

Mobility-as-a-Service: from IMOVE pilot experience in Europe to the initiatives of the City of Turin

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GREEN TECH SOLUTIONS



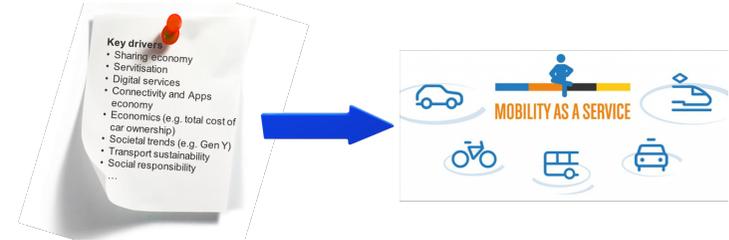
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Mobility-as-a-Service

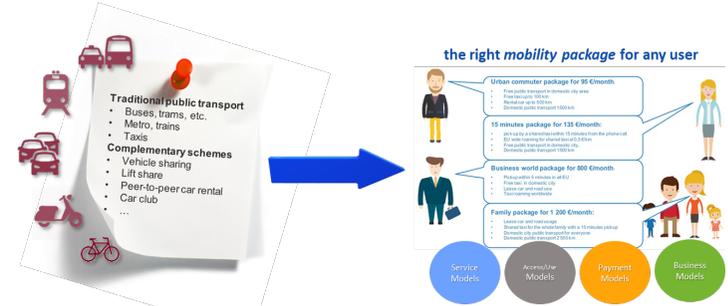
1 A change in focus

From **ownership** to **use**: a transition in mobility, where a **consumer subscribes in mobility**, instead of **investing in transport equipment**



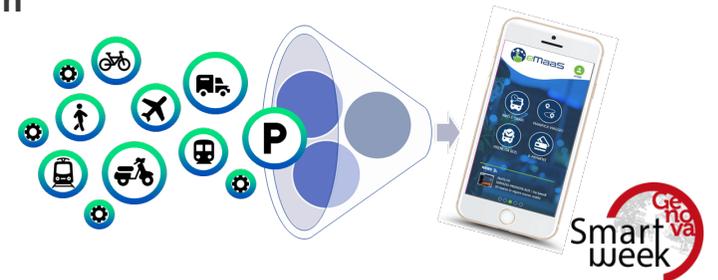
2 Multimodality

From **individual schemes** to highly integrated **combined mobility services**



3 At the heart of Digital Transport: all of your mobility in

- One user App
- One payment plan
- On demand and personalised



Mobility-as-a-Service



European
Commission

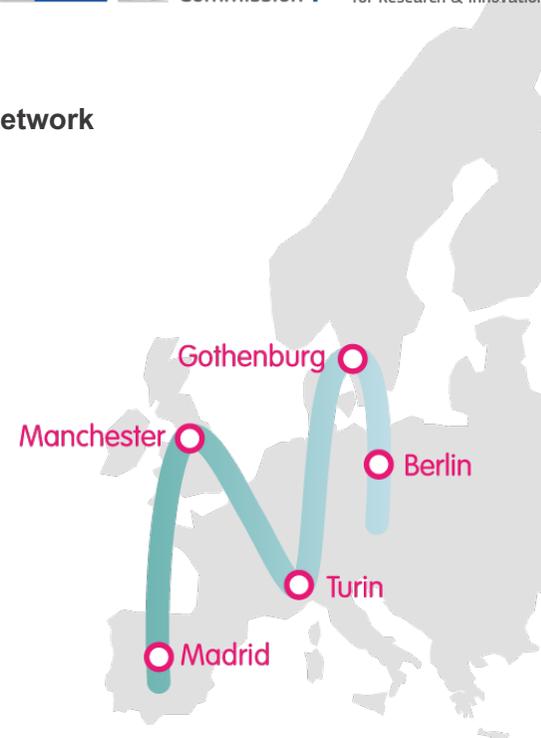
Horizon 2020
European Union funding
for Research & Innovation

The IMOVE (H2020) EU project

•Unlocking Large-Scale Access to Combined Mobility through a European MaaS Network

•Project Synopsis:

- Innovative concepts, systems and services towards 'mobility as a service'
 - MG-6.1-2016 call, one of the three selected lighthouse projects on MaaS
- Research and Innovation Action (RIA)
 - 30 months duration: 1.06.2017 – 30.11.2019
 - 3.69 M€ cost, 3.39 M€ EU grant
- Consortium: 15 organizations, 6 countries
 - **research:**
AICENTER (CVUT), I-SENSE (ICCS), RISE
 - **ICT/consulting:**
Softeco Sismat, Mosaic Factor, FIT, Vectos
 - **mobility:**
Transport for Greater Manchester, 5T, Turin Municipality, UBIGO, URBI, Vastrafik, EMT Madrid
 - **stakeholders' associations:**
UITP



IMOVE approach: research pillars

Measures, Policies and Strategies

Heterogeneous organizational/regulatory frameworks,
unclear business models

Scalability Unlocks

to enhance the framework conditions for MaaS development and
operation (business models, guidelines, best practices)

Enabling Technologies

A broad offer of services/products already on the market (mobile apps, travel
planners, e-ticketing, APIs, MaaS Platforms)

Software Enablers

to integrate existing functionalities,
enhance interoperability
and facilitate cross-border roaming of MaaS schemes

Data driven mobility

Different data models,
barriers in data sharing,
knowledge extraction

Data & Information Exchange Framework

to define a reference MaaS data model,
to understand user expectations, behaviour and needs,
to analyse customers activity and demand for services,
to foresee potential new user groups, offers or MaaS packages

Validating MaaS models: IMOVE Living Labs

The IMOVE pilot sites

Göteborg

MaaS provider: local providers (SpaceTime, SmartResenär) + Västtrafik
 Integration Level: initial L0, target L2-L3-L4
 3 distinct pilots: PT + parking services (integrated ticketing); combined mobility solutions for residents/tenants (132 new apartments with combined mobility services instead of parking); B2B combined mobility for business trips



Berlin

MaaS provider: URBI (IMOVE partner)
 Integration Level: initial L1, target L3
 integration of at least one MSP per transport mode. Cooperation with PT: adaptation of APIs for integrated ticketing system, reselling of PT tickets through URBI app



Turin

MaaS provider: URBI (IMOVE partner)
 Integration Level: initial L1, target L2
 Focus on home-2-work / work-2-work mobility: General Motors employees + Municipality employees. Strong role of PT (GTT), engagement of private MSP (car-/bike-sharing) ongoing



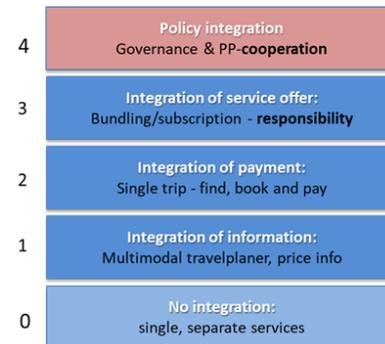
Manchester

MaaS provider: Mobbileo
 Integration Level: initial L0, target L3 (medium term)
 Several focus groups with local stakeholders (MSPs, users). Analysis of potentially applicable business models (public vs. private)



Madrid

MaaS provider: EMT Madrid (proprietary platform)
 Integration Level: initial L1, target L2 (+ policy integration)
 "MaaS Madrid" project as part of the Air Quality Plan of the City: PT, Car-Sharing, Scooter-sharing, Bike-Sharing, PMV



myMaaS | our offer for Mobility-as-a-Service



PLATFORM OF PLATFORMS



PUBLIC-PRIVATE INTEGRATION: INFORMATION AND MULTIMODAL MOBILITY PLANNING



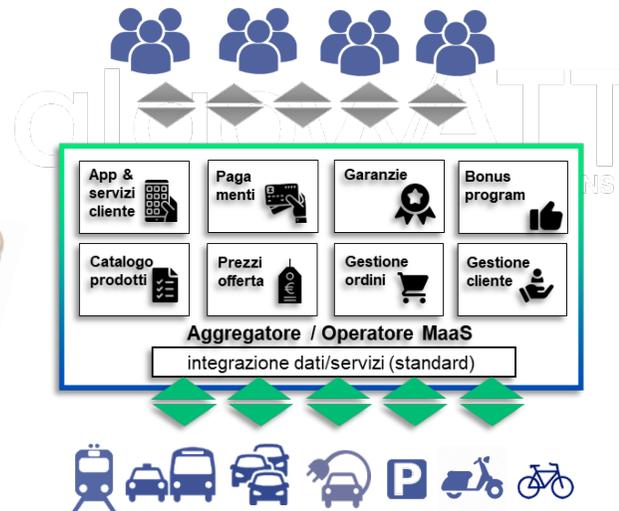
e-BOOKING, e-PAYMENT FOR MULTIMODAL TRAVEL



FULLY CONFIGURABLE AND CUSTOMISABLE PLATFORM



LEARNING FROM USER EXPERIENCE



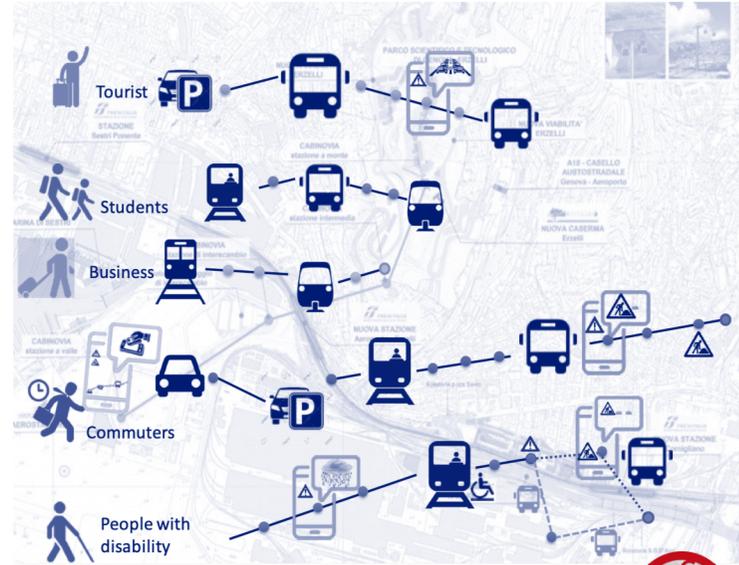
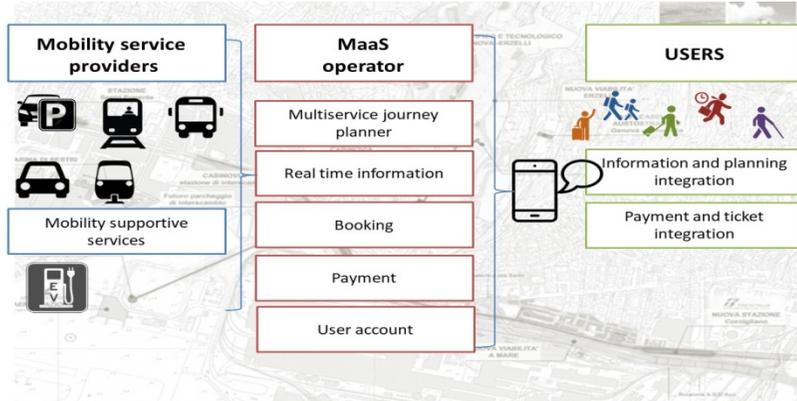
From IMOVE to MaaS deployment

Investigation and design of MaaS solutions in Genoa: the InGE EU project



InGE - Innovative solutions for Intermodal node “Genoa Erzelli”

- **Feasibility study** and procurement preparation, funded by EU program **Connecting Europe Facility 2014-2020**
- Investigation of a **highly intermodal system** ensuring the delivery of combined mobility and **MaaS-oriented product** in the hub, starting from an assessment of end-users attitudes and preferences



Turin MaaS Living Lab

**Can citizens modify their mobility habits?
How can the MaaS model contribute?**

General Goal

1. To reduce the use of private vehicles
2. To increase the use of public transport and sharing mobility
3. To increase the use of the MaaS platform



Turin Living Lab partners

3 European projects – IMOVE, SUMP's-UP, SOLEZ – have been working together synergistically, to test and evaluate MaaS potentialities.



The City's Department of Mobility supports the implementation of experimentation activities and **defines policies and guidelines to regulate** the entire process



URBI **supplies MaaS technology and signs commercial agreements** with mobility operators integrated into the MaaS platform



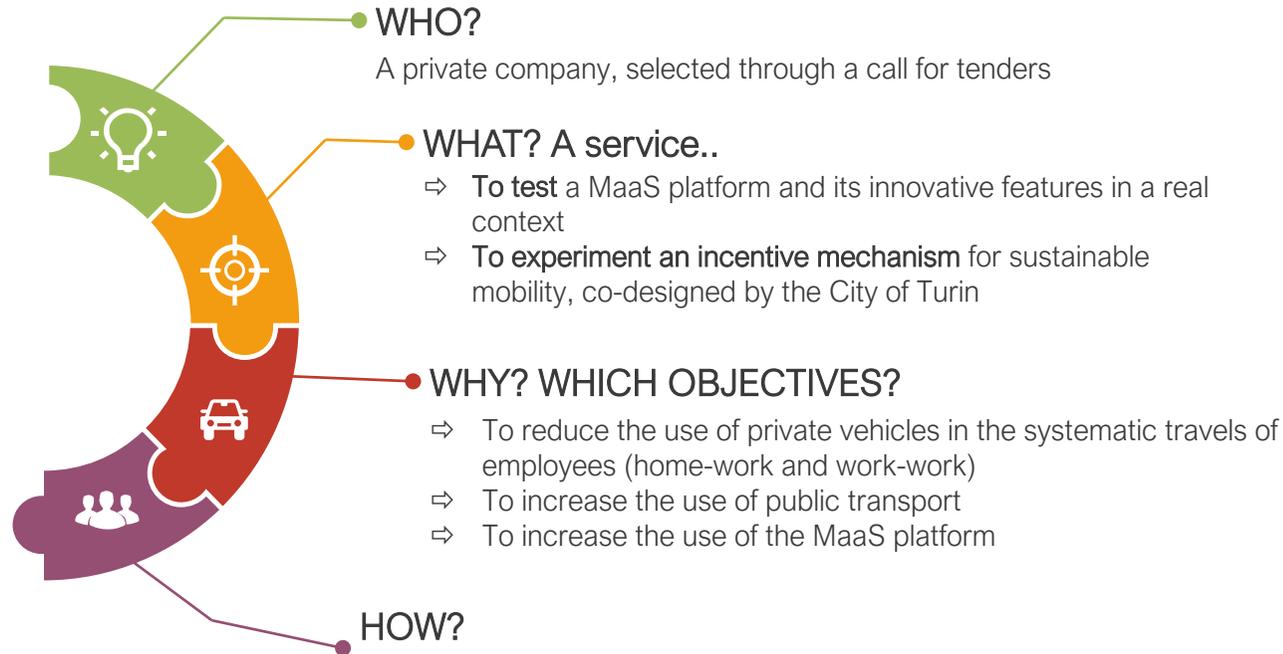
Torino Wireless **supports the coordination among stakeholders, the feasibility and operational implementation** of the Living Lab



5T **facilitates the technical integration** of the systems and manages the operation of the Living Lab



Why is the City of Turin activating a Living Lab?



By activating an experimentation with MM's employees, involving them in a competition that rewards the most sustainable mobility behaviors



Why implementing a Living Lab with Mobility Manager?

- ⇒ To test “in vivo” MaaS platform, its innovative functionalities and to experiment some mechanisms to incentive choices of sustainable mobility

FOR THE CITY

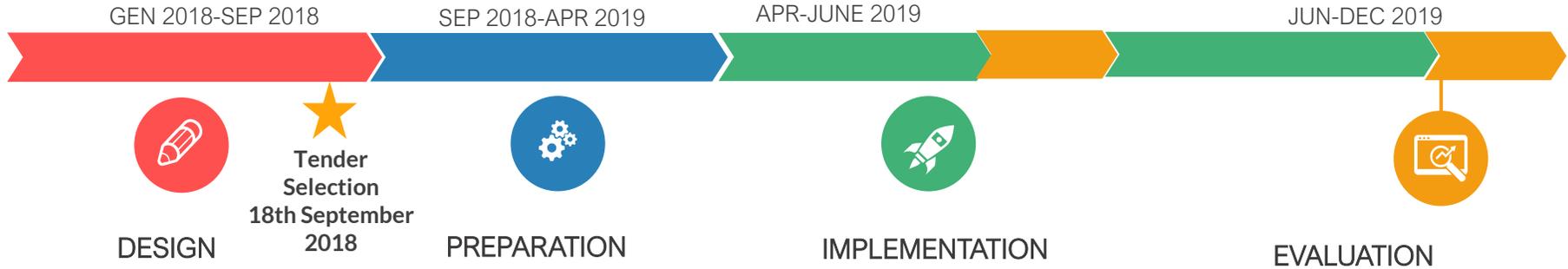
- ⇒ To test an innovative solution in a real context and in a collaborative environment with a small sample of users - who respond to a framework of common rules.



FOR Mobility Manager (MM)

- ⇒ To implement and encourage sustainable mobility policies among its employees
- ⇒ To involve employees directly in achieving corporate sustainability goals
- ⇒ To introduce an innovative system for work-to-work travel and achieve management economies
- ⇒ To evaluate a reorganization solution of internal mobility systems (e.g. company car sharing, etc.)
- ⇒ To attract new resources (*mobility vouchers*) to reward good practices and enhance sustainable travels for employees

Living Lab - Timeline



- Public Tender design and preparation to select a Lange Company for *testing and experimenting the MaaS paradigm*
- Public Tender assessment and evaluation and Award

- Development and integration of MaaS platform functions
- **Co-planning** with the City of incentive and reward mechanisms
- Identification and **activation** of the employee cluster



- Test of the IMOVE platform for work-work and home-work movements
- **Promotion** of employee participation



- Sending of **questionnaires** aimed at **profiling** users and behaviors
- Collection of **feedback and results** from the Living Lab and organization of focus groups
- Collection and **evaluation** of experimentation results



A public tender for MaaS experimentation

The experimentation of the MaaS paradigm involves initially a large private company (characterized by a significant number of commuters performing daily home-to-work trips), selected through a public tender

Specific admission requirements:

- ❑ **Mobility Manager**, keyplayer for the LL implementation
- ❑ **Must have Piano Spostamenti Casa Lavoro (PSCL)** – company plan to support sustainable mobility for home to work journeys
- ❑ **Operational headquarters in the Municipality of Turin** and/or or in one of the following neighbouring Municipalities: **Collegno, Grugliasco, Venaria Reale**
- ❑ must have **recent data collected on employee mobility habits** (*preferable, but not binding*)



Selection Criteria

The selection is made on the analysis of the technical / economic offer received



Only 1 company selected and a co-funding of euro 7,500.00 (VAT excluded)

TECHNICAL OFFER

- ✓ Quality and completeness of the PSLC
- ✓ Congruence of mobility management policies adopted at company level with respect to the activities and results expected from the "Living Lab MaaS Torino Service"
- ✓ Significance of the sample of employees

ECONOMICAL OFFER

- ✓ Additional economic value to boost the LL (co-finance)

And the Winner is...

IN PRIMO PIANO

IL BIG DELL'AUTO METTE SULLA BICI I DIPENDENTI

Stefano Parola

Una sola piattaforma per spostarsi in città con mezzi diversi, che consente di prendere bus, la bike sharing e taxi, e di pagare con una sola app. "Maas" sarà sperimentato a Torino. La cosa curiosa è che a provarlo saranno i dipendenti dei laboratori di General Motors. Un paradosso? Per nulla.

pagi



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Gm, gli addetti del colosso auto viaggeranno in bici, taxi e bus

Via ai test della piattaforma Maas, la "app" per la mobilità integrata in città General Motors: "Un paradosso? No, investiamo già su motori alternativi"

"In Usa abbiamo lanciato Maven, nato come car sharing e che si sviluppa su diversi tipi di trasporto collettivi e individuali"

STEFANO PAROLA

Una sola piattaforma per spostarsi in città con mezzi diversi, che consente di prendere il bus, la bicicletta condivisa e il taxi, e di pagare per questi servizi in un'unica soluzione. Il sistema si chiama "Maas" e sarà sperimentato a Torino nei prossimi mesi. La cosa curiosa è che a provarlo saranno i dipendenti dei laboratori di General Motors. Un paradosso? Per nulla.

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Pierpaolo Antonioli, direttore di General Motors Global Propulsion Systems-Torino. Il nesso tra una piattaforma che permette di spostarsi usando soprattutto il trasporto pubblico e i lavoratori di un gruppo automobilistico sta in questo slogan: zero emissioni, zero incidenti, zero congestione. È lo slogan che guida lo sviluppo futuro di General Motors, come racconta Federico Galliano, responsabile relazioni istituzionali di Gm Torino: «Lavoriamo a propulsioni alternative, che ci consentano di arrivare a non generare emissioni, a veicoli interconnessi e a guida autonoma, che...

un mezzo di trasporto individuale: «Stiamo investendo pesantemente da diversi anni su queste logiche. Lo abbiamo fatto, ad esempio, lanciando negli Usa Maven. E

un nostro sistema che nasce come car sharing ma che si sta sviluppando attraverso una serie di servizi di trasporto complementari, sia collettivi sia individuali», spiega Galliano. È lo stesso ragionamento che c'è alla base di Maas, che si basa su una piattaforma tecnologica realizzata da Urbi...



Innovazione
Federico Galliano, capo relazioni istituzionali di Gm
Power...

Taxi, bus e bici condivise "Tutto in una sola App"

LA STORIA

Contro lo smog e la piaga degli ingorghi, bici condivise, taxi

tutto dallo stesso portale. Una soluzione contro quello che l'assessora Maria Lapietra definisce il «paradigma vecchio: quello dell'auto propria». Per ora, però, il progetto parte monco: il car sharing non è...

mentazione per i circa 400 dipendenti di General Motors (in prospettiva con il raddoppio della sede nella cittadella politecnica diventeranno 750). Potrebbe sembrare singolare che, a sperimentare questo nuovo servizio, sia un'azienda che produce auto. «Invece è coerente con la nostra visione, che punta alle zero emissioni, zero incidenti e zero congestioni di traffico», spiega Federico Galliano, di Gm. L'azienda premierà i di-

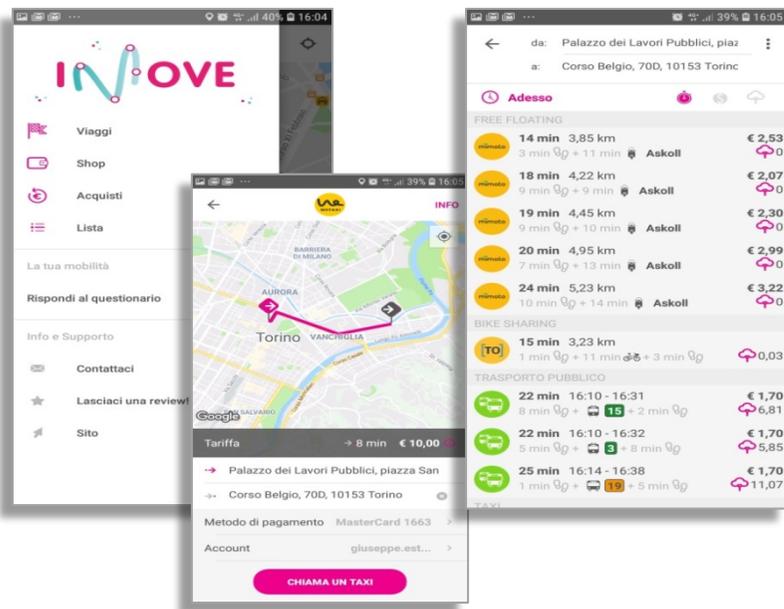
spendere nei servizi di mobilità condivisa e pubblica.

La piattaforma, che non è solo un'App ma un modo nuovo di affrontare la mobilità, è realizzata da Urbi, start-up appartenente a Telepass, parte da un progetto europeo ed è lanciata dal Comune di Torino insieme a 5T e alla Fondazione Torino Wireless. La direttrice di quest'ultima, Laura Morgagni, sostiene che quando il sistema sarà diffuso tra i cittadini, si potrà risparmiare dal 15 al 20 per cento del tempo passato nel traffico, data la riduzione dei...

colazione. L'App permette di usare i servizi di trasporto con divisi: per ora hanno aderito Gtt, Tobike, Mobike, Wetax. «Stiamo puntando ad avere car sharing, Mimoto e le auto in leasing - aggiunge Lapietra - Torino è la prima città in Italia ad adottare questo sistema. Dopo la fase di test, speriamo che gradualmente si espanda tutta l'Italia». La sperimentazione riguarderà anche le modalità di pagamento, che potranno contemplare abbonamenti e pacchetti di mobilità integrati o il costo a consumo. FA



The MaaS Technology Platform [IMOVE]



The City of Turin is testing the technology platform, accessed - for free for the entire duration of the LL - through a **mobile app**:

- **Route planner, booking and payment** (and validation) for the following means of transport: local public transport, bike sharing, car sharing, taxi;
- **Collection of anonymous and aggregated data on users**, regarding use of the app, mobility choices made, kilometres travelled;
- **Monthly corporate billing for costs** for work to work mobility-job of employees, during the trial period.



In collaboration with IMOVE partner



travelling by



(...by now!)

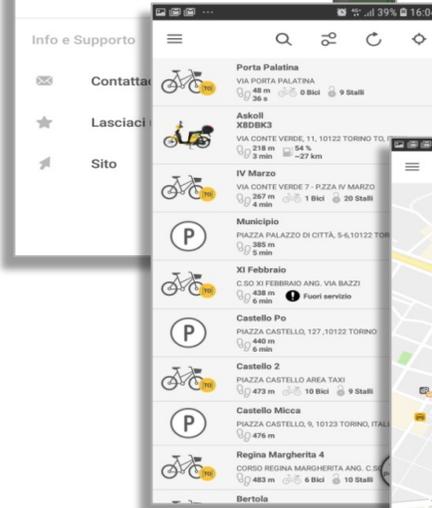
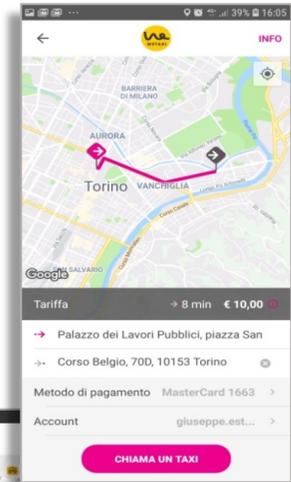
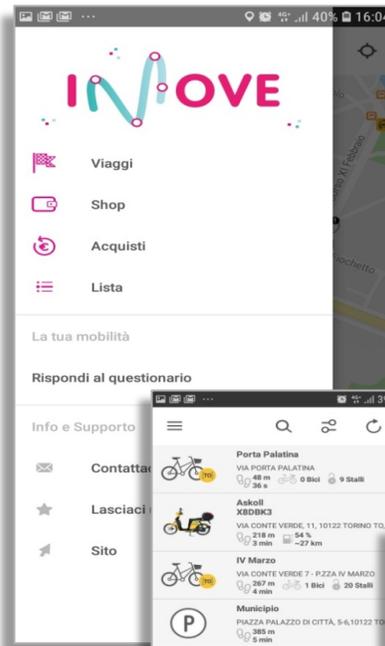


How to gain TREES-POINTS?



TREE-POINTS are points of sustainability, generated through the use of the MaaS platform, on the bases of :

- ⇒ the chosen vehicle
- ⇒ the nr of Km travelled with that vehicle



Thank you!

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