implementation Plan (read more about the measure phase in D.1.5.1. Report on ParkPAD: Phase 2 parking and Mobility Action Plan).
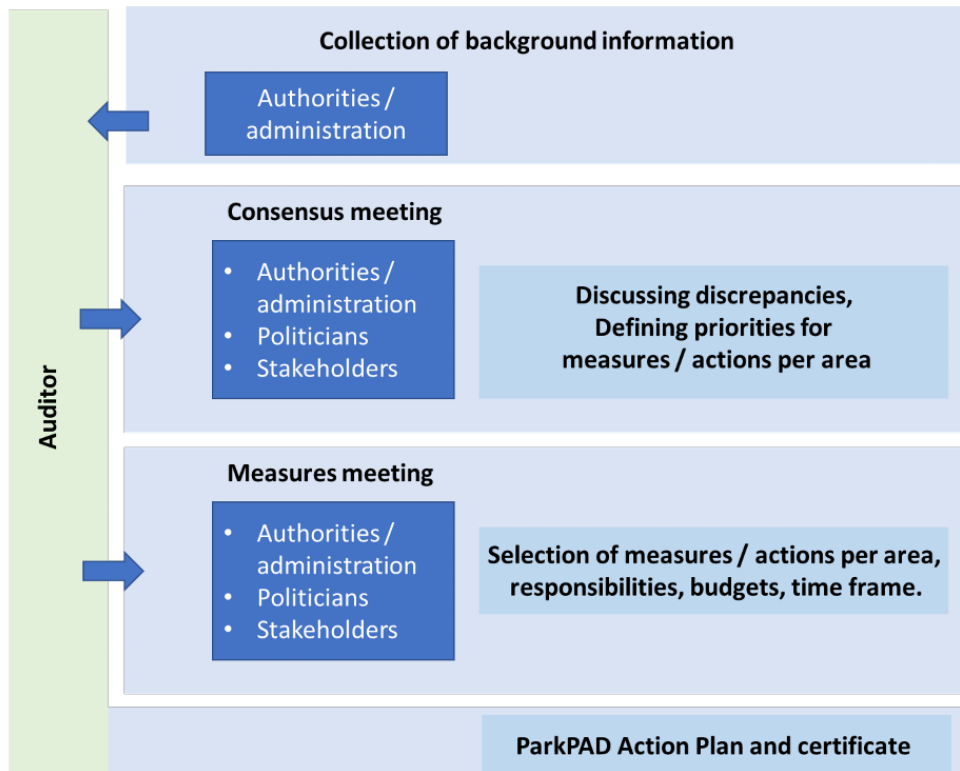

Figure 4: The 3 main phases of ParkPAD

F. The use of ParkPAD in the Nextlevel Parking Project

ParkPAD has been developed within the H2020 park4sump project and was completed in 2022. After the end of the project the consortium presented a business plan which defines the further use of the ParkPAD tool. For maintenance of users and updating the system the payment of a fee is obligatory.

The User License to the ParkPad Platform for the Nextlevel Parking Consortium is limited for 18 months and 2 auditors per partner and consists of:

- Access to the ParkPad Platform
- Use of the built-in surveying functionality
- Assessment and analysis tool
- Use of the repository of materials to support the ParkPad auditing process
- Direct line of support by the ParkPad team

G.Updates

Language updates

The full questionnaire and the evaluators questionnaire of the ParkPAD tool have been translated into Hungarian, Czech, Slovakian and Slovenian. The translations have been programmed and inserted into the existing ParkPAD tool so that users of these new ParkPAD countries have now the opportunity to fill in the questionnaires in their own mother tongue. This should reduce the barrier of bringing in own assessments and points of view due to lack of language skills and further on the participation in the parking and mobility working groups. Since the ParkPAD activities in the different countries are carried out by trained national auditors in their national languages the risk of misunderstanding and false interpretation of using an English questionnaire is avoided.

Update of the questionnaires

Since the original ParkPAD questionnaire has been developed and also tested in 16 cities in different European countries only in 2019-2021 and based upon the evaluation results of these tests modifications have been done, the NXTLVL modifications are more reasonably timed after the ParkPAD processes of the NXTLVL Parking cities.

However, the section of „evaluation and use of data" could be enlarged with questions regarding the effectiveness of parking management measures and regarding the digital readiness of the audited city / municipality. Of course, this question will only be asked to the „expert" on parking in the audited city / municipality but not to the entire evaluation group since it is to specific. Therefore, it is included only into the full questionnaire but not in the evaluators' questionnaire.

One of these questions is „How is parking policy supported by data driven decision making based on digital twins of city zones? Digital twins are data driven environments for automatic or semi-automatic triggering of decision-making processes and for planning processes".

This will be tested in the audits in Olomouc (CZ) and Zilina (SK) in parallel to the programmed ParkPAD tool.

Another question is "is the implementation and/or effectiveness of parking measures analysed / evaluated in any way?" will be tested in Slovenia.

Also in Slovenia the questions on "annual amout of revenues from paid parking" on "costs of maintenance of the system" and a policy question on "decision making system for establishing new parking areas incl. Setting the hourly rates" will be tested.

If these questions and the expected answers are found to be helpful for the entire process and the following development of the parking and mobility action plans they will be suggested for being taken up into the full questionnaire to the „owners" of the ParkPAD tool who are the only ones who could make changes in the programmed tool.

A few small mistakes such as missing translations in some parts or ambiguous terms and descriptions that might cause problems by the fillers-in have been identified and corrected via the host of the tool.

Another update of both questionnaires has been done by adapting it to the needs / frame conditions of smaller municipalities. For the use of the questionnaire in smaller municipalities some questions aren't appropriate (e.g. questions about technical innovations such as number plate recogition systems, scan-cars for enforcement, autonomous veicles, free floating scooter and systems, new taxi modes like UBER etc.). Therefore, these questions have been skipped and a separate version of the questionnaires has been

programmed and integrated into the ParkPAD system. The same has been done also for the background information form to be used in smaller municipalities.

The adapted and reduced questionnaire will be used in the municipality of Prettau in South Tyrol / Alto Adige and negotiations are ongoing to use it in another comprehensive ParkPAD for the entire Ahrn valley (where different smaller municipalities are located, with Prettau at the very bottom of the valley). If the smaller municipalities of the Ahrntal agree to participate at a ParkPAD audit it will be the first time that the area of application is not only a municipality but a polycentric structure of several municipalities.

The procedure of getting along with the system as well as all other training activities for new auditors (ParkPAD process, questionnaires, use of templates and forms, communication aspects, basics and principles of parking management incl. good practise examples etc.) are described in detail in D.1.2.1. Training activities.