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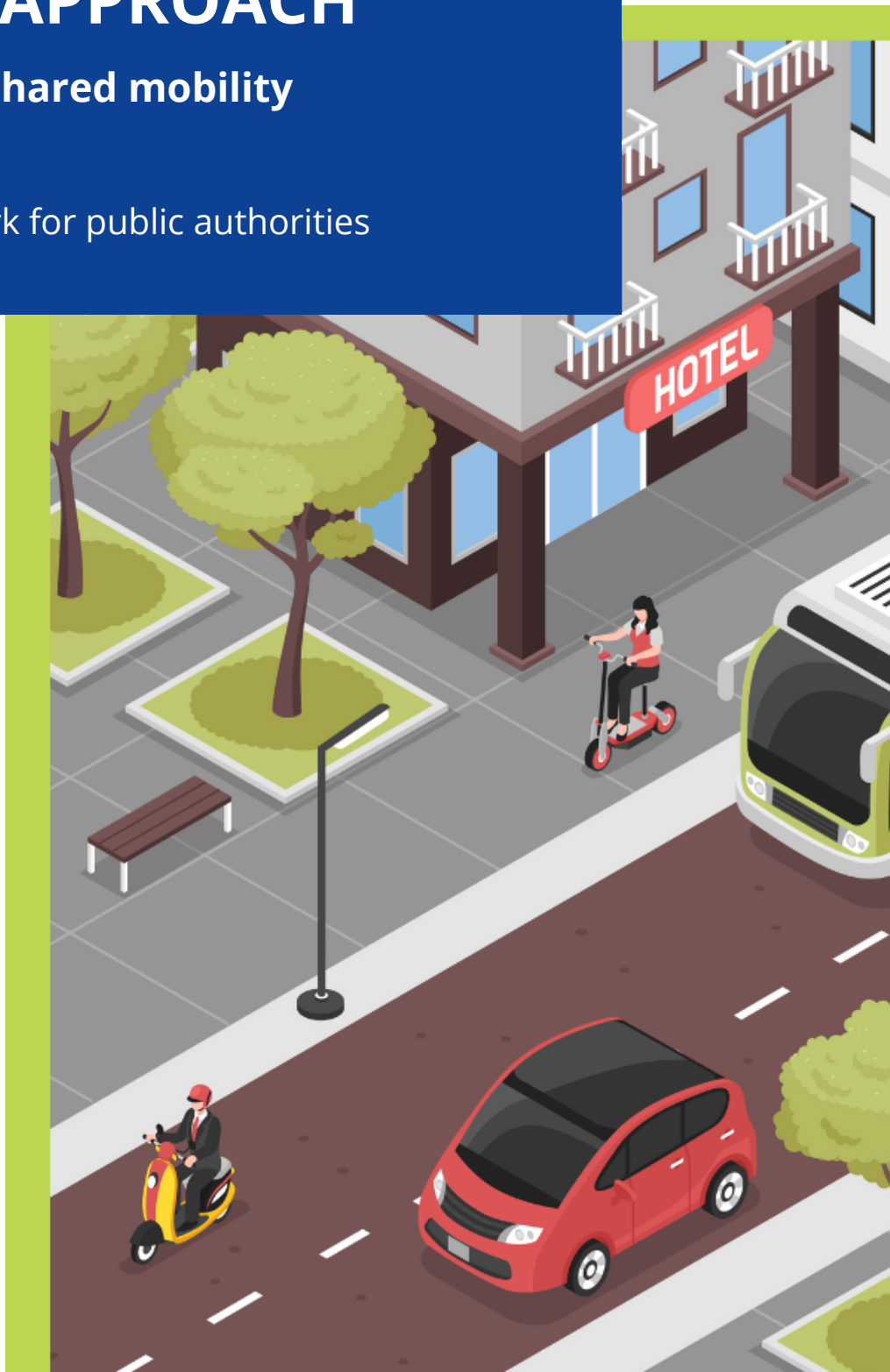
MOBI-MIX
European Regional Development Fund

HOW TO CHOOSE A GOVERNANCE APPROACH

For the deployment of shared mobility

A decision-making framework for public authorities



Document title: How to choose a governance approach for the deployment of shared mobility solutions?

Subtitle: A decision-making framework for public authorities

Authors: Sven Huysmans (The New Drive) , Roeland Koelman, Romy Fu, Giel Mertens (Bax & Company)

Design: Katie Basham (Bax & Company)

We would like to acknowledge the contribution from the following experts & mobility providers:
Nico Larco (UrbanismNext)
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Introduction

Many policymakers, city planners and mobility managers across Europe are starting to take an active policy role to either stimulate, regulate or facilitate the implementation of new shared mobility solutions in the urban environment. While some local governments take a "laissez-faire" approach to governance, other local leaders work directly with their residents, mobility providers, business owners and other stakeholders to ensure that the introduction of shared mobility solutions contribute to the achievement of their city's goals and minimises the risk of any damage to the public good.

Deciding on an appropriate governance approach that can enrich the deployment of shared mobility solutions is not an easy task. At the local level, cities have a wide range of options to design their governance approach, which usually consists of a combination of regulatory requirements, stimulative policies and self-regulating market mechanisms. It is particularly challenging for cities to choose a governance approach that takes into account the potential impact on the city's objectives while at the same time being aware of the impact on the viability of the business cases of mobility providers.

Therefore, the MOBI-MIX consortium, together with mobility providers and experts from around the world have developed a decision-making framework that supports cities to make an informed choice for a governance approach that simultaneously assesses the impact on the city goals and the business cases of mobility providers. The decision-making framework includes many examples and insights about what decisions a city can make and how to assess their impact.

Governance approaches

Regulation, stimulation, and self-regulation are three commonly recognized approaches that governments use to manage their relationship with the private sector.

Regulation

Rules and directives made and maintained by the public authority

Regulation can take many forms and nuances, ranging from low to high-intensity interventions:

- High-intensity interventions can take the form of hard rules that are set on the activities of a mobility operator, for instance through formal licenses or permit agreements.
- Low-intensity interventions are less stringent rules, where there is space for the provider to operate on their own terms, supported by some ground rules established in a memorandum of understanding.

Stimulation

Supporting the business case of mobility providers

There are many different options to stimulate the business case of mobility providers, which can be both financial and non-financial. The direct beneficiary does not always have to be the mobility provider itself, a city can also stimulate the end-user market (e.g., through promotion and training). The two main forms are:

- Financial support. A city can provide direct financial support (e.g., through subsidies) to mobility providers to operate. Cities can, for example: invest in the necessary infrastructure (e.g., charging/docking stations), include performance-based financial incentives, provide mobility budgets to end-users or subsidise the purchase of additional accessories such as helmets.
- Non-financial support. A city can also support the business case through non-financial means. This could include, for example, public promotion and effective data sharing.

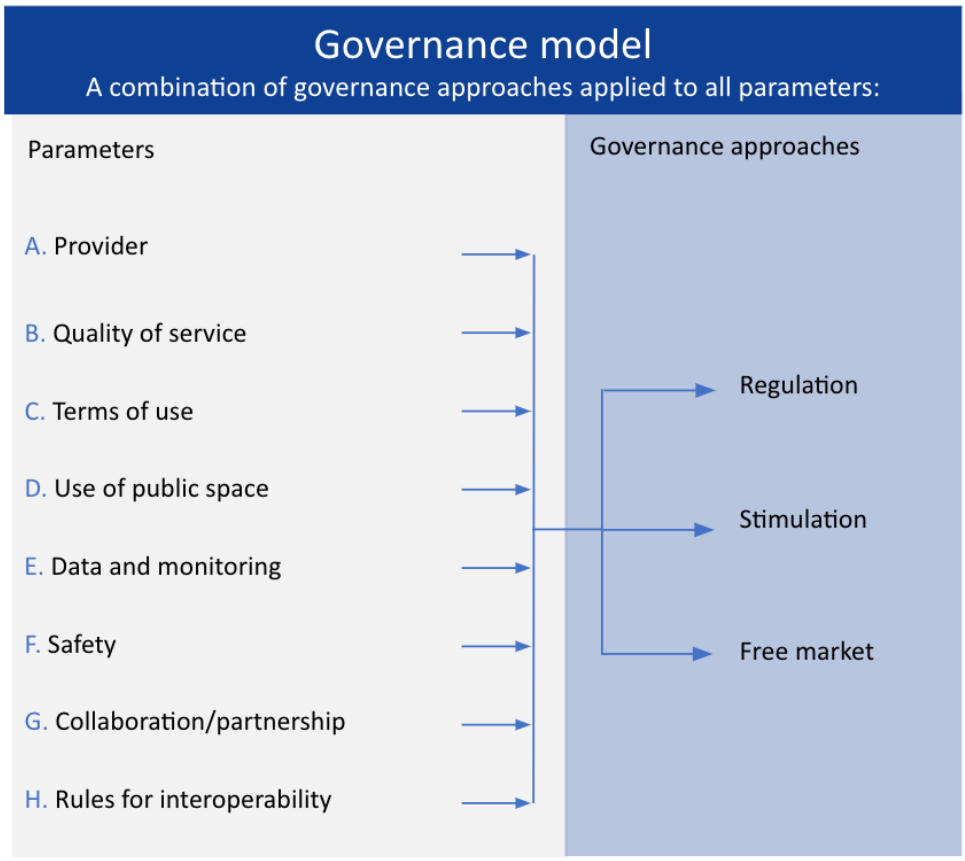
Self-regulation

Any market action that is not regulated by a government body (free-market)

Instead of guiding providers through regulation, a city may let the providers find their own solutions to their mobility challenges. This is often how cities start to work with mobility providers before they gain more insights into how the mobility solutions could contribute to the city goals or potential risks that may arise. With those insights, a city might then decide to regulate and/or stimulate the market.

Governance model

Cities and other public authorities need to select an appropriate governance model to effectively integrate shared mobility solutions. A **governance model** is a package of regulating, stimulating, and self-regulating measures. For example, a city mandates the use of motorcycle helmets (regulation approach) to promote road safety. Another example is when a city stimulates a mobility provider by creating more dedicated parking spaces. The figure below outlines the most relevant topics, which are referred to as parameters (see the annex for more examples and insights), for the deployment of shared mobility.



It is worth noting that for every **parameter**, there is not only one option to make. Cities can combine two or all three approaches for each parameter. For instance, when the mandate for the use of helmets (regulation approach) has significantly disincentivized providers to operate in more peripheral areas of the city, given the lack of profitability in those areas, the city can subsidise the cost (stimulation approach) for helmets installation – thus, combining regulation and stimulation approaches.

Impact assessment

Having identified the most relevant topics (parameters) for cities to either regulate, stimulate or let the mobility providers self-regulate, the question is how to decide which governance approach(es) to choose for each of those parameters?

When making the decisions, it is advised for cities to pinpoint and analyse the potential consequences after a certain approach is chosen. The method for cities to analyse the consequences and determine if an approach is overall favourable is the **impact assessment**, where the evaluation of the impact on important criteria will be made. In the previous example, when the city selects the appropriate approach(es) for the safety parameter, it first considers its primary objective on improving road safety and later takes into account the decreased market interest from providers to operate in peripheral areas.

Market interest, city goals, and risk mitigation are the three prevailing **assessment criteria**, on which the impact of the considered governance approaches should be examined.
A more detailed description of the criteria can be found in the next page.

Governance model will be assessed based on its impact on
3 criteria:

1 Market interest	2 City goals	3 Risk mitigation
Is there market interest and viable business case for mobility providers?	How do the mobility solutions impact the city goals?	Are there any potential risks associated with the mobility solutions?

Impact assessment: 3 criteria

1 Market interest

What are the main elements of the business case?

- **Value proposition:**

The value promised to be delivered through the product or service of a provider.
Example: Environmentally friendly (clean and quiet) vehicles that are easy to use.

- **Financial business case:**

The costs and benefits of operating.
Example: The financial business case of operating in a large, densely populated city is strong for most shared mobility providers as opposed to sub-urban areas.

- **Operating model:**

How the organisation brings value to its customers and beneficiaries, as well as how the organisation manages its internal activities such as administration and governance.
Example: The logistical activities a provider needs to undertake in order to recharge e-scooters in a city.

- **Target market:**

The group of potential customers the organisation aims to reach with its products and services.
Example: The target market for shared bicycles are young adults in urban areas.

2 City goals:

What city goals drive- and are impacted by shared mobility solutions?

Examples:

- Sustainability objectives: Mobility goals ensuring long-term environmental, social and economic stability and improvement.
- Safety objectives: Less traffic related incidents.
- Accessibility: Mobility goals to increase mobility options for all segments of the population, whilst also improving the accessibility of less connected parts of the city or municipality.

3 Need for risk mitigation:

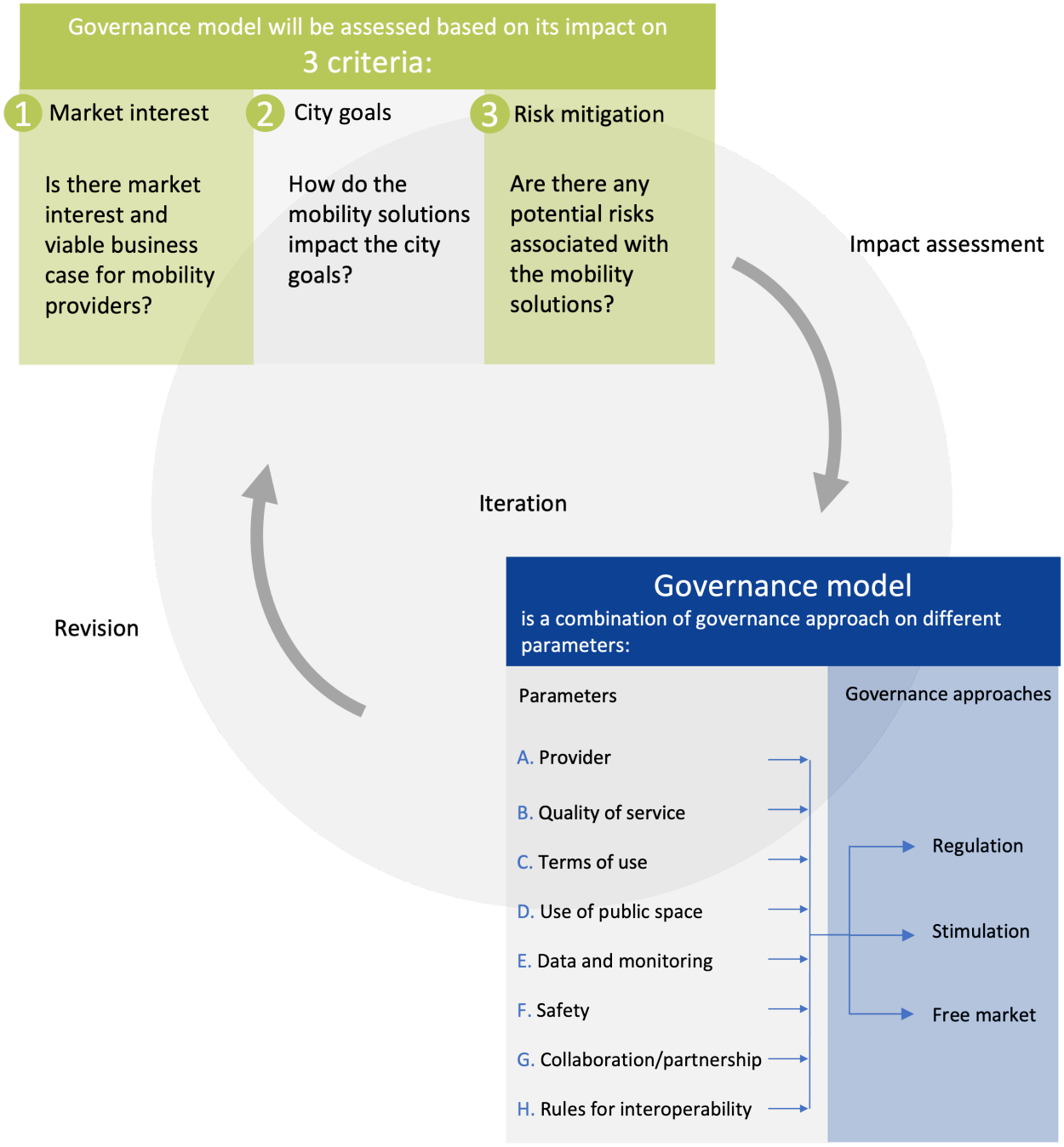
Are there reasons to protect the public interest from possible negative externalities of shared mobility solutions?

Examples:

- Safety: Risk of accidents due to speed differences with new, differtent types of transport modes.
- Public space: risk of over occupancy of road side areas due to increased parking of free-floating shared bikes.

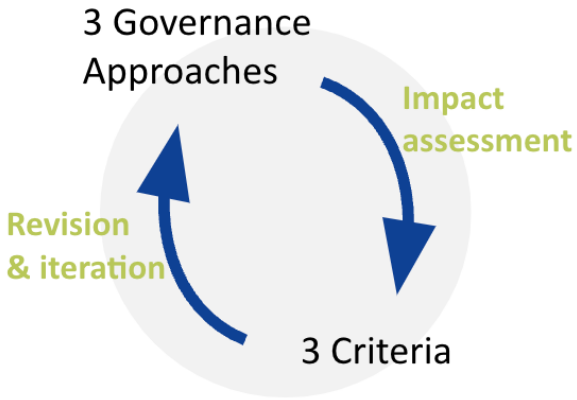
The decision-making framework

The decision-making framework consists of an iterative process where for each (new) governance approach the impact is analysed on the city goals, the business case of providers and how potential risks are mitigated. Revision and iterations are only carried out if the impact on any of these three criteria is regarded as insufficient or sub-optimal.



Case study: E-mopeds in a Dutch city

To better illustrate the decision-making process, the following case study shows how a medium-sized city in the Netherlands decides to impose regulatory measures to deploy shared e-mopeds.



Graph: The decision-making framework (simplified)

(1) Start:
A moped-sharing provider has recently started to deploy its vehicles in the city, as there are no (legal) barriers that would prevent this provider from operating in the city. In order for a city to decide what governance model to use, it analyses the market interest, city goals and risk mitigation:

Market interest:
The first results show that the e-mopeds seem to have been well used by a wide group of users and every moped is used several times a day. Bilateral discussions between the provider and the city also suggest that there is a viable business plan to operate in the city.

City goals:
The E-mopeds have been well received in the city and contribute actively to the city goals:

- Transition to active and green mobility in the city centre.
- Better use of available (public) space
- Contribution to inclusive mobility

Risk mitigation:
Although the free-floating, e-scooter system works well in large parts of the city, in a number of (touristic) hotspots, it is too busy and creates problems with parked vehicles. The city believes additional measures are needed to mitigate these inconveniences and to anticipate the arrival of more e-mopeds in the future.

(2) First iteration
With increased pressure on public space, the city decides to introduce a permit system. This permit allows providers to operate in the public space under certain strict parking conditions.

Market interest:
Implementing a permit scheme does limit the provider(s) in their service flexibility as the end-users might not be able to use the e-mopeds to certain hotspots as there are not enough parking spaces. However, after a market consultation by the city, it is clear that the provider(s) still see a viable business case to operate in the city.

City goals:
With the permit system in place, it, however, cannot be guaranteed that the inclusivity objective is fully met as the providers are not obliged to operate in all districts of the city, therefore the city might consider other governance approaches in the future to improve that aspect.

Risk mitigation:
It is to be expected that there will be less pressure on certain hotspots of public space, and therefore reducing the risk of inconveniences that come from it.

Annex: Parameters I

A governance approach or a combination of more approaches should be selected for the following parameters. Below are the description and examples for each of the parameters.

A: Provider

This parameter covers the organisational nature of the provider as well as the rules for entering a market.

Examples:

Regulation: cities can impose a permit system to put a cap on the number of providers and vehicles, for example a cap of 200 scooters per provider with maximum 3 providers. (Note: 2-3 would be the ideal number for mainstream shared mobility providers as it is important to provide different options to the end-users, whilst at the same time have enough market share for a single provider to achieve a sustainable business model. For cities with less than 200,000 inhabitants, 1 permit for 1 provider is seen as feasible, from 250,000 inhabitants multiple providers per vehicle type are favoured.)

Self-regulation: The city imposes no competitive application procedure to enter the market since there is no cap in place on the number of active providers in the city.

Stimulation: Cities can ease regulatory processes, facilitate market research, and provide financial incentives when there is little market interest from mobility providers.

B: Quality of service and product

This parameter covers the criteria of a city regarding the quality of the service or the physical product of the provider.

Examples:

Regulation: A city can impose a rule requiring that a defect vehicle is replaced or repaired within 24 hours. This could have a positive effect on the financial business case of a provider offering particular high quality vehicles compared providers with vehicles of less quality.

Self-regulation: A city can leave it up to the providers themselves to deal with the installation of docking stations and other infrastructure such as slow/fast-charging facilities to assure service reliability for users and the rate of electrified vehicles. For providers, station-based would likely only to be preferred if the purchaser, such as city, PTO, private asset owner, purchases the docking stations and charging infrastructure.

Stimulation: A city can provide support such as surveillance around docking stations to minimise vandalism of the vehicles.

C: Terms of use

This parameter covers the operational activities of a provider.

Examples:

Regulation: A city can impose requirements for providers to redistribute their vehicles. This could have negative effects on the operational model and financial business case. Limits on the number of vehicles per provider can negatively impact various aspects of the business case, as a certain number of vehicles per area is needed to offer customers a dependable service as well as for the provider to earn revenue. As a rule of thumb for mopeds, ideally a density of more than 15 units per kilometer can generate sufficient demand, thus making the business case for providers. For e-scooters, the rule of thumb would be to have 1 e-scooter per 300 inhabitants, given normal density rate and demographic factors (e.g., existence of students and tourists).

Self-regulation: The provider can determine its own price for the use of its service and/or where to offer their services.

Stimulation: The city may provide a budget to certain target groups to make use of the products and services of the provider.

Annex: Parameters II

D: Use of public space

This parameter covers how providers make use of the public space.

Examples:

Regulation: The city can require the provider to either provide or make use of docking stations rather than a free-floating model.

Self-regulation: A city can decide to let providers operate and park as they wish. This could positively affect the value proposition of a provider as their service becomes available in a greater area.

Stimulation: A city can stimulate the business case of a provider by granting access to valuable parking spaces in the city (e.g., near transport hubs such as train stations), meaning a provider can reach its target market more effectively.

E: Data and monitoring

This parameter covers how the data is collected and handled by the provider, as well as how the activities of the provider are monitored by the city.

Examples:

Regulation: A city can require a provider to report monthly on certain KPIs to the city such as usage, incidents, type of users, etc. A city could decide to withdraw the operating license from providers if the data are not provided.

Self-regulation: A city does not interfere with the ownership and requirements of the collected data by the mobility provider.

Stimulation: A city can promote easier data transferring/interpretation by asking providers to report data on a unified format (e.g., MDS 2.0) and only ask for the essential data to avoid over reporting and data redundancy.

F: Safety

This parameter covers the traffic and vehicle safety criteria of a city.

Examples:

Regulation: A city can impose requirements on the quality and storage places of vehicles to mitigate safety risks such as fires.

Self-regulation: A city may leave it up to the provider whether they allow underage users on their vehicles.

Stimulation: A city may subsidise helmets for new shared-mobility users. This has the potential to support the operating model of providers, as providers are able to easily meet safety requirements regarding helmets. Also note that simply asking for mandatory helmets may have a negative impact on the business case since most people don't want to share helmets which brings additional costs.

A city can also facilitate training events, to incentivise users (especially non-confident users) to come to online/in-person training, and conduct surveys to constantly monitor demographic information and the effectiveness of such trainings.

Annex: Parameters III

G: Collaboration/partnerships

This parameter covers the way in which the provider collaborates with the city as well as other providers.

Examples:

Regulation: A city can require a provider to become interoperable by joining a local/public MaaS platform. This could negatively affect the financial business model as providers earn more revenue when services are used through their own platform.

Self-regulation: A city does not initiate or limit the partnerships with mobility providers. It's up to the providers to decide and propose the level of partnership.

Stimulation: The city and provider can collaboratively process complaints, to allow for flexible problem solving. This may strengthen the financial business case for providers as the risk that a city will ban its services is reduced.

A city can make the provider's solution part of the public transport service/concession by using the same public transport chipcard.

Furthermore, a city can design together with providers their offering (e.g., where to implement, types of vehicles) based on the city's knowledge of characteristics of different locations/territories

H: Rules for interoperability

This parameter covers the requirements and rules for the interoperability of the mobility services of the providers.

Examples:

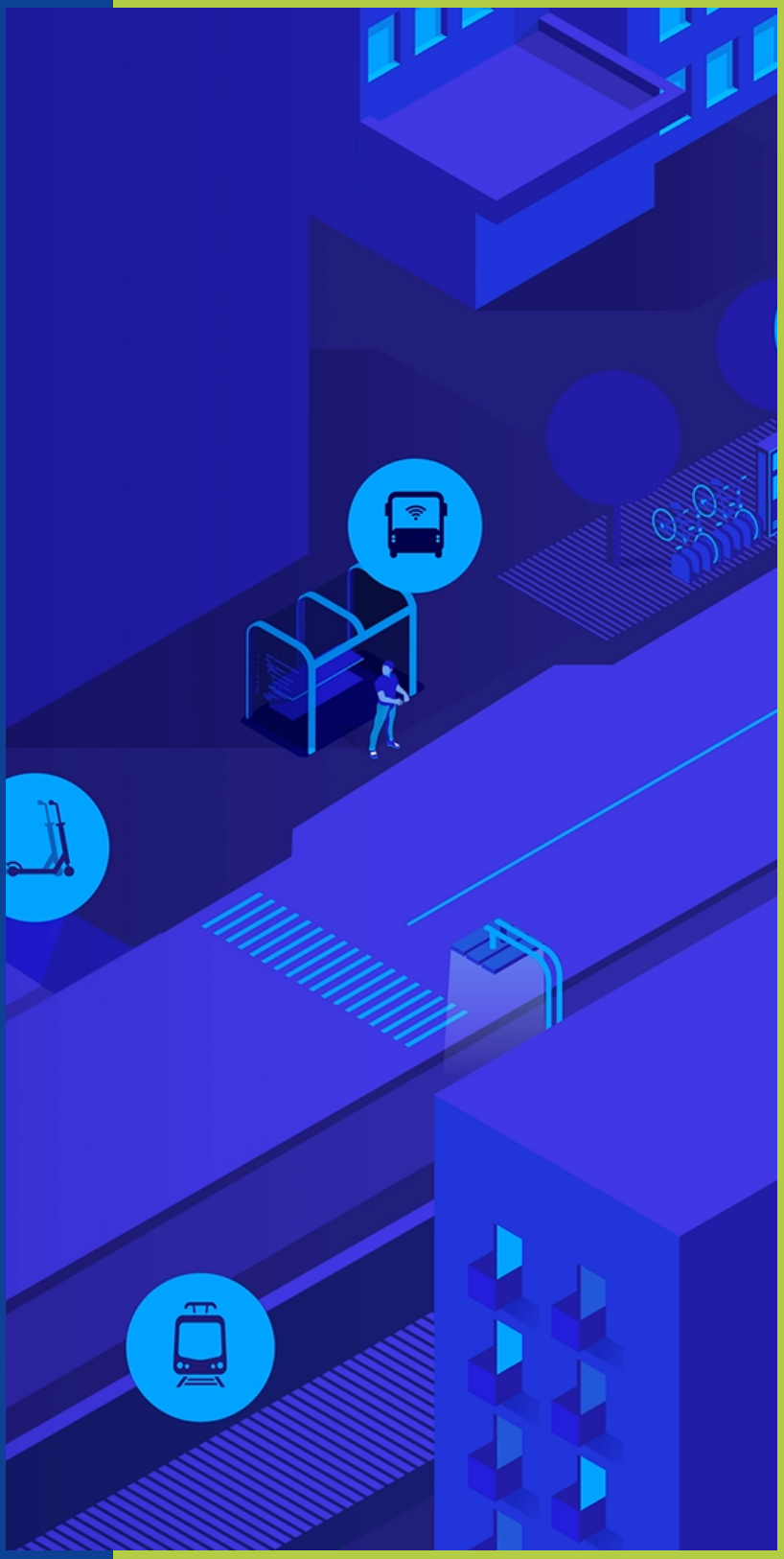
Regulation: A city requires that the API of a mobility provider must be available to the public on the open internet without requiring authentication.

Self-regulation: A city removes market access barriers (e.g., limits on licenses for new mobility services or barriers preventing the provision of integrated services), operational requirements (e.g., varying regulations in different boroughs in one city and between cities, or regulations that prevent the use of smaller, less polluting cars), and pricing regulation (e.g., hindering dynamic pricing) that are not justified by public interest.

Stimulation: The city and PTO can facilitate the access to open APIs that can enable and/or improve mobility services. This will allow new mobility services to integrate with existing public/private mobility services to allow and improve multimodal trip planning and effective operation.

About MOBI-MIX

The MOBI-MIX cities are working to decarbonise road transport by facilitating the private sector to more effectively implement Shared Mobility solutions (e.g., e-bikes, e-scooters, shared mopeds, docked bikes, shared cars) and MaaS solutions (the integration of various forms of transport services into a single mobility service accessible on demand). The aim is to reduce 365.000 kg of CO2-emissions by avoiding/replacing 2.6M fossil-fueled car-kilometres in the urban environments of 5 cities/regions in the 2 Seas area over the course of the project.



More from MOBI-MIX

Before any governance approach can be chosen, a city first needs to invest in the relationship with the mobility providers which is explained in the previously developed MOBI-MIX smart mobility guide. Once an appropriate governance approach has been chosen, a form of agreement typically comes in place in varying forms of intensity and formalisation: such as permit/license systems or a memorandum of understanding.

Contact for more information:

Arjan Oranje (City of Rotterdam)
aj.oranje@rotterdam.nl

Giel Mertens (Bax & Company)
g.mertens@baxcompany.com

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