Best Demonstrated Practices in Shared Micromobility Tenders

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1. Preparing a Shared Micromobility Tender   2. Selecting Shared Micromobility Operators

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Best Demonstrated Practices in Shared Micromobility Tenders

Micromobility has emerged as a first- and last-mile solution that complements public transport while supporting the shift towards electric, shared and multimodal transport in cities around Europe. Tenders are proven facilitators of ensuring micromobility is promoted and managed in a sustainable and organised way.

To ensure that cities, towns and residents receive the best possible service, Voi encourages cities to consider the following Best Demonstrated Practices (BDPs) when launching a shared micromobility tender, and selecting the operators. These BDPs are the result of Voi's experience in more than 70 cities across 11 European countries and covers (1) Preparing a Shared Micromobility Tender & Service and (2) Selecting Shared Micromobility Operators.

1. Preparing a Shared Micromobility Tender

1.1 Information gathering

Consult the industry

Cities and towns should make sure to regularly engage with the operators, preferably through dedicated points of contact. In our experience, this open and regular dialogue produces two key tangible benefits. First, when operators share their experience from other locations, the city is able to construct an RFP that results in a better service design for their city, and a higher standard of service from the operators they select. Second, the closer collaboration helps operators better understand, and respond to, the city's key pain points and goals.

Make provision for adequate parking

To avoid a scenario in which clutter becomes a pain point, towns and cities need to plan carefully for the provision and location of parking zones within their operational areas. The optimal parking design varies significantly across cities depending on factors such as operating zone, city density and available infrastructure. Voi has therefore developed a risk-based framework to determine a good starting point for parking design discussion with cities.

However, some things hold true across all parking models including:

- Where mandatory parking zones (MPZs) are deployed, e.g., in dense city centres, the MPZs should be physically identifiable[1]
- MPZs should also be made available with a minimum density of 30 per km^2 to ensure sufficient availability
- The proportion of available parking spaces per vehicle should also be a minimum of 3:1 to ensure a smooth flow of traffic

Finally, Voi does not recommend physical locks for parking. In our experience, there is no strong evidence to show that locks result in any improvement in parking compliance, or that they reduce the already minimal levels of theft. The inconvenience of locks therefore, as well as their damaging effect on service uptake, outweighs the benefits to parking that they allegedly bring.

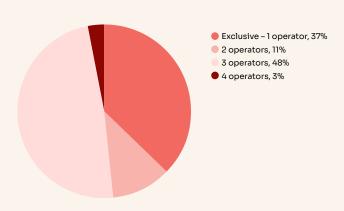1. E.g., physical racks, signs, or painted lines

1.2 Tender parameters

Limit the number of operators

Voi recommends that the number of operators selected to provide a tendered service should be limited to a maximum of three. In our experience, hosting more than three operators leads to reduced dialogue between operators and cities, increases administration costs for cities, and makes coordination between operators more difficult when tackling joint city challenges. More operators will also necessitate a higher number of vehicles. This is because each operator requires a minimum density of vehicles to provide adequate service availability for their own customers, and to ensure sustainable operations. For the same reason, in scenarios with a very low number of vehicles, it may make sense to reduce the number of operators to below three. As a general guide, if the scheme will offer fewer than 2,000 vehicles, the number of operators could be limited to two.

Share of micromobility tenders by number of operators weighted by fleet size in Western Europe Q2 2019 - Q1 2022

- Exclusive – 1 operator, 37%
- 2 operators, 11%
- 3 operators, 48%
- 4 operators, 3%

Overall cities and towns across Europe have been aligned with Voi's recommendations with nearly all cities applying a maximum of 3 operators. The proportion of markets with only 1 operator is skewed by the fact that UK cities almost exclusively went with single operators for their ongoing trials.

Align on continuous evaluation & sanctions mechanisms vis-a-vis operators

Cities and towns should align with operators on the various evaluation and sanctions mechanisms to ensure that operators deliver on commitments. Voi recommends the following evaluation mechanisms:

- SLAs on fleet utilisation, parking compliance and time to address wrongly parked vehicles
- Recurring joint reviews of commitments (e.g., product features, pricing)
- Data sharing including APIs, dashboards and recurring reports

Transparent data sharing is the key to allow cities to monitor operator performance and their fulfilment of the contract. The most transparent method to share data is through the Mobility Data Specification (MDS) API[2] as it ensures data is standardised between all operators. Supplementary methods include sharing data through third-party integrations or operator-built city dashboards. In all instances, operators should describe their approach to data sharing in their response, specify how they will ensure correct data, as well as how data will be visualised and made accessible.

Voi also recommends cities and towns provide clear guidance on sanctions relating to failed evaluations. Sanctions should start with warnings, escalate to fines, and in extreme situations, lead to the suspension of the operator's services.

2. MDS consists of multiple APIs and is standard in the industry for exchanging data between operators and cities.

Use objective criteria and require validated responses

To increase the likelihood of selecting the best performing operators, tender criteria should be as objective as possible, and require validated responses. Objective criteria allow cities to make direct comparisons between operators, and forces operators to be clear and concrete about the services they are able to provide. It is also crucial that operators are required to validate the claims made in their responses. For example, operators should be able to demonstrate actual implementation of their initiatives, and should be able to evidence a track record of successfully managing tenders or, conversely, avoiding licence suspensions and removals. Third-party validations and certifications are also useful tools to verify the authenticity of operators and their claims.
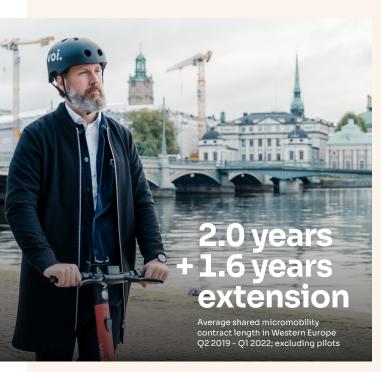
1.3 Commercial terms

Ensure contract lengths are both competitive and sustainable

Shorter contract periods (e.g. 1 year) risk service disruption for customers, limits the opportunity for sustainable operator investments, and increased job insecurity for local operator employees (e.g. maintenance and warehouse personnel). Voi therefore believes that, for mature markets, an optimal contract length is 3-4 years. An exception to this recommendation would be for cities new to micromobilty who, understandably, may wish to run shorter pilots (e.g. 1-2 years) before committing to a full-length tender contract. Contracts that are longer (e.g. 7 years), with no infrastructure investments, can stifle competition and innovation among incumbent operators.

Adjust fleet sizes dynamically

Where fleet sizes are capped, Voi strongly recommends that cities avoid 'static caps' in favour of adjusting fleet sizes dynamically throughout the contract period. This is because dynamic caps, when tied to operator performance, fundamentally align the interests of cities and operators. For example, operators' ability to grow their service will be contingent upon their ability to reduce clutter, enforce good parking, or ensure each vehicle deployed is being used. Dynamic caps also help to reduce city risk and increase responsiveness. Micromobility is a relatively young and fast-moving industry. The ability to flexibly adjust fleet sizes in response to changing public perceptions, demand levels, and evolving technologies will prove invaluable for cities.

Voi believes that the scaling of fleets within a dynamic cap should be contingent on operators complying with certain SLAs relating to 'parking compliance' and 'fleet usage'. Following quarterly reviews, for example, operators meeting their SLAs would be permitted to expand their fleet by a predetermined number. Figure 1 presents SLAs that Voi has used to secure successful scaling in 70+ cities across Europe, including for large fleets of more than 2,000 vehicles in major cities. The advantage of these particular SLAs is that they can be accessed through MDS and are commonly presented to cities by third-party data platforms. This means that data from different operators can be standardised and, as such, their performance fairly compared.

> " Dynamic caps are more effort, but achieve better outcomes. Capping the number of devices based on performance rather than static number is likely to produce the outcomes the City wants to see…while giving the operators the chance to focus on those outcomes…"
>
> – VIANOVA

2.0 years + 1.6 years extension

Average shared micromobility contract length in Western Europe Q2 2019 - Q1 2022; excluding pilots

FIGURE 1
Suggested SLAs for fleet scaling

		PARKING COMPLIANCE		FLEET USAGE		
GOAL	🎯	Ensure vehicles are not in 'No Parking Zones' (NPZs)	Encourage use of 'incentivised parking zonez' (IPZs)	Ensure vehicles are available for use	Ensure vehicles are not idle	Ensure each vehicle is being utilised
EXAMPLE SLA	👆	Vehicles in NPZs are removed within 6 hours	>20% of the fleet is in IPZs	Unavailable vehicles are removed within 24 hours	Vehicles unused for 48 hours are relocated within 24 hours	Average rides per vehicle should be >2 per day

1. Preparing a Shared Micromobility Tender   **2. Selecting Shared Micromobility Operators**

2.1 Operational excellence   2.2 Legal, safe and orderly parking   2.3 Environmentally sustainable service   2.4 Safety for users and non-users   2.5 Inclusive and accessible service   2.6 Social responsibility   2.7 Credible, local leadership and strong corporate financials

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2. Selecting Shared Micromobility Operators

Based on experience from 70 cities across 11 European countries and over 90 million rides, Voi has identified some pain points related to shared micromobility services that recur across cities. The tender process is an excellent opportunity for cities to force operators to commit to solving these pain points. Voi has identified the following recurring pain points:

PAIN POINT	SUGGESTED CRITERIA
Poor utilisation	2.1 Operational excellence
Disorderly parking	2.2 Legal, safe and orderly parking
Sustainability concerns	2.3 Environmentally sustainable service
Safety concerns	2.4 Safety for users and non-users
Lack of accessibility & inclusivity	2.5 Inclusive and accessible service
Lack of social responsibility	2.6 Social responsibility
Lack of organisational credibility	2.7 Credible, local leadership and strong corporate financials

Based on the above outlined pain points Voi recommends the following **7 criteria** for selection micromobility operators

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2.1 Operational excellence

The ability of operators to demonstrate operational excellence (in relation to e.g. fleet distribution, rebalancing, recharging, maintenance & repairs) is crucial for providing a service that is safe, reliable, environmentally friendly, and free from clutter. This should therefore be a central aspect that operators are assessed against in a tender. Operational excellence can be measured in a number of ways including, but not limited to: fleet utilisation; fleet tidiness; operators ability to conduct operations fully in-house (versus using 3PLs); and time taken to scale up or down operations on short notice.

2.2 Legal, safe and orderly parking

Clutter and disorderly parking can quickly become a key pain point for cities if operators are unable to manage their fleets and ensure good rider behaviour. Through a combination of high-end technological solutions, high precision GPS, efficient operations, and other targeted initiatives, operators should be able to ensure orderly, safe and legal parking. Minimum requirements should include third-party validated location accuracy, proven measures to prevent toppled vehicles (e.g. double kickstands for e-scooters), experience deploying and managing various types of parking infrastructure (e.g. racks), and proven initiatives to incentivise better user parking behaviour.

2.3 Environmentally sustainable service

Operators should always be striving to provide a sustainable service, and one that maximises the environmental advantages of micromobility. At a minimum, operators should be required to show proof of environmentally sustainable operations through a Life Cycle Assessment (LCA), as well as third-party certifications. Operators should also evidence (i) zero-emissions operations, (ii) high-quality environmental reporting, (iii) supply chain transparency, (iv) vehicle lifespan, repair, recharging and recycling plans, along with (v) an environmental action plan that describes routines, instruments and conditions for promoting the most environmentally friendly service possible. The plan should describe how the applicant works with the environment and sustainability during the permit period, with status and objectives. Finally, operators should demonstrate how they foster modal shift away from carbon-intensive modes by evidencing an ability to integrate their service with local public transportation authorities, providing high quality API documentation and a proven track record in the MaaS field.

2.4 Safety for users and non-users

Ensuring the safety of riders and other road users is a core responsibility for operators, and cities should require operators to evidence an ambitious and multi-pronged strategy to deliver a safe service. First, operators should be able to deliver robust vehicles with detailed maintenance & repair systems in place to limit hardware risk. Second, operators should outline how they equip riders with the tools to ride safely. For example, at a minimum, operators should ensure riders can utilise direction indicators, an integrated phone holder, and 360-degree visibility (i.e. lights and reflectors on all sides of the vehicle). Finally, operators should need to provide evidence of the initiatives they have implemented to successfully tackle bad behaviour. This should include their rider education strategy, a history of police collaboration, initiatives to deter intoxicated riding, and the implementation of 'slow speed' and 'no ride' zones.

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2.5 Inclusive and accessible service

Operators should demonstrate how they intend to ensure inclusivity and accessibility of services, and how they will consider (and adapt to) the needs of vulnerable road users. At a minimum, operators should be asked to detail: their social pricing schemes; balanced deployment commitments and experience in serving underserved communities; the alternative payment methods they support (e.g. for those without phones); the provision of different in-app and customer support languages; how they tailor their educational measures to consider vulnerable users, and their engagement with vulnerable user groups in the development of their service and vehicle design.

2.6 Social responsibility

Operators should be asked to set out how they meet their social obligations to employees, supply-chain partners, and the broader community. In relation to employees and supply-chain partners, a high standard of working conditions should be evidenced, along with a third-party validated Health & Safety plan. Operators should also highlight their engagement and contribution to their local community and stakeholders through, for example, dialogue with local community groups.

2.7 Credible, local leadership and strong corporate financials

Operators should demonstrate a high level of solvency, with adequate cash flows and reserves, as well as manageable debt. This is to ensure there is no disruption of service due to an operator's financial position, and that they are able to invest sufficiently in the city and maintain operational excellence. Verifying the financial security of operators, however, should not involve selecting operators based on financial contribution (e.g. "city fees", "level of investment" or "user pricing"). Experience has shown that such financial contributions trigger low quality and/or unsustainable business. For tax and liability reasons, cities and towns should require operators to have a local entity per country.

Finally, cities should deem it preferable for operators to have local representation in the market who are fluent in the local language. This is important to ensure efficient collaboration between the city and operator.

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