

Reforming paratransit

Catalogue of practical measures



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Why a paratransit toolkit?

This document is aimed at decision-makers, transit planners, consultants and policy-makers responsible for integration in the urban transport sector, working to promote sustainable, inclusive, efficient, and high-quality mobility systems. Its aim is to help stakeholders consider paratransit in these systems in a coherent and integrated manner.

Paratransit is an essential mode of transport – and often the only public transport available – in many towns and cities in the Global South. Better integrating paratransit into urban mobility systems is therefore a key challenge if we are to achieve fairer and more sustainable urban mobility for everyone.

This integration means meeting three key challenges for the sector, which can sometimes be contradictory: optimising the efficiency and quality of the service provided; improving working conditions for operators; and controlling negative externalities, particularly in terms of environmental impact and road safety. To achieve these objectives, we must first identify the relevant levers that will enable decision-makers and transit planners to reform paratransit services in an acceptable manner to all stakeholders, in order to build a sustainable and inclusive mobility system.

This publication therefore aims to provide decision-makers and transit planners with practical tools for planning and implementing paratransit reforms. The MobiliseYourCity toolkit consists of four documents:

- Tool I – Understanding paratransit – Global overview and local challenges
- Tool II – Conducting a paratransit diagnosis – A practical guide with 6 key questions
- **Tool III – Reforming paratransit – Catalogue of practical measures**
- Tool IV – Examples of paratransit reform – Case studies

The aim of this document (Tool III in the toolkit) is to provide decision-makers and transit planners with a catalogue of practical measures to improve paratransit performance. 55 measures are presented in this document, grouped into four main phases:

- Preparing for reforms,
- Reforming the paratransit sector,
- Supporting reforms,
- Ensuring implementation of reforms



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Presenting the catalogue of measures

Based on a detailed paratransit diagnosis (see **Tool II – Conducting a paratransit diagnosis – A practical guide with 6 key questions**), and once the local authorities' objectives have been defined, we can identify the levers that can be used to integrate paratransit into a multimodal public mobility service. We need to identify these levers, accounting for acceptability conditions and the needs of city residents.

The catalogue includes a range of measures useful for integrating paratransit. This includes preparing for reform, developing the content of the reform, supporting the reform process, and implementing reforms. Each page gives the necessary prerequisites, the resources to be mobilised, the points to watch out for, and the timeframe for implementation, as well as assessment criteria. Of course, these measures can be adapted to suit the context, and not all necessarily need to be applied. However, the categories of measures are presented in a progressive manner. Some steps are essential, while others can be implemented as part of a broader and ambitious reform project.

In this document, each page presents a measure that can be implemented. These 55 actions are grouped into 17 different categories, themselves grouped into four main phases:

- Preparing for reforms,
- Reforming the paratransit sector,
- Supporting reforms,
- Implementing reforms.

In general, these measures can be implemented as part of **an agreement** between the competent public authority and paratransit operators. This agreement should define the role and obligations of each party. It may also include benefits and obligations for operators included in the agreement. A wide range of benefits and obligations can be incorporated into the agreement, which can take various forms, as described in the pages below (regulate, certify, authorise, contractualise). **Introducing such an agreement** is key to any reform of the paratransit sector.

Examples of benefits provided to operators	Examples of obligations imposed on operators
<p>Exclusivity rights:</p> <ul style="list-style-type: none"> • Operating concessions (zones, routes) • Exclusive access to bus stations, depots, and other facilities • Feeder services for BRT lines <p>Financial assistance</p> <ul style="list-style-type: none"> • Direct subsidies • Easier access to finance/loans • Tax reductions, licence fees, etc. <p>Other support:</p> <ul style="list-style-type: none"> • Traveller information, mapping • Operations support system, vehicle tracking • Ticketing system • Support for fleet renewal • Development of terminals, stops, reserved lanes, depots, etc. • Training and other technical assistance. 	<ul style="list-style-type: none"> • Obligations of operator groups • Minimum vehicle standards (capacity, age, emission standards, etc.) • Minimum service standards: frequency, range, routes, stops, etc. • Providing passenger information • Implementing a ticketing system • Rates set by public authorities • Minimum employment standards for the sector: wages, wage standards, social insurance, working conditions, etc.

Table 1. Examples of benefits provided and obligations imposed on operators.

The list of measures presented in this tool is not exhaustive, and implementing paratransit reform in no way implies that all these actions will be implemented. Instead, these measures can be **selected “à la carte”** depending on the needs identified in the diagnosis, the objectives set out in a Sustainable Urban Mobility Plan (SUMP) if one exists, and the resources available to the authority responsible for reforming paratransit. The measures can therefore be used in an adaptable and evolving manner, considering paratransit integration over the long term.

Use Sustainable Urban Mobility Plans (SUMPs) to initiate local paratransit reform

For cities, the development of a Sustainable Urban Mobility Plan (SUMP) is a unique opportunity to create an inventory of residents’ mobility practices, as well as an inventory of available mobility services (both private and public) throughout the area. Local residents, and therefore city agencies, are familiar with these paratransit services. However, paratransit services are often unrecognised and poorly documented. They remain “informal”.

MobiliseYourCity’s Sustainable Urban Mobility Plan methodology¹ gives you the opportunity to (1) highlight and document paratransit services and (2) understand the relationship between operators (i.e., drivers, contractors, companies, etc.) and public authorities. By introducing the need to study paratransit into the terms of reference of the Sustainable Urban Mobility Plan and by considering paratransit as mobility services to be coordinated

¹ You can consult the [MobiliseYourCity Guide to Developing Sustainable Urban Mobility Plans](#)

with conventional public transport, a Sustainable Urban Mobility Plan can pave the way for the paratransit integration and reform.

There are four phases in the Sustainable Urban Mobility Plan process: preparation and analysis, strategy development, planning measures, and implementation and monitoring. Thanks to this process, we can pay particular attention to paratransit in preparing for sector reform and the gradual integration of these services into the sphere of conventional public transport. Based on the example of the Sustainable Urban Mobility Plan in Medan, Indonesia, the graph below provides a practical example of how paratransit is studied and integrated into this approach to mobility planning.

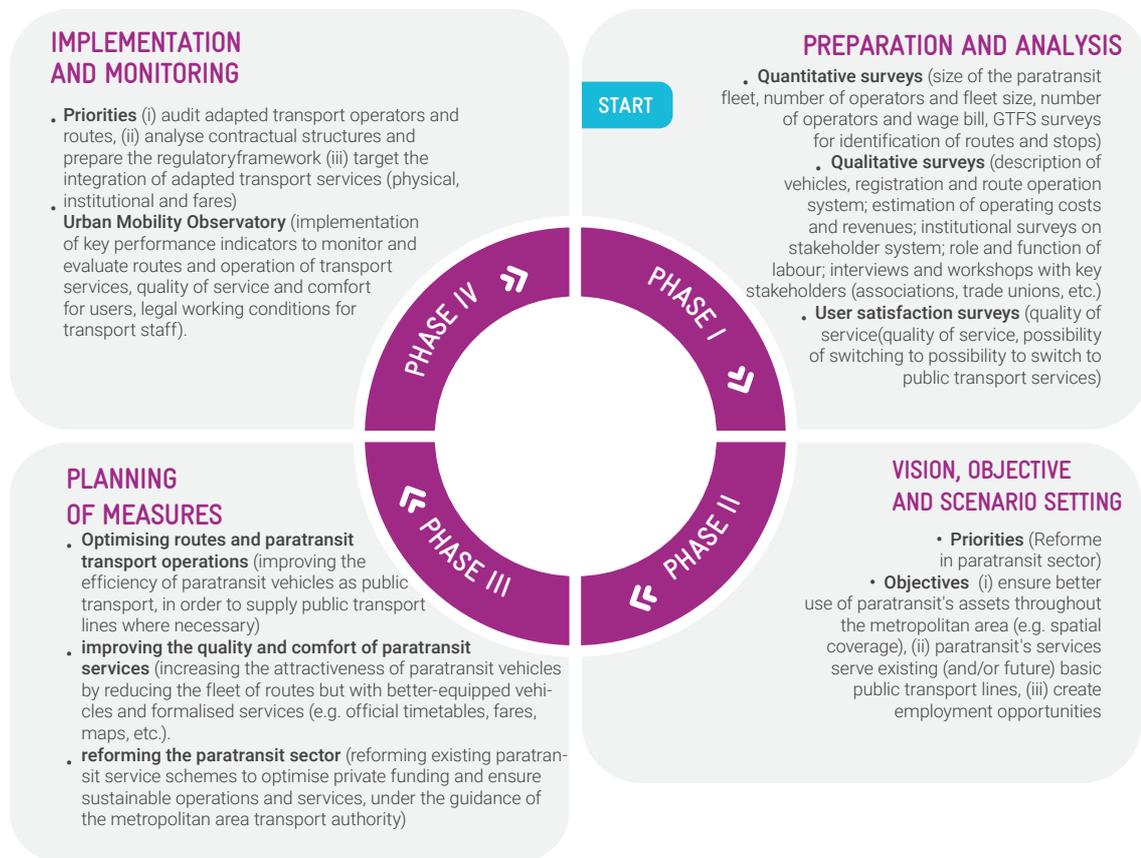


Figure 1. Integrating paratransit into the SUMP process

1. Preparation and analysis

Given the diverse range of urban environments, each shaped by its socio-economic and political context, each entity responsible for managing sustainable mobility planning must assess its own situation. That means it's essential to understand the existing realities of paratransit by conducting a detailed diagnosis.

This must be adapted to the two main types of service in the paratransit sector: on-demand services and fixed-route services. These services have different characteristics and meet different needs, even if there are interMediumte services between the two.

2. Strategy development

Broadly speaking, and in a manner adaptable to all situations, we can summarise the objectives of public policy with respect to paratransit into four main groups:

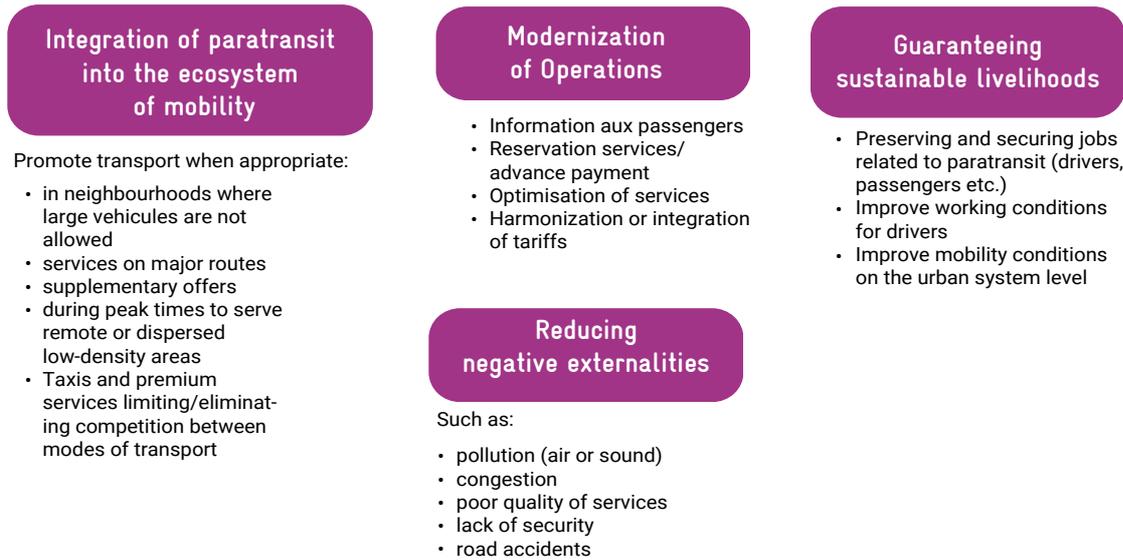


Figure 2. Public policy objectives for paratransit

Public authorities are responsible for defining these objectives according to the local situation and ranking them in order of importance. The diagnosis will allow you to measure the gap between the current situation and the defined objectives, helping guide the development of an action plan.

3. Planning measures

The third phase aims to identify the relevant actions to achieve the objectives defined above. The implementation is divided into the national, local, and project levels. Measures can be planned at various levels, depending on the capacities and prerogatives of the public authorities. Measures refer to the framework, rules, initiatives, and actions implemented by the public authorities to create the levers needed to integrate paratransit while improving working conditions and the quality of services. These measures can also be described as 'tools', i.e., technical mechanisms public authorities can use to implement a defined policy.

Consequently, these measures should be implemented as part of a coherent, coordinated vision to ensure that the objectives set are achieved. For each objective, different sets of measures (or tools) can be used, depending on the local objectives and the resources of the level of government in question. These measures should be prioritised and selected with care.

Overview of the catalogue of measures

Preparing for reforms

List – Ongoing monitoring of paratransit services

- 1-1 Set up a paratransit dashboard/monitoring body
- 1-2 Conduct recurring surveys
- 1-3 Request reports from operators
- 1-4 Map paratransit services
- 1-5 Identify contacts

Consulting – Setting up forums for dialogue and better understanding between the parties

- 2-1 Set up a paratransit steering committee
- 2-2 Set up a register of complaints and suggestions
- 2-3 Include representatives of the paratransit sector in consultation and steering bodies for transport projects and Sustainable Urban Mobility Plans

Plan – Defining the type of service and the paratransit's role within an intermodal public transport ecosystem

- 3-1 Define paratransit's role in the public transport system
- 3-2 Draw up specifications for the quality of paratransit services
- 3-3 Define the authorities responsible for regulating the sector
- 3-4 Transform certain paratransit services into on-demand transport and introduce advance booking

Reforming the paratransit sector

Structure – Promoting the creation of representative structures within the paratransit sector

- 4-1 Facilitate visual identification of operators
- 4-2 Promote and support the creation of professional organisations
- 4-3 Facilitate coordination between professional organisations
- 4-4 Ensure that professional organisations function democratically

Regulate – Developing the legislation and regulations defining legal and illegal services

- 5-1 Recognise and define paratransit's role in the legal, regulatory, and political frameworks.
- 5-2 Define the type of service provided by paratransit and its integration with other modes of transport
- 5-3 Define access conditions for paratransit operators
- 5-4 Define the rules governing paratransit operations
- 5-5 Support illegal operators in adapting to a formalised system
- 5-6 Define the optimum number of permits

Certify – Defining quality metrics and giving preference to operators who satisfy these metrics

- 6-1 Define the conditions for certification of paratransit operators and services
- 6-2 Define the benefits granted to operators with certification
- 6-3 Define the procedures for monitoring and renewing operators' certification

Authorise – Monitoring paratransit operators and ensuring their compliance with certain conditions

- 7-1 Define the permit conditions for paratransit operators and services
- 7-2 Define the procedures for monitoring and renewing permits

Contract – Integrating legal paratransit into the mobility ecosystem via agreements with the organising authority and/or an organised carrier

- 8-1 Determine the most appropriate economic and legal model for contracting with paratransit operators
- 8-2 Set up contract monitoring and assistance mechanisms

Set fares – Introducing a coherent, multimodal pricing system

- 9-1 Work with representative organisations to establish coherent pricing and ticketing systems
- 9-2 Define an integrated, multimodal pricing and ticketing system
- 9-3 Set up an interoperable ticketing system

Integrate - Integrating paratransit into the mobility ecosystem

- 10-1 Integrate the paratransit and public transport systems

Supporting reforms

Professionalise – Implementing activities to encourage operators to improve their skills

- 11-1 Identify training structures
- 11-2 Set up appropriate training programmes
- 11-3 Promote the introduction of shared services
- 11-4 Help paratransit operators who cannot adapt to the new environment to retrain

Inform – Developing information on paratransit services as part of a multimodal information system

- 12-1 Implement communications campaigns
- 12-2 Implement information tools (website, apps)
- 12-3 Define and monitor operators' obligations to provide passenger information
- 12-4 Develop appropriate signage

Implement – Developing paratransit stations, hubs, and other facilities to improve visibility and quality of service

- 13-1 Formalise and demarcate stations, hubs, and other facilities, as well as dedicated lanes, if necessary
- 13-2 Draw up specific regulations for paratransit facilities
- 13-3 Equip paratransit facilities

Support – Provide the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

- 14-1 Implement a policy to support investment in rolling stock renewal
- 14-2 Use tax incentives to promote paratransit reform
- 14-3 Support or facilitate the acquisition of social insurance
- 14-4 Support local industry

Ensuring the implementation of reforms

Control – Implement inspections and penalties against illegal transport operations

- 15-1 Define the prerogatives of law enforcement agencies and identify the authorities responsible for enforcement
- 15-2 Establish regular inspection procedures
- 15-3 Put in place technical and human resources for inspections by the organising authority
- 15-4 Set up an action protocol with law enforcement authorities

Finance – Ensure that the authorities responsible for regulating the paratransit sector can function

- 16-1 Find funding mechanisms for the Organising Authority
- 16-2 Verify that funding is sustainable

Test - Test interventions at the project level before implementing them more generally

- 17-1 Facilitate trials and experimentation through pilot projects and research projects

List of measures

Preparing for reforms

List – Make sure you have an up-to-date understanding of paratransit services					
	Actions	Importance	Cost	Page number	✓
1-1	Set up a paratransit dashboard/monitoring body	High	Low	15	
1-2	Conduct recurring surveys	High	Variable	16	
1-3	Request reports from operators	Medium	Low	17	
1-4	Map paratransit services	Medium	Medium	18	
1-5	Identify contacts	High	Low	19	
Consult – Set up forums for dialogue and better understanding between parties					
	Actions	Importance	Cost	Page number	✓
2-1	Set up a paratransit steering committee	High	Low	20	
2-2	Set up a register of complaints and suggestions	Medium	Low	22	
2-3	Include representatives of the paratransit sector in consultation and steering bodies for transport projects and Sustainable Urban Mobility Plans	Variable	Low	23	
Plan – Define the type of service and paratransit's role within an intermodal public transport ecosystem					
	Actions	Importance	Cost	Page number	✓
3-1	Define paratransit's role in the public transport ecosystem	High	Variable	24	
3-2	Draw up specifications for the quality of paratransit services	High	Variable	26	
3-3	Define the authorities responsible for regulating the sector	High	/	27	
3-4	Transform certain paratransit services into on-demand transport and introduce advance booking	Medium	Variable	29	

LIST
Ongoing monitoring of paratransit services

IMPORTANCE



COST



Set up a paratransit dashboard or monitoring body

Set up a paratransit monitoring body within the authorities responsible for urban transport planning and regulation.

The collected data concern the offer (fleet status, number of vehicles), the economic model (fares, fuel costs) and internal structures (number of operators, operating methods). For a more complete list of the indicators that can be used, see Tool II in the MobiliseYourCity paratransit toolkit: *“Conducting a paratransit diagnosis – A practical guide with 6 key questions”*.

Based on this data, set up a regularly updated dashboard or a monitoring body to provide a dynamic understanding of the state of paratransit services. This dashboard – essentially a paratransit database for the given area – will need to be supplemented and updated on a regular basis. Various sources are used (and enhanced):

- Collection of “internal” data (number of licences and permits issued, vehicle registrations, data from vehicle inspections)
- Regular data collection through surveys (see measure 1.2.)

Types of paratransit affected	All varieties, legal and illegal.
Prerequisites	Identification of a data storage location and hardware.
Stakeholders	Supervisory authorities, local authorities, professional representatives, etc., depending on the context (law enforcement, user representatives, shopkeepers based at paratransit facilities, etc.).
Level of investment	Financial investment: limited to the creation and maintenance of spreadsheets. Human investment: a team of experts and technicians. It is important to regularly update the information in the job descriptions (at least once a year).
Level of importance	High. An essential prerequisite for understanding the sector and assessing the scope and impact of reform.
What to watch out for	To be useful, the dashboard needs to be kept up to date. Ensure that the dashboard is maintained and that data is traceable (storage). Incorporate the data collected into planning documents.
Timing	Ongoing. Can be implemented quickly using information already available to the various regulatory authorities.
Assessment criteria	Number of indicators in the database. Frequency of information updates. Use of the data by the various departments and institutions responsible for mobility planning and regulation.



Example for reference

The Urban Transport Observatory in Ouagadougou, Burkina Faso monitors all forms of mobility (not just paratransit).

LIST

Ongoing monitoring of paratransit services

IMPORTANCE



COST



Conduct recurring surveys

Surveys and fieldwork are among the sources used to provide up-to-date monitoring of paratransit supply and demand. These are all the more important given that, when formal data are, surveys are one of the main sources of information. These surveys are based on:

- Counts and surveys at paratransit facilities (number and frequency of vehicles, space per kilometre offered, number of jobs, passenger volume per route, main origins and destinations, market share of paratransit)
- Counts along routes and surveys of passengers boarding and alighting at stops
- Mapping of paratransit facilities and their operation
- GPS trip logging
- Surveys of operators, drivers (working conditions and methods), and passengers (level of satisfaction)
- More general surveys of city residents to understand the number of trips not taken (unmet demand).

Types of paratransit affected	All varieties, legal and illegal. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Surveys should be used to define indicators. Identify at an early stage the information that needs to be collected, how it will be collected (so that it can be repeated), and how it will be processed.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation.
Level of investment	Financial effort: variable, related to formatting the collected data using conventional IT tools. Possible use of GPS and IT tools for data conversion and mapping. Human investment: team of interviewers to collect data on a regular basis (at least every year).
Level of importance	High. Knowledge of the sector is an essential prerequisite for estimating the scope and impact of reforms.
What to watch out for	The data collection methodology must remain stable and be subject to a thorough review if the teams of interviewers change. Incorporate the data collected into planning documents and dashboards (action 1-1).
Timing	Preferably annual.
Assessment criteria	Number of indicators constructed from the information and data collected. Quality of the interview grid, existence of longitudinal data.



Example for reference

Surveys carried out in Antananarivo as part of the Urban Mobility Improvement Programme project. GPS tracking and mapping: Accra (Accra Mobile), Nairobi (Digital matatus), Cairo (TransportforCairo), Managua (Mapanica), Dakar for Destinations Origins.

LIST

Ongoing monitoring of paratransit services

IMPORTANCE



COST



Request reports from operators

Reporting mechanisms allow operators to regularly provide information to the authorities responsible for paratransit planning and management. Their objectives are to:

- Systematise data collection by operators; for example, vehicle occupancy rates, the number of trips made each day, routes covered, fares charged, running costs (fuel, daily maintenance, crew, etc.), revenue generated, etc.
- Have a good knowledge of the paratransit performance, fare revenues, etc.
- Improve operators' knowledge of how to manage and operate services by visualising data and information.

Based on these mechanisms, we can construct operators' operating accounts, evaluate service frequencies, etc. This allows us to better calibrate measures to integrate paratransit and optimise operators' activity.

Types of paratransit affected	All legal varieties, although more appropriate for regular services.
Prerequisites	The obligation to report certain data should be formalised (authorisation, approval, contract). It is preferable that operators be supervised and assisted by a professional organisation, which will ensure that data are provided in the correct format.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable.
Level of investment	Financial effort: limited, related to examination of the documents and data supplied, formatting, and archiving. Human investment: one or more people to draw up the template for the reporting file, distribute it, explain it, and follow up with operators.
Level of importance	Moderate. Information with high added value, but which the prerequisites sometimes make difficult to obtain, and the reliability of the information must be verified.
What to watch out for	The information collected via reporting mechanisms should be cross-checked with the information obtained from field surveys. Ensure that only data that operators can collect without investing significant additional effort are required.
Timing	Ongoing. The frequency of collection should not be too high.
Assessment criteria	Frequency of reporting and consistency of the information provided.



Example for reference

Operating accounts in Madagascar as part of the Urban Mobility Improvement Programme. Identification of motorbike taxi drivers in Douala, Cameroon, via the unions that supply uniforms and helmets to paratransit operators.

LIST

Ongoing monitoring of paratransit services

IMPORTANCE



COST



Map paratransit services

Using survey or GPS tracking data, map the paratransit network and the main paratransit facilities and stations.

The mapping of regular services can serve two purposes:

- on the one hand, it represents a diagnostic and management tool for the Organising Authority. The maps produced during the diagnosis should be kept up to date with the information provided by paratransit operators.
- on the other hand, although the graphic route maps for passenger use is rare in the Global South, it may be worth experimenting with graphic representations of transport services, which could be displayed in various locations and on various Medium. Preference should be given to schematic, symbolic displays that allow users to easily determine which vehicle serves their destination.

Types of paratransit affected	Regular services.
Prerequisites	Diagnosis of paratransit services.
Stakeholders	Supervisory authorities
Level of investment	Financial investment: medium, the equipment required is not very expensive (computer equipment, GPS), but you also need to be able to store and back up the data collected. Human resources: a team of experienced IT technicians to build and maintain the database. This can then be fed with information from users. It is also possible to utilise the local Open Street Map community.
Level of importance	Auxiliary. A mapping tool is essential for highly formalised networks, but may be considered optional in less regulated systems.
What to watch out for	Need for an updated system.
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Depending on the chosen Medium, for example: number of network map leaflets distributed.



Example for reference

Accra, Nairobi (with maps similar to that of London), South African cities, Maputo (map of chapas displayed near bus shelters).

LIST

Ongoing monitoring of paratransit services

IMPORTANCE



COST



Identify contacts

Regularly follow up with the appropriate contacts among operators.

Depending on how they are organised (grouped by zone, line, terminal, union, etc.), identify the appropriate contacts, inform them that they are considered representatives, and start a dialogue with them (see measure 2-1)

Types of paratransit affected	All varieties, legal and illegal. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Diagnosis of the paratransit sector and the internal relationships between players.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable
Level of investment	Financial investment: limited. Human investment: identifying contacts responsible for discussions and negotiations with the representatives identified in the paratransit sector.
Level of importance	High. This is a preliminary step towards establishing a dialogue with the players in the sector.
What to watch out for	Make sure the identified operators in fact represent the interests of a majority of their peers. The Organising Authority should identify a long-term contact to establish a relationship of trust with paratransit operators.
Timing	At the start of the process, to be re-evaluated regularly.
Assessment criteria	Number of meetings per year. The number of paratransit operators present. Quality of the interactions and willingness of paratransit operators to engage in dialogue.



Example for reference

Recognition of the associations formed by operators to manage the schimos – motorbike taxi camps – in Dar-Es-Salaam.
Identification of stakeholders among public authorities and professional organisations in South Africa when BRT services were set up. For example, in Cape Town and Johannesburg.
The Urban Mobility Improvement Programme in Madagascar.
The consultative forum on paratransit reform in Kampala.

CONSULT

Setting up forums for dialogue
and better understanding
between the parties

IMPORTANCE**COST**

Set up a paratransit steering committee

Set up a permanent body for dialogue and consultation between supervisory authorities, local authorities, and the bodies representing the paratransit operators (operators, drivers, crew members). This body may take various forms, such as a Steering Committee that meets annually or bi-annually, led by the Organising Authority, or a mechanism for ongoing information exchange and dialogue among the stakeholders.

The purpose of such body is to address the problems encountered by all parties, including paratransit operators, and to seek solutions or draw up action plans through dialogue.

In principle, it should not be an executive body, only an advisory one. However, certain forms of more advanced cooperation may enable qualified professional representatives to be involved in decision-making, particularly with respect to fares.

Types of paratransit affected	All varieties – legal, informal, and even illegal. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of bodies representing the paratransit owners and operators (trade unions, associations, economic interest groups, etc.). Failing that, meetings open to all interested parties may be planned.
Stakeholders	Supervisory authorities, local authorities, professional representatives, etc., depending on the context (law enforcement, user representatives, shopkeepers based at paratransit facilities, etc.)
Level of investment	Financial investment: none or virtually non-existent. Human investment: requires the appointment of a contact person – a technician from the supervisory authority.
Level of importance	High. It would be difficult to take effective action in this area without such a monitoring body which could anticipate difficulties in implementing the planned measures and address them by working with the main stakeholders.
What to watch out for	Ensure that the paratransit sector is properly represented. Prepare meetings in detail, with an agenda and a certain degree of formality (invitations, attendance sheets, minutes, and records of decisions with a validation process, etc.).
Timing	Ongoing. Can be set up quickly if bodies representing the profession already exist. Public consultations may also be planned.
Assessment criteria	Number of meetings per year. Number of participants. Assessment of the contribution of paratransit operators in finalising decisions.



Example for reference

The Urban Mobility Improvement Programme in Madagascar.

Example of the Association de Financement des professionnels du Transport Urbain (Urban Transport Financing Association) and the Conseil Exécutif des Transports Urbains (Urban Transport Executive Board) in Dakar.

Consultation platform in South Africa created during the post-Apartheid transition (National Taxi Task Team).

Registration of unions with the Accra local authority, as part of the World Bank's Urban Transport Project.

UKOME committees in Turkish cities: representatives of paratransit operators' associations are invited to join a decision-making body in an advisory capacity.

CONSULT

Setting up forums for dialogue and better understanding between the parties

IMPORTANCE**COST**

Set up a register of complaints and suggestions

It is worth setting up an independent, permanent channel for submitting any complaints and suggestions that paratransit operators would like to make regarding their work. This must be accessible outside a trade union or organisational framework, including outside the Organising Authority. It should be managed on a collaborative basis.

It may also be useful to set up a permanent channel for customer complaints and suggestions. The two channels will complement each other.

These channels can be very useful to the Organising Authority in assessing paratransit realities, without the need for significant investment of human resources.

A variety of channels may be used: post, an app, a website, a service desk, or an SMS/USSD code. In all cases, there should be an awareness campaign (for example, posters in vehicles or at transit facilities) about these mechanisms.

Types of paratransit affected	All legal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of human resources capable of collecting complaints, summarising them, and passing them on to the authorities able to take action.
Stakeholders	Supervisory authorities, and all stakeholders in a position to intervene (local authorities, professional representatives, law enforcement entities, user representatives, etc.)
Level of investment	Financial investment: none or virtually none. Some costs may be incurred for setting up an app or a website, and for informational campaigns. Requires the appointment of a contact person – a technician from the supervisory authority.
Level of importance	InterMedium. The existence of this information channel may be very valuable, as long as we can limit its potential adverse effects (see below).
What to watch out for	Do not give the impression that the supervisory authority has the power to solve all problems. Be clear about the purpose of this mechanism and avoid raising false expectations. Do not respond to complaints of a strictly private or interStaff nature. Report and provide regular feedback, including to paratransit operators and customers, on the general parameters for complaints and the actions taken. Adapt human resources to the volume of complaints and suggestions to be processed.
Timing	Ongoing. Prior consultation with paratransit operators and/or their representative organisations is necessary.
Assessment criteria	Number of complaints by channel and type. Complaint response or handling rate.



Example for reference

Tentative "grievance plan" in Dar Es Salaam with the Daladala. In Kenya, paratransit operators can submit complaints via the SACCOs (operators' associations).

CONSULT

Setting up forums for dialogue and better understanding between the parties

IMPORTANCE



COST



Include representatives of the paratransit sector in consultation and steering bodies for transport projects and Sustainable Urban Mobility Plans

The Organising Authority, which is responsible for drawing up the Sustainable Urban Mobility Plan, may decide to involve representatives of the paratransit sector to a greater or lesser extent in the consultation and steering of the project.

There are many different ways in which this association can be formed, largely depending on the structure and qualifications of the profession.

However, if the measures in the Sustainable Urban Mobility Plan directly concern or have an impact on the activity of paratransit operators, we recommend that those most affected be involved in the decision-making process at an early stage, in order to facilitate the diagnosis and to be able to assess whether the planned measures will be acceptable.

The participation of paratransit operators in the consultation and steering bodies for Sustainable Urban Mobility Plans is also intended to facilitate dialogue between the paratransit sector and conventional transport operators.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Drawing up a Sustainable Urban Mobility Plan (or an equivalent process). Existence of bodies representing the paratransit profession (trade unions, associations, economic interest groups, etc.). Failing that, meetings open to all interested parties may be planned.
Stakeholders	Regulatory authorities and all stakeholders in a position to intervene: (local authorities, professional representatives, law enforcement entities, passenger representatives, etc.)
Level of investment	No specific effort beyond that required to implement a Sustainable Urban Mobility Plan.
Level of importance	To be assessed according to the market structure. Auxiliary if the profession is fragmented and has strong negative externalities, indispensable if the profession is already structured and plays an important role in the service system.
What to watch out for	Ensure that the participants are representative. Do not let sectoral demands interfere with the development of a Sustainable Urban Mobility Plan.
Timing	Involved in drawing up the Sustainable Urban Mobility Plan.
Assessment criteria	Qualification of the contribution of representatives of paratransit operators in formulating actions.



Example for reference

Most SUMPs include paratransit representatives in the Steering Committee. The Yaoundé and Kochi SUMPs are good examples.

PLANNING

Defining the type of service and the paratransit's role within an intermodal public transport ecosystem

IMPORTANCE



COST



Define paratransit's role in the public transport ecosystem

When drawing up a Sustainable Urban Mobility Plan or any other framework for transport reform, the aim is to identify paratransit's current role, define the roles of its various forms in the multimodal service plan, and assess whether some services can be contracted with the Organising Authority.

There are several configurations available:

- 1) Draw up a multimodal service plan and define the role to be played by the various forms of paratransit;

There are three stages to the process:

- Paratransit is the only service available throughout the city or in certain areas. Transport services can be organised in certain districts and/or at certain times with regular lines and in certain districts and/or at certain times as an on-demand service.
- Paratransit complements the capacity of public transport. This complementarity can be organised along the lines of a "trunk and feeder" model, with paratransit providing a feeder service for higher-capacity modes.
- Paratransit provides a parallel service, for example, a short-distance service (local buses) parallel to higher-capacity express services.
- Paratransit reinforces public transport services, particularly during peak and off-peak periods, for example with "peak looping" (reinforcement on certain lines during peak hours) or as a replacement service, for example during off-peak periods, as paratransit transport is sometimes more suitable to meet smaller and less consistent demand.

Whatever the configuration, this process will undoubtedly have to be accompanied by a restructuring of the network or services to make them more coherent and efficient. It is likely that the existing services were organised on an ad hoc basis, that is, individually, without any overall coordination. This restructuring will have to be carried out in close consultation with the affected operators, seeking to respect the current economic balance as much as possible. This could be an opportunity to offer paratransit operators new services, such as night-time or premium services.

The planning of paratransit services may be accompanied by other urban planning developments, such as dedicated lanes, to improve performance at peak times.

- 2) Put together a model business plan for the paratransit operators affected and check that you can offer them a "win-win" agreement.

The rationalisation of public transport is most often aimed at ensuring that major routes are served by high-capacity, formal transport services and at confining paratransit to serve outlying areas. As such, it is not necessarily easy to define a scope of activity that is sufficient to guarantee continuity and the number of existing jobs.

- 3) Set up consultations with representatives of the paratransit sector to test the acceptability of the principle of contractualisation, while also finalising the contractual model.

Not all paratransit operations lend themselves to contractualisation. Several conditions must be met: firstly, the service provided must be integrated into the public transport ecosystem, and secondly, the paratransit operators must be sufficiently structured and professionalised to accept and follow the terms of a contract. Depending on the role assigned to paratransit, various types of contracts may be preferred, such as monopolies or concessions. Consistent fares should also be established based on the defined roles.

Types of paratransit affected	All legal varieties, although more appropriate for regular services.
Prerequisites	Paratransit diagnosis, creation of economic interest groups/existence of professional organisations. If possible, mapping of paratransit network(s).
Stakeholders	Local authorities/Authorities responsible for planning, paratransit management and regulation, operators, and professional organisations where applicable.
Level of investment	Financial investment: varies. Depending on the role assigned to paratransit, adjustments may be required, as well as the granting of concessions. Human investment: significant. Include experts and representatives from the paratransit sector when drawing up planning documents.
Level of importance	High. A key stage in the development of an integrated, sustainable mobility plan.
What to watch out for	Facilitating intermodality as part of complementary services. It is preferable not to embark on this process unless there is a strong political will and the technical means to manage and monitor it.
Timing	Ongoing.
Assessment criteria	Adapting planning documents to the defined role of paratransit. Monitoring performance indicators for the range of transport services. Meeting demand.



Example for reference

The example of *taxi-clandos* in Dakar: informal transport complements higher-capacity services on certain routes.

The role of minibuses in Phase 2 of Cape Town's Bus Rapid Transit system.

The example of Polokwane in South Africa: rather than formal bus services, minibus services operate regular services on certain routes.

Integration of rickshaw services at metro stations in Kochi.

PLANNING

Defining the type of service and the paratransit's role within an intermodal public transport ecosystem

IMPORTANCE



COST



Draw up specifications for the quality of paratransit services

In consultation with operators and professional organisations, draw up specifications to limit negative externalities and improve service quality.

The standards in the specifications may relate in particular to:

- Quality of service (number of passengers, frequency, service – routes and stops, passenger information, timetable)
- Safety (speed limits, helmets, compulsory driving licences)
- Vehicle types (size, comfort, condition, engine)
- The environment (type of fuel used, age of rolling stock)
- Working conditions (formal employment, number of hours worked per day, insurance for the vehicle and driver).

To encourage operators to comply with the standards, the specifications can be drawn up in consultation with operators. In compliance with these standards can sometimes result in lost income for operators, compensation may be offered – whether financial, by granting operators the exclusive right to operate in certain areas, at certain times, etc., or by implementing formal concession systems.

Types of paratransit affected:	All legal varieties, although more appropriate for regular services.
Prerequisites:	Carry out an analysis to identify the positive and negative externalities of paratransit, as well as the expected level of service.
Stakeholders:	Local authorities/Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable
Level of investment:	Financial investment: varies (may require compensation measures) Human investment: significant. Drawing up specifications in consultation with the affected parties, and monitoring indicators.
Level of importance:	High.
What to watch out for:	Define precise indicators (greenhouse gas emissions, status of operator: maximum number of seats per vehicle, compulsory use of helmets, etc.) in advance in order to monitor the specifications. Internal monitoring bodies ensure compliance with specifications.
Timing:	Ongoing.
Assessment criteria:	Based on precise indicators identified in consultation with representative paratransit sector. Indicators must be monitored at least once each year



Example for reference

Specifications for the Sierra Leone Road Transport Corporation in Freetown. Moja Cruise project at eThekweni in Durban, South Africa.



PLANNING

Defining the type of service and the paratransit's role within an intermodal public transport ecosystem

IMPORTANCE



COST



Define the authorities responsible for regulating the sector

Define the authorities responsible for regulating all transport services defined as belonging to the paratransit sector, as well as the scope of their prerogatives.

This regulation **takes into account** the planning, management, and regulation of services and facilities, the drafting of regulations, dialogue with paratransit operators and professional organisations, etc.

Where appropriate, these functions may lead to the updating of legislation and regulations.

For each function, identify the human and material resources required. Needs must be assessed both internally and externally (with the help of outside consultants, where appropriate).

The diversity of local situations and modes of governance makes it difficult to formulate detailed recommendations. In some cases, municipal authorities may be able to assume the role of Public Transport Authority, as their scope of action is sufficiently large. In other cases, supra-municipal structures (inter-municipal bodies, districts, regions, provinces, etc.) may constitute an appropriate territorial scope. Finally, in other cases, it will be preferable to set up a specific entity, whose modalities of governance may take several forms

A Public Transport Authority must have the necessary staff and adequate capacity to carry out four main functions:

- Planning and studies
- Project management
- Contractual monitoring with operators
- Quality control

The Public Transport Authority should also manage the internal administrative and financial functions and should run the meetings.

In any case, it is important that:

- The status of the Authority and the framework for its functions, governance, and resources be based on clear legislative and regulatory texts, at both the national and local level;
- The Public Transport Authority have the technical, human, and financial resources it needs to carry out its tasks, including the means to monitor activities on the ground;
- The Public Transport Authority have the legal status necessary to conclude contracts or agreements with operators, to examine licence applications, and to penalise illegal operators or those who fail to comply with rules and agreements;
- The Public Transport Authority have an effective mandate to supervise both formal and informal transport;
- The competence and legitimacy of the Public Transport Authority be recognised by the other levels of government.

Types of paratransit affected	All legal varieties.
Prerequisites	Legal audit of the applicable legislation and regulations and their application. Agreement among stakeholders (ministries, local authorities, agencies, etc.) on the division of competencies.
Stakeholders	Ministries affected, local authorities.
Level of investment	Financial investment linked to the human resources deployed and to the planned budget for intervention. Human investment: moderate. To be assessed based on the resources already available for the regulation of formal transport, as well as the planned measures.
Level of importance	Very high. An essential step in implementing a mobility policy or reform.
What to watch out for	Make sure you anticipate any needs that may arise after the project starts to ensure it is implemented and monitored.
Timing	Prior to the start of the project, and then on a regular basis.
Assessment criteria	Precise identification of needs and associated job descriptions. Organizational chart.



Example for reference

The status and form of the Public Transport Authority may differ according to the structure of local government, the devolution process, the available resources, existing transport projects, etc. Globally, the nature and structure of these authorities vary greatly. Asian cities exhibit particular diversity in this regard.

In some countries, there is a limited delegation of power and resources from the national government to local authorities, which limits the latter's competence. In the Philippines, the transfer of competence and capacity in urban transport regulation is increasing, particularly since the implementation of the Public Utility Vehicle Modernization Program in 2017.

There are other possible configurations in which cities enjoy a wide range of powers and means to regulate and coordinate urban transport services. This is the case in India, for example, where the creation of Unified Metropolitan Transport Authorities enables major conurbations to define their own public transport policy and regulations and to enter contracts with transport operators.

In Singapore, the Public Transport Authority enjoys powers relating to both public transport services and urban roadways, as well as road safety and regulation.

Instead of a metropolitan agency, inter-municipal structures are being created in megacities such as Johannesburg, which groups together several metropolitan areas. In order to implement the BRT and the paratransit reform in 2010, it was decided to create an inter-municipal transport committee rather than a regional transport authority. This is an example of a rather original governance structure in African cities, where no specific institutions have been created to implement mass rapid transit projects and where efforts are focused on improving the coordination of already existing institutions at the regional level (Klopp et al., 2017).

PLANNING

Defining the type of service and the paratransit's role within an intermodal public transport ecosystem

IMPORTANCE



COST



Transform certain paratransit services into on-demand transport and introduce advance booking

The term “on-demand transport” refers to all forms of regular services operated in whole or in part based on advanced booking by customers. There may be adaptations to itineraries, timetables, vehicle capacity, etc... Their common point is the principle of the pre-booking.

Paratransit often meets the definition of on-demand transport, with the exception of advance booking. When considering how mobility services are organised, it is important to consider these more “flexible”, adaptive modes of operation.

In the case of taxi services, this may simply involve informing potential customers of the operator’s telephone number. Above all, however, the aim is to develop *e-hailing* applications that can be used to locate nearby vehicles and organise services more rationally. The introduction of these tools represents a powerful incentive for the profession to reorganise, rationalise, and improve both skills and quality of service, as it makes services traceable, facilitates the standardisation of fares, enables users to rate drivers and report complaints, and requires operators to have a bank account, etc.

For services that closely resemble regular services, booking should ideally be done through central booking offices, which customers may contact by e-mail, text message, telephone, or even via a dedicated app. The role of these centres is not only to receive requests, but also to allocate routes, optimise organisation, and keep records in order to calculate operators’ remuneration. They may be organised by professional organisations or economic interest groups, or in some cases by a public body (municipal service, Mobility Organising Authority, etc.). Here too, the introduction of such a system represents a major change in the way paratransit is organised, imposing rules on service quality, full traceability, etc. It is the ultimate stage in the integration of paratransit into a multimodal transport system, making it possible, for example, to manage integrated intermodal fare and passenger information systems.

Types of paratransit affected:	All legal varieties, in particular on-demand transport services not operating on fixed routes.
Prerequisites:	A highly structured organisation of paratransit operators and an acceptance of transparent transactions. Where there is a central booking office, definition of a general fare structure, intermodal if possible (in this case, there are many other prerequisites, see measure 9-2)
Stakeholders:	Professional organisations / Operators / Authorities responsible for paratransit management and regulation
Level of investment:	Financial investment: <i>e-hailing</i> applications are based on a private model in which the application developer is remunerated via a commission on each trip, so there is no need for public investment. Online services require booking facilities, which can take several forms (from operators’ own telephones to shared platforms equipped with route optimisation software). Human investment: highly variable, depending on the chosen solutions. If there is a central booking office, appropriate human resources are required.
Level of importance:	Secondary. This is the final stage in the evolution of the paratransit service.
What to watch out for:	Regular assessment of system performance, particularly with regard to centralised reservations.

Timing:	Ongoing.
Assessment criteria:	Change in the number of operators connected. Change in the number of trips ordered and paratransit's market share. Change in the average fare.

**Example for reference**

For taxi/e-hailing services: the GoZem platform in West Africa, SafeBoda in East Africa, and the Grab and Ola platforms in Asia.

For scheduled services/booking centres: the SWVL platform in Egypt.

Reforming the sector

Structure – To promote the creation of representative structures within the paratransit sector					
	Actions	Importance	Cost	Page number	✓
4-1	Facilitate visual identification of operators	Medium	Low	34	
4-2	Promote and support the creation of professional organisations	High	Variable	35	
4-3	Facilitate coordination between professional organisations	Medium	Low	37	
4-4	Ensure that professional organisations function democratically	High	Low	38	
Regulate – To develop the legislation and regulations defining legal and illegal services					
	Actions	Importance	Cost	Page number	✓
5-1	Recognise and define paratransit's role in the legal, regulatory, and political frameworks.	High	Low	39	
5-2	Define the type of service paratransit can provide and its integration with other modes of transport.	High	Variable	42	
5-3	Define access conditions for paratransit operators	High	Low	45	
5-4	Define the regulatory framework for paratransit operations	High	Low	46	
5-5	Support illegal operators in adapting to a formalised system	High	Variable	49	
5-6	Define the optimum number of permits	Optional	Low	51	
Certify – To define quality metrics and to give preference to operators who satisfy these metrics					
	Actions	Importance	Cost	Page number	✓
6-1	Define the conditions for certification of paratransit operators and services	Medium	Staff	52	
6-2	Define the benefits granted to certified operators	Medium	Variable	53	
6-3	Define the procedures for monitoring and renewing operators' certification	Medium	Staff	54	
Authorise – To monitor paratransit operators and ensuring their compliance with certain conditions					
	Actions	Importance	Cost	Page number	✓
7-1	Define the permit conditions for paratransit operators and services	High	Staff	55	
7-2	Define the procedures for monitoring and renewing permits	High	Staff	57	

Contract – To integrate legal paratransit into the mobility ecosystem via agreements with the organising authority and/or an organised carrier					
	Actions	Importance	Cost	Page number	✓
8-1	Determine the most appropriate economic and legal model for contracting with paratransit operators	High	/	58	
8-2	Set up contract monitoring and assistance mechanisms	High	Staff	60	
Set fares – To introduce a coherent, multimodal pricing system					
	Actions	Importance	Cost	Page number	✓
9-1	Work with representative organisations to establish coherent pricing and ticketing systems	Variable	Variable	61	
9-2	Define an integrated, multimodal pricing and ticketing system	High	Variable	62	
9-3	Set up an interoperable ticketing system	Optional	Variable	64	
Integrate – Integrating paratransit into the mobility ecosystem					
	Action	Importance	Cost	Page number	✓
10-1	1Integrate the paratransit and public transport systems.	High	Variable	66	

STRUCTURING

Promoting the creation of representative structures within the paratransit sector

IMPORTANCE



COST



Facilitate visual identification of operators

Distinctive signs are adopted to make it easier for supervisory authorities to identify formalized paratransit operators.

Operators of two-wheeled vehicles must wear a uniform. These are issued by the Organising Authority or the professional organisations and identify regulated paratransit operators.

For larger vehicles, specific coloured licences or number plates are issued to facilitate visual identification.

Types of paratransit affected:	All legal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites:	Clear regulations govern the conditions for obtaining a uniform, licence, or number plate.
Stakeholders:	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment:	Financial investment: limited. Provision of the necessary equipment by the Organising Authority. Human investment: limited. Enforcement of the conditions for obtaining equipment from the Organising Authority.
Level of importance:	Moderate.
What to watch out for:	To avoid developing a market for smuggled equipment issued by the Organising Authority. Ensure that inspections are carried out, including of paratransit operators who have their own signage.
Timing:	Ongoing.
Assessment criteria:	Ability of law enforcement agencies to identify illegal paratransit operations.



Example for reference

Chasubles in Kigali, coloured licences in the Philippines.
Red helmets issued by the SafeBoda application in Uganda.

STRUCTURING
 Promoting the creation of representative structures within the paratransit sector

IMPORTANCE

COST
 VARIABLE

Promote and support the creation of professional organisations

The creation of a professional organisation depends at the very least on a certain degree of pooling of the resources available to operators, as well as recognition by public authorities. For example, fleet management may be handled collectively; this can be done on a shared basis via a regulator provided by the professional organisation. In addition to organising professional activity, more advanced forms of pooling can create financial advantages, optimise operations, regulate competition, respond to calls to tender issued by the Organising Authority, or offer social guarantees to paratransit operators.

Once it has been recognised by the local authorities, the structure can take on all or some of the following responsibilities:

- Licence management,
- Defining routes and timetables,
- Optimisation of operations,
- Pooling financial resources to improve owners' borrowing capacity (renewal of rolling stock),
- Monitoring compliance with safety standards,
- Driver and crew training,
- Insurance coverage (social, mutual) for paratransit operators and regulation of relationships between vehicle crews and owners,
- The operation of an e-hailing application or a reservation centre (see measures 3-4)

Depending on the legislation in force, the professional structure may acquire legal Staffity as an economic interest group in order to bid for public contracts.

The public authorities may support the process of setting up economic interest groups by clarifying the specifications and facilitating certain administrative procedures. In the case of mass transport projects (such as BRT), calls to tender can be drafted so as to make them more accessible to operators organised as an economic interest group.

In addition to organising operators into economic interest groups, we should also consider those operators who do not have the means to join existing economic interest groups or who prefer to continue working on an independent basis. For those operators who want to join an economic interest group, a registration or waiting list system may be encouraged by the local authorities. Operators who prefer to remain independent should also have to comply with the current regulations governing paratransit.

Types of paratransit affected	All legal varieties, although more appropriate for regular services.
Prerequisites	Diagnosis of the paratransit sector and the internal relationships between players.
Stakeholders	Local authorities/ Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable
Level of investment	Financial investment: varies, from regular monitoring to granting loans or credit at advantageous rates. Human investment: significant. Time to establish a dialogue with the operators.

Level of importance	High. Important lever for the integration of paratransit.
What to watch out for	Degree of representativeness and knowledge of the sector among representatives of professional organisations. Non-democratic operation of professional organisations
Timing	Ongoing.
Assessment criteria	Degree of pooling of resources. Paratransit operators obtain legal status. Ability to respond to calls to tender issued by public authorities.



Example for reference

Motorbike taxi camps in Dar Es Salaam, economic interest groups created in Dakar (Association de Financement des Professionnels du Transport Urbain), *Vehicle Operating Companies* (VOC) in Cape Town and Johannesburg to operate BRT services, and the *Transport Operating Company* in Cape Town, part of the Mitchell's Plain pilot project. Another example can be found in a smaller city, George, South Africa, where a company has been set up to bring together bus and minibus operators.

STRUCTURING

Promoting the creation of representative structures within the paratransit sector

IMPORTANCE



COST



Facilitate coordination between professional organisations

Establish a regular dialogue between the various operators' groups and professional structures. Guarantee the same quality of dialogue between the Organising Authority and the various professional organisations.

Facilitate coordination between the various professional organisations in order to limit competition between them and avoid purely vertical operations. Ultimately, the aim is to facilitate cooperation between the various operators' groups, rather than competition. Encourage the creation of forums for dialogue between stakeholders.

It is also worth facilitating discussions between paratransit operators and conventional transport operators in order to ensure the best possible coordination between these services and even to consider possible collaboration (subcontracting).

Types of paratransit affected	All legal varieties, although more appropriate for regular services.
Prerequisites	Diagnosis of the paratransit sector and the internal relationships between players.
Stakeholders	Local authorities/ Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable
Level of investment	Financial investment: limited. Human investment: identifying contacts responsible for discussions and negotiations with the representatives identified in the paratransit sector.
Level of importance	Moderate. This is a preliminary step towards establishing a dialogue with the players in the sector.
What to watch out for	Make sure the identified operators in fact represent the interests of a majority of their peers. Avoid favouring certain groups of paratransit operators to the detriment of others.
Timing	Ongoing.
Assessment criteria	Existence of discussion platforms between the professional organisations in the sector Representing all organisations at meetings between them.

STRUCTURING

Promoting the creation of representative structures within the paratransit sector

IMPORTANCE



COST



Ensure that professional organisations function democratically

Ensure that professional organisations operate democratically, are representative of the sector, and do not interfere with the regulatory procedures of public authorities.

To do this, it is important to precisely verify that:

- The organisation's bylaws or articles of association are compliant with current legislation;
- The organisation and its membership are indeed representative of the sector (in particular by establishing communications channels), and its leaders have connections with the sector (to avoid the organisation's operations being directed by persons without experience in paratransit);
- The organisation's leaders do not exceed the mandates for which they were elected or appointed, and there is a turnover within the organisation at the executive and management levels;
- The number of licences issued by the organisations, and whether the number of licences corresponds to the number of vehicles on the road (the use of digitised files and a data storage platform can facilitate these inspection procedures);
- Payment of business or property taxes in the amounts required by law;
- The absence of conflicts of interest with members of law enforcement agencies and local authorities.

Types of paratransit affected	All legal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of the identified professional organisations.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	Low, human resources to carry out inspections and monitor the operation of professional structures.
Level of importance	This measure is essential to ensure that operators are enrolled, that professional structures are representative and that the sector is well governed.
What to watch out for	Absence of conflicts of interest between local officials responsible for regulation and members of professional organisations.
Timing	Yearly.
Assessment criteria	Growth in the number of operators who are members of professional organisations, quality of dialogue among all governance players, and compliance with current legislation and the regulatory framework.

REGULATE

Developing the legislation and regulations defining formal and informal services

IMPORTANCE



COST



Recognise and define paratransit's role in the legal, regulatory, and political frameworks

The main objective of this measure is to define and affirm or confirm the role of paratransit within the existing legal, regulatory, and political frameworks.

The following elements could form the basis of a law or decree recognising paratransit:

1. Paratransit includes all means of public transport available to the public, carried out by small and medium-capacity vehicles, and capable of adapting to passengers' needs without major infrastructure and/or public investment.
2. Paratransit is a public service because it serves all citizens and is a form of public transport.
3. Paratransit services include those that respond entirely to demand and adapt to passenger requests ("taxi" or "on demand" services), as well as those that operate along predefined routes serving several customers at the same time ("bus" or "fixed route" services), although intermediate forms may exist. These different services are subject to various regulations and varying degrees of public intervention.
4. With regard to the paratransit sector, the government assumes the following responsibilities:
 - a. Facilitating complementarity and integration with other forms of public transport, in particular mass transit, notably through planning, fare, ticketing, and passenger information systems, and intermodal infrastructure.
 - b. Create the conditions for accessible and affordable paratransit, taking into account the needs of women, older people, people with disabilities, young children, and other underrepresented groups in the planning and delivery of services.
 - c. Reduce the negative externalities caused by paratransit services: pollution, road safety, road and traffic congestion, uneven distribution of supply.
 - d. Guarantee safe working conditions and social insurance for operators and workers, and promote women's access to the various employment opportunities offered by the sector.
 - e. Promote the modernisation of the fleet of paratransit vehicles through standards, regulations, awareness-raising, and technical and financial support.
5. Paratransit services are provided by the private sector, whether on an individual or organised basis. However, as a public service, they are subject to and must comply with the objectives, regulations, and quality of service, social, environmental, and economic standards provided by law.
6. Local authorities are responsible for setting fares. They must be consistent and must be communicated and applied transparently. To the extent possible, fares should strike a balance between affordability, economic viability, and density of supply.
7. For operators, access to the sector should be subject to compliance with the requirements defined by the relevant laws and regulations, as determined by the competent authorities, particularly with regard to staff qualifications, employment conditions, vehicle standards, and quality of service.

8. The local authorities responsible for planning and regulating public transport should draw up contractual agreements stipulating obligations (such as service and vehicle standards, frequencies, fares, etc.)
9. The government may intervene in the economic model of paratransit services in order to achieve social, economic, and environmental objectives.
10. All paratransit services in general, and fixed-route services in particular, should be planned and operated to complement public transport systems, where the two coexist. In such contexts, paratransit must take on the role of a public transport service provider in neighbourhoods that are not well connected to the public transport system. Paratransit operators may complete and operate along the public transport network under terms agreed between the parties concerned and with the approval of the competent authorities.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Knowledge of the existing transport offer, of paratransit's role in the urban transport ecosystem, and of demand.
Stakeholders	Government ministries (such as those responsible for finance, the environment, economic development, labour, infrastructure and transport), legislative bodies, local authorities, public transport operators and civil society.
Level of investment	Financial investment: ostensibly insignificant. Human investment: high. This will require political leadership, ownership, and support from executive and legislative bodies. To mobilise all the stakeholders mentioned above, coordination will be necessary.
Level of importance	High.
What to watch out for	Any action to reform the paratransit sector must be part of existing frameworks that guide, support, enable, and integrate interventions at all levels.
Timing	Ongoing, depending on existing governance arrangements and legislative and decision-making processes.
Assessment criteria	Development of the paratransit sector in general.



Example for reference

Definition of the paratransit sector in India

India's *Faster Adoption and Manufacturing of Electric Vehicles in India* (FAME) programme is accompanied by a number of legal and policy documents defining the role of the paratransit sector in the electrification of the country's transport systems:

- The Motor Vehicles (Amendment) Bill 2014 specifies the battery capacity of electric rickshaws and electronic carts. It also introduces safety standards.
- The Central Motor Vehicles (Amendment) Rules 2015 set out the conditions for obtaining a driving licence and the conditions for operating electronic rickshaws.
- The 2016 draft public policy on taxis identifies the role of e-rickshaws in providing first and last mile connectivity. The aim is to promote these services as non-polluting sources of power for public transport.

the box continues on the next page



- The 2017 draft national energy policy establishes the development of charging stations as a component of urban planning. To create a favourable environment for this type of infrastructure, the Indian government has also made it compulsory to install charging points for electric vehicles in residential and commercial buildings and car parks, while capping the price of energy at public charging points.

Despite these efforts by the Indian government, there is still a need to harmonise the policy and regulatory frameworks of the various levels of government. Consideration should also be given to the integration of urban and public transport, for example by establishing an optimum number of vehicles authorised to circulate, determining the locations of terminals and recharging stations, and designing lanes and infrastructure reserved for two- and three-wheeled vehicles.

Example 2: Definition of public utility vehicles in the Philippines

The Department of Transport of the Philippines recognises paratransit services under the term "public utility vehicle" (PUV), which includes Jeepneys, UV Expresses, minibuses, and other buses. All public utility vehicles are subject to regulations governing the provision of public services by private operators.

The government has implemented a number of measures to influence the development of the paratransit sector since 2003. The first interventions included a moratorium on the number of franchises issued. However, this has led to an increase in illegal operations. Other measures have focused on fleet modernisation, such as the compulsory withdrawal of jeepneys over 15 years old in 2017. This decision was strongly contested by the associations of operators concerned, which led the Ministry of Transport to reverse its decision.

The Public Utility Vehicle Modernization Program (PUVMP) is the latest and most successful attempt to improve the paratransit sector in the Philippines. It comprises 10 components:

1. Optimisation of routes
2. Planning of local public transport routes
3. Regulatory reform
4. Consolidation of the sector
5. Fleet modernisation
6. Financing
7. Vehicle lifetime programme
8. Stakeholder support mechanism
9. Communication
10. Initial implementation

The PMVUP demonstrates the importance of paratransit in the public transport ecosystem as recognised by the national government, while setting out clear actions to transform the sector in a direction that meets the government's expectations and objectives, particularly in terms of improving service quality, optimising routes, and modernising the fleet.

REGULATE

Developing the legislation and regulations defining formal and informal services

IMPORTANCE



COST



Defining the type of service to be provided by paratransit and its integration with other modes of transport

By defining a service plan, the public transport authority undertakes a (re)evaluation of paratransit's role in the mobility system and in the regulation of excessive competition or, on the contrary, insufficient supply. Similarly, where a formal transport network exists, the respective roles of paratransit and formal transport need to be clarified.

The objective of this service plan is to define the rules of competition and the organisation of operators in order to reconcile the needs of the local population, economic equilibrium among operators, improved service quality, and reduced negative externalities. It is therefore necessary to go beyond a purely transport-oriented approach and propose a global reorganisation of the sector.

The quest for better geographical coverage will inevitably lead operators to serve less profitable routes and to reorganise their services to complement public transport systems where they exist. This necessarily implies a complex reflection on the forms of compensation, equalisation, or limitation of competition. Therefore, such a plan must result from both technical research as well as a participatory process involving both operators and customers. No regulation will be effective without the agreement of the operators themselves.

The service plan must be based on an in-depth analysis of the initial situation. This diagnosis should cover not only the transport services offered to residents but also both economic (a standard business plan for operators) and social (working conditions for drivers and assistants) aspects.

The service plan could be laid out as part of a public transport project, as these projects represent opportunities to define the function of paratransit services within the urban transport system and to plan infrastructure and services accordingly. In Jakarta, R. Desmoulière (2019) listed the various forms of integration possible between public transport and paratransit:

1. Parallel services operating on the same route;
2. Connections between public transport lines and paratransit services;
3. Reserved lanes, shared by both types of service;
4. Opening up public transport corridors for paratransit services, only during peak hours ("peak smoothing");
5. A model based on main lines and feeder lines. This dual model distinguishes, at the city level, between main lines and routes, preferably allocated to public transport or other centralised services, and feeder lines allocated to paratransit services and smaller operators. Prior to 2015, some initiatives to implement a model based on main and feeder lines without integrating paratransit services led to tense conflicts in the Jakarta region, with paratransit drivers damaging Transjakarta buses.
6. A sixth form of integration, known as "extreme", consists of "absorbing" paratransit operators by inviting them to become public transport operators by creating consortia or other commercial entities.

Finally, the design of a service plan also relies on the provision of specialised infrastructures. Investments in infrastructure are typically implemented at the local level. They may take various forms, as Ghosh and Kalkra (2016) point out. The first type of infrastructure to be developed is "stop and go" facilities, which avoid the problem of paratransit vehicles queuing along the roads. These facilities should be provided at strategic points such as along important routes and at interchanges, bus stops, and metro stations.

Such facilities have been created near bus and metro stations in Delhi and near metro stations in Kochi. Parking facilities are another key type of infrastructure, as they prevent illegal parking and traffic jams and, where possible, provide greater security.

Thirdly, it is also essential to provide amenities for operators and users, including sheltered stops with access to drinking water, toilets, and even services for transport operators (mechanics, fuel, and vehicle cleaning services). Maintenance of the infrastructure may be entrusted to a private company or to the professional organisations that use it. Use of the infrastructure may generate revenue through the payment of a monthly fee by operators or the deployment of advertising.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Knowledge of the existing transport offer, of paratransit's role in the urban transport ecosystem, and of demand.
Stakeholders	Local authorities/authorities responsible for paratransit management and regulation, paratransit operators, and formal public transport operators.
Level of investment	Financial investment: variable, ~EUR 200,000 to carry out the necessary studies and consultations. Human investment: high. This will require political leadership, ownership, and support from executive and legislative bodies. To involve all the stakeholders mentioned above, coordination will be necessary.
Level of importance	High.
What to watch out for	Any action to reform the paratransit sector must be part of existing frameworks that guide, support, enable, and integrate interventions at all levels.
Timing	Ongoing, subject to adaptation to changing demand and urban structure.
Assessment criteria	Development of the paratransit sector in general, degree of integration/conflict with competing services, etc.



Example for reference

Example 1: Optimising routes in the Philippines

In the design of a service plan, we may highlight two main approaches. On the one hand, existing operations may be improved and considered as “services” by optimising routes. This has been implemented in the Philippines, where the *Land Transportation Franchising and Regulatory Board* publishes a call for tenders to operate a given route, specifying the number of vehicles required and the relevant service standards. A single franchise for the corridor is then issued, which means that a single entity (a cooperative or a jeepney company) may operate its services on this corridor. The *Land Transportation Franchising and Regulatory Board* does not issue franchises to non-consolidated operators, which means that it is compulsory for operators to “pool” resources to operate a route/corridor. At the start of the programme, priority was given to existing operators when applying for franchises. However, it is understood that by mid-2020, if existing operators do not comply with the requirements of the Public Service Vehicle Modernisation Programme, their routes will be open to all interested applicants.



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REGULATE

Developing the legislation and regulations defining formal and informal services

IMPORTANCE



COST



Defining access conditions for paratransit operators

In introducing market access criteria, the aim is to regulate the quantity and quality of transport services. This regulation is based on imposing conditions for access to the urban transport market.

Various types of measures can be introduced:

- **Justified service:** new operators must prove that the service they offer is in the general interest, meaning that it will meet a need not currently satisfied by the market.
- **Operator solvency:** The public authorities grant operating rights only to operators who are of sufficiently good repute and have sufficient financial resources. This also means they can plan to renew their vehicles in good time.
- **Verifying operators' competence:** access to the profession is reserved for those holding a licence or those meeting the required initial training conditions (in mechanics in particular).

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Knowledge of the existing transport offer, of paratransit's role in the urban transport ecosystem, and of demand. Specifications with established standards, particularly in terms of safety and environmental quality. Introduction of controls on access to the profession (authorisations, accreditations, contracts, etc.).
Stakeholders	Local authorities/ Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable.
Level of investment	Financial investment: ostensibly insignificant. Human investment: variable. May require specific management services and additional human resources.
Level of importance	High.
What to watch out for	Restricting access to the sector may lead to social difficulties and should probably not have a retroactive effect (unless via a procedure for validating skills and experience). It can lead to a reduction in supply, with difficult consequences for users. Any measures to control access to the sector should be closely monitored in order to make adjustments to conventional transport services or should be carried out gradually.
Timing	Ongoing.
Assessment criteria	Growth in the number of operators, fleet status.



Example for reference

Bogotá for justified services, Vietnam for operator solvency.
In Kigali, the SafeMoto digital platform, which requires drivers to have at least 3 years' experience, is used in part to verify operators' skills.

REGULATE

Developing the legislation and regulations defining formal and informal services

IMPORTANCE



COST



Defining the regulatory framework for paratransit operations

Establish the regulatory framework, specifying:

- **Conditions for access to the sector, through the introduction of a system of licences, approvals, or operating permits.**

Obtaining these documents controls access to the profession, regulates the number of workers operating in a given area, balances supply and demand, and shapes the development of the market. An operating licence may be required for the owner, the driver, the vehicle, or all three.

- **The conditions under which the profession is carried out are defined at the very least by compliance with the Highway Code.**

Other criteria may be added, such as obligatory training courses or minimum qualifications, as well as criteria relating to road safety (wearing helmets, insurance) and geographic considerations (certain areas of the city may be forbidden to paratransit). Paratransit fleet and facilities management criteria may also be elaborated.

- **The maintenance of rolling stock, with the obligation to meet certain criteria (greenhouse gas emissions, maximum vehicle age) and/or the obligation to conduct technical inspections at regular intervals.**

In addition to these criteria, which relate to the regulation of supply, you may also impose rules respecting insurance for users (civil liability) and employment protection (types of contract, termination conditions, employers' obligations towards employees).

The implementation of the regulatory framework may, in some cases, be delegated to digital platforms in the urban mobility sector. Where local authorities have limited resources, these public-private partnerships with platforms enable them to monitor compliance with the regulatory framework by making access to the platform's services conditional on compliance with the applicable rules.

Precise specifications must then be drawn up with the digital platform, with regular audits of the implementation of verification and inspection procedures with respect to paratransit operators.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Existence of a regulatory framework and the means to implement it. Establish the regulatory framework in consultation with operators to avoid the risk of creating inapplicable and/or unenforceable measures or causing a drastic reduction in paratransit supply.
Stakeholders	Local authorities/ Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable.
Level of investment	Financial investment: low. Human investment: significant. A regulatory framework is only useful and effective if there are the means to enforce it.
Level of importance	Very high to critical.

What to watch out for	<p>The regulatory framework must not reflect “wishful thinking”. It should be drawn up in accordance with the resources available to the local authorities to implement it and should be realistic.</p> <p>It’s important to verify that the legal framework is compliant with the existing law (criminal, labour, commercial, etc.).</p> <p>The regulatory framework should be implemented gradually and should evolve: it should adapt to changes in the urban transport system, the needs of city residents, and the resources available to the players involved.</p>
Timing	Ongoing.
Assessment criteria	<p>Number of permits/licences issued and number of active operators. Number of technical inspections carried out each year. Number of insurance policies issued in the sector. Number of tickets issued for failure by paratransit operators to comply with the highway code.</p>



Example for reference

Definition and monitoring of minimum conditions for access to the profession in India

The regulatory framework adopted in India lays down specific criteria for obtaining an auto rickshaw operating licence. As well as focusing on vehicle standards and safety requirements, it also seeks to match demand to supply by adjusting the number of licences issued.

To promote the adoption of electric rickshaws, they have been subjected to a simplified authorisation procedure, compared to that applicable to fossil fuel-powered rickshaws. While traditional rickshaw operators have to apply for an operating or transport permit, electric rickshaws simply have to be registered. These incentives have been reduced recently, with some cities introducing route optimisation measures for electric rickshaws to balance supply and demand.

The manufacturing process for electric rickshaws must comply with the standards set by the Automotive Research Association of India (ARAI) and the International Centre for Automotive Technology (ICAT). New models are first approved by these state agencies, after which they are registered with the regional transport offices. Despite these procedures, many vehicles do not meet the standards, as the registration process is often circumvented.

Public Utility Vehicle Modernization Program (PMVUP) in the Philippines.

In the Philippines, the process of reforming paratransit, initiated in 2017 by the Department of Transport, began with the coining of the term “Public Utility Vehicle” and the recognition of paratransit services as public interest services. Several modes of paratransit are grouped together under the term “public utility vehicle”, such as jeepneys, UV Express, minibuses, and other public buses, as they are all covered by the framework regulating private operators providing public services. The reform has also introduced additional regulations in the sector:

- Specifications for accessing the sector, such as licences, training, etc.;
- Route restrictions through route optimisation;
- Service quality and safety standards;
- Operating hours and fares;
- A fleet renewal support programme;
- Fixed wages and working hours.



In the Philippines, reform has faced a number of challenges. One of the most important was the difficulty of integrating all paratransit operators into the new regulatory framework, in particular excluding those operating in the most precarious conditions.

Identifying the steps needed to reform paratransit in Medan, Indonesia

The sustainable urban mobility plan drawn up for the Medan metropolitan area identifies various measures and steps to reform the local transport sector. These measures are as follows:

- Consultations with operators, including interviews, focus groups, and workshops;
- Analysis of existing contractual agreements and financial flows;
- Defining the institutional framework to (re)define the relationship between angkot operators and local authorities;
- Creation of the regulatory framework, including improved contractual provisions, service quality assessment criteria, and a long-term monitoring body.

GoZem digital platform

The GoZem digital platform in West Africa, issues operating licences for motorbike taxis.

SafeBoda in East Africa

Drivers must abide by a code of conduct (respect for the highway code, use of safety equipment, punctuality, and vehicle inspections).

REGULATE

Developing the legislation and regulations defining formal and informal services

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Combating illegal activity and supporting accession to the formal system

Establishing a regulatory framework for paratransit operations necessarily implies that those who do not respect the framework will be forced to change their practices.

This involves introducing and enforcing penalties such as fines, licence or permit withdrawals, and/or bans. These penalties must be proportionate to the operators' resources and must not be applied arbitrarily.

However, in parallel with these measures, support mechanisms may be used to encourage operators to comply with the regulatory framework. These measures may include:

- Formalisation: assisting operators with administrative procedures (obtaining permits, quality criteria, forming economic interest groups, etc.), as some operators have limited Staff resources to understand legal texts and administrative procedures.
- Professionalisation: access to professional training courses (see measure 10-1); easier access to loans, in particular, to enable the purchase of rolling stock that complies with standards. This measure may be combined with setting up economic interest groups.
- Leaving the sector: buying back permits and licences at advantageous rates and introducing compensation can make it easier for operators who cannot accede to the regulatory framework to leave the sector (see measure 10-1).

The regulatory framework, associated penalties, and accompanying measures should evolve and adapt to changing circumstances. For example, the development of clandestine transport services in new suburbs may give rise to specific support measures to formalise these services (such as the *taxis-clandos* in Dakar).

Types of paratransit affected	All types where there are illegal or unregulated operations.
Prerequisites	Existence of a regulatory framework and a criminal code. Transport policy with a defined role for paratransit.
Stakeholders	Local authorities/ Authorities responsible for paratransit management and regulation, operators, and professional organisations where applicable.
Level of investment	Financial investment: varies. All the presented measures to facilitate accession to the formal system require an initial investment that can be recouped over time (such as leasing). Human investment: significant, especially if it involves promoting support for individuals to formalise their operations.
Level of importance	High.
What to watch out for	Existence of human resources to support the accession of illegal operators to the regulatory framework.
Timing	Ongoing, but particularly when new regulations and/or new urban transport projects are introduced.
Assessment criteria	Controls to monitor any illegal/clandestine transport services.



Example for reference

In Accra, the various municipal *Departments of Transport* are supposed to identify operators who do not comply with the regulations and recommend appropriate penalties.

REGULATE

Developing the legislation and regulations defining formal and informal services

IMPORTANCE



COST



Define the number of approved paratransit operators

Even before establishing an authorisation or licensing procedure for paratransit operators, it may be necessary to regulate the activity by setting the appropriate number of approvals (or authorisations or licences) in advance. This preliminary work should make it possible to strike the best possible balance between the needs of the public service, the exercise of free enterprise, and balanced competition.

Determining the appropriate number of authorised operators requires an assessment of the current situation, in terms of service quality, supply and demand, and operators' practice of their profession, followed by a search for the best compromise between the various objectives set out above, in particular through a consultative process. This number can then change depending on formal transport projects or the pace of urban development.

A simple method might be to 'freeze' the number of legal vehicles on the road and then index the growth in licences to population growth.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of a paratransit diagnosis.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	There are no specific costs, apart from the cost of the paratransit diagnosis.
Level of importance	Optional. This approach can be a powerful means of regulation and control. It may, however, be considered restrictive and may not be readily accepted.
What to watch out for	Risk of promoting unregulated transport services.
Timing	Can be implemented as part of an overall project to improve and monitor paratransit, possibly in conjunction with the development of a structured transport offer.
Assessment criteria	Trend in the number of illegal or unlicensed paratransit operators.

CERTIFY

Defining quality metrics and giving preference to operators who satisfy these metrics

IMPORTANCE



COST



Define the conditions for certification of paratransit operators and services

Introduce a certification confirming that the operator meets a certain number of quality criteria in order to reassure customers. Unlike in the case of a permit, paratransit operators who do not have the certification are not deemed to be practising illegally (the two concepts may also be combined). However, in addition to its direct commercial impact, obtaining a certification may be associated with certain advantages (see measures 6-2).

Quality criteria are defined on a case-by-case basis, but may relate to the quality and age of the vehicle, the driver's level of training, the continuity of service, customer feedback, the absence of punishable offences, etc.

The certification should be awarded for a limited period (for example, two years) and should be subject to a renewal procedure.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of human and technical resources within the Organising Authority to manage and monitor the certification process.
Stakeholders	Supervisory authorities, local authorities, professional representatives, and others depending on the situation (police, user representatives, etc.)
Level of investment	The financial investment essentially consists of putting in place staff responsible for investigating and monitoring quality requirements.
Level of importance	InterMediumte. This could be a first step towards a legal framework for paratransit or could complement other approval procedures. If properly applied, it can encourage paratransit operators to make improvements in order to reap the commercial benefits associated with the certification.
What to watch out for	Beware of the risks of misappropriation and fraudulent practices (buying certifications, etc.). We do not recommend embarking on this path if training and monitoring resources cannot be provided (risk that certification will lose its value).
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Number of operators certified. Number of renewals. Change in market share among operators with and without certification.

CERTIFY

Defining quality metrics and giving preference to operators who satisfy these metrics

IMPORTANCE



COST



Define the benefits granted to certified operators

Obtaining a quality certification should give the certified operator a significant competitive advantage.

This advantage can be seen, for example, in:

- displaying the certification on the operator’s vehicles and in commercial communications;
- listing in public directories;
- access to representative and consultative bodies;
- rights to access certain public facilities (bus stations, corridors) or specific service areas;
- tax and financial benefits.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Same as for the previous action. Some benefits may need to be adapted to comply with regulations. Ultimately, it may be necessary in some cases for the certification itself to have a clear regulatory status.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	The effort depends on the nature of the benefits ultimately produced: it is virtually nil for communications-related actions, but may be significant if it takes the form of grants or benefits.
Level of importance	InterMediumte. If major advantages are granted to certified paratransit operators, the leverage effect on quality and professionalisation may be significant.
What to watch out for	Beware of the risks of misappropriation and fraudulent practices (buying certifications, etc.).
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Evaluation of the indirect effects of certification, to be determined according to the benefits provided

CERTIFY

Defining quality metrics and giving preference to operators who satisfy these metrics

IMPORTANCE



COST



Define the procedures for monitoring and renewing operators' certification

Obtaining a quality certification only makes sense if compliance with the criteria used to obtain it is verified over time. It is therefore essential that this certification only be awarded for a limited period, for example 2 to 3 years. However, it must also be possible to monitor compliance with the certification criteria on an ongoing basis.

This monitoring may take several forms:

- random spot checks by staff from the Organising Authority;
- analysing customer feedback (complaints, satisfaction surveys);
- working together with law enforcement;
- a requirement for the operator to submit supporting documents on a regular basis;

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Same as for the two previous actions.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	The financial investment essentially consists of putting in place staff responsible for investigating and monitoring quality obligations, which varies greatly depending on the monitoring methods applied. In any case, the whole certification process requires a certain amount of human resources.
Level of importance	InterMediumte, but essential within the "certification" objective.
What to watch out for	We do not recommend embarking on this path if training and monitoring resources cannot be provided (risk that certification will lose its value).
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	All indicators relevant to the monitoring methods used (number of inspections, complaints, etc.). Certification renewal rate. Number of decisions to suspend certification.

AUTHORISE

Monitoring paratransit operators and ensuring their compliance with certain conditions

IMPORTANCE**COST**

Define the permit conditions for paratransit operators and services

The aim is to restrict the list of companies, operators, or entities authorised to provide paratransit services, and therefore to define formal and informal transport in administrative terms.

This requires a number of terms to be defined:

- authorisation refers to a simple administrative registration procedure, allowing a company to operate freely, often with the sole prerequisite of compliance with legal or regulatory obligations. It can be temporary or permanent, free or paid.
- a permit implies greater control over the operating conditions and the nature and quality of the service provided. In principle, this involves preparing a file and a plan. It therefore applies more to services than to companies or individuals. Ideally, it should be temporary in order to ensure that the plan is monitored, and it should be nature be free of charge.
- a licence is an authorisation to operate as a transport operator; it is characterised by its cost (a licence can be bought and resold), its permanent or long-term nature, and the limited number of licences in circulation. This term is more applicable to taxi services.

These different terms can be combined. For example, a licensed taxi may apply for authorisation to operate a regular service using small vehicles.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Many countries already have authorisation, permit, or licensing systems. This action therefore remains to be implemented in areas where there is no control over the activities of paratransit operators.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	Costs of setting up and managing a permit review and monitoring body, essentially with respect to human resources.
Level of importance	Top priority. It would be very difficult to take action on paratransit without having established control and a legal framework.
What to watch out for	Risk of promoting unregulated transport services.
Timing	Ongoing.
Assessment criteria	Growth in the number of paratransit operators working within a regulated framework.



Example for reference

Definition and monitoring of conditions for access to the profession in the Philippines

The Public Utility Vehicle Modernization Program (PMVUP) has introduced a framework to specify the conditions for access to the sector for both operators and vehicles:

- **Optimisation of routes:** Local authorities are responsible for planning the local network. They must carry out route optimisation studies to determine the appropriate modes and levels of service based on passenger demand and travel patterns in a given area. Route optimisation is considered a prerequisite for consolidating franchises. Based on these studies, local public transport route plans are drawn up by local authorities and submitted to a regulatory body at the national government.
- **Reform of the regulatory framework:** Once the number of jeepneys and other public utility vehicles required for a given route has been determined, the national body opens a public procurement procedure for the operation of that route, with the fleet size and vehicle standards specified in the contract documents. A single franchise is granted to a company, usually a cooperative or a company comprising several jeepney operators. Having a single franchise effectively imposes competition for the market, rather than competition on the market. The procurement procedure initially favoured consolidated paratransit operators, but by mid-2020, tenders will be opened up to external competitors in the event that existing operators fail to comply with the requirements set by the government.
- **Consolidation of the sector:** granting individual franchises encourages paratransit operators to consolidate their activities. Consolidation of the sector is widely seen as a prerequisite for public transport reform and the overall financial viability of the system.

AUTHORISE

Monitoring paratransit operators and ensuring their compliance with certain conditions

IMPORTANCE



COST



Define the procedures for monitoring and renewing permits

The ongoing monitoring of permits can take various forms, and can be more or less onerous, depending on the authorisation system chosen and the nature of the conditions imposed on paratransit operators. However, in all cases, monitoring procedures must be put in place to ensure that the conditions required at the outset are maintained over time.

These conditions may be of an administrative nature (being up to date with the payment of taxes, for example), related to equipment (operating a vehicle that is less than X years old or that has passed a regular technical inspection), or to quality of service (respecting the agreed timetables or operating conditions, continuity of service, etc.). They may be verified via unannounced checks, via supporting documents periodically submitted by operators, or by handling reports from customers or law enforcement agencies, in the same manner as for monitoring certifications (see measure 6-3).

Rules must also be put in place in the event of non-compliance (immediate withdrawal of the permit, warning, a deadline to rectify the non-compliance, a financial penalty, etc.)

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Existence of authorisation, permit, or licence schemes associated with conditions for access to the profession.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	Costs of setting up and managing a permit review and monitoring body, essentially with respect to human resources.
Level of importance	Top priority. It would be very difficult to take action on paratransit without ongoing regulatory control of such services.
What to watch out for	The required operating conditions should be adapted to the local context so as not to foster the development of clandestine services, and must remain verifiable. It must be possible to punish violations in a dissuasive yet proportionate manner.
Timing	Ongoing.
Assessment criteria	Number of permits inspected (by type of inspection). Number of irregularities found. Number of permits withdrawn.

CONTRACT

Integrating legal paratransit into the mobility ecosystem via agreements with the organising authority and/or an organised carrier

IMPORTANCE**COST**

Determine the most appropriate economic and legal model for contracting with paratransit operators

The aim of contractualisation is to define the roles and obligations of each of the contracting parties, from a win-win perspective. Through contracts, the Organising Authority seeks to ensure that paratransit services complement formal transport, which means that the role of paratransit must be defined and the quality of service monitored. Paratransit operators, for their part, expect their business and income to be more secure.

The very concept of paratransit means that the contractual model will probably be based on the notion of “risk and reward”, with the operator remaining solely responsible for his revenue and expenses. However, in view of its obligations, and to establish a win-win relationship, the competent public authority may intervene at various levels: securing operations (guarantees of exclusivity, numerus clausus, etc.), access to services (information, digital applications, logistical support through reserved lanes, multimodal hubs, etc.), or even financial support (aid for investment or vehicle renewal, for example).

Types of paratransit affected	Regular services, including flexible modes of operation, but not taxi services.
Prerequisites	Existence of a sufficiently structured paratransit service, both in terms of its services (regular routes) and its professional organisation. Existence of a Sustainable Urban Mobility Plan or a mobility development plan. Existence of a legal framework for public-private relations in the transport sector.
Stakeholders	Regulatory authorities, local authorities, professional representatives
Level of investment	Mobilisation of human resources and expertise to manage the approach and direct the process. Resources committed to support the activity (see Objective 16)
Level of importance	Contractualisation is the most successful way of integrating paratransit into a global mobility system. In this sense, it is not necessarily appropriate in all contexts and it requires a strong political and technical investment. But it is the only way for a transport system to reach the quality standards of a developed city.
What to watch out for	It is preferable not to embark on this process unless there is a strong political will and the technical means to manage and monitor it.
Timing	The contractualisation process comes at the end of the integration process, on well-laid foundations (organisational, technical, legal, and financial).
Assessment criteria	Number of contracts signed. Contracted work units (companies, jobs, vehicles, kilometres, passengers, etc.)



Example for reference

French Guyana

Regional network partly created by contracting out former semi-regular collective taxi routes.

Subcontracting of paratransit operators

Most initiatives aimed at formalising paratransit operations as feeder services require both modal and fare integration.

R. Desmoulière (2019) points to another type of configuration for introducing a particular form of subcontracting, as has been the case since 2017 for services provided by the Koperasi Wahana Kalpika (KWK) cooperative for ten of its lines. KWK had to stop operating on some sections of Transjakarta's competing routes, and Transjakarta passengers were given unlimited access to KWK's angkots if they alighted at a peripheral terminal at peak times and bought a 'friend of KWK' card each month at Transjakarta ticket offices. The income generated by the sale of the cards was paid back to the KWK members (that is, the vehicle owners).

This specific case is representative of the development of paratransit services to extend the reach of formal public transport networks. However, this integration model was limited, as it excluded drivers from the programme. Vehicle owners remained responsible for setting the wages offered to drivers. As a result, the integration has led to a fall in drivers' incomes.

CONTRACT

Integrating legal paratransit into the mobility ecosystem via agreements with the organising authority and/or an organised carrier

IMPORTANCE**COST**

Set up contract monitoring and assistance mechanisms

As with measures related to certifications or permits, but even more crucially, the Organising Authority must put in place the human, financial, and technical resources needed to:

- ensure that contracts and agreements with paratransit operators are properly executed,
- apply the penalties provided in the contract in the event of a breach,
- monitor activity and draw up the necessary performance indicators and assessments,
- but also to fulfil their role as Organising Authorities by providing advice and assistance and improving the way they conduct their activities.

There may be numerous forms of organisation which should be adapted to the context. However, it seems essential to provide qualified staff to exclusively handle taxi services, and in particular to monitor contracts and provide advice.

Types of paratransit affected	Regular services, including flexible modes of operation, but not taxi services.
Prerequisites	Existence of contracts or agreements between the Organising Authority and all or some of the paratransit operators who operate regular services as part of the transport plan.
Stakeholders	Supervisory authorities, local authorities, professional representatives, and paratransit operators.
Level of investment	Mobilisation of technical and human resources to carry out the tasks described above. Resources committed to supporting the activity (see Objective 13)
Level of importance	High, provided that a contracting or agreement process has been put in place.
What to watch out for	The staff responsible for monitoring contracts and agreements with paratransit operators will need to be highly qualified and be able to strike a balance between rigour and benevolence. They must, of course, resist against any attempt at corruption.
Timing	Ongoing, once contracts or agreements have been concluded with paratransit operators.
Assessment criteria	Ratios between the number of paratransit operators contracted and the resources (human, financial) mobilised. Follow-up of any penalties and sanctions.

SET FARES

Introducing a coherent, multimodal pricing system

IMPORTANCE



COST



Work with representative organisations to establish coherent pricing and ticketing systems

Fares are a key issue when it comes to integrating paratransit. The first step in this direction is to negotiate a set of fare principles with the paratransit operators and their representative organisations, to prevent fares from going up or down. There are many ways of doing this, and the results may vary. At the very least, this may involve setting minimum and maximum fares for each type of service. At most, this may lead to a general fare agreement establishing a concentric zone-based fare system.

Ticketing is a related but important issue. In almost all cases, paratransit operators do not issue proof of payment. The introduction of a ticketing system can help to improve the visibility, security, and traceability of services, and can be a prerequisite for moving towards more sophisticated forms of pricing. The introduction of a ticketing system is a very important lever for reforming paratransit, as having traceable fare revenue means we can move away from the "target system" (where the driver pays a fixed amount to the vehicle owner) and move towards a system where the driver is an employee. This ticketing system may take very simple forms (ticket booklets) or be more elaborated, in preparation for introducing a modern ticketing system.

Types of paratransit affected	All formal varieties. Where appropriate, separate taxi and regular service modes may be defined.
Prerequisites	Knowledge of the operating accounts of paratransit operators. Existence of channels for consultation with paratransit operators, and preferably a form of contractual relationship (certification, authorisation, contractualization) enabling any observed fraud to be penalised. Existence of human resources to lead and monitor the process.
Stakeholders	Regulatory authorities, professional representatives, paratransit operators, customers.
Level of investment	Mobilisation of technical and human resources to carry out the tasks described above. There may be some implementation costs if the paratransit operators do not have the necessary resources.
Level of importance	Varies according to the context and the extent to which services are structured.
What to watch out for	Beware of the risk of fraud. Need for regular checks by a "secret shopper".
Timing	Ongoing, once an agreement has been concluded with the paratransit operators.
Assessment criteria	Follow-up of any penalties and sanctions.



Example for reference

The Urban Mobility Improvement Programme in Madagascar, The Association de Financement des Professionnels du Transport Urbain (Urban Transport Financing Association) in Dakar.
Accra, with zone-based BRT pricing per kilometre, which corresponds to the *troto* fares on the same zones.

SET FARES

Introducing a coherent,
multimodal pricing system

IMPORTANCE



COST



Define an integrated, multimodal pricing and ticketing system

Once a coherent fare system has been established, you may consider attempting to integrate paratransit into a universal fare system, as part of an overall urban mobility plan (Sustainable Urban Mobility Plan or similar).

In fact, if paratransit services are entrusted (as is often the case, and rightly so) with connecting isolated or outlying areas to the core network, multimodal integration will be fundamentally imperfect, as a customer who has to use both modes of transport successively will have to pay two fares, whereas a customer living near a core line will only pay one.

There are considerable challenges, because the fare income from the core network must somehow be equalised with that from the paratransit network, while respecting the paratransit operators' business model. This presupposes a high degree of intervention, and probably contractualization, or even a form of cooperation between the operator of the core network and the paratransit operators.

Of course, it will be important to search for low-tech, robust solutions that provide a sufficient level of traceability and fraud prevention.

Note: it is only possible to integrate certain products (subscriptions/school passes/unit tickets, etc.)

Types of paratransit affected	Regular services, including flexible modes of operation, but not taxi services.
Prerequisites	Existence of channels for consultation with paratransit operators, as well as a contractualisation process. Existence of human resources to lead and monitor the process.
Stakeholders	Regulatory authorities, professional representatives, paratransit operators
Level of investment	This is a complex process that will require both a specific technical study and a complex consultation process. Depending on the solutions chosen, the implementation costs may vary.
Level of importance	The stakes are high, but the difficulties of implementation mean that few cities have been able to complete the process.
What to watch out for	Pay particular attention to the security and reliability of the proposed solution, and in particular to the traceability of transactions and the risk of fraud.
Timing	Ongoing, once an agreement has been concluded with the paratransit operators.
Assessment criteria	Multimodal transaction volumes. Breakdown of multimodal transactions between paratransit and structured transport services.



Example for reference

In Progress: Under development in Dakar with the TER and BRT projects.

Tariff integration in Jakarta

To promote modal integration and intermodality, fare and ticketing systems need to be implemented. These measures require a high level of dialogue with transport operators and may use various Medium, from the fairly simple (paper tickets) to the fairly sophisticated (cashless payment methods). Indeed, the most challenging issue is the possible introduction of compensation for users in order to penalise passengers using other modes of transport. Similarly, setting and integrating fares are difficult undertakings, and should be adapted to the local relationships between players and service providers as well as the needs of users.

In Jakarta, fare integration was attempted in 2015, when the Kopaja65 cooperative was allowed to use bus lanes where routes overlap. Passengers could use the same ticket, for the same price. The aim of this integration was to enable feeder services, with 300 Kopaja benefiting from the BRT infrastructure while also serving outlying areas. Phasing out the target system was a prerequisite for this integration. The municipal company PT Transportasi Jakarta - which operates TransJakarta - paid vehicle owners per kilometre, while the drivers became employees. The integration programme has changed Kopaja's purpose and role as a cooperative:

- Before integration: Kopaja controlled the creation and operation of routes and negotiated with other stakeholders, such as transport authorities and banks.
- After integration: Kopaja recruited the drivers and acted as an interMediumry for the payment of compensation and wages.

The impact of this collaboration between Kopaja and PT Transportasi Jakarta has been well received, thanks to the successful integration of drivers as well as the successful integration of costs to passengers. However, this integration model is reserved for a small group of operators, as one of the conditions for joining the programme was purchasing modern vehicles adapted to the Transjakarta corridors. This means that only operators with sufficient financial and social capital were able to take part in the programme.

Building on the success of the Kopaja experiment, the programme was extended in 2017 to Metromini66 and 7 other cooperatives. In October 2018, the programme was officially implemented as JakLingko, an intermodal integration programme following the trunk and feeder model. By March 2019, JakLingko had 29 routes in five DKI Jakarta zones, with 700 vehicles in the programme. Licensed fleets of vehicles less than 5 years old were given priority. With JaKLingko, passengers can use a combination of minibus and TransJakarta network journeys, for an integrated fare of IDR 5,000 for each 3-hour period, using cashless payment. Drivers may only stop at designated stops. Between January 2018 and February 2019, around 185,000 e-cards were sold. In the years to come, JakLingko aims to integrate all rail services owned by the provincial government of DKI Jakarta, such as *Mass Rapid Transit* (MRT), *Light Rail Transit* (LRT) and the electric train (KRL Commuter Line). Integrated distance-based tariffs should be implemented by March 2022. The aim is for fare integration to apply to both rail and road transport, including ojek and shared taxis.

However, some problems appear to be hampering the deployment of JakLingko:

- Negotiations on the price per kilometre have led to conflicts between PT Transportasi and paratransit operators. Currently, JaKLingko aims to include direct and indirect costs, as well as a 10% profit margin and the company's operating costs.

The marketing of smart cards is still limited. They are not sold at every bus stop in Transjakarta.

SET FARES

Introducing a coherent,
multimodal pricing system

IMPORTANCE



COST



Set up an interoperable ticketing system

Ticketing systems are technologies used to manage fare collection and integration in a secure manner, ensuring traceability and monitoring of transactions, and enabling the introduction of sophisticated fare systems such as intermodal tickets, discount cards, etc.

In the context of paratransit, implementing expensive technologies such as magnetic or contactless ticket validators is often unrealistic. On the other hand, recent advances make it possible to envisage the implementation or development of solutions managed entirely by mobile phone, which can free both the operator and the customer from handling cash while guaranteeing secure transactions and providing information.

The introduction of ticketing systems in the Global South is probably not a major concern for customers. It is probably not of considerable interest if it is not combined with an intermodal fare system. On the other hand, if a ticketing system is implemented in a core bus network (or BRT), the Organising Authority may want to ask their project management team about providing paratransit operators with smartphone applications enabling them to integrate into the system.

Types of paratransit affected	Regular services, including flexible modes of operation, but not taxi services.
Prerequisites	<p>In the context of paratransit, the introduction of a ticketing system is the final stage in the integration process. It assumes that a high level of integration of paratransit services into a global mobility system is already in place. This must be based on both effective contractualisation and the provision of the necessary financial resources for intervention.</p> <p>An awareness-raising campaign may be deployed in the paratransit sector, particularly among drivers and vehicle owners, to convince them that the plan represents a “win-win”.</p> <p>Awareness-raising campaigns may also be deployed among users.</p>
Stakeholders	Regulatory authorities, professional representatives, paratransit operators
Level of investment	<p>This is a complex process that will likely require both a specific technical study and a complex consultation process</p> <p>Training programmes could help familiarise operators – particularly drivers – with cashless payment methods.</p> <p>The implementation costs will vary, depending on the chosen solution.</p>
Level of importance	The introduction of a modern ticketing system may be seen as the culmination of a policy to integrate paratransit into the overall mobility ecosystem. However, it remains optional.
What to watch out for	<p>Pay particular attention to the security and reliability of the proposed solution, and in particular to the traceability of transactions and the risk of fraud.</p> <p>The introduction of this type of system may create tensions within the sector, particularly between drivers and vehicle owners (especially when the “target system” is prevalent).</p>
Timing	Ongoing, once an agreement has been concluded with the paratransit operators.
Assessment criteria	Multimodal transaction volumes. Breakdown of multimodal transactions between paratransit and structured transport services.



Example for reference

Safoboda for motorbike taxis in Kampala and Nairobi (mobile payment and e-hailing).
Tap&Go in Rwanda (NFC card) and Yaoundé (NFC card) for buses.
Taxify (Bolt) in Kampala, (mobile payment and e-hailing) for motorbike taxis.
Uber in Dar-Es-Salaam and Mombasa (mobile payment and e-hailing) for three-wheelers.
Gozem in Lomé (mobile payment and e-hailing) for motorbike taxis.

INTEGRATE

Integrating paratransit into the mobility ecosystem

IMPORTANCE



COST



Integrating paratransit and public transport systems

The implementation of a mass transit project (such as a BRT, metro, or tram) generally takes precedence with respect to both national and local government action (for example, creating a local public transport authority). However, when a city plans to invest in a mass transit system, it is also an opportunity to take direct action on paratransit services.

A public transport project generally has a set budget – often several hundred million USD. On this occasion, after negotiations between the international financial institution (if such a stakeholder exists) and the beneficiaries (that is, the municipal and/or national authorities), a certain percentage of the budget may be (re) allocated to the integration and modernisation of paratransit as one component of the project. This component may be described as “environmental and social management”, as it aims to mitigate the negative externalities of paratransit vehicles (described in section 3.4.) and could offer career opportunities to those employed in this sector.

Secondly, at the city level, the development of a public transport project raises two additional questions linked to the financial viability of the facility:

- Feeder services need to be put in place to channel mobility flows towards the new public transport project in order to guarantee sufficient ridership;
- To ensure a modal shift towards the new public transport project is important to avoid unnecessary competition along the planned corridors

Participation and dialogue with paratransit stakeholders in advance of a major investment programme could help establish safeguards to ensure the success of a public transport project.

Initiate the transition and integration of paratransit into all phases of a public transport project

The development of a public transport project offers the opportunity to take numerous measures to modernise and integrate paratransit. The “environmental and social management” component discussed above should encourage stakeholders to engage with the existing paratransit sector (as well as the existing conventional bus sector) to begin negotiations towards allowing existing operators to participate in the new public transport system. Special attention should be paid to paratransit workers, with a particular view to guaranteeing employment opportunities for these workers in the new mass rapid transit system.

Offering to integrate paratransit into the new mass transport system can help to defuse and avoid conflicts between existing paratransit and future formal public transport. To achieve this, existing paratransit operators and staff should be integrated into the workforce of the new mass transit system to the greatest possible extent. This may also require the conclusion of rental agreements and contracts with paratransit operators. Actions can be taken from the start of the planning process through to the construction and operation of the project, in the four phases detailed below.

Integrating paratransit into the context of a mass rapid transit system remains complex and difficult, as it raises a number of issues: physical, economic, and institutional integration, and so on. We may expect integration to remain an iterative process involving a certain amount of trial and error.

The approach set out in the following sections is based on the assumption that the implementation of a public transport project will require the restructuring and reorganisation of paratransit. This could potentially jeopardise the business model and livelihoods of paratransit, but could also offer opportunities to continue operations on a more formal basis.

The main objectives of this approach are as follows:

- Anticipate and defuse potential conflicts between public authorities and paratransit operators;
- Prevent competition between paratransit services and the public transport system;
- Ensuring large service coverage and high levels of ridership for the future public transport project.

This win-win situation should ensure that those involved in paratransit services also benefit from the project. All the actions proposed in the following sections must be initiated by public authorities, with the Public Transport Authority (if any) taking the lead.

1. Preliminary phase of the project

Main objective: over and above the technical aspects of a public transport project, public authorities should ensure that the project is economically and socially acceptable to the paratransit sector.

Step: Contact the paratransit stakeholders and begin the negotiation process.

- Identify the key players in paratransit (associations, cooperatives, car-sharing driver associations).
- Communicate with these key players (organised by the local authorities) about the public transport project.

Step: Carrying out socio-economic impact studies.

- Carry out a survey of local paratransit operations to identify services (fixed or on-demand routes, frequencies, vehicles) that could overlap (wholly or partially) with the public transport project.
- Carry out a survey to categorise stakeholders (vehicle owners, drivers, route owners, etc.) in order to understand (1) their business models (including revenues/costs/expenditure) and (2) how the public transport project might affect their business (operations and revenues).
- Carry out a survey of vehicles to identify their number, registration status, and quality (capacity, age, emissions), including fixed-route and on-demand services.

Step: Vehicle compensation and scrappage programme

- The municipal level (for example, the Public Transport Authority, if one exists) is responsible for drawing up a compensation and vehicle scrappage scheme (based on criteria such as vehicle and service registration, vehicle age, etc.)
- Compensation is then determined according to the categories of paratransit players affected by the public transport project (that is, owners of vehicles operating on paratransit routes overlapping the project; owners of vehicles operating on the paratransit routes partially overlapping the project; drivers; route owners); this represents “compensation for operating losses”.
- The scrappage offer will depend on the vehicle (age, cost, registration status). The criteria and prices are set by the public authorities.

Step: Draw up a roadmap for training and capacity development.

- The municipality (and the Public Transport Authority, if one exists) should anticipate the number and level of education/training of the employees the project is likely to employ.
- The municipality (for example, the Public Transport Authority if one exists) should communicate the needs (and potential job opportunities) associated with the operation of the project. This communication campaign should focus on the potential improvement in working conditions and the job security offered.
- Based on the results of the labour survey, transition plans for those employed in paratransit should be proposed. These plans should integrate those workers into the project. Regular communication campaigns on the socio-economic benefits of joining the public transport system operating companies should also be carried out.

2. Project design phase

Main objective: To increase synergy between the technical aspects of paratransit services and the public transport project.

Step: Define a feeder network for major routes

- Based on the preliminary plan for the public transport project and the survey of existing paratransit services (fixed lines), the municipality (for example, the Public Transport Authority if one exists) should define a network of feeder services serving the “trunk” (that is, the public transport system).
- Feeder lines and shared stops (between feeder lines and the public transport corridor) must be clearly identified by the Public Transport Authority.
- The Public Transport Authority should determine which feeder services should be provided and which may or may not have access to main routes (fixed routes and/or on-demand services).

Step: Infrastructure design

- During the design phase of the public transport project, particular attention must be paid to the physical articulation of feeder services in the corridor (for example, in the case of BRT, parallel lanes for paratransit services could be created).
- Multi-modal hubs will need to include facilities for transferring between the public transport system and paratransit services (for example, dedicated platforms or special bridges). This physical integration will ensure a smoother transfer for passengers.
- Establish rules and regulations for paratransit operators’ access to multimodal interchanges (fixed routes and/or on-demand services).

Step: Draw up operating rules and regulations for paratransit services

- The municipal level (for example, the Public Transport Authority, if one exists) should draw up criteria and regulations that allow paratransit workers to operate in public transport corridors.
- These criteria may be based on company registration and payment of taxes (for fixed routes), route registration (for fixed routes), and/or vehicle and driver registrations (for example, driving licences).

3. Project implementation phase

Main objective: to reform paratransit and ensure its integration with existing (or future) transport services.

Type of actions: Implement the vehicle compensation and scrappage programme

- Finalise the scrappage scheme, determine the price, and proceed with payments to the owners of eligible paratransit vehicles.
- Finalise the commercial compensation phase, determine the price, and proceed with payments to owners of paratransit lines and eligible drivers.
- Plan the audit and due diligence of the programme with independent supervisors.

Type of actions: Build the capacity of paratransit operators

- Based on the social survey, offer jobs to workers likely to be affected by the project. These positions may include drivers, conductors, security, station, cleaning, ticketing, maintenance, and administrative staff, as well as management and public relations officers.
- Organise training for the affected/concerned/ involved paratransit employees.

Type of actions: Contracts

- With the new paratransit operator, draw up agreements/contracts defining all relationships (technical, fares, and financial) with the new public transport system.

Type of actions: Fares and ticketing

- Define an intermodal fare system that is not detrimental to feeder services and that protects the business model of paratransit operators.
- Adopt a policy of revenue equalisation between operators (that is, adjust the revenues of the various operators, supporting the weakest).
- Set up a unified ticketing system.

Type of actions: Passenger information

- Define operators' responsibilities with respect to passenger information.
- Produce plans and brochures.
- Equip stops with relevant information.
- Encourage the creation of information agencies and offices.

4. Operational phase of the project

Objective: to ensure that paratransit services and public transport services remain complementary through a transparent evaluation process.

Step: Follow up on the integration of existing paratransit services

- Monitor the disposal and compensation programme (provide answers if there are complaints).
- Verify the registrations of paratransit operators authorised to provide feeder services.
- Coordinate with municipal services, in particular the traffic police, to ensure that rules and regulations are enforced along rapid transit corridors and in multimodal centres.

Step: Carry out audits and evaluations to adapt measures

- Carry out an independent audit of the scrappage and compensation programme.
- Carry out an assessment of the training given to former paratransit staff who take on new roles within the rapid transport operator.

Types of paratransit affected	All legal types
Prerequisites	Formalisation and consolidation of paratransit operations.
Stakeholders	Local (and national) transport authorities, representatives of paratransit operators.
Level of investment	Variable financial investment, depending on the measures included (for example, vehicle scrappage schemes) Significant human effort, mainly linked to the planning, design, and management of the entire public transport network.
Level of importance	High, depending on the (planned) existence of public transport services.
What to watch out for	Definition of the exact role of paratransit operators, including the rules and procedures for their inclusion.
Timing	Ongoing.
Assessment criteria	Number of paratransit operators reintegrated/relocated into the new public transport system.



Example for reference

Integrating paratransit into a mass transport system in Peshawar

When it invested in the first BRT line in Peshawar in 2018, the Asian Development Bank included a component entitled Bus Industry Restructuring Programme in the project. The Asian Development Bank proposed that, in parallel with the development of the BRT corridor, a programme would be launched to reorganise paratransit services along the corridor. The aim was to avoid any disruption to BRT operations and to avoid competition.

The programme included buses (the iconic Mazda 'rocket', minibuses, Ford Wagons) and some lighter vehicles (Suzuki, Datsun, and Qingqi) operating on fixed routes. On-demand services (mainly rickshaws) were excluded. After extensive consultation, a total of 517 vehicles were selected for the restructuring programme, along with almost 400 vehicle owners, 126 owner-drivers, 517 drivers, and 510 conductors. These vehicles were operating wholly or partly on the BRT corridor. During the consultation phase, compensation and vehicle scrappage schemes were proposed, as well as re-employment-oriented training programmes for operators, owners, drivers, and conductors at risk of losing their livelihoods.

The authorities have defined specific rules for access to compensation programmes. A distinction was made between conflicting and non-conflicting routes (that is, routes which did or did not overlap the BRT corridor). Legal criteria were considered, that is, a distinction was also made between formal and informal paratransit operations (for example, unregistered bus services). A complex system was put in place (see the figure below), aiming to be as inclusive as possible.

General limits of the restructuring programme:

Despite the launch of the bus industry restructuring programme in 2018, the programme is still ongoing. The first phase of the programme began with an extensive round of negotiations. This phase was crucial to ensure the smooth development of the public transport project and the restructuring of the bus sector.

A number of lessons were learned from this phase, or at least recommendations for future projects:

- Prepare public institutions (allocate tasks among the relevant authorities and ensure they understand the need to include existing "associations" in the process at an early stage).
- Prepare a clear programme with exact amounts and eligibility criteria for compensation and scrappage schemes (define a budget and timetable).
- Clearly explain the benefits of the new jobs and the positions that will be offered in the BRT system (benefits, working hours, working conditions).
- The consultation must be transparent and documented in order to avoid the spread of false rumours (a communication campaign by the public authorities).

Supporting reforms

Professionalise – Implement measures to help operators develop their skills

Actions	Importance	Cost	Page number	✓
11-1 Identify training structures	Medium	Variable	73	
11-2 Set up appropriate training programmes	Medium	Medium	74	
11-3 Promote the introduction of shared services	Medium	Low	76	
11-4 Help paratransit operators who cannot adapt to the new environment to retrain	High	Variable	77	

Inform – To develop information on paratransit services as part of a multimodal information system

Actions	Importance	Cost	Page number	✓
12-1 Implement communications campaigns	Medium	Low	78	
12-2 Implement information tools (website, apps)	Medium	Low/ Medium	79	
12-3 Define and monitor operators' obligations to provide passenger information	High	Low	82	
12-4 Develop appropriate signage	/	Low	83	

Materialise – To develop paratransit stations, hubs, and other facilities to improve visibility and quality of service

Actions	Importance	Cost	Page number	✓
13-1 Formalise and demarcate stations, hubs, and other facilities, as well as dedicated lanes, if necessary	Medium	Medium	84	
13-2 Draw up specific regulations for paratransit facilities	Medium	Low	85	
13-3 Equip paratransit facilities	Medium	Variable	86	

Support – To provide the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

Actions	Importance	Cost	Page number	✓
14-1 Implement a policy to support investment in rolling stock renewal	Medium	Variable	87	
14-2 Use tax incentives to promote paratransit reform	Medium	Variable	89	
14-3 Support or facilitate the acquisition of social insurance	Medium	Low	91	
14-4 Support local industry	High	Low	92	

PROFESSIONALISE

Implementing activities to encourage operators to improve their skills

IMPORTANCE**COST**

Identify training structures

Identify training structures for paratransit operators. Several types of structures may be suitable, for example:

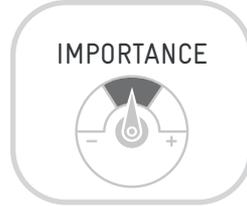
- The organising authority or the authority responsible for paratransit management and regulation
- Professional organisations (economic interest groups, associations, trade unions, cooperatives).

This training may also be provided by external players. In this case, the contracting organisation should draw up precise specifications with the organisation responsible for the training to determine its content, the targeted skills improvements, the target audience, and the training methods.

On-demand transport platforms can be appropriate structures for providing such training when the public authorities delegate certain aspects of the regulation of paratransit operators to them.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Define the expectations of the training as well as the target audience.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, on-demand transport platforms.
Level of investment	Financial investment: variable, depending on the organisation providing the training. The minimum cost of a training course includes the days spent drawing up the specifications and designing the content and the days spent delivering the course, as well as the follow-up. At the very least, it is necessary for the Organising Authority to draw up the relevant specifications or to monitor their preparation. Human investment: limited. A staff member is responsible for follow-up and the possible involvement of the relevant experts during the training process.
Level of importance	Moderate.
What to watch out for	If training is contracted out, introduce control and monitoring measures within the Organising Authority.
Timing	Ongoing.
Assessment criteria	Quality and replicability of the specifications.

PROFESSIONALISE
 Implementing activities to encourage operators to improve their skills



Set up appropriate training programmes

The training programmes meet the pre-identified needs. Based on these needs, objectives are drawn up in terms of skills acquisition, and the body responsible for organising the training then proposes an educational model. The training may target several types of skills, for example:

- Mastery of safety regulations and service quality standards, as defined in consultation with all stakeholders.
- Skills linked to the role(s) defined for paratransit under the Sustainable Urban Mobility Plan.
- Mastery of skills related to fleet management and vehicle operations and maintenance.
- Skills relating to the economic model of the paratransit sector, as well as sustainable financing.
- Raising awareness of the use of digital tools, particularly when these are used as part of the Sustainable Urban Mobility Plan, through GPS surveys, network and flow mapping, passenger information, and ticketing systems.

Types of paratransit affected	All formal varieties. Separate taxi and regular service modes may be defined.
Prerequisites	Expectations with respect to training may be defined in the Sustainable Urban Mobility Plan (capacity building). Training needs are expressed by the various stakeholders, and may also be identified from passenger satisfaction surveys.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, transport-on-demand platforms.
Level of investment	Financial investment: moderate. Above all, this is a question of setting up platforms for exchange between the various players to identify the relevant training needs. Training may be provided in-house or by specialist organisations. Human investment: limited.
Level of importance	Moderate. Particularly relevant in the context of professionalisation programmes.
Timing	Ongoing.
What to watch out for	Ensure that the content of the training is relevant to the specifications. Ensure that the trainer(s) is/are neutral.
Assessment criteria	Number of hours of training provided by type. Follow-up on training participants' skills. Satisfaction surveys of training participants and trainer(s).



Example for reference

Training in South Africa to professionalise paratransit operators and integrate them into the BRT system

In South Africa, a number of training courses have been organised by various institutions to support the formalisation of paratransit operators:

- In Cape Town, the University of Cape Town organised a training course on economic management, regular services, and vehicle maintenance.
- In Johannesburg, the University of the Witwatersrand organised business development training for operators involved in BRT projects.
- In KwaZulu Natal, by the Department of Transport and National Transport Education organised training on customer service.

Road safety training in Uganda

In Uganda, bodaboda operators wishing to join the SafeBoda digital platform must undergo a compulsory five-day training course run in partnership with the Red Cross. The training programme covers road safety, first aid, and motorbike taxi maintenance. SafeBoda drivers are required to follow a code of conduct (respect for the highway code, use of safety equipment, punctuality, and vehicle inspections).

Capacity-building as part of the Philippines' Public Utility Vehicle Modernization Program (PUVMP)

The Philippines' PMVUP includes capacity-building activities aimed at helping paratransit operators modernise their fleets, consolidate their activities, improve the performance of their services, or find new employment:

- For vehicle owners, capacity-building focuses on the financial aspects and management of new vehicles, encouraging them to assume the financial and technical risks involved in replacing old vehicles with newer models.
- A social support programme includes training in entrepreneurship and the acquisition of new skills for drivers who will be affected by the reorganisation of the sector (for example, vocational training to become a mechanic). To encourage participation and mitigate loss of income, participants receive a daily allowance for the duration of the course.
- Local authorities can also benefit from capacity-building measures, as their mandates evolve and they take on greater responsibility for implementing paratransit reform and regulation.
- Consultations with operators and awareness-raising campaigns are carried out on an ongoing basis by public authorities in order to publicise the benefits of the reform and to communicate on its progress.

PROFESSIONALISE

Implementing activities to encourage operators to improve their skills

IMPORTANCE**COST**

Promote the introduction of shared services

The aim of setting up professional structures is to facilitate resource pooling in order to carry out fleet renewal, and, in the long term, to organise shared services such as:

- A central procurement body;
- Vehicle maintenance and repair;
- Passenger information;
- Bus station management;
- Legal and social assistance.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Forums for dialogue within and between professional organisations.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation.
Level of investment	Financial investment: limited. The main aim is for the local authority to encourage such initiatives. Though one-off assistance may be provided, it is never the authority's responsibility to take charge of this process. Human investment: limited. The authorities may also provide advice.
Level of importance	Moderate. Particularly relevant in the context of professionalisation programmes.
What to watch out for	Verify that all operators' interests are protected (avoid a situation where one group benefits from better protection), assess the requirements of internal monitoring bodies.
Timing	Ongoing.
Assessment criteria	Improved working conditions. Extending the guarantees provided by professional organisations to include social insurance for paratransit operators.



Example for reference

Implementation of shared resources in Dakar, with MECTRANS (Mutuelle d'Épargne et de Crédit des Transporteurs) and TRANSVIE (Mutuelle Sociale des travailleurs des transports) as part of the Association de Financement des professionnels du Transport Urbain (Urban Transport Financing Association) and the rolling stock renewal programme, SENBUS for vehicle servicing and maintenance.

PROFESSIONALISE

Implementing activities to encourage operators to improve their skills

IMPORTANCE**COST**

Help paratransit operators who cannot adapt to the new environment to retrain

The professionalisation of the sector, the contractualisation of services, the need to renew rolling stock, and the growing importance of formal transport services will inevitably lead to a reduction in the number of paratransit operators and make impossible for some of them to adapt to the necessary changes. This will have social consequences and will likely lead to protests by paratransit operators and staff who will be prevented from continuing their work.

Therefore, it is necessary to implement measures to promote the redeployment of such persons, which may take various forms:

- organising skills assessments, Staffised assistance, etc.
- vocational training: free training programmes or help with reorientation in other transport professions (formal transport, freight, mechanics, etc.)
- aid or loans (micro-credit) for the establishment of shops or other non-paratransit services
- negotiation of hiring priorities in formal transport companies (after appropriate training) or in sectors with reserved jobs.

Types of paratransit affected

All legal or semi-clandestine varieties

Prerequisites

Identification of the impact of the planned measures and assessment of the number of affected workers

Stakeholders

National/Local authorities/Authorities responsible for paratransit management and regulation/Formal transport companies/Vocational training bodies

Level of investment

Financial investment: highly variable depending on the solutions chosen, but to be weighed against the cost of the social impacts.
Human investment: sustained. Requires constant support and evaluation.

Level of importance

High, if the number of paratransit operators is expected to fall sharply.

What to watch out for

Avoid windfall effects by ensuring that the implemented measures are reserved for those who really need them.

Timing

One to five years from the implementation of measures leading to a reduction in the number of paratransit operators.

Assessment criteria

Growth in the number of paratransit operators. Number and proportion of paratransit operators who have successfully retrained.

INFORM

Developing information on paratransit services as part of a multimodal information system

IMPORTANCE



COST



Implement communications campaigns

Signal paratransit's integration into the overall mobility system by launching targeted communication campaigns to publicise the range of services as well as the Organising Authority's actions in this area.

The consistency of these actions will obviously depend on the implemented policies. This may involve publicising the range of transport services available, the rules of use, recommended fares, safety initiatives, etc.

These campaigns may be very simple: communication in local Medium, posters and signage, and a strong presence on social networks.

Types of paratransit affected	All formal types, though more appropriate for regular services.
Prerequisites	Existence of a formalised policy for the Organising Authority's intervention in the organisation of paratransit. Existence of the human resources needed to implement these campaigns.
Stakeholders	Supervisory authorities, local authorities, professional representatives, paratransit operators
Level of investment	Very low: free or low-cost communication channels (posters) are preferred. Communications agencies may also be involved. The primary investment involved mobilising the human resources needed to design the campaigns.
Level of importance	InterMediumte. Campaigns such as these affirm that paratransit is a public service, and can be used as an argument in negotiations with paratransit operators.
What to watch out for	Ensure that the messaging is based on verifiable facts.
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Number of campaigns. Allocated budgets.

INFORM

Developing information on paratransit services as part of a multimodal information system

IMPORTANCE



COST



Implement information tools (website, apps)

The Organising Authority may propose that paratransit operators set up shared passenger information tools. These may be very simple (a passenger info line) or more sophisticated (smartphone apps, websites).

These tools should be set up and managed by the bodies that represent the profession, under the impetus of the Organising Authority. If no such bodies exist, the Organising Authority may manage the tools itself. In exchange, they may collect a reasonable fee from paratransit operators who wish to benefit from the tool.

These tools may include the central reservation systems mentioned in measures 3-4.

Digital tools can be divided into several categories:

- **E-hailing tools:** more suited to taxi-like services, these tools make it possible for customers to access transport services, improve market access for the operators by regulating competition, facilitate secure financial transactions, and ensure traceability. They include ticketing, passenger information, and reporting tools.

The best known are Uber and Grab. In all cases, these tools are offered by private companies to private operators and the general public on the basis of a self-sustaining business model, without the intervention of public authorities. These applications are profoundly changing the way operators work, as well as customers' image of paratransit services. However, they may cause unintended consequences, as their providers' business models – based on taking a percentage of fares – encourages operators to work harder and harder. In this respect, the applications could contribute to worsening the precarious working conditions of paratransit operators.
- **Ticketing applications:** while it is unlikely, even in the long term, that vehicles will be equipped with validation systems comparable to those used in formal transport services, it is possible to develop smartphone payment options, either with e-tickets (which have the disadvantage of requiring prior purchase), or by debiting an electronic wallet.
- **Geolocation and operational support tools:** these tools enable a group of vehicles to be tracked and their routes recorded, making it possible to manage operations in real-time from a centralised control station, for example as part of an economic interest group, and to verify that services are compliant with the contractual commitments.
- **On-demand transport management tools:** we may attempt to bring fixed-route operations closer to the European model of "on-demand transport". In that case, the route and even the timetable are adapted to customers' advance requests, within the limits defined by the volume, route, or frequency. This mode of operation facilitates the integration of highly flexible transport services into a formal transport system.
- **Passenger information tools:** data from geolocation and operational support systems can be used to inform customers of upcoming services in real-time or of the location of the vehicle that will be picking them up (a common feature in *e-hailing* applications). This information can be presented on real-time information panels (scrolling banners, TFT screens), on a website, or on an application. At bus stops and bus shelters, a QR code may be displayed to direct customers to the appropriate web page or application. These systems, which are widely used in formal transport, can be adapted to certain types of fixed-route paratransit services.

What these systems have in common is that they are not based on a self-sustaining business model. These are tools developed by IT companies and offered to operators and Public Transport Authorities. While they make a significant contribution to facilitating the operations and modernising the paratransit's image, they also represent an additional financial burden for the operator. This additional burden must be recouped in one way or another, either by increasing tariffs or through support mechanisms. Public Transport Authorities can intervene in various ways:

- By **financing** investment, development, and implementation costs, in particular with the support of international donors;
- By **entrusting** implementation to formal transport operators so that they can then deploy it to paratransit operators and by financing the additional investment and operating costs incurred;
- By **requiring** paratransit and formal transit operators to make **open data** available;
- By **launching** and **supporting calls for projects** to develop specific tools, particularly in the field of passenger information based on open data.

In principle, public intervention is more appropriate for fixed services that are integrated into a multimodal transport offering. For taxi services, experience shows that the economic model is self-sustaining. Operators recoup the costs of acquiring and operating digital tools through the resulting increase in visitor numbers.

Types of paratransit affected	All formal types, though more appropriate for regular services.
Prerequisites	Support for the project from representative organisations. Existence of a sufficiently structured and organised offer, with quality commitments (at the very least: certifications)
Stakeholders	Supervisory authorities, local authorities, professional representatives, paratransit operators
Level of investment	Low to moderate. Most of our investments concern human resources. Technological solutions (automated text messaging, apps, etc.) can be implemented at a relatively low cost.
Level of importance	InterMediumte. Tools such as these can provide a real service to paratransit operators, improve the visibility of their services, and demonstrate the involvement of the Organising Authority.
What to watch out for	Pay attention to any impropriety on the part of operators, and to the monitoring of service quality (if the system is managed by a body set up by operators themselves).
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Number of affiliated paratransit operators. Number of reservations. Number of complaints.



Example for reference

Partnership between car-sharing applications and mobility players in Asia

With its enormous popularity in Southeast Asia and its millions of users, Grab has the capacity to collect a massive amount of valuable data that can prove useful to mobility players and transit planners alike.

In early 2015, Grab announced a data-sharing partnership with the **World Bank's Open Traffic** project to provide a real-time data stream that reported on service volume, location, and travel time history. This partnership was promising and had the potential to help governments in improving mobility systems (at local and national level). Planners could connect to the platform to better model traffic, examine historical data, understand congestion patterns, and plan infrastructure, as well as improve emergency response and disaster preparedness.

Later in 2019, Grab launched a new project, *Grab Posisi*, which aims to be the first comprehensive GPS dataset documenting paratransit journeys in Southeast Asia. The project began by collecting data from the phones of Grab drivers in Singapore and Jakarta. The data recorded included time and location, as well as speed, direction, area, and distance travelled. To date, the dataset contains a total of 84,000 trips, consisting of over 80 million GPS pings and covering more than a million kilometres. Route models derived from users' GPS data are a source of information for various urban planning applications (for example, solving transport problems, traffic prediction, transport planning). Grab proposes using the datasets for research purposes (Huang et al., 2019) and will extend its data collection to other cities.

While partnerships with **e-hailing applications** such as Grab offer great potential for improving mobility systems, they can also put mobility stakeholders/planners, including municipal governments, at risk. In the Global South, local governments sometimes lack financial and/or human resources, which makes them vulnerable when entering into partnerships with wealthy technology giants such as Grab. What's more, Grab has become a dominant player in the region; this virtual monopoly means that governments can become overly dependent on private stakeholders pushing their own agendas.

The need for local and national authorities to commit to the digitalisation of mobility is also highlighted in the Sustainable Urban Mobility Plan implemented in Medan, Indonesia. Consultants point to the uneven adoption of digital tools across the urban mobility ecosystem. Paratransit and **"mobility-as-a-service"** are experiencing significant growth, while the authorities are struggling to make disruptive changes. However, it is important to point out that mobility-as-a-service offers promising prospects in terms of regulation, passenger information, and the modernisation of operations.

INFORM

Developing information on paratransit services as part of a multimodal information system

IMPORTANCE



COST



Define and monitor operators' obligations to provide passenger information

The Organising Authority may require operators to provide a defined level of passenger information, in particular as part of a certification, approval, or contractualisation procedure, or simply in order to gain access to certain locations. For example: signs displaying destinations, departure times, and fares, a flyer providing key information about the service.

Of course, the requirements must be adapted to the given environment, and must not create constraints that the paratransit operators cannot meet. Valuable information can be provided with a simple display screen or cardboard panel.

Of course, compliance with these obligations will have to be monitored, with non-compliance resulting in penalties.

Types of paratransit affected	All formal types, though more appropriate for regular services.
Prerequisites	Preferably an existing certification, authorisation, or contractual system. Human resources for monitoring (integrated into the monitoring resources of the certification, authorisation, or contractualisation system)
Stakeholders	Supervisory authorities, local authorities, professional representatives, paratransit operators
Level of investment	Low to very low.
Level of importance	Essential. This simple measure could significantly change the relationship between the authorities, paratransit operators, and customers.
What to watch out for	This measure must be negotiated in advance with paratransit operators or their representative bodies.
Timing	Ongoing. Can be implemented as part of an overall project to improve and monitor paratransit.
Assessment criteria	Compliance rate. Number of penalties for failure to display signage.

INFORM

Developing information on paratransit services as part of a multimodal information system

IMPORTANCE



COST



Develop appropriate signage

The lack of dedicated signage for paratransit services makes travelling and road safety more precarious for all city residents.

Signage adapted to the existing mode(s) of paratransit services should be deployed around stations, transit facilities, and more generally in the city.

The signage is aimed at pedestrians, to make them more aware of paratransit vehicles. It is also aimed at paratransit operators, to determine their position on the road, traffic and parking conditions, and passenger loading and unloading procedures, particularly on busy roads.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Identification of points of conflict and insecurity for pedestrians and transport users.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: limited; deployment of the appropriate signage, if necessary. Human investment: limited. Developers and technicians to identify and install the appropriate signage, police to enforce signage regulations.
Level of importance	To be assessed according to the local context.
What to watch out for	Check that signage is comprehensible to all road users.
Timing	Punctual.
Assessment criteria	Reduction in the number of accidents and conflicts caused by paratransit operators or in/around paratransit facilities.

MATERIALISE

Developing paratransit stations, hubs, and other facilities to improve visibility and quality of service

IMPORTANCE**COST**

Formalise and demarcate stations, hubs, and other facilities, as well as dedicated lanes, if necessary

Identify and draw up a typology of paratransit facilities within stations, according to their function: passenger loading/unloading, parking, vehicle maintenance and servicing, off-peak waiting, etc.

Depending on the identified functions, provide appropriate boundaries and facilities: demarcate vehicle access to traffic lanes, mark pedestrian paths and crossings, mark passenger traffic flows with ground markings, mark short-term (passenger loading/unloading) and long-term parking areas, vehicle cleaning and maintenance areas, garage areas. Defined spaces for traders may also be identified and delineated. Signage should be provided at the site entrances and exits.

The boundaries are clearly visible, with markings on the ground (if the area is paved) and appropriate vertical signage.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Data collected.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: medium (inexpensive road markings, more signage). Human investment: moderate; a small team of technicians is needed to identify stations and facilities and their function(s), and then to make the necessary markings and draw the necessary boundaries.
Level of importance	Moderate.
What to watch out for	The number, location, and function of paratransit stations and facilities may change rapidly and new sites may appear. A field survey should be carried out regularly (at least once a year) to identify stations and facilities and verify their function(s).
Timing	Ongoing.
Assessment criteria	Improving travel conditions within stations and facilities, improving vehicle traffic conditions, reducing the number of incidents.

**Example for reference**

Dedicated traffic lanes for minibuses in eThekweni (Durban).

MATERIALISE

Developing paratransit stations, hubs, and other facilities to improve visibility and quality of service

IMPORTANCE**COST**

Draw up specific regulations for paratransit facilities

Based on the identified functions of each station/facility, establish how the site will operate and what the regulatory requirements will be.

Site regulations are then drawn up in collaboration with the relevant stakeholders. Depending on the level of formalisation of the professional organisations and the existing forums for dialogue with the local authorities, these regulations may be developed as part of a consultative or collaborative process to involve, to the greatest possible extent, those stakeholders who will ultimately manage the site.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Identifying the functions of paratransit facilities and stations.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: limited. Human investment: moderate; technical and consultation team.
Level of importance	Moderate.
What to watch out for	This measure is implemented each time a new site is identified or when users or the parties responsible for managing a site express a need. Paratransit facilities may be a breeding ground for unregulated and undesirable money-making practices by third parties (access controls, commercialisation of sites, etc.). It is therefore important that the management systems put in place account for all existing practices, and that the managing organisations are able to control them.
Timing	Recurring.
Assessment criteria	A coherent regulatory framework. Applicability of the regulatory framework.

**Example for reference**

Drawing up regulations for *schimos* – informal motorbike taxi camps – in Dar Es Salaam. Operators form associations according to their *schimo* (or camp), and apply to the local authorities, the *mtaa*, for authorisation. Regulations are then defined collaboratively by both the operators and the authorities, with the latter recognising the former's mode of operation.

MATERIALISE
 Developing paratransit stations, hubs, and other facilities to improve visibility and quality of service



Equip paratransit facilities

Based on the identified functions of each site, assess needs in terms of the existence of passenger loading/unloading points (platforms), waiting areas and toilet facilities for passengers, parking and maintenance areas for vehicles, premises available to the professional organisations responsible for managing the site, shops, etc.

Based on the stakeholders at each site, draw up a list of needs and priorities with respect to facilities and infrastructure.

Depending on the decisions taken, define by mutual agreement who is responsible for maintenance and upkeep and what these responsibilities entail.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Identifying the functions of each site and the budgetary capacities available to the Organising Authority.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: variable, depending on requirements, but may be significant. Human investment: limited; team to draw up a list of needs, organise and lead consultations. Working with technicians, check equipment servicing and maintenance requirements and pass them on to those responsible for them.
Level of importance	Moderate.
What to watch out for	Check that the financed equipment is distributed equally (or fairly) among the various sites. Prevent any category of users or professional structures from feeling disadvantaged.
Timing	Recurring.
Assessment criteria	Use and maintenance of equipment.



Example for reference

A pilot project in Cape Town (Mitchell's Plain district), with a fully equipped station where maintenance is the operators' responsibility. They benefit from this, in particular from the revenue generated by the advertising panels at the station.
 Another example is in Cape Town, in the area of Wallacedene, where the local council has equipped the minibus station with solar panels to supply water and electricity at a lower cost.

SUPPORT

Providing the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

IMPORTANCE



COST



Implement a policy to support investment in rolling stock renewal

The organising authority provides support to paratransit operators to help them obtain loans from outside investors or landlords. This means providing support with administrative procedures, follow-ups, and even advice. In some cases, the Organising Authority may vouch for the solvency of paratransit operators and make representations to lenders.

More broadly, the government may implement tax or customs measures to reduce the cost of purchasing equipment (lower customs duties, deferred payment of VAT, etc.).

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Existence of dialogue and discussion forums between the Organising Authority and professional organisations.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: variable (limited if the aim is to support the process, substantial if the Organising Authority makes loan commitments). Human investment: moderate. Establishment of a monitoring team, Organising Authority executives lobbying lenders.
Level of importance	Moderate.
What to watch out for	The Organising Authority probably does not have to grant loans directly. However, its assistance and support for paratransit operators are important in promoting rolling stock renewal and thus improving service quality and safety conditions.
Timing	Ongoing
Assessment criteria	Obtaining loans or including paratransit operators in fleet renewal programmes financed by lenders.



Example for reference

Support for the Urban Transport Executive Council in Dakar, Senegal, to obtain revolving funds for new phases in the renewal of express coaches.

Fleet renewal programme in the Philippines

A fleet renewal programme has been implemented as part of the Public Utility Vehicle Modernization Program described above. This programme is based on a number of mechanisms involving improved regulations, vehicle modernisation, access to finance, and maintenance.

the box continues on the next page



As far as the regulations are concerned, it has been established that franchises may only be granted to operators whose fleet complies with a certain number of environmental, safety, and user comfort standards (Omnibus Franchising Guidelines, OFG). Vehicles must (at the very least) comply with the Euro 4 standard, and must include a number of features such as seatbelts, surveillance cameras, access ramps, Wi-Fi, GPS, and the Automatic Fare Collection System. The Ministry of Labour has proposed three categories of light commercial vehicles:

- Class 1 consists of motor vehicles with 9 to 12 seats, better suited to municipal/provincial roads.
- Classes 2 and 3 can accommodate up to 23 passengers and are considered to be the new jeepneys.

Vehicle modernisation represents a considerable investment for operators. The average price of a vehicle complying with the Euro 4 standard varies, but new vehicles generally cost between PHP 1.8 million and PHP 2.4 million. It is estimated that 10% of operators who can afford to modernise their vehicles choose electric jeepneys. It should be noted that the government is offering incentives to carmakers as part of its *Comprehensive Automotive Resurgence Strategy* (CARS) programme to revitalise the Philippine automotive industry and fill gaps in production capacity.

To facilitate access to finance, the government, in partnership with the Development Bank of the Philippines (DBP) and Landbank of the Philippines (LBP), has set up a financial assistance programme to help operators make the necessary investments to acquire modern vehicles.

This model has been dubbed the “5,6,7,8 model” because it involves:

- 5% deposit,
- 6% annual interest,
- a 7-year amortisation period (with an initial grace period of six months),
- a grant of PHP 80,000 (USD 1,555) to renounce an old franchise. This grant was recently revised to PHP 160,000 (USD 3,110), as the initial amount was deemed too low.

To benefit from this financing scheme, operators must 1) consolidate, 2) submit an application to replace older vehicles or a franchise application (for routes under development) and 3) apply for a loan from the DBP or the LBP.

Finally, the maintenance component of the programme ensures that vehicles are treated appropriately throughout their useful life, including approvals, inspections, and disposal at the end of the vehicle’s life. The scrappage scheme is necessary to improve the acceptability of the programme and to ensure that old vehicles are not returned to public transport systems elsewhere in the country.

A fleet renewal programme is a typical measure to be implemented as part of a broader urban transport reform, and as a first step towards professionalising, modernising, and structuring the paratransit sector. This approach has been developed in South Africa, where the government introduced the *Taxi Recapitalisation Programme* in 1999.

Under this scheme, owners whose vehicles failed to meet safety standards were required to scrap their vehicles in exchange for subsidies towards the purchase of a new vehicle. Although this programme was considered a partial failure due to the many diversion strategies devised by owners to get the subsidies and keep their vehicles, it also paved the way for other reforms, leading to the implementation of the BRT in 2010 and the transition of the minibus taxi industry. Through the fleet renewal programme, a first step was taken to identify the number of vehicles in operation, and this was also the national government’s first commitment to minibus taxi operators and a means to start a dialogue on a positive basis.

SUPPORT

Providing the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

IMPORTANCE



COST



Use tax incentives to promote paratransit reform

One of the main instruments used by the national government to support paratransit reform is the use of fiscal instruments that encourage (or discourage) certain actions and decisions by the targeted stakeholders. Depending on the policy objectives, various instruments can be deployed, such as the following:

- Tax exemptions on fuel/electricity consumed by public transport companies to reduce operational costs (for example, to reduce the total cost of ownership of electric buses compared with their fossil fuel-powered counterparts).
- Tax breaks for local industry and/or import duties on public transport vehicles to encourage local production and manufacturing.
- Tax relief on certain vehicle technologies (in particular electric vehicles) and/or a surcharge on polluting vehicles to encourage the electrification of paratransit fleets.
- (Re-)Allocation of tax revenues (for example, fuel tax or other levies) to support paratransit reform measures.

The implementation and success of these measures depend on a proper assessment (for example, via studies) of their impact on government revenue, their suitability (particularly with regard to the capabilities and interests of the stakeholders involved, but also with regard to implementation requirements and fraud prevention), and any potential windfall effects.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Involvement of the Ministry of Finance and adaptation of the existing legal and tax systems.
Stakeholders	National government, in particular the Ministries of Finance and Transport; possibly the judiciary.
Level of investment	Financial investment: variable, depending on scope and type of instrument Human investment: moderate.
Level of importance	Moderate.
What to watch out for	The Organising Authority does not have to grant loans directly. However, its assistance and support for paratransit operators are important in promoting rolling stock renewal and thus improving service quality and safety conditions.
Timing	Variable, may be ongoing or limited
Assessment criteria	Use and impact of incentives, both on paratransit operators and on public finances



Example for reference

Tax incentives to promote the electrification of paratransit in India

To encourage the transition to electric vehicles, the Indian government has implemented various measures at the national and State levels.

At the national level, the *Faster Adoption and Manufacturing of Electric Vehicles in India* (FAME) programme provided tax breaks of up to USD 320 for the purchase of electric vehicles. 62 models are covered by the programme, of which 40% are low-speed two-wheelers (under 25 km/h) and 8 are three-wheelers. The size of the subsidy depends on the size of the battery, with larger batteries eligible for higher subsidies. During the second phase of FAME, two-wheelers were excluded from the list of eligible models, as the government placed greater emphasis on public transport.

Additional measures to support local industry have been introduced by some state governments. In Uttar Pradesh, the 2018 electric vehicle manufacturing policy includes several measures for a period of five years, such as tax exemptions, loans on preferential terms, and subsidies for the purchase of electric vehicles. In Goa, electric vehicles are exempt from road tax.

The Public Utility Vehicle Modernization Program in the Philippines

To facilitate the modernisation of the Jeepney fleet, the government, in partnership with the Development Bank of the Philippines and Landbank of the Philippines, set up a financial assistance mechanism to help operators invest in modern vehicles.

This model has been dubbed the “5,6,7,8 model” because it involves:

- 5% deposit,
- 6% annual interest,
- a 7-year amortisation period (with an initial grace period of six months),
- a grant of PHP 80,000 (USD 1,555) to renounce an old franchise. This grant was recently revised to PHP 160,000 (USD 3,110), as the initial amount was deemed too low.

To benefit from this mechanism scheme, operators must consolidate, submit an application to replace older vehicles or a franchise application (for routes under development), and apply for a loan from one of the applicable banks.

Despite the government’s efforts to promote the modernisation of the paratransit fleet, financing for new vehicles and access to capital remain a major obstacle. Although initial investments are considerably lower and operators have access to loans, many are unable to repay them. The depreciation period, although deemed too short, cannot be extended because the defined operational life of a vehicle is 15 years.

The financial viability of the Public Utility Vehicle Modernization Program could prove difficult in the long term. While the quality of service provided by the modernised jeepneys has improved, fares have not been increased in line with rising costs. Such an increase in costs should be shared by all stakeholders, including users and the government, if the reform is to be sustainable.

SUPPORT

Providing the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

IMPORTANCE



COST



Support or facilitate the acquisition of social insurance

The Organising Authority provides support to paratransit operators to help them acquire social insurance coverage. This means encouraging dialogue internally, so that paratransit operators can express their views on their working conditions and needs to professional organisations and, as directly as possible, to the Organising Authority.

The Organising Authority can set up a monitoring team to make it easier to obtain certain rights and guarantees (for example, health insurance). The Authority may also act as an advocate and as a guarantor for companies or institutions to obtain guarantees at advantageous rates, for example from insurance companies.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Existence of dialogue and discussion forums between the Organising Authority and professional organisations.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: limited, as the Organising Authority does not directly participate in financing arrangements. Human investment: moderate. Establishing a monitoring team, Organising Authority executives lobbying institutions and companies (for example, insurance companies).
Level of importance	Moderate.
What to watch out for	Existence of a monitoring unit within professional structures to ensure that social coverage is renewed.
Timing	Punctual.
Assessment criteria	Social coverage at advantageous rates.

SUPPORT

Providing the resources needed to help paratransit operators renew or repair their equipment, get training, etc.

IMPORTANCE



COST



Support local industry

Reforming the paratransit sector involves modernising the vehicle fleet, setting up support mechanisms, and innovation (in particular by adopting digital technologies). In other words, paratransit reform will generate demand for a wide range of products and services that local industry can potentially provide. To this end, the government can offer various types of support to different economic sectors.

- **Automotive industry:** production, manufacture of vehicles used in the paratransit sector, development of specific components or parts, etc.
- **Energy industry:** production of biofuels, biogas, and electricity using renewable energies to power paratransit vehicles.
- **Information and communication technologies:** development of digital applications and equipment for ticketing, geolocation, fleet management, e-hailing, trip planning, route calculation, etc.

The government can use a number of instruments to ensure that local industry plays a key role in the process of reforming and modernising paratransit, such as fiscal measures and incentives, capacity building, setting standards, inclusion in public procurement contracts, import tariffs and quotas, research and development, etc.

Types of paratransit affected	All types
Prerequisites	National government, in particular the Ministries of Transport, Industry and Finance/Institutions responsible for defining industrial standards/ Representatives of local industry.
Stakeholders	National government, in particular the Ministries of Transport, Industry, and Finance / Institutions, is responsible for defining industrial standards / Local industry representatives
Level of investment	Financial investment: variable, depending on the type of support Human investment: high, involving consultation with stakeholders, identification of support mechanisms, budget allocations, implementation, and evaluation
Level of importance	High
Timing	Variable, depending on the type of support
Assessment criteria	Involvement of local industry in supply/production / construction/maintenance of paratransit assets (including rolling stock, infrastructure, services); reduction of import dependency (for example, energy supply, vehicle imports, etc.)



Example for reference

Promoting India's e-mobility industry

The Government of Uttarakhand's Electric Vehicle Manufacturing, EV Usage promotion, and Related Services Infrastructure Policy 2018 provides tax exemptions and access to land for electric vehicle manufacturers, as well as full exemption from electricity taxes and favourable access to loans.

Innovation in local industry is also encouraged at a national level through close links between universities, manufacturers, technical organisations, and government institutions.



Ensuring implementation of reforms

Control – To implement inspections and penalties against illegal transport operations

	Actions	Importance	Cost	Page number	✓
15-1	Define the prerogatives of law enforcement agencies and identify the authorities responsible for enforcement	High	Medium	95	
15-2	Establish regular inspection procedures	Medium	Low	96	
15-3	Put in place technical and human resources for inspections by the organising authority	Medium	Medium	97	
15-4	Set up an action protocol with law enforcement authorities	Medium	Low	98	

Finance – To ensure that the authorities responsible for regulating the paratransit sector can function

	Actions	Importance	Cost	Page number	✓
16-1	Find funding mechanisms for the Organising Authority	High	/	99	
16-2	Verify that funding is sustainable	High	Medium	101	

Test – Test interventions at the project level before implementing them more generally.

	Actions	Importance	Cost	Page number	✓
17-1	Enabling trials and experimentation through pilot and research projects	High	Medium	102	

CONTROL

Implementing inspections and penalties against illegal transport operations

IMPORTANCE



COST



Define the prerogatives of law enforcement agencies and identify the authorities responsible for enforcement

Specify the authorities and bodies involved in enforcing urban transport regulations.

Define precise mandates for each of these authorities and bodies, indicating in particular the prerogatives and penalties that may be applied.

To the extent possible, limit the imposition of penalties that require immediate cash payment upon inspection. Facilitate the traceability of penalty payments.

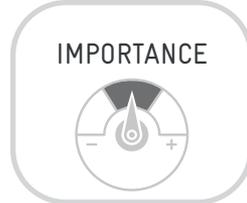
Set up an internal control authority to prevent corruption and misappropriation on the part of staff responsible for applying penalties, and verify that controls are carried out in accordance with defined procedures.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	There are clear rules governing the different types of penalties and the methods of payment. Traceable payment system.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation.
Level of investment	Financial investment: moderate. It may be necessary to set up appropriate payment systems. This investment can pay for itself by preventing fines from being collected by corrupt officials. Human investment: moderate. Establishment of an internal control authority.
Level of importance	Important.
What to watch out for	Verify that the necessary funding to carry out internal monitoring and control activities exists.
Timing	Ongoing.
Assessment criteria	Complaints book available to those in the paratransit sector to prevent abusive inspection practices. Monitoring revenue generated by fines.



Example for reference

Police corruption on a massive scale in Kenya, failure of an urban transport project. Informal tolls charged by police officers in Cameroon. Dismissal in 1987 of hundreds of Dakar police officers who extorted money from paratransit operators.



Establish regular inspection procedures

Establish regular control procedures to verify compliance with regulations. These control procedures concern in particular:

- Approval of operators by the authorities (authorisation, licence, contract, etc.) ;
- Compliance with the highway code and similar laws, as enforced by the police;
- The operation of vehicle inspection centres, to monitor their operations, the reliability of the data they provide, and their ability to meet demand;
- Maintenance, development, and management of paratransit stations and facilities by competent organisations, and fleet management by operators;
- The labour inspection authorities, to check that operators comply with working conditions.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Coordination between the various departments involved (law enforcement, monitoring unit within the Organising Authority, legal experts). Communication with the various stakeholders to prevent control procedures from being perceived as punitive.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation.
Level of investment	Financial investment: limited. Human investment: moderate. Mobilisation of technicians and managers on a regular basis to prepare, carry out and report on control operations.
Level of importance	Moderate.
What to watch out for	Control procedures must be closely monitored internally to prevent any attempt at corruption or circumvention of regulations. They must complement the actions of law enforcement agencies (no "double punishment") (measure 14.1). Monitor how operators pay the fine, where applicable (for example, in Kenya, where the fine is passed on to passengers).
Timing	Ongoing.
Assessment criteria	Issuing penalties, although this must not lead to a 'race to the finish line'. Instead, the communication of information and data can be encouraged (status of technical inspection centres, paratransit facilities, need for consultation on working conditions, etc.).

CONTROL

Implementing inspections and penalties against illegal transport operations

IMPORTANCE**COST**

Put in place technical and human resources for inspections by the organising authority

Creation of a dedicated unit within the Organising Authority to conduct visits, inspections, and monitor indicators (number of licences granted, number of vehicles in circulation, etc.).

Certain specific aspects may be outsourced, but it is recommended that there is an internal body responsible for monitoring compliance with the regulations. This body should have the necessary human and material resources (access to computer equipment for monitoring and storing information) and may collaborate with the teams responsible for building and providing data to the paratransit dashboard/monitoring body.

This unit should also ensure that penalties are traceable in order to limit the risk of repeat offences by operators.

Types of paratransit affected	All formal varieties. Eventually, separate taxi and regular service modes may be defined.
Prerequisites	Creation of a paratransit dashboard/monitoring body.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation.
Level of investment	Financial investment: moderate. Computer hardware, data storage. Human investment: significant. A team of technicians and managers with a good knowledge of the operation and regulation of the paratransit sector.
Level of importance	Moderate.
What to watch out for	Storage and updating of information. The unit's mission must be clearly defined.
Timing	Ongoing.
Assessment criteria	Building and updating indicators, tracking penalties.

CONTROL

Implementing inspections and penalties against illegal transport operations

IMPORTANCE**COST**

Set up an action protocol with law enforcement authorities

An agreement may be drawn up with law enforcement to optimise safety conditions. According to this approach, the role of law enforcement is that of a “facilitator” rather than a “controller” of paratransit activities.

This agreement may then concern:

- Assistance in managing passenger flows at peak times, particularly as this is also when petty crime (pickpocketing) occurs.
- Securing paratransit facilities and stations, particularly at night and during opening/closing hours.
- Protecting operators, who are sometimes the target of theft (cash in vehicles).
- Managing pedestrian and traffic flow around assembly points and stations.

Types of paratransit affected	All formal types, although more appropriate for regular services.
Prerequisites	Forums for dialogue between operators and representatives of law enforcement.
Stakeholders	Local authorities/Authorities responsible for paratransit management and regulation, professional organisations.
Level of investment	Financial investment: limited. Human investment: moderate. Integrate the management and surveillance of paratransit facilities into the missions of law enforcement agencies.
Level of importance	Moderate.
What to watch out for	Verify that there are no conflicts of interest, power struggles, or informal agreements between operators and law enforcement agencies.
Timing	Ongoing.
Assessment criteria	Improving safety conditions for passengers and pedestrians, and improving traffic conditions in the vicinity of stations.

FINANCE

Ensuring that the authorities responsible for regulating the paratransit sector can function

IMPORTANCE



COST



Find funding mechanisms for the Organising Authority

To guarantee that the Organising Authority and its activities can continue to exist, sustainable sources of funding must be identified.

These resources may include:

- **Fares** (payment by users for transport services). In most paratransit services, however, this source of revenue is not passed on to the Organising Authority but is collected and retained by the paratransit operators
- **Fiscal** (direct funding from the government budget and/or local authorities)
- **Parafiscal**: introduction of dedicated taxes, for example on fuels, licences, tickets sold, property transactions, or even on economic activities (for example, the Versement Mobilité in France)
- **External**: financing and loans obtained from international donors and cooperation agencies, particularly “climate” financing

The extent of this funding obviously depends on the Organising Authority’s role, depending on whether it is limited to organisational, planning, and control functions, or whether it also supports certain investments or subsidies.

Whatever funding mechanisms are chosen, it is important to explain to the public how this will enable the implementation of measures and projects that will improve travel conditions.

Types of paratransit affected	All formal varieties.
Prerequisites	Definition of the Organising Authority’s prerogatives and powers and legal transcription. Of course, if “formal” transport also exists, this question concerns the entire transport system.
Stakeholders	Organising Authority, assistance and advice from specialist consultancy firms.
Level of investment	Financial investment: the introduction of new financial resources can mobilise resources to make them operational. Human investment: significant. Internal audit to identify all the needs internal to the local authority and the project management team. Search for appropriate sources of funding (financial skills and legal expertise required).
Level of importance	High. This is an essential step in ensuring the existence and sustainability of the Organising Authority, and in gaining the confidence of its partners.
What to watch out for	Make sure to anticipate any needs that may arise after the project starts, to ensure that it is implemented and monitored (that is, anticipate how the investment and operating budgets will be covered, the revenue allocated to each action, the financing of the debt associated with a loan – if applicable, what grants are available, etc.).
Timing	One-off, before the start of the project, to be re-evaluated on a regular basis.
Assessment criteria	The Organising Authority’s accounts are in good order, with a balanced budget and controlled debt.

FINANCE

Ensuring that the authorities responsible for regulating the paratransit sector can function

IMPORTANCE



COST



Verify that funding is sustainable

The Organising Authority's funding requirements may change, particularly when new projects involving paratransit are implemented (especially if this means changing the Organising Authority's size with respect to human resources, for example).

An audit should then be carried out to assess existing needs and the related funding possibilities.

If funding sources prove insufficient, the previously established funds must be reformed and other funding mechanisms found.

Types of paratransit affected	All formal varieties.
Prerequisites	Established sources of funding, access to data to carry out an audit.
Stakeholders	Local authorities, with the help of specialised structures to lead audits.
Level of investment	Financial investment: limited (expert consultancy). Human investment: limited. Provision of information to the entity conducting the audit, implementation of the primary findings after it is completed.
Level of importance	High. This is an essential step in ensuring the existence and sustainability of the Organising Authority.
What to watch out for	Implementation of audit recommendations.
Timing	Occasional, particularly when new transport projects are introduced, or when the Organising Authority needs to increase its human resources.
Assessment criteria	The Organising Authority's accounts are in good order, with a balanced budget and manageable debt.

TEST

Test interventions at the project level before implementing them more generally

IMPORTANCE**COST**

Enabling trials and experimentation through pilot and research projects

The implementation of pilot and/or research projects prior to large-scale adoption enables project owners, in particular public authorities, to test the viability of the reform and the underlying assumptions, in particular the specific interventions. Such approaches may be tested on particular routes or in particular areas, working with a limited set of paratransit operators.

Pilot projects may be designed for several types of intervention, for example to test the viability of an electrification or fleet modernisation programme, the process of industry consolidation, the implementation of a new form of contract or licence, an innovative approach to mapping or route planning, etc.

One of the primary goals of a pilot project is to learn from the whole process and identify the primary obstacles to the planned reform. These lessons should be used to design reform measures and make any necessary adjustments.

Types of paratransit affected	All formal varieties.
Prerequisites	Well-define project, including limits, scope, monitoring, timetable, responsibilities, and budget.
Stakeholders	Local authorities, paratransit operators, potential development organisations and/or universities.
Level of investment	Financial investment: low to moderate Human investment: variable, depending on the type of intervention
Level of importance	High, interventions that are particularly innovative, disruptive, or relatively uncommon should be tested and trialled before being fully implemented.
Timing	Temporary
Assessment criteria	Reproducibility and potential scalability; lessons learned; efficiency

