Flexible energy systems Leveraging the Optimal integration of EVs deployment Wave

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Deliverable 2.1

The setup of two European user panels: description of the identified panels

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List of Acronyms

ACRONYM	MEANING
AC	Alternate Current
AVERE	European Association for Electromobility
BEV	Battery Electric Vehicle
DC	Direct Current
DTU	Technical University of Denmark
EAFO	European Alternative Fuels Observatory
EFTA	European Free Trade Association
EU	European Union
EV	Electric Vehicle
GDPR	General Data Protection Regulation
HMI	human-machine-interface
ICEV	internal combustion engine vehicle
M	Month
MSP	Mobility Service Provider
PHEV	Plug-in Hybrid Electric Vehicle
SP	Stated Preference
TUC	Technische Universität Chemnitz
WP	Work Package

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Executive Summary

The objective of T2.1 is to define a recruitment strategy for two user panels required in the FLOW project. The first user panel is a larger sample of (at least) 500 respondents from each of the six participating countries (Denmark, Germany, Spain, Italy, Ireland and Czech Republic), which consist of both EV and non-EV users. The recruitment strategy for this user panel is based on multiple parallel data streams. More specifically, data will be collected through online panels survey providers and through AVERE's network of EV users (more than 140,000 across Europe). In addition to that, EV member organisations, car owner organisations and Facebook groups for each of the six participating countries have been identified as possible additional data sources in case data collection needs to be upscaled even further.

The second user panels is a smaller sample of approx. 30 expert users at each test and demonstration site, including end-users and distributors as well as local authorities. The recruitment strategy is intended to empower all demo and testbed leaders to recruit the expert users independently at each location. The whole recruiting process including marketing, acquisition of interested users, data collection and the exchange of user related information in consideration of General Data Protection Regulation (GDPR)-handling is analysed. The process and the methods used for the recruitment strategy are described. Further, the recommended procedure for the user selection and sampling as well as a short checklist for the recruiting process and the user selection is provided.

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1. Introduction

T2.1 is led by DTU and carried out in close collaboration with TUC. The objective of T2.1 is to define an overall strategy for recruiting users to participate in the FLOW project. Two types of user panels will be defined in accordance with the project proposal:

1) A larger sample of minimum 500 respondents for each of the demonstration countries. The sample will consist of both EV and non-EV users, and is intended to be as representative of the population as possible. This sample will be used for quantitative model estimations to elicit user preferences regarding car purchases and smart charging (in T2.2).
2) A smaller sample of approx. 30 expert EV users for each of the demos and testbeds. This sample will be used for qualitative analysis of user experiences (T2.4).

The recruitment strategies for each of the two panels are different, and in the following we will describe each of the two panels separately. We will therefore structure this report such that we first describe the user recruitment of the larger sample in chapter 2, followed by the smaller sample in chapter 3.

2. Strategy for recruiting a larger user panel

The following sections will present the considerations and decisions made to define the recruitment strategy for the larger user panel. For a short summary of the final strategy, please refer to section 2.3.

2.1. Specifying requirements for the larger user panel

The larger user panel will be collected with the aim of estimating quantitative choice models. More specifically, choice models are a methodology to derive user preferences and predict demand when individuals are faced with a decision process where they have to choose one outcome (out of a finite numbers of a fine number of alternatives). The large user panel will be used as the basis for estimated choice models in two choice contexts, namely car purchase decisions and EV charging decisions. In order to do that, we will rely on stated choice experiments, which are hypothetical scenarios, where respondents are asked to declare which of the presented options they prefer. The development of the stated choice experiment will be addressed in details in T2.2. For more information on this we refer to deliverable 2.2.

2.1.1. User characteristics

When sampling users for a survey it is critical that they can relate to the questions posed in the questionnaire. This is particularly true for stated choice experiments, in which respondents are presented with “hypothetical” scenarios, where these scenarios are often pivoted around personal characteristics to make them realistic and relevant for each respondent. Within these scenarios, respondents are asked to choose an alternative out of a set of presented options based on a trade-off of the attributes associated with each of the alternatives. If the stated choice experiment is not aligned

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with the participating users, this can lead to inefficient, insignificant or unrealistic parameter estimates.

In the FLOW project two stated choice experiments are planned (in T2.2). The first stated choice experiment relates to a car purchase decision, while the second stated choice experiment relates to charging decisions. As we are interested in analysing how both EV users and non-EV users (would) behave, we are interested in sampling both EV and non-EV users (below we will discuss in greater details how we target each of the two segments).

Since both stated choice experiments relate to private cars, it was deemed important to sample only individuals who own a car (and are above 18 years of age) to make sure they have prior experience of purchasing a car and thus can relate to the stated choice experiment presented to them. Furthermore, we expect that individuals who own a car have experience in using and refuelling the car. This experience is important for them to be able to relate to the second stated choice experiment about charging. Even though only EV owners have direct experience with charging their EV, non-EV car owners have experience with their daily mobility need and driving pattern. Based on these patterns, we need the respondents' perspective on what they would choose in a situation where they had an EV in order to identify differences and potential barriers. To summarise, the requirements for the desired target sample in the large user panels is that they own a car and are above 18 years of age.

2.1.2. Sample size

When estimating choice models, it is crucial to have good data. However, data collections usually come down to a trade-off between the amount of data and cost of collecting the data.

A common rule of thumb is to apply the "10-times rule" (Hair et al., 2011) suggesting that the data size should be at least 10 times greater than the degrees of freedom in the model. Although simple in nature, it is not always known a prior how many degrees of freedom a model will have. In addition, the 10-times rule does not always lead to accurate parameter estimates (Goodhue et al., 2012). Thus, although the 10-times rule can be a good guideline, we prefer to oversample to have some buffer for unforeseen outcomes in the subsequent model estimation.

We decided that (at least) 500 respondents per participating country (thus 3000 respondents in total) would be an appropriate compromise of quality and costs (assuming all respondents are recruited through online panels). To increase efficiency, a common strategy is to present each respondent with multiple stated choice experiments, which increases the data pool for the subsequent model estimation even further.

2.2. Sampling strategy

A cost-efficient way of collecting data is to utilise online survey panels. Online survey panels consist of people who have signed up and agreed to answer surveys distributed to them. Information about the people registered in the online survey panel is available to the panel provider, which enables sampling of a desired demographic composition (in many cases a sampling representative to the population is wanted). Such online survey panels are available through third party data providers. To ensure both

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EV and non-EV users in the sample, our initial plan was to utilise an online panel and employ an exogenous stratified random sampling (ESRS) strategy (Rose & Bliemer, 2013, Hensher et al., 2005, Louviere et al., 2000) with a 50/50 split between EV users and non-EV users. This oversampling of EV users would (although not representative for the population) ensure sufficient data for the subsequent model estimation for the EV-segment. However, due to low incident rates of EVs in the general population in all six participating countries, it would be very difficult and costly to sample among EV owners using online panels. This is because online panels are not tailored to analyse EV users, but instead cover the population more broadly.

To ensure contact with both EV and non-EV users, we will collect data through multiple parallel streams. We still intend to utilise online panels to obtain a representative sample among the population in each of the six participating countries. However, this would mainly provide responses from non-EV users given the low incident rates of EV users in the population. To reach a critical mass of EV users, we intend to utilize EV member groups and organisations. A key partner here is The European Association for Electromobility (AVERE), who is part of the FLOW consortium. AVERE has access to EV organisations in all European countries. In addition to that we consider distributing the survey directly to EV member groups and organisations. The parallel data streams are depicted in Figure 1 and we will describe each of them separately in greater details in the following subsections.

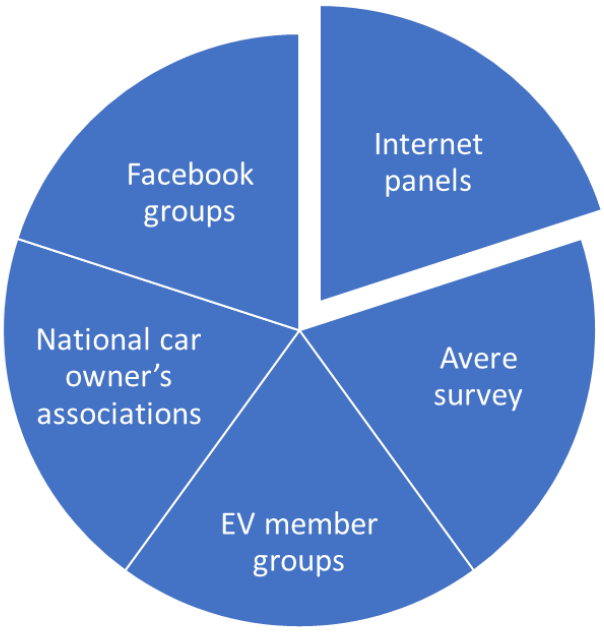

Figure 1: Illustration of how other sources will complement observations from EV users in the internet panels

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2.2.1. Internet panels

A main source of data collection is through online survey panels, which is a common strategy when studying user preferences. The advantage of online survey panels is that they are an easy and reasonably cost-efficient way of collecting data, and that they allow to specify the desired sample composition – in our case car owners above 18 years of ages and otherwise representative for the population in each country. The disadvantage is that the online survey could be bias towards a specific demographic type (e.g., elderly people are often underrepresented in online panels and surveys, however this can to some extend be corrected through the sampling distribution), and in addition to that, there could be financial motives to participate either directly through economic compensation or indirectly through the prospects of winning gifts. All in all, we believe the benefits of using online panels outweigh the drawbacks. We will utilise the online panels to sample 500 interviews in each country.

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2.2.2. Joint survey with AVERE/EAFO

Another main stream in the data collection phase is through collaboration with the European Association for Electromobility (AVERE), which is also part of the FLOW consortium. AVERE (www.avere.org) is a non-profit organisation that promotes electromobility and sustainable transport across Europe and collaborates both with the industry, academia, and EV users. Their vision is to support the transition to electrification and establish the right policy frameworks throughout Europe, and their mission is to promote the widespread use of electromobility. AVERE has contacts with relevant EV organisations in all six participating countries as well as the remaining European. More specifically, AVERE currently has 50 active members (Companies, Research Institutions, and National Associations) across 23 countries. These associations count almost 2600 industry members and 140,000+ EV users across their network. Figure 2 provides an overview of AVERE's network.

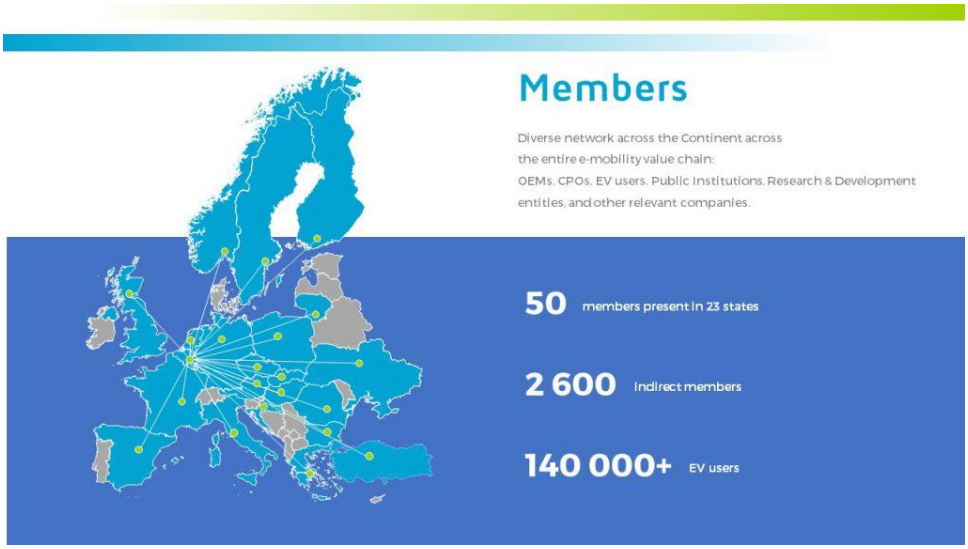

Figure 2: Overview of AVERE's members (source: https://www.avere.org/what-is-avere/).

AVERE is currently involved in The European Alternative Fuels Observatory (EAFO), which is also funded by the European Commission. EAFO is an online portal (https://alternative-fuels-observatory.ec.europa.eu/) that provides open and free information on the deployment of infrastructure for alternative fuels. The portal includes information from all EU Member States + EFTA members + Turkey (33 countries in total). In order to collect this information AVERE has already established contacts with relevant EV organisations in each of the 33 countries. EAFO recently launched a survey across EV users in their network, and plans to launch the survey on a yearly basis.

For the FLOW project, the required information for the model estimations could be obtained through the addition of some questions to the existing survey in the EAFO survey, and could be incorporated in existing data collecting framework.

Initial negotiations towards a joint survey have provided promising grounds for collaboration in data collection across these two EU projects. Ongoing work consists of coordinating survey items and planning how a joint survey can be realised in practice. If this collaboration is successful, this stream

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would provide more than enough responses from EV users. However, as the collaboration has not been finally agreed on before the deadline of this deliverable, we will describe further options in the remaining sections.

2.2.3. EV member groups and organisations

In addition to distributing a joint survey with EAFO, it is also possible to reach out to EV organisations and other relevant member groups. This can be a strategy both to increase the number of responses (for those EV organisations not already partnering with AVERE) as well as a backup in case the joint survey faces unforeseen and unresolvable issues. In case of the latter, we can reach out to the EV organisations directly. Table 2 presents an overview of relevant EV organisations in the six participating countries.

Table 2: Overview of EV member groups and organisations in which we plan to recruit users.

Country	Source	Members	Comments
Denmark	FDEL – association of Danish EV owners (https://fdel.dk/)	Approx. 3500	DTU has a close collaboration with FDEL and have previously distributed surveys to the members of the association. We therefore consider this source to be associated with a low risk.
Germany	Electrive.net – Branchendienst für Elektromobilität (www.electrive.net)	Claim to have 55,000 daily readers	TUC has partnered with electrive.net before, and we therefore consider this source to a low risk.
Spain	AEDIVE – Spanish Business Association for the Boosting and Development of the Electric Vehicle Market (https://aedive.es/)	Unknown	AVERE are collaborating with them, and their network includes "*EV users, NGOs, Trade Associations, Interest Groups, Public Institutions and Research & Development Centres.*" AEDIVE claims that they are recognized by the national government (as well as regional and local administrations) as "*the right contact partner for any question related to the electric vehicle market*".
Italy	Motus-E (www.motus-e.org)	Unknown	AVERE are collaborating with them
Ireland	IEVOA - Irish EV Owners Association (www.irishevowners.ie)	Unknown	
Czech Republic	E-mobility Platform (www.eplatforma.cz)	Unknown	AVERE are collaborating with them

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2.2.4. Car owners' organisations

Similar to the EV organisations presented in the previous section, most countries also have strong car owners' organisations with a significant number of members. Although some of the members could be EV owners, it is likely that the majority of the member base are non-EV owners, and thus reaching out to the main car owners' organisations would be a good strategy to boost the sampling of the non-EV owners if needed. Table 3 presents an overview of relevant car owners' organisations in the six participating countries.

Table 3: Overview of car owners organisations.

Country	Source	Members	Comments
Denmark	FDM (https://fdm.dk/)	Approx. 50,000	DTU has a close collaboration with FDM.
Germany	ADAC - Allgemeiner Deutscher Automobil-Club (https://www.adac.de/)	Approx. 21,000,000	
Spain	RACC (www.racc.es)	Approx. 800,000	
Italy	ACI – Automobile Club D'Italia (www.aci.it)	> 1 million	
Ireland	SIMI - Society of the Irish Motor Industry (www.simi.ie)	Unknown	More directed towards motor industry partners than car owners.
Czech Republic	Not specified		

2.2.5. Online user groups using social media

As with several groups of interest, there is a high activity on Facebook from EV users who discuss issues or opportunities related to EV purchase, driving and charging. In many cases, these groups will belong to one of the EV associations, but in case it is not possible to reach out directly through these organisations, it is possible to contact their members through the Facebook pages. Table 4 presents an overview of possible Facebook EV user groups.

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Table 4: User groups on Facebook.

Country	Source	Members	Comments
Denmark	Elbilforeningen i Danmark - åben gruppe	19,100	Does not fully overlap with members as a lot of information is provided without membership fee and everybody can sign up.
	Hyundai elbiler Danmark	2,100	Hyundai is a very popular EV brand in Denmark
	Nissan elbiler i Danmark	1,700	
	WV e-up! Danmark	1,000	
Germany	Elektroauto Elektromobilität	12,400	General discussion group on electric mobility
	Elektroauto D-A-CH-FL DEATCHLI	22,400	Discussion group specifically for battery electric vehicles
Spain	COCHES 100 % ELÉCTRICOS	10,200	Discussion group specifically for battery electric vehicles
	COCHES ELECTRICOS	22,100	General discussion group on electric mobility
Italy	Auto Elettriche Club Italia	12,700	Discussion group on electric mobility (managed by Giancarlo Amato)
Ireland	Irish EV Owners Association	13,900	Facebook page related to the Irish EV Owners Association
Czech Republic	Majitelé a příznivci elektromobilů v ČR / SK	5,500	Facebook page for EV owners

2.3. Summary of sampling strategy for the large user panel

The relevant group of "target users" is identified to be individuals who are 18+ years of age and own a car. This ensures that users have experiences with a car purchase decision, and thus realistically can relate to the questions presented.

In addition to that, it is important to sample both EV and non-EV users to analyse preferences and potential barriers of both groups. However, since EVs still have fairly low market shared in the overall car fleet across the six participating countries (Italy, Spain, Czech Republic, Ireland and Denmark), we decided to pursue multiple streams of parallel data sources to ensure sufficient data from both EV and non-EV users respectively. More specifically, the following possible stream of data sources will be considered:

1) Internet panels to collect a representative sample among car owners (including EV users) above 18 years of age for each of the participating countries. An external company will code, translate and distribute the survey to users in their online panels. The company will be responsible for collecting 500 responses in each of the six participating countries (thus 3000 responses in total).

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2) Partnering with The European Association for Electromobility (AVERE) to launch a survey among EV users from all EU-countries.
3) National EV member groups and organisations in each of the participating countries (to avoid overlap with AVERE's survey, we only target EV member groups which are not participating in AVERE's survey).
4) National car owners' organisations.
5) Online user groups using social media.

3. Strategy for recruiting a smaller expert user panel

3.1. Aim

The aim of the Deliverable D.2.1 – Part 2 "User recruitment" is to provide a How-To for the recruitment of a dedicated expert user panel of approx. 30 participants at each test- and demonstration site, including end-users and distributors as well as local authorities. This guidance is intended to empower all demo and testbed leaders to recruit the expert users independently at each location.

Within task T2.1 we analysed the whole recruiting process including marketing, acquisition of interested users, data collection and the exchange of user related information in consideration of General Data Protection Regulation (GDPR)-handling. Further, we have created a recruiting checklist for the demo and testbed leaders as well as all project partners.

The paragraph regarding T2.1 user recruitment is structured as followed: First, we address considerations that precede the recruitment process by providing a specification of the user related characteristics at the different demos and testbeds and defining the expert users. Second, we describe the process and the methods used for the recruitment strategy. Further, we refer to our recommended procedure for the user selection and sampling. Finally, yet importantly, a short checklist for the recruiting process and the user selection is provided.

3.2. Considerations before the recruitment process

3.2.1. Specification of potential use cases

Before a suitable as well as demo and testbed specific strategy can be developed, it is necessary to know the use cases and the localities of the demos and testbeds for which users are to be recruited. Besides the definition of the use cases in WP1, WP6 and WP7, the following constraints have to be taken into account at each demo and testbed to ensure the development of a suitable and effective recruiting strategy:

- The usage scenario and the technically motivated research aim, including items which have to be validated
- The value chain and all stakeholders involved

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- The provided charging infrastructure, including the context, localization and operator as well as the number of the charging points with their functionalities and equipment (i.e., access, charging human-machine-interface (HMI), dialogue options)
- The vehicle types (i.e., vans, cars) and the expected number and type of battery electric vehicles (i.e., BEV, PHEV)
- The BEV usage type (i.e., corporate, private), the expected number and user groups of special interest (i.e., tourists, employees)

3.2.2. Definition of potential (expert) users

In the light of these considerations, it would be expected that potential users will differ between the demos and testbeds. It is therefore not possible to provide an overarching user characterisation of expert users. Thus, the potential users have to be defined depending on the research questions and use cases at each demo and testbed.

The literature on experts and novices' states, that with increased experience in a particular domain, procedural (i.e., practical) and declarative (i.e., factual) knowledge increases (Ericsson & Towne, 2010) leading to automaticity in skilled performance and, thus, higher task efficiency (Shiffrin & Schneider, 1977; Trick, Enns, Mills, & Vavrik, 2004). Similar results were observed when driving with internal combustion engine vehicles (ICEVs; Patten, Kircher, Östlund, Nilsson, & Svenson, 2006). It has been argued that as the driving experience increases, the driving task (e.g., gear changing) becomes automatic, and easier (Hasher & Zacks, 1979). Automatic, or highly skilled behaviours have less need for active knowledge retrieval (Hacker, 1998) resulting in reduced cognitive workload while driving, hence, greater available attention (Patten et al., 2006), which may be allocated to other driving operations (e.g., eco-driving strategies).

In the field of BEV user research, experts have a certain domain specific level of expertise and knowledge. In addition, users' knowledge and understanding of the system as well as possible energy-saving options also play an important role in participation in V2G or similar projects (Kubli, 2022, Venegas et al., 2021, Huang et al., 2021). In particular, we defined BEV experts as having a certain level of:

- BEV driving experience (Günther, Rauh & Krems, 2019)
- Expertise in smart/controlled charging (Kämpfe et al., 2022)
- Knowledge regarding BEVs (Günther, Rauh & Krems, 2019)
- Knowledge regarding (smart) charging handling (Huang et al., 2021)
- Problem awareness and understanding of and strategies for dealing with malfunctions (e.g., range, eco-driving, different charging types; Haustein & Jensen, 2018)
- Motivation to use Smart Charging Systems (Schmalfuß et al., 2017)
- Positive attitudes and less concerns (Jensen et al., 2014)
- BEV ownership and higher purchase intention (Jabeen et al. 2012)
- Daily driving routine; BEV-characterized mobility profile with weekly charging processes (Günther, Rauh & Krems, 2017)

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However, there is some potential for discussion and it is necessary to prove whether the mentioned BEV experts are really the potential FLOW users who can be recruited, who are interested in participating in the demos and testbeds, as well as who are able to answer our research questions.

Therefore, we recommend a recruitment strategy for the selection of potential users based on the defined use cases, research questions and circumstances at each demo and testbed. For instance, in Dublin, private users, such as students and staff are of interest. In Menorca, tourists and island visitors are potential demo users. On the other hand, in Prague, a use case of corporate users up to 12 employees is the intended usage scenario.

Nevertheless, further variations of the independent research variables (i.e., previous BEV experience) become of particular interest in user research. For instance, investigating the influence of taking part in controlled charging on user behaviour and experience, users' attitudes towards the new technologies as well as users' system trust and willingness to give up control. Some possible variations based on user characteristics are presented in Table 5.

Table 5: Suggested considerations for the definition of potential user groups based on users' system support demand.

	Low system support demand	High system support demand
Mobility profile	Low mobility profile (i.e., seldom - monthly trips)	High mobility profile (i.e., daily trips)
BEV ownership	BEV ownership	BEV rental or leasing; public transport users
Charging place	Home charging	Public charging
Access to infrastructure	Home/private or reserved parking space; familiar with infrastructure	Public parking; unfamiliar with infrastructure
Familiarity with the HMI concept	Well known application (e.g., private charging App)	No experience with the provided application (e.g., HMI of public charging stations, provided Smartphone-App of rented BEV)
Expected FLOW-system usage	Low intensity and short duration (i.e., seldom – once)	High intensity and long duration (i.e., frequently – daily usage pattern)

3.3. Recruitment strategy

It is planned to acquire a small user panel at each demo and testbed who can be interviewed several times in order to be able to survey changes in users' behaviour, attitude and experience over time. The recruitment strategy developed is to ensure that the user acquisition initially addresses as many potential users as possible. In the process of recruitment marketing, it is possible to control which

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potential user groups are to be addressed. Interested users register with their contact details and can be contacted and interviewed afterwards several times (longitudinal data collection approach). Subsequently, from the interest registered, it is selected who is suitable for T2.4 at the respective demo and testbed locations. Based on the selected users, the research methodology and survey instruments will be set up in T2.4.

Contact will be made only with the selected users. In this way, the demo and testbed leaders can cover the interests of potential users more broadly and reach more potential users. Furthermore, within the recruiting process we reserve the possibility to tolerate any adjustments in WP6 and WP7.

3.3.1. Screener

TUC will provide an online registration questionnaire (screener) with all necessary information for interested long-term users and interested study participants. This screener will include study context, informed consent and assess personal user data for user selection (e.g., level of experience, contact details). Due to the screener, it will be possible to survey users several times without a huge marketing effort for each questionnaire.

Possible screener structure could be:

- Welcome
- Study context and research aim
- GDPR-handling and informed consent
- Location
- Personal data of the interested user
    - Sociodemographic characteristics
    - Contact details
    - Mobility profile
    - BEV and controlled charging experience
    - Intended FLOW system usage
- Willingness to take part in study and data collection
- Agreement to be contacted
- Awareness of and understanding for possible technical inadequacies

The screener will be provided in English. Thus, the demo and testbed leaders are responsible for a translation in Czech, Irish, Italian, Spanish and Danish. Based on the translation, TUC can set up five language specific screeners.

All demo and testbed leaders are responsible for contacting potential users as well as the marketing and promotion of the screener. The promotion contains, for instance, sending and posting invitations to potential interested users via press release, social media, newsletter and study homepage. Even each charging station might be equipped with the study information and a QR code containing the link to the study participation. Car-sharing providers and car rental companies as well as MSPs should also be contacted and included in the marketing process.

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The time of providing the final screener to all demo and testbed leaders depends on the definition of the use cases and the constraints mentioned in section 1.2. The aim will be to make the screener available in a timeframe of at least 6 months before the system is ready to work and validation begins in all demos and testbeds (M31).

Having the small expert user panel at each demo and testbed for the long-term evaluation would be desirable and corresponds to the gold standard of user evaluation. However, we can already assume that it will be difficult to survey users over a longer period of several months at the individual demos. For example, in the Menorca demo, there will hardly be any tourists who stay on site long enough to be considered as long-term study participants. Therefore, in addition to the screener, we recommend to promote each online questionnaire in T2.4. with the same marketing approach. This could add additional spontaneous users to the sample. These non-registered short-time users can also be approached via promotions and the MSP. Thus, within this sample expansion, also short-time users can provide helpful answers to our research questions. All demo and testbed leaders are highly recommended to include the local MSPs in the acquisition and promotion process.

3.3.2. User data collection

Data collection of potential interested users will be carried out in accordance with the American Psychological Association Code of Ethics, recommendations, regulations and consent templates of TUC's ethics commission as well as GDPR. Thus, all subjects have to give written informed consent. The collected user data is stored on a TUC-server in Germany.

TUC will provide a regular status update as well as monitor and export (new) user data and inform demo and testbed leaders once a week about the number of registered interests. TUC will set up a participants database. Data can be shared in anonymized form via Excel (sharing of participants names and e-mail addresses is not intended).

3.4. Recommendations for the user selection and sampling

Based on the defined inclusion and sampling criteria, an appropriate user sample at each test- and demonstration site suitable to answer the defined research questions can be selected. The user selection and sampling are based on:

- Required sample size (approx. 30 users at each test- and demonstration site)
- Definition of potential user groups
- Willingness to take part in study participation and data collection
- Agreement to be contacted
- Awareness and understanding of possible technical inadequacies

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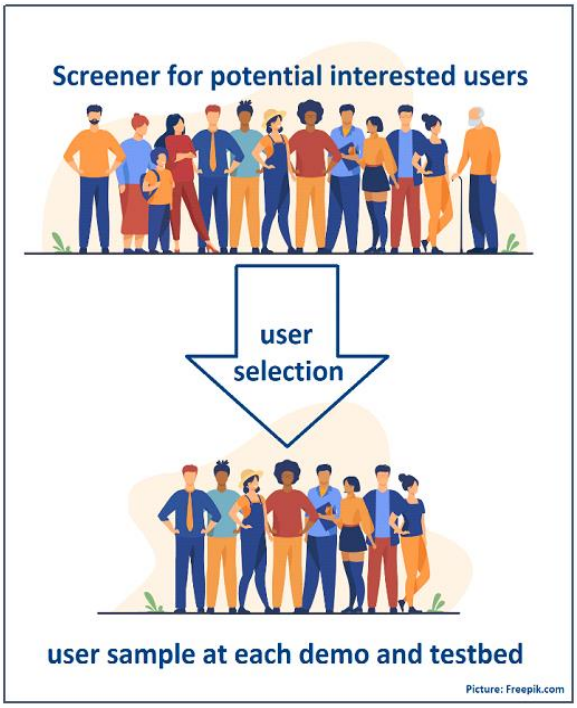

Via an online registration questionnaire (i.e. Screener) interested users can apply for taking part in the demos and testbeds.

Within the screener promotion and marketing via broad channels we try to addresses as many potential users as possible.

From the pool of potential interested users, the user selection will be carried out based on:

- use cases
- research questions
- localities of the demos and testbeds
- user inclusion criteria

Based on the defined inclusion and sampling criteria, an appropriate user sample at each test- and demonstration site which is suitable to answer the defined research questions can be selected.

Figure 3. Structure of the recruiting process.

3.5. Checklist

Considerations before recruitment

- Demo & testbed leaders: specifying of the different demos & testbeds
- All: definition of potential user groups

Recruitment

- TUC: setup of language and demo and testbed specific screener (online application system)
- Demo & testbed leaders: translation of the screener
- Demo & testbed leaders: contact potential interested users
- Demo & testbed leaders: promotion and marketing of the screener (long-term users) and additional T2.4 online surveys (short-term users)
- TUC: data collection via TUC hosted server
- TUC: user-datahandling and regular status update to demo & testbed leaders

User Selection

- All: definition of inclusion and sampling criteria
- TUC: user selection based on required sample size and defined inclusion criteria
- Demo & testbed leaders: contact and communication with users

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- (Demo & testbed leaders: If necessary, conclusion of contract & contract management)
- TUC: user sampling
- Demo & testbed leaders: user support

Result

- TUC suggests and provides a user sample at each test- and demonstration site

Table 6: Responsibilities

Task	TUC	Demo & testbed leaders
Specifying of the different demos & testbeds		x
Definition of potential user groups	x	x
Setup of language, demo and testbed specific screener (online application system)	x	
Translation of screener in Czech, Irish, Italian, Spanish and Danish		x
Contact and acquisition of potential interested users		x
Screener and T2.4 online surveys promotion and marketing		x
Data collection via TUC hosted server	x	
User data-handling and regular status update to demo & testbed leaders	x	
Definition of inclusion and sampling criteria	x	x
User sampling	x	
User selection based on required sample size, inclusion criteria	x	
Contact and communication with users		x
If necessary, conclusion of contract & contract management		x
User support		x

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