Île**de**France
mobilités

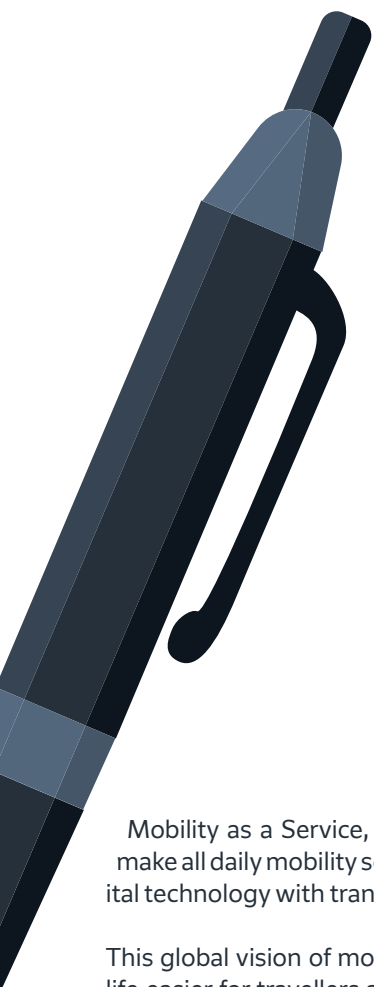# REFERENCE GUIDE FOR MOBILITY AS A SERVICE IN THE ÎLE-DE-FRANCE REGION

CON TENTS

PRÉFACE

Île-de-France Mobilités must use its overall vision of transport to play a crucial role in coordinating all mobility entities in order to provide the best possible service for users.

Mobility as a Service, also known as "MaaS", aims to make all daily mobility services accessible by linking digital technology with transport methods.

This global vision of mobility is essential today to make life easier for travellers and to offer the best options for getting around. Trips can now be organised by using a unique digital media application that provides more services, such as information, ticket purchases, reservations, etc. and partnerships with companies working with mobility (shared mobility, parking, etc.).

MaaS is much more than a tool because it represents a formidable process for organizing and piloting mobility on a regional scale.

As the umbrella authority for all sustainable mobility in Île-de-France, we are responsible for ensuring that each traveller gets the right information and the right services at all times to address a seemingly obvious dilemma: what transport method should I use to get around as easily and quickly as possible in a region that offers a wide variety of mobility services?

We have drawn up this reference guide for mobility as a service in Île-de-France as a resource for resolving this dilemma. With this overall vision of transport, we have a crucial role to play in coordinating all mobility players in order to provide the best possible service for users.

The guide was developed through numerous consultations with private and public entities involved with mobility and lays the foundations for a regional ecosystem that will provide quality service to travellers.

We hope that this reference guide will spark your interest and that it prefigures viable discussions at a future meeting devoted to service-based mobility in Île-de-France.

Laurent Probst,
Executive Director
of Île-de-France Mobilités

Jean-Louis Perrin,
Deputy Executive Director
of Île-de-France Mobilités

01
INTRODUCTION

1 Glossary

2 Positioning of Île-de-France Mobilités

> " *The best way to implement the lever of mobility as a service, is to organize the market and coordinate private initiatives with those of public entities.* "

3 Purpose and scope of the document

> " *This guide seeks to collectively implement service-based mobility that responds to the issues addressed in public policies, of quality of service and of safety for all users by outlining good practices that are grounded in regional ambitions.* "

4 Keys to reading the document

5. Static data refers to data concerning journeys within the meaning of Commission Delegated Regulation (EU) 2017/1926 of 31 May 2017 supplementing Directive 2010/40 / EU of the European Parliament and of the Council with regard to providing multi-modal travel information services throughout the European Union (Text with EEA relevance);

6. Dynamic data refers to data relating to movements and traffic within the meaning of the aforementioned Commission Delegated Regulation (EU) 2017/1926.

7. The **guidelines for public mobility policies**, as defined in the introduction to the Law on Mobility Guidelines (LOM), designate strategies and financial and operational programming of government investments in transport systems for the 2019-2037 period, focusing on the following objectives:

• **Reduce regional inequalities** and contribute to achieving cohesion in metropolitan and overseas areas, by strengthening the accessibility of medium-sized towns and territories poorly connected to metropolitan areas, large agglomerations or neighbouring countries, as well as within from agglomerations to municipal priority districts, while limiting the use of natural assets and urban sprawl;

• **Increase the range of daily travel options**, improve the quality and safety of road, rail and river networks and ensure their sustainability, resolve the congestion in cities and their access points and improve links between rural or suburban areas and urban centres;

• **Accelerate the energy transition process**, reduction in greenhouse gas emissions and the fight against pollution and road congestion by promoting modal rebalancing to promote travel using individual, collective and freight transport modes that pollute less, such as rail, river, public transport or active modes, by increasing the shared use of individual modes of transport and facilitating multi-modal travel.

1.1 GLOSSARY

The following definitions are provided for the purposes of this document:

1. Mobility options refer to regular services of public transport, on demand public passenger transport services, school transport services and new mobility resources;

2. New mobility refers to services relating to shared mobility (carpooling, car-sharing, self-service scooters, bicycles and scooters, etc.);

3. Active mobility, in particular walking and cycling, refers to all modes of travel for which the power source is directly applied human effort, with or without motorized assistance;

4. Mobility as a Service (**MaaS**) refers to multi-modal information and ticketing services, referred to as **MaaS digital media** in this document. These digital media can be made available to travellers in the form of websites or mobile applications which **1/** provide users with multi-modal traveller Information and **2/** offer a ticketing service, i.e. sales and / or reservations, combining different mobility options or parking services available to users within a region;

1.2 POSITIONING OF ÎLE-DE-FRANCE MOBILITY

The use of mobility as a service must **address to the strong societal challenges facing Île-de-France Mobilités with regard to urban mobility**, such as urbanization, pollution, traffic congestion, accessibility and including people with reduced mobility.

In accordance with public mobility policy guidelines, these issues are assessed by the **Île-de-France Urban Travel Plan (PDUIF)** on behalf of regional authorities in the Île-de-France region. PDUIF objectives include **coordinating policies of mobility entities for all services and modes of transport at the regional level**, including parking and use of the road network.

The current PDUIF is compatible with regional concept documents, namely the "Île-de-France 2030" master plan and the regional climate, air and energy plan. As a result, it has a target of **20% reduction in regional greenhouse gas emissions linked to transport over the period 2010 - 2020**, against a backdrop of an estimated 7% increase in travel demand. Over this period, the PDUIF is seeking:

• A 2% decrease in trips made by car and motorized two-wheeled vehicles

• A 20% growth in trips made via public transport

• An increase of 10% in active mode trips (cycling and walking)

The best way to activate the concept of mobility as a service is **to organize the market and private initiatives in coordination with those of the public sector.** To achieve this, Law No. 2019-1428 dated 24 December 2019 on Mobility Guidelines (LOM) has empowered Île-de-France Mobilités with a new organizational capacity for developing new mobility. The Paris Region Mobility Authority (AOM) is exercising this new prerogative with the objective of:

• Becoming a player in mobility as a service by offering **MaaS digital media** to travellers

• Assuming the role of contracting authority **for a MaaS platform** comprising both a Regional Mobility Information Platform (PRIM) and an Information and Services System for ticketing (SIS) - intended for persons who habitually use data and services

• Organize mobility as a service more widely in the Île-de-France region and promote **best practices and determine the main principles for interactions between entities**, in accordance with the guidelines of public mobility policies

To do this, **Île-de-France Mobilités will use its assets and its specific character**, including its ability to consolidate data relating to offers from all mobility entities, developing information tools for passengers and providing dedicated reservation platforms (for example: A platform for on-demand transport), its authority in pricing policy for public transport, the development of a new ticketing system integrating various mobility offers, actions to promote the development of multi-modal processes through contractual mechanisms, contracts, certification through labelling, supervision, coordination or promotion, as well as investments in physical inter-modal infrastructure
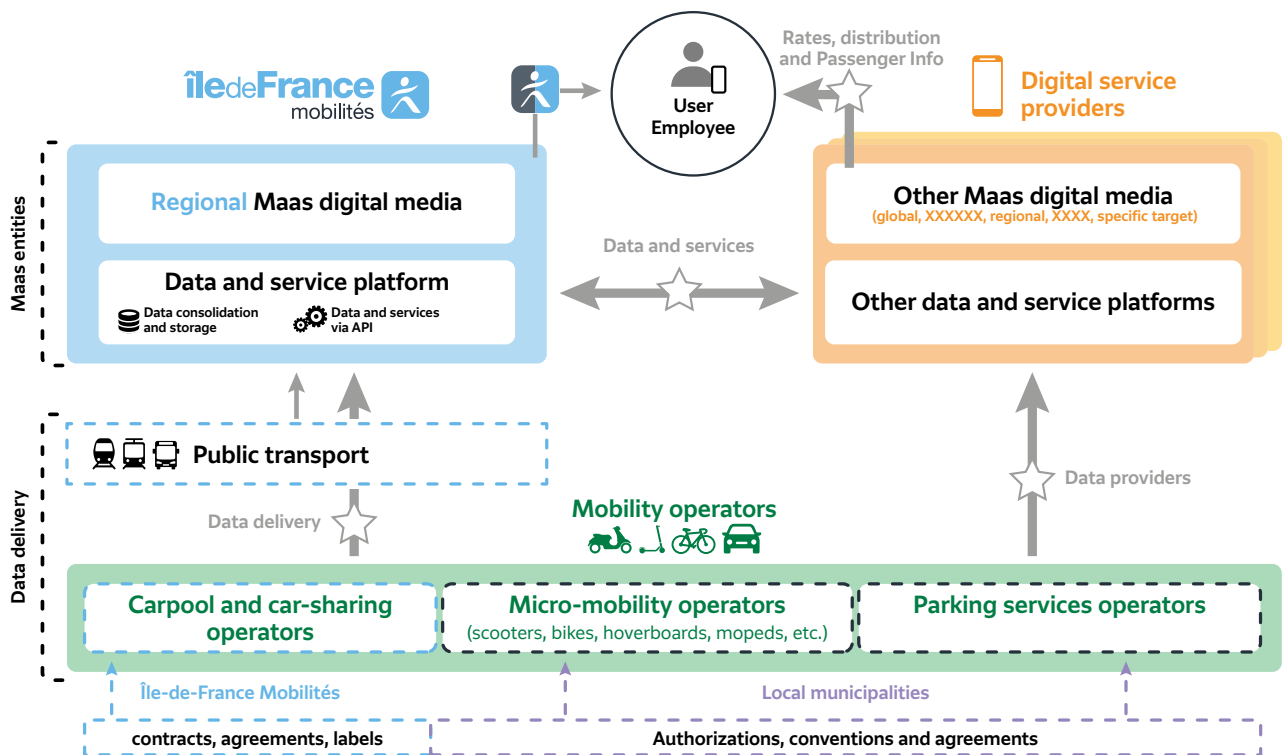
1.3 PURPOSE AND SCOPE OF THE DOCUMENT

The objective of this guide is to **promote good practices** and to **clarify the main principles of interactions between mobility entities in Île-de-France**, in order to guarantee the best possible service to users and to support sustainable economic models that implement mobility as a service to benefit the general interest.

As such, this guide is mainly intended for **operators of new mobility and parking resources**, multi-modal digital media providers **and** for **local authorities**, through the following items:

• The mobility offer (§ 1): how to better combine public and private mobility options, while guaranteeing sustainable and inclusive mobility to users? ;

• Delivery and exchange of data and services (§ 2): to what extent should data and services be shared or reutilized to expand service mobility? ;

• Traveller Information (§ 3): how to coordinate in such a way as to guarantee reliability and consistency of Traveller Information content relayed on MaaS digital media ;

• Pricing and distribution (§ 4): how to coordinate in such a way as to guarantee users readability of the pricing information for the various transport services on MaaS digital media? ;

• Innovation (§ 5): how to promote innovation in terms of mobility as a service? ;

• Supervising mobility as a service in the Île-de-France region (§ 6): what approach to use in coordinating the main principles of interactions between entities on the basis of the proposals appearing in this guide?

A diagram of the main interactions covered in the guide

Diagram labels:

Île de France mobilités

Maas entities
- **Regional** Maas digital media
- **Data and service platform**
  - Data consolidation and storage
  - Data and services via API

Data delivery
- 🚆🚋🚌 **Public transport**

User Employee

Rates, distribution and Passenger Info

Data and services

Digital service providers
- **Other Maas digital media** (global, XXXXXX, regional, XXXX, specific target)
- **Other data and service platforms**

Data providers

Mobility operators 🛵 🛴 🚲 🚗

- **Carpool and car-sharing operators**
- **Micro-mobility operators** (scooters, bikes, hoverboards, mopeds, etc.)
- **Parking services operators**

Data delivery

Île-de-France Mobilités — **contracts, agreements, labels**

Local municipalities — **Authorizations, conventions and agreements**

1.4 KEYS TO READING THE DOCUMENT

This document is the result of **a collective reflection process** carried out via a phase of **consultations with all mobility stakeholders, including public carriers**. These entities were involved in bipartite discussions, outside of the specific framework of existing public service contracts and delegations or those under negotiation.

Since devising a regional public MaaS is completely interwoven with the public mobility policy, the **new contractual provisions now include specific commitments on MaaS.**

The colour code used below is used throughout the guide. Use it to better identify the persons responsible for managing or implementing good practices:

• The Mobility Organizing Authority, in this case **Île-de-France Mobilités,** which organizes public transport services within its region that are provided under contracts concluded by mutual agreement or by public service delegation;

• New **mobility and parking operators**, approved / recognised or not (excluding public service delegation contracts)

• Representatives of **local authorities** and their groups

• Multi-**modal digital media providers**, and either private or public mobility services providers

• Operators **in the transport ecosystem** refer to all entities mentioned above except for public service contracts and delegations
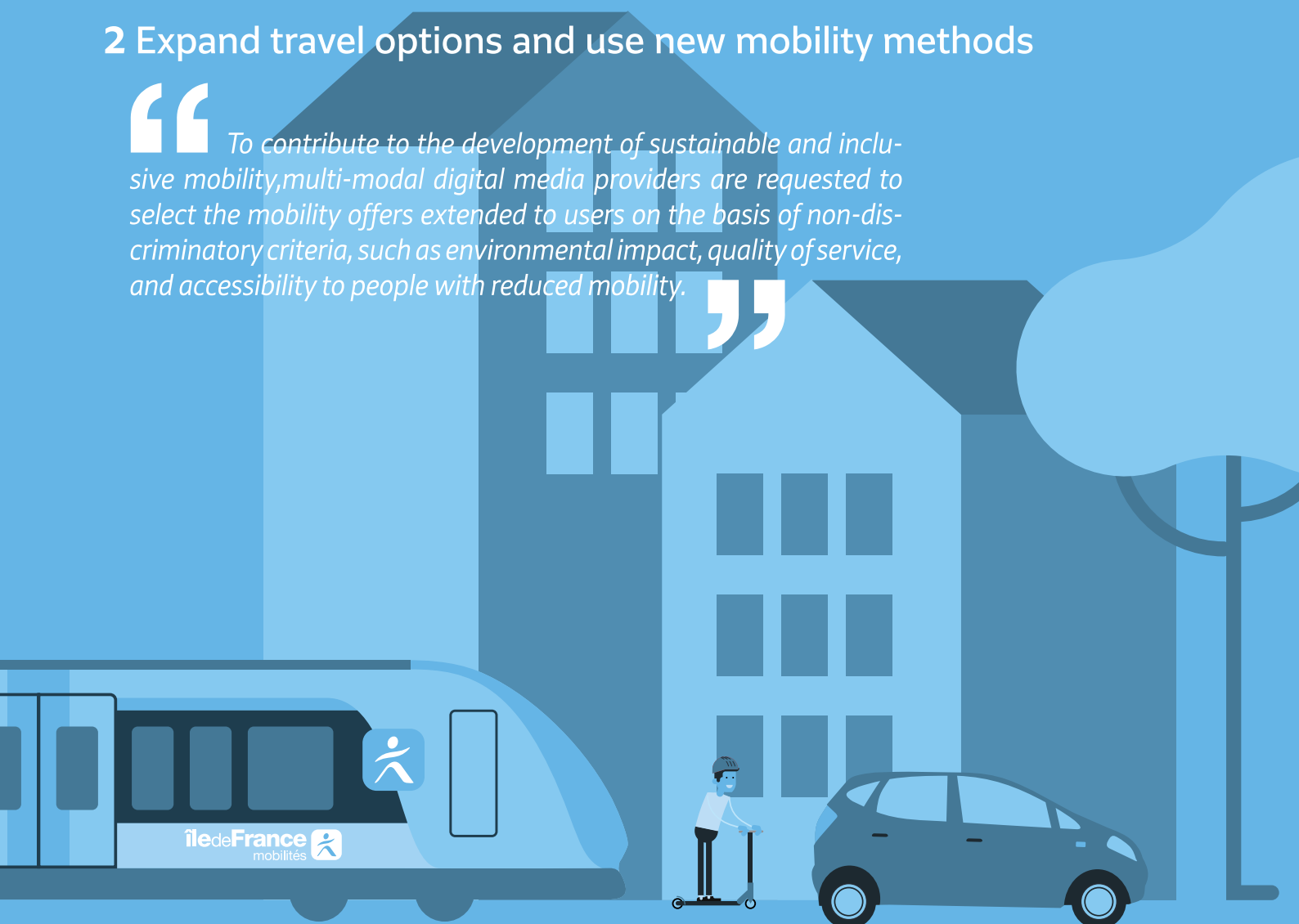
02
THE MOBILITY OFFER

1 Organize multi-modal and inter-modal travel and promote sustainable and inclusive mobility

"

In order to facilitate the transition from one mode of transport to another and to design travel chains limiting single drive vehicles, Île-de-France Mobilités is organizing multi-modal and inter-modal processes alongside expanding services and equipment in stations.

"

2 Expand travel options and use new mobility methods

"

To contribute to the development of sustainable and inclusive mobility, multi-modal digital media providers are requested to select the mobility offers extended to users on the basis of non-discriminatory criteria, such as environmental impact, quality of service, and accessibility to people with reduced mobility.

"

île de **France**
mobilités

*To fulfil its task of organizing new mobility and parking, Île-de-France Mobilités **is drawing up a mobility plan for the Île-de-France region**, under the authority assigned to it by the LOM. This plan sets the objectives for the transport of people and goods, traffic and parking, taking into account the specific features of all the regions that make up Île-de-France and interactions with neighbouring areas. Its objective is to contribute to reducing greenhouse gas emissions from the transport sector, bringing them onto a trajectory consistent with France's commitments in the fight against climate change, its efforts to control air and noise pollution and to preserving biodiversity.*

*With this in mind, it is appropriate to**to state the main principles for interaction between the transport entity options and the dedicated infrastructures that make up** the foundations of mobility as a service.*

2.1 ORGANIZE MULTI-MODAL AND INTER-MODAL TRAVEL AND SUSTAINABLE AND INCLUSIVE MOBILITY

In order to facilitate the transition from one mode of transport to another and in order to build travel networks that limiting single-occupant driving, **Île-de-France Mobilités is organising the following actions, in consultation with local authorities and transporters**:

• The **multi-modal process** (implementing additional modes of transport): actions to promote and subsidize certain modes, uses or transport services (via communication, promotion, certification through labelling, agreements or contractual mechanisms), pricing and multi-modal passenger information, interoperability between systems, '' studies and surveys of users or road development such as reserved lanes (outside the areas of authority of Île-de-France Mobilités). From a traveller's point of view, it is about being able to choose one mode of travel from among others that addresses an immediate or planned requirement;

• Inter-modal **processes**, from a "network" and "door to door" perspective, by developing interchange hubs at the nodes of the network (building more stations and surrounding infrastructure, park & ride locations, bus stops and parking areas for new mobility). For a traveller, it is about being able to choose a combination of at least two modes of travel meeting an immediate or planned need;

• Expansion **of station services and facilities** retail or non-retail services, connectivity services, more comfortable waiting areas, all of which are a complement to transport "services bases" necessary for travel.

In accordance with public mobility policies, **Île-de-France Mobilités** is also committed to **promoting sustainable and inclusive mobility** by developing service to sparsely populated areas, services for the elderly, disabled or low-income and links to public transport.

To this end, **Île-de-France Mobilités** provides users with **information and remote reservation resources for transport on demand (TAD)** and finances **local transport services adapted to people with reduced mobility or impaired autonomy and can promote certain new mobility services.**.

2.2 EXPAND TRAVEL OPTIONS AND USE NEW MOBILITY METHODS

To develop the use of new mobility, **Île-de-France Mobilités is providing stakeholders with the following, openly and indiscriminately**:

• Information on the institutional Île-de-France Mobilités site, such as studies and surveys, projects and sites in the Île-de-France region.

• Educational and communication tools for users

• Usage data sets on new mobility in certain cases, like car-sharing

• Facilitation tools like dissemination of good practices and links to entities for local authorities and the ecosystem of entities ;

• A car-sharing label

• Contracting, as with car-pooling

• Term equipment contracting (example Véligo Location, Transport à la Demande).

When a labelling, contracts or equipment contracting framework is set up for a new mobility offer:

• **All entities in the ecosystem** are requested to **interact with Île-de-France Mobilités before making a decision on rolling out or renewing a transport system offer** in their region By doing so, we can guarantee that the offer is consistent with the mobility plan and that it has been developed and adapted to changing usage modes and the guidelines of public policies.

• **Île-de-France Mobilités** can **facilitate bringing companies into the mobility ecosystem and support them in positioning their offer**, thanks to an overall view of the market and requirements of Travellers. It can also **facilitate the development of partnership networks** to optimize transport flows and organize a complementary aspect for travel modes.

• **Operators of new mobilities without a contract feature or a label** can **approach Île-de-France Mobilités** with a view to adapting their offer to the standards required by the Organizing Authority in order to use the MaaS digital media system developed by Île-de-France Mobilités).

Île-de-France Mobilités can support local authorities and companies in their **eco-mobility initiatives** (promoting companies awarded labels to local public officials or employees, providing shared mobility fleets, etc.) **as well as with associated financing methods** ("mobility vouchers" as defined in article 82 of the LOM and articles L. 3261-5 et seq. of the Labour code) in order to encourage the use of sustainable mobility solutions on daily home-work commuting.

To contribute to the development of sustainable and inclusive mobility, **multi-modal digital media providers** are requested to **select the mobility offers offered to users on the basis of non-discriminatory criteria,** such as environmental impact (level of emissions of GHG and other pollutants), quality of service (performance of digital interfaces, reliability and regularity of service), and accessibility to people with reduced mobility. Failing this, digital media providers shall explicitly state the criteria that justify rejecting certain mobility offers.

As such, **multi-modal digital media providers** are encouraged to **promote the mobility offer set up by Île-de-France Mobilités or service partners under contract, agreements or having labels**[1].

Local **authorities** are requested **to allocate parking spaces with electric charging stations** to car-sharing entities with the Île-de-France Mobilités label to facilitate their entry into urban areas. They are also requested **to make traffic and parking of carpooling and micro-mobility methods** such as bicycles, scooters and electric scooters easier in their region by providing more dedicated infrastructure. Also, in accordance with article 41 of the LOM as codified in article L. 1241-17 of the transport code, these municipalities shall issue **companies providing vehicles on a free-floating basis an authorization to temporarily occupy the public domain,** after consulting with Île-de-France Mobilités.

Through this method, **Île-de-France Mobilités** can help municipalities **harmonize the requirements in their calls for applications relating to the new forms of mobility that it promotes** through contracts, agreements or labels, in particular when they are supported by several local authorities. **Île-de-France Mobilités can support local authorities with regard to entities it contracts with, has agreements with or issues labels by monitoring effective implementation of these requirements,** by facilitating access to data produced by new mobility operators, carrying out audits and refusing access to non-compliant or rejected mobility services.

In addition to all of these measures and support, the **"sustainable mobility package"** recently came into force in France **to promote the use of soft mobility for home-work travel**. Employers can cover up to €400 / year / employee for home-work travel expenses exempt from taxes and social contributions. Transport modes concerned are cycling, carpooling, car-sharing, shared micro-mobility and public transport tickets (not including subscription).

[1] A list of partner services is available on request from Île-de-France Mobilités.

03
PROVIDING AND EXCHANGING DATA AND DIGITAL SERVICES

1 **Accelerate openness and data-sharing trends**

"

Île-de-France Mobilités seeks to be a trusted third party with regard to data providers and data re-users.

"

2 **Develop accessible and reusable digital services**

"

Île-de-France Mobilités is developing digital services that are intended for use by entities other than AOM, such as web services for accessing real-time data, a multi-modal itinerary search system and a client authentication tool.

"

3 **Develop a regional MaaS digital media**

"

This positioning of Île-de-France Mobilité could give rise to cooperation with local existing or developing MaaS, thus raising the question of their coexistence with the regional MaaS of the AOM.

"

*Mobility as service should lead to **facilitating and encouraging multi-modal** and inter-modal processes. In this regard, Île-de-France Mobilités wishes to actively participate in developing mobility as a service in the Île-de-France region, by providing companies in the transport ecosystem with free access (open data) or on a case-by-case basis, data and services to **encourage implementing services and innovation in the field of mobility as a service.**.*

In this way, Île-de-France Mobilités creates consistency with regard to the diversity of sources and requirements, by ensuring that data is protected and shared amongst companies.

*Île-de-France Mobilités **is building a regional digital interface to address this issue, which it has baptised PRIM.**[2]. It is developing a system for aggregating and making available data, in particular static and dynamic data relating to the movements and traffic of the transport services it organizes, as provided for by the LOM and digital services.*

*Île-de-France Mobilités **uses this interface and the digital services it is developing in order to offer travellers its own regional MaaS digital media,,** as it considers this a key lever for addressing the challenges of public mobility policies under its jurisdiction.*

3.1 ACCELERATE OPENNESS AND DATA-SHARING TRENDS

In order for the organization of multi-modal and inter-modal processes to attain the highest optimal level in the Île-de-France region, data relating to mobility should be made accessible, and made available specifically to Île-de-France Mobilités, the guarantor of public interest in exercising its powers.

Île-de-France Mobilités seeks **to be a trusted third party** with regard to:

• Data providers, such as new mobility and parking operators, by providing a secure platform governed by appropriate collaboration rules. In accordance with the LOM, Île-de-France Mobilités **oversees the conditions of access to its platform** and prepares a data management plan to ensure use of data that adheres to public mobility policies. Île-de-France Mobilités can also **grant licenses guaranteeing a reasonable opening of access to data, which is compatible with public policies**, in accordance with the European Directive on intelligent transport systems (Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport Text with EEA relevance).

• Re-users of data, such as multi-modal digital media providers, through a set 1 / of guidelines on the provision of data to promote their **reliability, completeness and updating, 2 / of control measures for the data collected to contribute to their quality and interoperability.** Île-de-France Mobilités sets out the terms for data re-use so that data containing passenger Information is not altered.

Île-de-France Mobilités aggregates and makes the following available on its PRIM platform :

• All **historical, static and dynamic data on movements and traffic activity of regular public transport services (RER, metro, tramway, bus) and public transport on demand; ;**

• Data relating **to parking services** ;

• Data relating to **inter-modal infrastructure and station services and equipment** (e.g. Park & Ride-labelled, Île-de-France Mobilités bicycle parking lots), including data relating to accessibility for people with reduced mobility;

• Data relating to **cycling infrastructure** in municipalities (bike lanes and paths).

As producers of data **new mobility and parking operators** are asked to **provide the following data, via the digital PRIM platform, automatically through "API" web services or semi-automatically by forwarding files in an open standard format,** of a type easily reusable that can be processed by an automated processing system, in particular:

• Historical, **static and dynamic traffic and movement data,** in accordance with the LOM and as defined within in the framework of the European Regulation

• In particular for free-floating shared mobility operators: data relating to the **location** and availability of **vehicles, cycles and personal mobility machines, available**, in accordance with the LOM

• In particular for carpooling operators: data relating to the **location where vehicles are boarded and where drop off occurs, corresponding estimated travel times and the price of the trip,** in accordance with the LOM

• Data relating to **evaluating the quality of transport services and customer satisfaction** (anonymised data[3]), necessary for Île-de-France Mobilités to properly guide public mobility policies, such as rating by users with regard to their trip

• Data relating to **knowledge of passenger use** (anonymised data), needed by Île-de-France Mobilités to improve the offer and mobility uses in line with public mobility policies, such as:
  • Origin and destinations of users
  • User timetables: departures and arrivals
  • Distances covered per trip
  • Breakdown of users by reason for travel

• Data relating to **user knowledge**, in compliance with GDPR regulations (including obtaining the express consent from users), needed by Île-de-France Mobilités to improve public mobility policy guidelines, such as:
  • User age
  • Gender
  • Socio-professional category
  • Information relating to the preferences of movement (favourite transport modes, accessibility for persons with reduced mobility, etc.)

Local **authorities** are requested to **provide the data they can produce or collect via the PRIM digital interface in open standard format, in cooperation with Île-de-France Mobilités;** these should be easily exploitable and reusable, and should concern:

• Data relating to **micro-mobility modes approved by local authorities** (offer data, usage data, user data, in compliance with the provisions of the GDPR)

• Data relating to **inter-modal services and infrastructure dedicated to new forms of mobility** (location, accessibility, availability, etc.) such as parking spaces (bicycles, car-sharing, carpooling), charging stations for electric vehicles, reserved lanes (bicycles, carpooling), etc.

• Data relating to **the use of cycle lanes or bike paths**, derived from information feedback from on-board sensors

• Data relating to **market and non-market services near mobility hubs** (location, type, opening hours, etc.)

• Parking data for car parks near stations (opening hours, prices, availability, etc.)

• Counting **data (fixed sensors) of road traffic, road conditions and traffic congestion on roads**.

In addition, **Île-de-France Mobilités** carries out **innovation projects in collaboration with partners,** particularly local authorities, on subjects relating to digital technology, multi-modal processes, accessibility, etc.

Île-de-France Mobilités can act as facilitator at the initiative of local authorities **to provide support in analysing certain use cases** that they may consider useful to development in their region to address the requirements of users. The purpose of the Île-de-France Mobilités intervention **is to pool reference systems and specific data by local authorities** in order to reuse them in their own management system and, if necessary, make them accessible to users via a digital interface. For example, this could involve **the implementation of applications or sites dedicated to companies and their employees**.

Île-de-France Mobilités will also be able to facilitate the development of partnerships **by putting local authorities in touch with specialized partner actors**, in particular with entities it has contracted and others with a. Île-de-France Mobilités label.

New **mobility and parking operators** and **local authorities** are requested to provide the **data listed above in accordance with the terms set by Île-de-France Mobilités in an objective, transparent, non-discriminatory and proportional manner.**.

[3] Anonymisation is defined by the CNIL as processing which consists in using a set of techniques in such a way as to make it impossible to identify the person by any means whatsoever and irreversibly. Data anonymised using anonymisation techniques recognized as reliable by the CNIL for statistical and research purposes,are then excluded from the scope of the GDPR

In accordance with the LOM and the forthcoming decree on Article 28, **multi-modal digital media providers** shall send managers of the services they sell and to competent local authorities, where applicable, the following:

• All the data necessary for **statistical knowledge regarding movements and parking**,

• All data relating to **customer service of rates for products and anti-fraud formats**, including user identification data collected by the multi-modal digital service,

• Data **regarding use and visits to digital service formats**.

In addition, **multi-modal digital media providers** should set up a **data protection policy** that informs users about the processing of their personal data, in accordance with the legal framework in force (RGPD) and the recommendations of the CNIL.

3.2 INCREASE ACCESSIBLE AND REUSABLE DIGITAL SERVICES

Île-de-France Mobilités is developing alone or through partnerships **digital services that are intended to be used by players** other than Mobility Organizers (AOM). For existing web services, this specifically concerns access to real-time data in addition to static and theoretical data (known as "API"), the multi-modal itinerary search system, the real time information system, the information system for accessibility of People with Reduced Mobility (PRM) and the Île-de-France Mobilités Connect customer authentication mechanism. Additional **tools will be made available in 2020 and 2021** : for example, account management tools and the reservations and payment system (see point 4 below, Pricing and Distribution of this Guide), the mapping programme for service points in depots, the inter-modal equipment geolocation system and the indoor guidance system.

Public or private **Multi-modal digital media providers**, will be requested to **enter Île-de-France Mobilités when reusing these digital services**, which are made available by the AOM under the terms and conditions it sets.

Île-de-France Mobilités determines the **technical integration methods through a distribution contract,** such as V, Software Development Kit, white or grey label, and the **financial terms for accessing its digital services**. These terms of access are objective, transparent and non-discriminatory.

3.3 DEVELOP A MAAS DIGITAL MEDIA OFFER

In addition to the data and services that it can make available to re-users, **Île-de-France Mobilités** wishes to **offer region-specific digital media to travellers** who meet the challenges and requirements of universality, sustainability and inclusion in both the people and different regions of Île-de-France.

In this context, Île-de-France Mobilités may **request access to the sales units of mobility services operators** it wishes to include, as well as **to certain data necessary for ensuring the quality of the customer experience.** One of the Île-de-France Mobilités positions in connection with the promotion of the Sustainable Mobility Package, may consist in retrieving consumer information for use in **devising an aggregated invoice for several mobility entities.**

Île-de-France Mobilités determines the **technical terms** of a contract or an agreement with each mobility service such as Deep Link, Software Development Kit, white label or grey label, **and the financial terms for the distribution of the services it includes in its regional digital media process**.

This positioning of Île-de-France Mobilités can give rise to **cooperation with local existing or developing MaaS**, thus raising the question of their coexistence with the regional MaaS of the AOM in order to **achieve visibility of mobility applications for users and consistency in traveller information on a regional scale.**

Communities could reflect this cooperation as follows:

• By developing the mobility component of a general application of the City

• By developing an application dedicated to a specific target such as tourists, students or employees in targeted areas

• By integrating all or part of the mobility and parking offers and services organized by a local authority

In this case, a bilateral agreement between the community and Île-de-France Mobilités should be signed. As a minimum, local authorities should use the data and functional bricks developed by Île-de-France Mobilités and available on PRIM, and attribute the source of the data and / or the service to Île-de-France Mobilités, as a trusted third party for users.

04
TRAVELLER INFORMATION ON DIGITAL MEDIA

1 Guarantee that modal proposals meets Traveller requirements and respond to the issues affecting public mobility policies

> *To obtain transparent results in a response to a route calculation request, multi-modal digital media providers are requested to allow users direct access to a list of the main parameters and to optimization and ranking criteria used.*

2 Create an environment of trust with travellers by ensuring reliability and consistency of Traveller Information

> *To guarantee the reliability and consistency of the Information relayed to Travellers multi-modal digital media providers are requested to use APIs made available by Île-de-France Mobilités.*

4.1 GUARANTEE THAT MODAL PROPOSALS MEETS TRAVELLER REQUIREMENTS AND RESPOND TO THE ISSUES AFFECTING PUBLIC MOBILITY POLICIES

To ensure that modal solutions are neutral and suitable with regard to Travellers' requirements, **multi-modal digital media providers** should:

• **Offer services and modes of transport in line with public mobility policiesé** ;

• S**elect the mobility services for a given mode in a non-discriminatory manner** (see Part 1. Offer), in accordance with the LOM.

• **Offer solutions to address users' requests in a manner that is clear and not likely to mislead users**, in accordance with the LOM. This may involve indicating modes used for each solution and total time upon availability of information, indicating the price for each trip in terms of full price or special user rates,, or to allow users to sort the responses according rate or travel time (or time of arrival);

• **In selecting and ranking user solutions, resort to criteria that are transparent, explicit and non-discriminatory to all mobility services referenced in the digital interface**, n accordance with the LOM.

Île-de-France Mobilités is developing its own MaaS digital media in order to **offer a range of services in line with the guidelines of public mobility policies that address the travel requirements of all Île-de-France residents**. *This package of services will change over time and displays the entire public transport offer that Île-de-France Mobilités is coordinating in the region, as well as new mobility and parking services with contracted partners and ones with labels that are linked with local authorities.*

In order to provide a relevant response to the issue of personalizing and contextualizing mobility as a service, Île-de-France Mobilités can contribute to the development of other MaaS digital media - targeting international, national and local user targets. or specific such as tourists or PRMs – to ensure that **Traveller Information** *is of high quality and consistent across all communication channels and at each stage of travel in Île-de-France.*

4.2 CREATE AN ENVIRONMENT OF TRUST WITH TRAVELLERS BY ENSURING RELIABILITY AND CONSISTENCY OF TRAVELLER INFORMATION

As such, to attain transparent results in a response to a route calculation request, **multi-modal digital media providers** are requested to:

- **Allow users direct access to a list of the main parameters** (with users able to modify values) **and optimization and ranking criteria** used for each solution or of a summary of solutions, depending on whether or not the criteria used are different

- **Use the classification criteria defined in the Consumer Code** (duration, distance, price, GHG emissions, calories expended, number of connections, etc.), as well as **PRM accessibility or comfort criteria** (sound levels, WiFi connectivity, storage space, etc.)

- **Explicitly state the values considered for each of the calculation parameters mentioned in the Consumer Code** (walking speed, level of CO2 emissions per mode, the maximum number of changes used, etc.).

As part of a collaborative facilitation approach (see part 7. Facilitation of Mobility as a Service in this guide), all the players are conducting a joint discussion to **take stock of the impacts of MaaS digital media on the user experience and urban mobility habits in the Île-de-France region**, based on indicators determined in advance with regard to public mobility policies.

Île-de-France Mobilités can provide some Traveller Information content to digital media providers **which is automatically updated** via API web services, such as real-time access to bus timetables, traffic information, information on equipment and services in stations, rates information, etc.. Access and use of these web services are subject to prior agreement to the general conditions of use (T & Cs) established by **Île-de-France Mobilités**.

To guarantee the reliability and consistency of the Information relayed to Travellers **multi-modal digital media providers** are requested to **use APIs** made available by Île-de-France Mobilités, and to **draw on good practices in the area of designing and disseminating Traveller Information** as set out in the Traveller Information Media and Content Charter available on the Île-de-France Mobilités Open Data portal.

This Charter, drawn up by Île-de-France Mobilités, determines the **principles for the design and display of Traveller Information content on all remote digital media**, in particular websites, mobile applications, networks. social, chatbots and voicebots. It is part of the powers attributed to Île-de-France Mobilités, which ensures that **information is available that is consistent with the various digital media and accessible** to the entire public, particularly to people with disabilities, and allophones.

In the event of a serious and exceptional situation, such as serious acts of violence, acts of terrorism, floods and fires, **multi-modal digital media providers** shall **will relay the Traveller Information system that is common to all mobility stakeholders as developed by Île-de-France Mobilités to their users** at the request of public authorities.

All **entities in the mobility ecosystem** shall state the data sources and services they are re-using. Regarding this, where re-usable data and services made available by Île-de-France Mobilités, **suppliers of multi-modal digital media**, **operators of new mobility and parking facilities** and **local authorities** are requested to state Île-de-France Mobilités as a source, as a trusted third party vis-à-vis users.

05
PRICING AND DISTRIBUTION

1 Ensure that users get the full extent and readability of pricing for products offered in public transport services

" *To guarantee the quality and integrity of distribution and after-sales service transactions, multi-modal digital media providers are requested to provide the various public transport services exclusively by means of the service bricks made available by Île-de-France Mobilités.* "
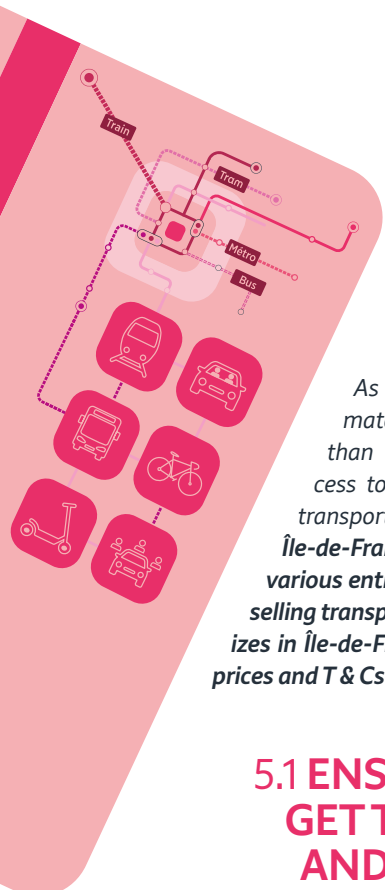
2 Preserve the quality experience specific to each mobility and parking operator

" *Ecosystem stakeholders are requested to collaborate with Île-de-France Mobilités to work out technical solutions that facilitate user authentication and payment.* "

As soon as this is technically and materially possible, but no later than 1 July 2021, the date that access to digital media for on-line sale of transport tickets becomes mandatory, Île-de-France Mobilités shall provide the various entities with service bricks for use in selling transport services that the AOM organizes in Île-de-France remotely, contingent upon prices and T & Cs that it sets.

5.1 ENSURE THAT USERS GET THE FULL EXTENT AND READABILITY OF PRICING FOR PRODUCTS OFFERED IN PUBLIC TRANSPORT SERVICES

As part of the distribution of **transport services that Île-de-France Mobilités** is setting up in its region, **multi-modal digital media providers** should do the following, in accordance with article 28 of the LOM:

• Deliver the rates products of these services to these providers **by strictly applying their terms of use, pricing and reservation**.

• Carry out the sale of these rates products **according to technical and financial terms set out in a contract concluded between the supplier of the multi-modal digital service and the manager of each of the mobility or parking services.**. Its terms are reasonable, fair, transparent and proportionate.

• Establish **an information management plan concerning the services it sells,** which are protected by trade secrecy, and the **terms of presentation of the manager's brand** by the digital multi-modal service. This plan is processed under the aforementioned contract and guarantees that a competing service shall have no access to this information.

• Should a service not state the entire price range of a given product - in particular the specific prices for people with reduced mobility and their companions - **it shall clearly and explicitly mention the incomplete nature of the price range displayed and direct users to Île-de-France Mobilités** so that they can get these specific prices, subject to eligibility.

As soon as this is technically and materially possible via the provision of Île-de-France Mobilités service bricks, **multi-modal digital media providers** shall:

• Deliver the **various public transport services, exclusively by means of the service bricks made available by Île-de-France Mobilités** to guarantee the quality and integrity of distribution and after-sales service transactions

• Deliver, if necessary, **the various transport services at special rates** for users whose file has been previously investigated and for whom information on entitlement to the special rate is available.

Supposing a common basket distribution is available that includes a public transport service set up by Île-de-France Mobilités, and as soon as this is made technically and materially possible through Île-de-France Mobilités service bricks, **multi-modal digital media providers** shall **clearly and explicitly display the prices set by Île-de-France Mobilités**.

In addition, **new mobility operators** are requested to offer **reduced prices for the services they provide to specific groups**, especially people with reduced mobility or disabilities, as well as those accompanying them, or along the lines of **social-economic criteria, age, etc.**.

5.2 PRESERVE TRAVELLER QUALITY EXPERIENCE SPECIFIC TO EACH MOBILITY AND PARKING OPERATOR

Multi-modal digital media providers are encouraged to:

• Offer services to users, at rates **that use strictly the same pricing as those set by the managers of these services**, in accordance with the LOM, taking into account dynamic pricing (yield management) where applicable;

• Provide these services **without distorting the user experience** specific to each mobility operator and to the complex nature of of the transactional journey. Otherwise, refer users to the website of the operator concerned

• Distribute these services **by strictly restoring / or directing the user to the T & Cs of these services**

In addition, multi-modal digital media providers are encouraged to ensure transactional evidence and product validity for users through a set of actions, as follows:

• **Validate the transaction**, based on the bank details provided by users and the pricing information provided by service providers.. An operator must issue proof of the contract concluded and forward it to service providers and users.

• **Provide an initial step in the fight against fraud** and transmit to mobility services providers the necessary elements to use in carry out a second level of service operator control

• If paid in, **submit** the revenue to mobility service providers and provide them the elements for carrying out their own revenue control

• **Provide users with receipts for their subscriptions to mobility offers.é**. This proof, in the form of public transport tickets or proof of carpooling, may be verified and must therefore be compatible with validation systems, for example in public transport. It can also give access to benefits in terms of pricing, services or dedicated infrastructure, such as parking spaces, reserved traffic lanes, etc.

Ecosystem stakeholders are requested to collaborate with Île-de-France Mobilités **to work out technical solutions that facilitate user authentication and payment**. These solutions could be devised through account federation, tokenization, or establishing correspondence through pivot tables to link the different accounts of a like user. They must incorporate regulations pertaining to the protection of personal data (RGPD) and CNIL recommendations in terms of anonymisation. Île de France Mobilités has set up an Île-de-France Mobilités Connect tool with the goal of facilitating authentication to its services.

06
INNOVATION

> *"Ecosystem stakeholders are requested to collaborate with Île-de-France Mobilités to work out technical solutions that facilitate user authentication and payment.*"

1 Promote innovation in the area of mobility as a service

2 Contribute to achieving Open Innovation

*To address the strategic challenges of developing new forms of sustainable and responsible mobility, Île-de-France Mobilités wishes to actively promote **innovation**[4] **in the area of new mobility and mobility as a service offers across the Île-de-France Region***.

6.1 PROMOTE INNOVATION IN THE AREA OF MOBILITY AS A SERVICE

Île-de-France Mobilités' concept is to **stimulate a dynamic trend in community innovation, coordinated amongst entities and consistent with the strategic issues.**

Île-de-France Mobilités' innovation policy in the field of mobility as a service is determined within an ad hoc committee. It identifies several major innovation themes considered to be strategic for the development of mobility as a service.

As part of this innovation policy, **Île-de-France Mobilités** can focus on:

• **Allocating funds** to finance innovation of subsidized companies by means of a contract or partnership agreement, as well as financing other actors outside of contracts and agreements

• **Monitoring from start to finish**, to the extent possible - from the design phase to rollout - the research and development projects it finances

• **Organizing regional events** dedicated to innovation in mobility as a service, in order to promote the latest innovative projects in the ecosystem and discuss possible cooperation

• **Organizing "innovation competition in Île-de-France" events** during which various companies offer innovative solutions to address regional strategic challenges (example "Challenge 2019 dedicated to providing information during incidents).

6.2 CONTRIBUTE ACTIVELY TO OPEN INNOVATION

Stakeholders in the mobility ecosystem are invited to **attend and actively participate in** meetings organized by Île-de-France Mobilités and to respond more broadly to requests for information / data and other requests presented by Île-de-France Mobilités.

Stakeholders in the mobility ecosystem are invited to **collaborate with Île-de-France Mobilités to experiment with new digital media and services** relating to mobility as a service.

This experimentation should be carried out with a view to **converging the working methods used by public and private entities** to include UX design, design thinking, agile methods, lean management, sprint design, etc.

[4] The OECD defines innovation as all scientific, technological, organizational, financial and commercial approaches that are successful, in producing technologically new or improved products or processes..

07
OVERSEEING MOBILITY AS A SERVICE IN ÎLE-DE-FRANCE

" *Innovation and supervision must be treated together in order to collectively address an effective and pragmatic response to user issues, in line with public mobility policies and acting in the general interest.* "

1 A collaborative coordination approach for an ecosystem with multiple participants

2 A constructive coordination process based on annual priorities trends

*Île-de-France Mobilités wishes **to establish a community system based on the principle of shared responsibility** in devising attractive offers for users that are consistent with public mobility policies when circulating data and services to improve their practicality and usefulness, and in developing and stabilizing sustainable economic models.*

*As such, Île-de-France Mobilités wishes to offer a model for facilitating the mobility as a service concept, with a view to **extending dialogue and facilitating cooperation between the various public and private entities**. This approach to facilitating mobility as a service can be grounded on the main principles of interactions between entities presented in this guide.*

7.1 A COLLABORATIVE COORDINATION APPROACH FOR AN ECOSYSTEM WITH MULTIPLE PARTICIPANTS

A **regional body will be available to entities in the mobility ecosystem in Île-de-France**, namely:

- Île-de-France Mobilités

- transport operators under contract or public service delegation contract (DSP)

- new mobility and car park operators

- multi-modal digital media providers

- local authorities and their groups

This kind of multi-entity approach allows everyone **a forum for expression in a common area**, within which Île-de-France Mobilités plays the role of facilitator, mediator and regulator of the ecosystem.

7.2 A CONSTRUCTIVE COORDINATION PROCESS BASED ON ANNUAL PRIORITIES TRENDS

The purpose of this regional body, which will meet biannually, will be to **give substance to the main principles of interactions between stakeholders**, on the basis of the elements presented in this guide.

It will also serve to facilitate the integration of existing innovation into the Île-de-France mobility ecosystem. This is why innovation and supervision must be treated together in order to **collectively address an effective and pragmatic response to user issues**, in line with public mobility policies and acting in the general interest.

Accordingly, the approach to facilitating mobility as a service should lead to:

- **Sharing the guidelines of public mobility policies and urban mobility plans in Île-de-France** with all stakeholders

- **Converging innovation efforts of private companies in the area of mobility as a service with the efforts of public actors** to achieve more sustainable and inclusive mobility trends

- **Keep discussions open with all parties** to incorporate everyone's constraints and expectations, and as a result, guarantee the best service for users

- **Apply the aforementioned principles of interactions between entities** on all the topics covered in this guide to the greatest extent possible

- **Rounding out and translating these principles into technical and legal operational projects** that require everyone's collaboration, within the framework of a collective roadmap

- **Share and coordinate the progress of the various operational projects** which will lead to collective discussions.

For the 2020-2021 period, Île-de-France Mobilités offers an initial open-ended list **of work areas to be addressed with regard to the following three user issues**:

Areas of work relating to **improving the offer and using new forms of mobility as a complement to public transport that are in line with public policies guidelines**

- Expand the use of electric bikes, car sharing, carpooling and all associated infrastructure, to include reserved lanes and tracks, dedicated and secure parking, electric charging stations, etc.

- Increase mobility services that are tailored to people with reduced mobility or loss of autonomy

- Support to companies in transforming mobility options of their employees , such as facilitating the emergence of approved companies, promoting the sustainable mobility package and developing an aggregate billing system for home-work commuting, implementing innovation projects , etc.

Areas of work relating to **reliability and consistency of Traveller Information at the local and regional level**

- Facilitating standardisation, quality and interoperability of data

- Collecting and using anonymised data on usage knowledge for purposes consistent with public mobility policies

- Developing a contractual framework for the use of personal data for marketing purposes, such as personalized offers

- Drafting "standard" T & Cs for users and developing a "standard" data privacy policy

Areas of work relating to **retaining a quality customer experience specific to each operator (authentication, payment, after-sales service, etc.)**

- Developing a unified user dashboard as part of a mobility account

- Facilitating user authentication and payment, including use of Île-de-France Mobilités Connect

- Determining typical integration methods (SDK, API, deep link, etc.)

Work avenues relating to the **prospective vision of mobility taking into account the risk of a health crisis**

Mobility processes organized by the AOM must now take into account the pandemic risk and its health issues **which will impact demand in mass transit as well as in shared mobility.**

Implementing a regional public MaaS that promotes organizations and working methods revamped due to stay at home work trends, and which makes it possible to envisage an urbanism that favours soft mobility, constitutes a real lever for the onset of sustainable mobility.

To achieve this, the regional public MaaS must rely **on multi-modal data, from transport to station services; reliable and in real time guaranteeing consistent quality passenger information at every stage of a trip.**

In view of the current crisis, the reuse of this data for the benefit of travellers is more than ever essential to reinforce trust: offering practical schedules and routes that avoid risk areas or routes to users, taking into account the level of occupancy in real time of vehicles and avoiding rush hours, relaying and supervising social distancing measures, providing information on cleaning operations, etc.

The initial approaches to work on this theme are likely to evolve in line with changes in mobility behaviour that will be emerging.