

PriMaaS Thematic Conference

Session 2 | Elements to Support MaaS Delivery

The Digitization of transportation systems The perspective of Regione Liguria

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Presentation outline

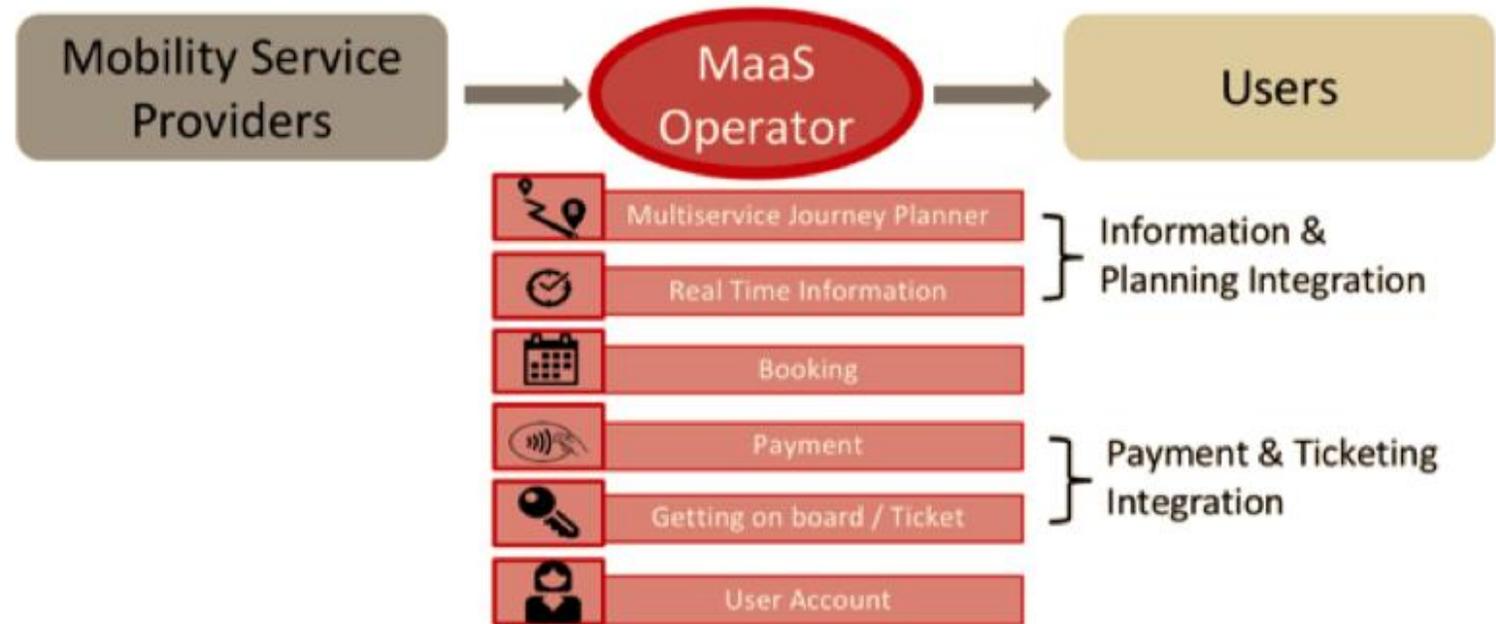
- **A short recap about MaaS**
- **Our platform for MaaS: LiguriaGO**
- **Data for MaaS: (our) current state of digitization**
- **What are we working on?**
- **Expected results**

A short recap about MaaS

A short recap about Maas (1) – What is MaaS?

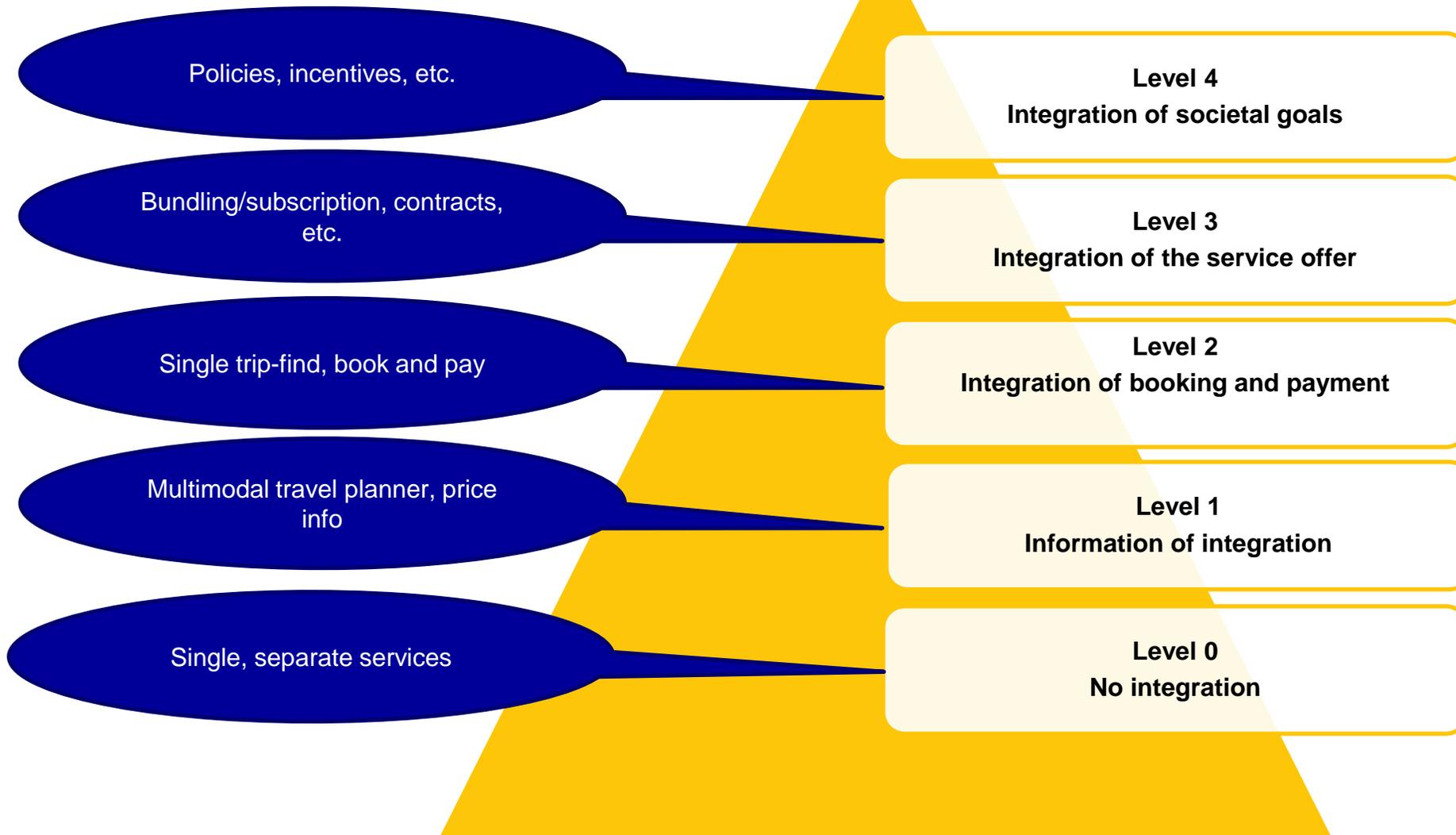
MaaS is the integration of various forms of transport services into a single mobility service accessible on demand. To meet a customer's request, a MaaS operator facilitates a diverse menu of transport options, be they public transport, ride-, car- or bike-sharing, taxi or car rental/lease, or a combination thereof. For the user, MaaS can offer added value through use of a **single application to provide access to mobility**, with a single payment channel instead of multiple ticketing and payment operations (MaaS Alliance)

Mobility-as-a-Service (Maas) is a **user-centric, intelligent mobility management and distribution system, in which an integrator brings together offerings of multiple mobility service providers**, and provides end-users access to them through a digital interface, allowing them to seamlessly plan and pay for mobility (MaaS Lab)



Kamargianni, M., Matyas, M., Li, W., Muscat, J., Yfantis, L., 2018. *The MaaS Dictionary*. MaaS Lab, Energy Institute, University College London

A short recap about Maas (2) – MaaS Integration Levels



MaaS Integration Levels – according to 5T based on Sochor et al. 2017

Our platform for MaaS: LiguriaGO

Our platform for MaaS: LiguriaGO

- In July 2021 we published **LiguriaGO** <https://liguriago.regione.liguria.it>
- LiguriaGO is not *just* the new travel planner of Regione Liguria
- LiguriaGO is a **radical shift** from the HAFAS platform we've used since 2004 (proprietary software, closed data format) **towards a complete Open Source/Open Data approach**
- LiguriaGO technological stack is based on the world-wide deployed **OpenTripPlanner** engine, the powerful **Pelias** geocoding engine and the ubiquitous **OpenStreetMap** open cartography
- The **openness** of the LiguriaGO concept makes it possible to think in terms of **progressive build-ups** of features, aiming to a full MaaS platform

The screenshot displays the LiguriaGO web application interface. At the top, there is a navigation bar with the LiguriaGO logo and the Interreg logo. Below the navigation bar, there is a search bar and a list of suggested itineraries. The main content area shows a map of the Liguria region with a highlighted travel route. On the right side, there is a table titled "VICINO A TE" (Near you) listing nearby stations with columns for distance, line, destination, and departure/arrival times. Below the map, there is a section titled "Itinerario" (Itinerary) showing a detailed travel plan with stops, times, and distances. At the bottom, there is a section titled "Itinerari suggeriti" (Suggested itineraries) showing alternative travel options with their respective times and distances.

Distanza	Linea	Destinazione	Parte	Proxima
10m	773	S.Margherita	17:21	18:21
10m	775	Rapallo	17:27	18:27
10m	773	S.Margherita	19:20	20:20
40m	775	Genova	2 min	17:48
40m	773	Recco	17:35	18:35
180m	874	S.Rocco	17:25	19:25
180m	874	Ruta	17:50	19:50
260m	880	Ruta	17:25	19:25
260m	880	Rapallo F.S.	18:25	19:50
260m	880	Ruta	19:17	20:25
260m	880	Rapallo F.S.	20:50	
1.3km	REG	LA SPEZIA CENTRALE	16:56	18:58
1.3km	REG	SESTRI LEVANTE	17:31	
1.3km	REG	SAVONA	19:20	
1.3km	REG	SESTRI LEVANTE	19:56	

Itinerario

05:40 • Piazza San Biagio 5, Finale Ligure, SV, Italia
• Alle 05:40 cammina 202 m da Piazza San Biagio 5, Finale Ligure, SV, Italia a Via Arnaldi Incr via dante finale. Durata stimata 2 min
• **Mostra dettagli percorso (2 min)**
05:43 • Via Arnaldi Incr via dante finale
• Bus 040/ Pzza mammì corsia preferenziale savona
• **TPL LINEA SRL**
• **2 fermate (4 min)**
05:47 • Via dante fronte n 10 finale
• Alle 05:47 cammina 230 m da Via dante fronte n 10 finale a FINALE LIGURE MARINA. Durata stimata 3 min
• **Mostra dettagli percorso (3 min)**

Itinerari suggeriti

07:05 • GENOVA PIAZZA PRINCIPE
Treno 8405 ROMA TERMINI
• **TRENTALIA**
• **3 fermate (1 h 9 min)**
08:14 • LA SPEZIA CENTRALE
• Alle 08:14 cammina 677 m da LA SPEZIA CENTRALE a Garibaldi. Durata stimata 9 min
• **Mostra dettagli percorso (9 min)**
08:23 • Garibaldi
• Attesa (6 min)
08:29 • Garibaldi
• Bus P
• **ATC**
• **36 fermate (29 min)**
08:59 • V. Garibaldi Bassa
• Alle 08:59 cammina 940 m da V. Garibaldi Bassa a Ristorante Portovenere 1, Comune di Portovenere, SP, Italia. Durata stimata 15 min
• **Mostra dettagli percorso (15 min)**
09:14 • Ristorante Portovenere 1, Comune di Portovenere, SP, Italia
Distanza totale: 160 km

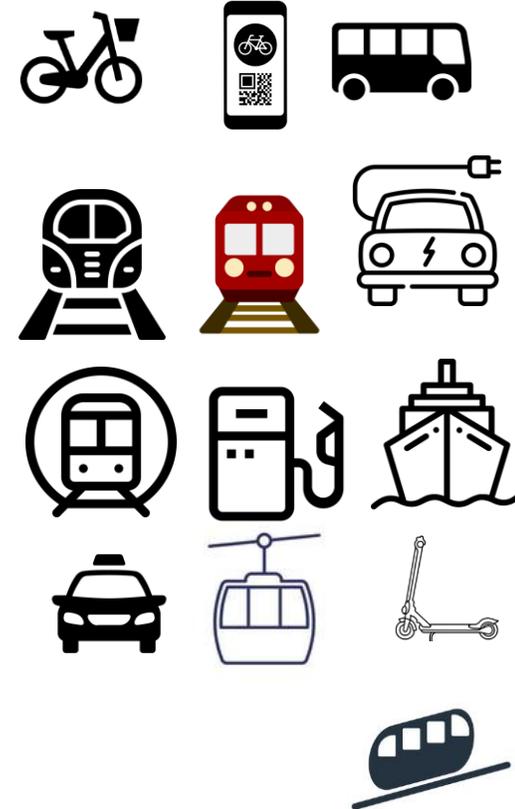
06:04 • FINALE LIGURE MAR • GENOVA PIAZZA PRIN • Garibaldi
06:23 RV 3019 • IC 651 • P • **10:38** 4 h 34 min 2.4 km

05:40 • Via Arnaldi Incr • FINALE LIGURE • GENOVA PIAZZA • Garibaldi
05:43 040/ • IC 655 • FB 8605 • P • **09:14** 3 h 34 min 2.1 km

Data for Maas: (our) current state of digitization

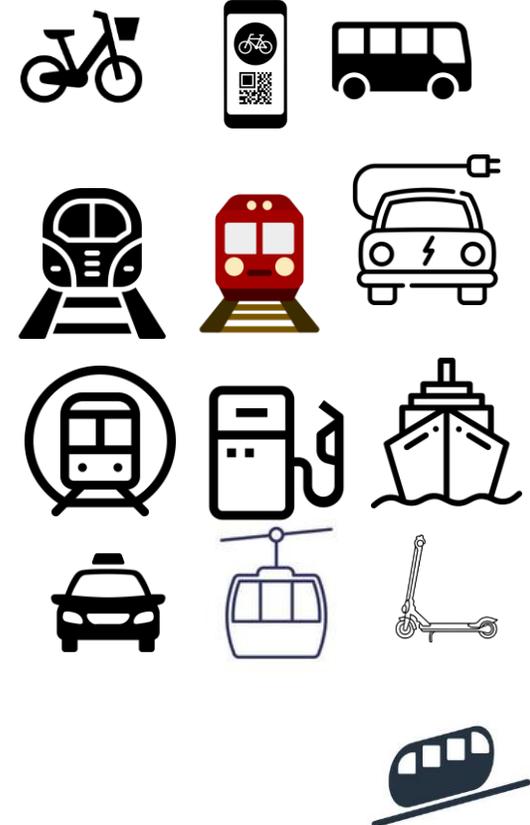
Data for MaaS? – current state of key enablers (1)

- Nowadays all regional PT Agencies (RT, TPL Linea, AMT, ATC) share planned data with Regione Liguria in GTFS format
- Since July 2021 Trenitalia Divisione Regionale sends us GTFS planned data about both regional and long-distance trains in Liguria
- In summer 2021 we set up and published timetable data about tourist boats (Cinque Terre, Golfo Paradiso, Tigullio)
- As of April 2022 we publish intermodal, fully-connected planned data about **bus, metro, funicular, regional and long-distance trains, ferries and tourist boats**
- We are in touch with Agencies to pursue further enrichments of the datasets according to the GTFS specification
- We are developing a data converter from GTFS data to NeTEx (Italian Profile), currently in beta-testing
- We are planning to publish the full GTFS AND NeTEx data in the new Open Data Portal in Q2/2022



Data for MaaS? – current state of key enablers (2)

- **Real-time PT data** is a fundamental asset in a modern transportation information system
- LiguriaGO can manage three types of dynamic PT data:
 - **Alerts:** stop moved, unforeseen events affecting a station, route or the entire network
 - **TripUpdates:** delays, cancellations, changed routes
 - **VehiclePositions:** information about the vehicles including location and congestion level
- Nowadays just AMT and TRENITALIA could exchange real-time data with us, but the implementation of the electronic ticketing system on a regional scale would enable us to cover the whole PT fleet
- We successfully tested the LiguriaGO platform with real-time (GTFS-RT flavour) in the MOBIMART project (data courtesy Regione Toscana)



What are we working on?

What are we working on?

- According to the MaaS Integration Level hierarchy, Regione Liguria is currently positioned at a **partial** Level 1
- Pricing information will be added in 2022 for some simple ticket formulas (single tickets, no bundling, no subscriptions) to get a **full** Level 1
- **Regional e-ticketing system (formerly known as Smart Ticket): tender procedure in-progress**
 - **Full range of services to reach Level 2**
- Our aim for 2022 is to **consolidate** the information offering in a three-fold way:



Keep a focus on widely used specifications and standards:

- *De facto* standards (think “specifications”)

GTFS

GTFS-RT

GTFS-FLEX

GBFS (General Bikeshare Feed Spec)

- *De iure* standards (think “real standards”)

NeTEx

SIRI

▶ **NAP National Access Point**



Seek agreements with data/service providers

Strengthen our role as a MaaS Integrator



Expand the range of mobility information in LiguriaGO to:

- FTS/DRT (Flexible Transport Systems/Demand Responsive Transportation)

- Micromobility/shared mobility (bike/scooter sharing, car sharing)

- Ancillary information (e.g. charge stations)

Expected results

Our aim

Strengthen the role of LiguriaGO as a **knowledge hub** to support regions fostering the MaaS concept ensuring that:

- mobility solutions are focused on **citizens' needs**
- low carbon mobility solutions are good options from the citizen's perspective in terms of **comfort and price**



...according to PriMaaS specific objectives

- **To engage regional stakeholders and increase levels of confidence among each other** - New sources of data (including the production of mobility services) can be shared in common online repositories to facilitate further tuning of the mobility services towards citizens' requirements.
- **To deliver high-quality training and information material to policymakers and regulators** - The new concept of mobility as services brings new opportunities to promote sustainable mobility, but can also entail some risks. More qualified professionals will certainly be better able to adapt policy instruments to new paradigms in transport sector.



PriMaaS
Interreg Europe

Thank you!

Roberto Martinelli | Liguria Digitale – Regione Liguria

<https://liguriago.regione.liguria.it/>