DT.1.2.4.
MILAN AIRPORTS ACCESSIBILITY

Analysis of the mulimodal mobility system

Written by SEA

Table of Contents

1. Introduction

SEA Milan Airports is partner of the LAirA (Landside Airports Accessibility) European project, funded by the Central Europe Programme. LAirA aims at improving airports' surface access and fostering low-carbon mobility solutions for passengers and employees.

This report focuses on the analysis of Linate and Malpensa Airports' landside accessibility systems, with reference to the current surface access infrastructures and service supply. The report is structured taking into consideration the index proposed by the project partnership, in particular:

- Chapter 2 provides an overview of Linate and Malpensa Airports, in terms of territorial and statistical information concerning the Functional Urban Area in which they are located, passenger traffic and surface access infrastructure.

- Chapter 3 analyses in detail the Airports' landside mobility services and facilities, including:

    o road public transport and coach;

    o rail;

    o taxi and limousine;

    o car-sharing and car-rental; and

    o parking.

- Chapter 4 includes an international benchmark of taxi services at European airports.

- Chapter 5 focuses on mobility information services and on passengers' satisfaction with the services provided and with the multimodal transport supply.

2. Linate and Malpensa Airports and their Functional Urban Area

2.1. Territorial overview

Milano Linate and Milano Malpensa Airports are located in Lombardy region, which has over 10 million inhabitants and which is leader in the Italian economic system (21.8% of the Italian GDP[1]). Linate and Malpensa Airports fall under two Functional Urban Areas (FUA)[2] in the north-west of Lombardy region:

- Linate is in Milan FUA (IT002);

- Malpensa is in Varese FUA (IT043).

The two FUAs have a significant share of the regional population (41%[3]).

Nevertheless, the analysis of the Airports' integration into their territorial systems needs to consider that:

- the core urban area for the two Airports is Milan Metropolitan Area (corresponding to Milan province and Milan FUA); in fact, this is a significant part of the Airports' catchment area in terms of number of passengers (45.9% for Malpensa and 63.7% for Linate[4]);

- the core region for the two Airports is Lombardy region; in fact, it covers 86.7% of Malpensa and 76.9% of Linate catchment area in terms of number of passengers[5].

Therefore, the territorial end economic overview in this chapter refers to these areas (Milan Metropolitan Area, corresponding to Milan province, and Lombardy region).

The following Table reports key socio-economic indicators of the two territorial areas;

- Lombardy regions covers about 8% of the Italian land surface, but it hosts almost one-fourth of active enterprises in the country and provides employment to almost one fifth of all workers in Italy.

- Milan Metropolitan area hosts almost half of active enterprises in the region and one third of the people employed; it also has a GDP per capita exceeding by 70% the Italian average;

- Lombardy region has about one sixth of the Italian population, with the Milan Metropolitan Area contributing to about one third of it.

---

[1] Source: Regione Lombardia (2018) – please see: http://www.regione.lombardia.it/wps/portal/istituzionale/HP/lombardia-notizie/DettaglioNews/2018/03-marzo/26-31/lombardia-speciale-pil/lombardia-speciale-pil

[2] Source: Functional Urban Areas in OECD countries: Italy (2016) – please see: https://www.oecd.org/cfe/regional-policy/functional-urban-areas-all-italy.pdf

[3] Source: ISTAT 2017

[4] Source: SEA Milan Airports

[5] Source: SEA Milan Airports

Table 1. Main economic indicators for Milan Metropolitan Area and Lombardy region

Indicator	Year	Milan Metropolitan Area	% of Lombardy	Lombardy	% of Italy	Italy
Population (n.)	2017	3,218,201	32.1%	10,019,166	16.5%	60.589.445
Surface (sq.km)	2017	1,575	6.6%	23,863	7.9%	302,072
Active enterprises (n.)	2015	1,839,962	48.6%	3,783,789	23.2%	16,289,875
People employed (n.)	2017	1,461,000	33.2%	4,399,000	19.1%	23,023,000
GDP current prices (mln €)	2015	-	-	361,401	21.9%	1,652,152
GDP *pro capite* current prices (€)	2015	45,651	-	36,807	-	27,204

Source: Steer analysis on ISTAT data 2015 and 2017

Moreover, the population in Lombardy region will increase at a 0.2% CAGR by 2050 (up to 10.6 million)[6]; considering the forecasted urbanisation processes in European cities, we can expect that Milan Metropolitan Area will have an even higher population increase. This trend will further increase the dimension of the Airports' catchment area in terms of number of passengers.

Concerning land transport infrastructure, Lombardy region has a significant share of the national road and rail network, consistently with its key role in the Italian economy. The following Table includes data on the regional and national rail and road infrastructures' length.

Table 2. Length of the rail and road network in Lombardy and Italy

Infrastructure	Year	Lombardy	% of Italy	Italy
Railways - RFI (km)[7]	2017	1,736	10.3%	16,787
Railways – Total (km)	2017	1,920[8] km	7.9%	24,380[9]
Highways (km)[10]	2015	706 km	10.2%	6,943
Regional and provincial roads[11]	2015	10,304 km	6.6%	155,668

Sources: Steer analysis on Rete Ferrovie Italiane, Regione Lombardia, il Sole 24 Ore, Annuario Statistico Regionale Lombardia

2.2. Linate and Malpensa Airports: facts and figures

Linate Airport is city airport, located 9 km east of the centre of Milan. The Airport offers a wide range of short and medium-haul flights, including European Schengen and extra-Schengen destinations, operated by about 20 airlines. Linate is characterised by[12]:

---

[6] Source ISTAT (medium growth scenario – please see http://demo.istat.it/previsioni2017/download.php#)

[7] Rete Ferroviaria Italiana (RFI) is the national rail infrastructure manager (data source: http://www.rfi.it/rfi/LINEE-STAZIONI-TERRITORIO/Istantanea-sulla-rete/La-rete-oggi#2 – 2017); further rail networks are managed by Ferrovie Nord Milano

[8] Source: Regione Lombardia (2017) – please see: http://www.regione.lombardia.it/wps/portal/istituzionale/HP/DettaglioRedazionale/scopri-la-lombardia/territorio-e-popolazione/infrastrutture-in-lombardia

[9] Source: il Sole 24 Ore (2017) – please see: http://www.infodata.ilsole24ore.com/2017/11/27/quello-ce-sapere-sui-treni-stazioni-disparita-nella-mobilita/

[10] Source: Annuario Statistico Regionale Lombardia (2015) – please see: http://www.asr-lombardia.it/ASR/regioni-italiane/trasporti/reti-infrastrutturali-e-impianti/tavole/1679/2015/

[11] Ibid.

[12] Source: SEA Milan Airports, Linate Masterplan (2016) – please see: http://www.va.minambiente.it/File/Documento/199846

- the prevalence of business passengers and a high incidence of frequent flyer passengers for national and international flights;

- "point-to-point" flights;

- the limited presence of "low-cost" and cargo flights;

- "originating" or "terminal" traffic without significant transit; and

- the use of "narrow body" aircrafts.

The Airport registered 9.5 million passengers in 2017 and has a balanced mix of national and international passenger traffics (52% and 48% respectively in the same year[13]). The Airport registered a passenger growth between 2013 and 2017 (CAGR +1.4%[14]), but it has a capacity cap preventing passenger traffic growth (the forecast is +0.3% between 2020 and 2030[15]).

Malpensa airport is located in the province of Varese, 52 km south-west of Milan. It has 2 passenger terminals and a cargo terminal:

- terminal 1 serves business and leisure domestic, international and intercontinental flights, operated by both low-cost and full-service carriers;

- terminal 2 hosts low-cost short and medium-haul flights (e.g. operated by EasyJet);

- the Cargo terminal is the first Italian one in terms of tonnage[16].

Malpensa Airport hosts 88 Airlines[17] and it registered about 22 million passengers in 2017. It is the second Italian airport (after Rome Fiumicino)[18] and it was the 28th busiest hub in Europe in terms of passenger traffic in 2017[19]. In the same year it registered 86% of international (including intercontinental) traffic and 14% of national traffic. The Airport registered a passenger traffic growth between 2013 and 2017 (CAGR +5.4%[20]). The forecasted traffic by 2030 is about 31.5 million passengers (CAGR +2,5% between 2020 and 2030[21]).

The following Figures report Linate and Malpensa historical (2000-2017) and forecasted passenger traffics.

---

[13] Source: Steer analysis on Assaeroporti data http://www.assaeroporti.com/statistiche

[14] Source: Steer analysis on Assaeroporti data http://www.assaeroporti.com/statistiche

[15] Source: PwC for SEA, *Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa* (February 2018)

[16] 49,895 tons in 2017 (source: Assaeroporti)

[17] Source: SEA Milan Airports – please see: http://www.milanomalpensa-airport.com/it/voli/compagnie-aeree

[18] Source: Assaeroporti (2018)

[19] Source: IATA (2018)

[20] Source: Steer analysis on Assaeroporti data http://www.assaeroporti.com/statistiche

[21] Source: PwC for SEA, *Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa* (February 2018)

Figure 1. Annual passenger traffic (2000-2017): Linate and Malpensa Airports
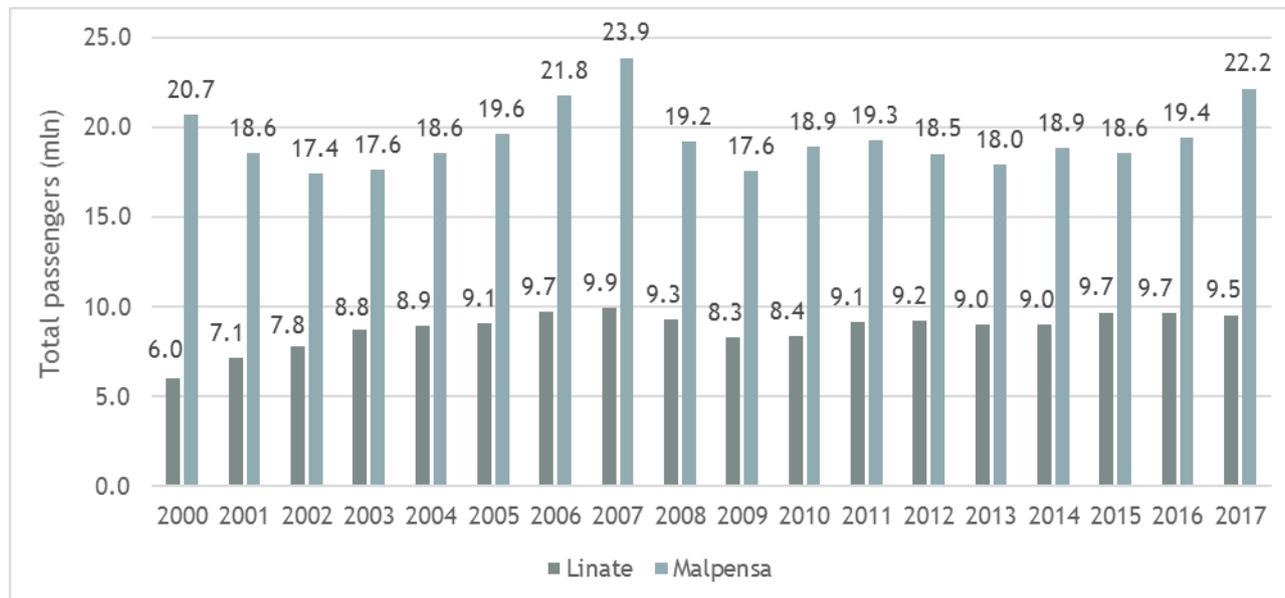
Source: Steer analysis on Assaeroporti data 2017

Figure 2. Passenger traffic growth forecasts (2020, 2025 and 2030) for Linate and Malpensa Airports
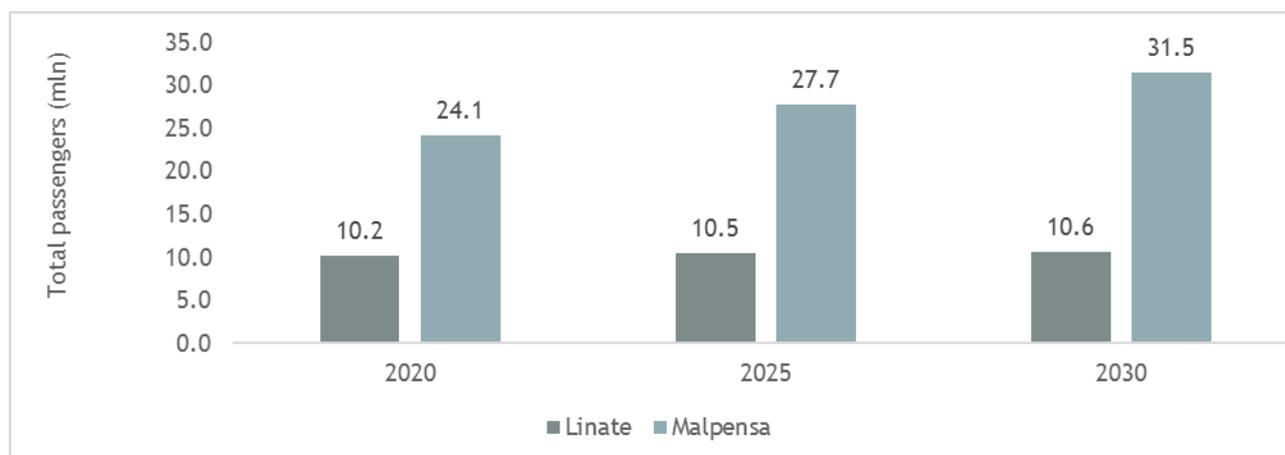
Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

2.3. Milano and Linate Airports: surface access infrastructures

Linate and Malpensa Airports are integrated within a dense road and rail transport network connecting them to core regional, national and cross-border urban and economic areas. The following Figure presents the Airports' positioning within the main regional infrastructure system.

We report more details on each Airport in the following part of this section.

Figure 3. Linate and Malpensa Airports: main road and rail networks
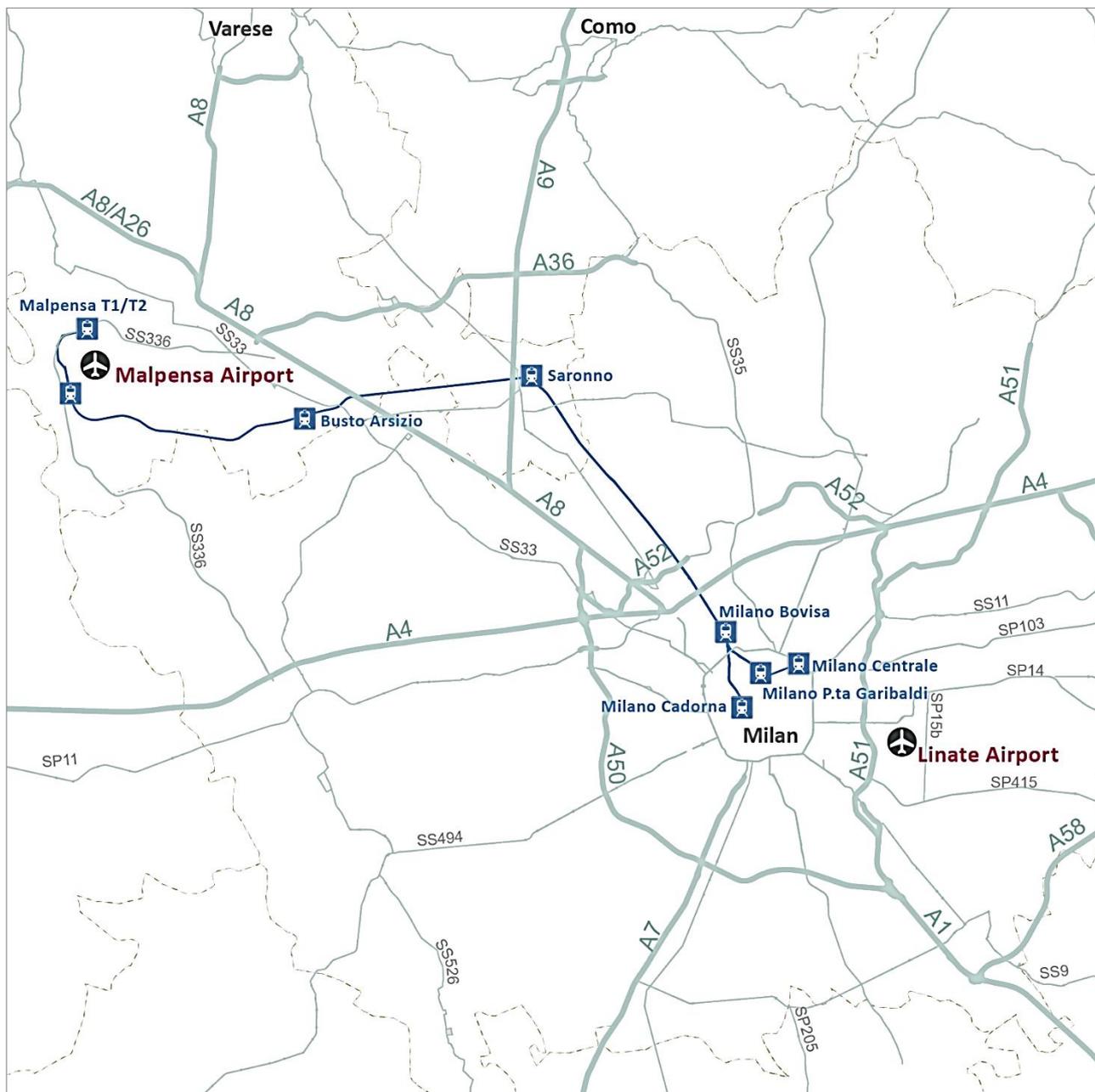
Source: Steer

Linate Airport

Linate Airport is only accessible by road[22], but it is well integrated into the road transport network. The main access road axes include:

- highways A51 (*Tangenziale Est Milano*), A52 (*Tangenziale Nord Milano*) and A58 (*Tangenziale Esterna Est Milano*);

- State Road (*Strada Statale*) *Padana Superiore* SS11;

---

[22] The construction of the Metro Line M4 extension to the Airport is ongoing and it will be completed by 2022

- Provincial Roads (*Strade Provinciali*) *Cassanese* SP103, *Rivoltana* SP14, *Paullese* SP415 and *Via Mondadori* SP15b.

Other road axes to access the Airport are *Viale Forlanini,* which connects the Airport to Milan ring road system (*Tangenziale)* and the city centre, and *Via Circonvallazione Idroscalo* (north-east of the Airport).

Malpensa Airport

Malpensa Airport is directly connected to the main road axes, in particular via:

- highway A8 from Milan to Busto Arsizio – Milano Malpensa exit and then State Road SS336 to Gallarate – Milano Malpensa;

- highways A8 and A9 respectively from Como and Varese;

- highway A4 from Turin and Venice, to *Marcallo Mesero* exit and then State Road SS336 to Malpensa; and

- highway *Pedemontana* A36.

Both Malpensa terminal 1 and 2 are integrated within the rail network. The Malpensa Express service runs from Milano Centrale and Milano Cadorna railway stations to Malpensa Airport. Moreover, since June 2018 the Airport is connected to Switzerland by the rail company TILO, which operates the S40 service from Canton Ticino to Malpensa Airport. We report more details on rail connections in the next Chapter.

3. Analysis of Linate and Malpensa Airports' mobility systems

This Chapter focuses on the analysis of Linate and Malpensa Airports' landside mobility services, in particular:

- road public transport and coach;
- rail;
- taxi and limousine;
- car-sharing and car-rental;
- parking.

3.1. Linate Airport

3.1.1. Road public transport and coach services

Road local public transport and coach services cover a wide range of destinations, including:

- the central Milan area;
- Milan Metropolitan area;
- other provinces;
- other airports in Lombardy region; and
- Switzerland.

Services are both regular and on-demand or seasonal. We present the services in the next paragraphs.

- **CENTRAL MILAN AREA**

The central Milan area is connected to Linate Airport by local public bus and coach services; services differ in terms of origin, operators, number of daily rides, travel time, fares and vehicle capacity. We present them in the following Table.

Table 3. Local public bus and coach services between the central Milan area and Linate Airport

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity (n. passengers)
Coach	FS Milano Centrale (railway station)	ATM	70	45 min	€5.00	12 - 50
Coach	FS Milano Centrale (railway station)	STARFLY	54	25 min	€5.00	
Local public bus - Urban line 73	Milano Duomo	ATM	246 Monday to Friday 170 Saturday 192 Sunday / public holidays	40 min	€1.50	Up to 95
Local public - Urban line 183[23]	Milan	ATM	N/A	N/A	€1.50	N/A

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018), supplemented by Steer analysis

- **MILAN METROPOLITAN AREA**

Milan Metropolitan area (that is to say Milan province either than the central area) is connected to Linate Airport by two local public transport bus services: line 923 originating in Segrate and line Z409 originating in Rodano. Moreover, there is a bus service connecting Linate Airport and Fiera Milano City (the exhibition fair), which only operates during trade exhibitions. We present the main information on these services in the following Table.

Table 4. Local public bus and coach services between Milan Metropolitan area and Linate Airport

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Local public bus - Urban line 923	H. S. Raffaele (Hospital)	ATM	78 Monday to Friday 23 Saturday 23 Sunday / public holidays	55 min	€1.50	9 - 19
Local public bus - Urban line Z409	Rodano	Autoguidovie	10 Monday to Friday 8 Saturday	35 min	€2.30 – €4.00	50
Coach	Fiera Milano City / Rho Pero	Air Pullman	20 (during exhibition fairs)	45 min	€10.00	N/A

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

- **OTHER PROVINCES**

Linate Airport has regular connections with Monza and Pavia and on-demand connections to Brescia. The following Table includes details on the services. The coach service connecting Linate Airport and Brescia needs advanced booking and runs based on demand.

---

[23] The service operates in summer between Linate Airport and *Idroscalo* and allows changing to the urban line 73 to reach Milano city centre.

Table 5. Coach services between Linate Airport and other Lombardy provinces

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Coach	Monza	Air Pullman	11	30 min	€8.00	50
Coach	Pavia	Autoservizi Botti	11	45 min	€15.00	19
On-demand Coach	Brescia	AirShuttleNord	8	60 min	€35.00	N/A

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer

- **OTHER AIRPORTS IN LOMBARDY REGION**

Linate Airport is connected to Malpensa Airport by a regular service operated by Air Pullman (with stops at Rogoredo and Cascina Gobba) and to Orio al Serio Airport by a coach service which needs advanced booking and runs based on demand.

Table 6. Linate airport connections to other airports in Lombardy region

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Coach	Milano Malpensa Airport	Air Pullman	10	90 min	€13.00	35
On-demand coach	Orio al Serio Airport	AirShuttleNord	8	60 min	€25.00	N/A

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

- **SWITZERLAND**

Linate Airport lacks regular direct connection with Switzerland; however, some private operators offer on-demand services from Switzerland. The vehicles type depends on the number of bookings.

Table 7. Coach connections between Switzerland and Linate Airport

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare
On-demand coach	Lugano Mendrisio Chiasso	Luxury Bus	On demand	75 min	From €75.00

3.1.2. Taxi and limousine services

- **TAXI SERVICES**

Currently 6 taxi companies operate at Linate Airport:

- ✓ Radiotaxi 6969;
- ✓ Radio Taxi Freccia;
- ✓ Taxi Blu;
- ✓ Radio Taxi La Martesana;
- ✓ Taxi 8585 Autoradio.

On average 170 cars are at the Airport, of which 120 cars stay at waiting area next to the Airport ready to move to the terminal. The fares are fixed by Milan Municipality and are mandatory for all taxi operators[24].

- **LIMOUSINE SERVICES**

The limousine service is a car-rental service with driver, mainly used by business travellers. The fare is agreed upon booking. This type of service allows choosing the vehicle type (car, minivan, bus, etc.). Currently Linate Airport has 20 parking slots nearby the arrivals area for this service.

3.1.3. Car-sharing and car-rental services

- **CAR-SHARING**

Four operators provide car-sharing services at Linate Airport. We provide hereafter information on the parking slots per operator which is a proxy of the available cars:

- ✓ CAR2GO - 20 parking slots;
- ✓ ENJOY - 14 parking slots;
- ✓ DRIVENOW - 10 parking slots;
- ✓ E-Vai - 4 electric parking slots.

Cars are at the second floor of the parking P3[25]. Moreover, there are two re-charging stations for E-Vai electric cars.

- **CAR-RENTAL**

Linate Airport has parking slots dedicated to car-rental inside parking P3. Currently there are 13 car-rental companies at the Airport, as detailed in the following Table which includes information on the number of cars offered.

Table 8. Car-rental companies at Linate Airport

Car-rental company	Car offer	
	High season	Low season
Europcar	130	80
Herz, Dollar, Thrifty	150	150
Maggiore	100	100
Locauto	300	200
Gold Car[26]	100	100
Sixt	40	50
Budget-Avis	35	35
Sicily by car-Autoeuropa	30	30
Win Rent	100	100
TOTAL	**885**	**745**

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

---

[24] Please see Chapter 5 for more details on taxi fares.

[25] Plase see section 3.1.5 for more details on parking areas at Linate Airport.

[26] Values estimated by PwC.

3.1.4. Mobility service supply saturation

The following Figure presents the saturation level of the landside mobility services at Linate Airport, as a ratio of the current demand (passengers/day) and current supply (service capacity/day)[27].

The transport mode with the lowest saturation level is coach (13%), while local public buses operate at 40% of their capacity. Car-sharing and car-rental services operate at approximately half of their capacity and taxies at approximately one third.

Figure 4. Mobility services saturation level at Linate Airport
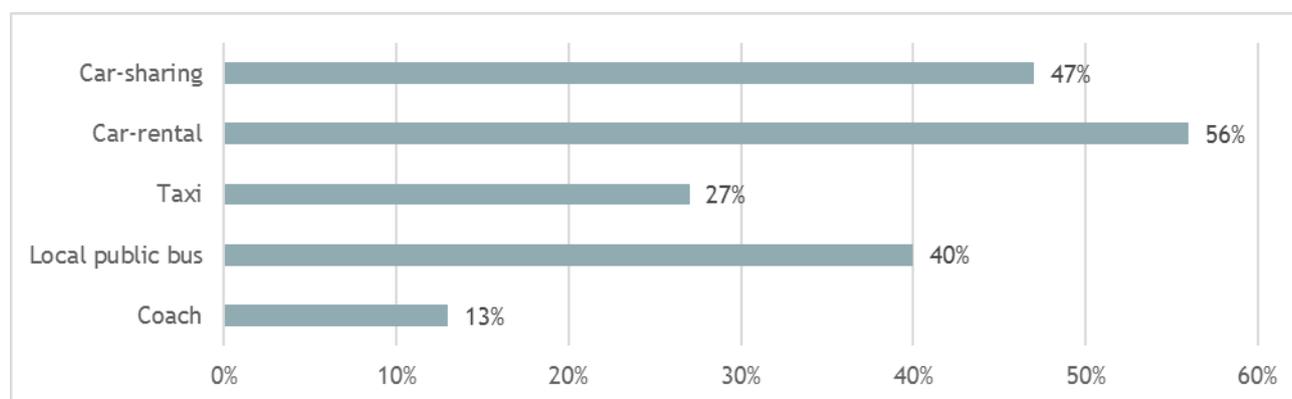
Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

3.1.5. Parking infrastructure

The following Table reports the parking capacity at the Linate Airport.

Table 9. Parking capacity at the Linate Airport

Parking	Number of parking slots
P1 Top Class	738
P2 Executive	2390
P2 Holiday	419
P3	304
P3 Rent a car	216
Rent a Car Park MP[28] Employees	310
Intermodal node	200
Short-stay parking Arrival Area	189
Short-stay parking Departure Area	100
TOTAL	**4866**

Source: SEA Milan Airports web site, Linate Masterplan 2016 and PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

---

[27] Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

[28] *Multi Piano* (multiple floor)

Linate Airport also has parking slots available to motorcycles: 30 slots in the P1 Rider parking and 50 slots in the P2 Rider parking.

The following Figure includes an analysis of parking fares at Linate Airport according to the parking duration. We note that:

- short-stay parking is less expensive than others under the threshold of 5 hours, consistently with its market positioning;

- P2 parking is less expensive for longer stays;

- P1 parking fares are comparable to P2 parking up to 48 hours.

Figure 5. Linate Airport parking fares
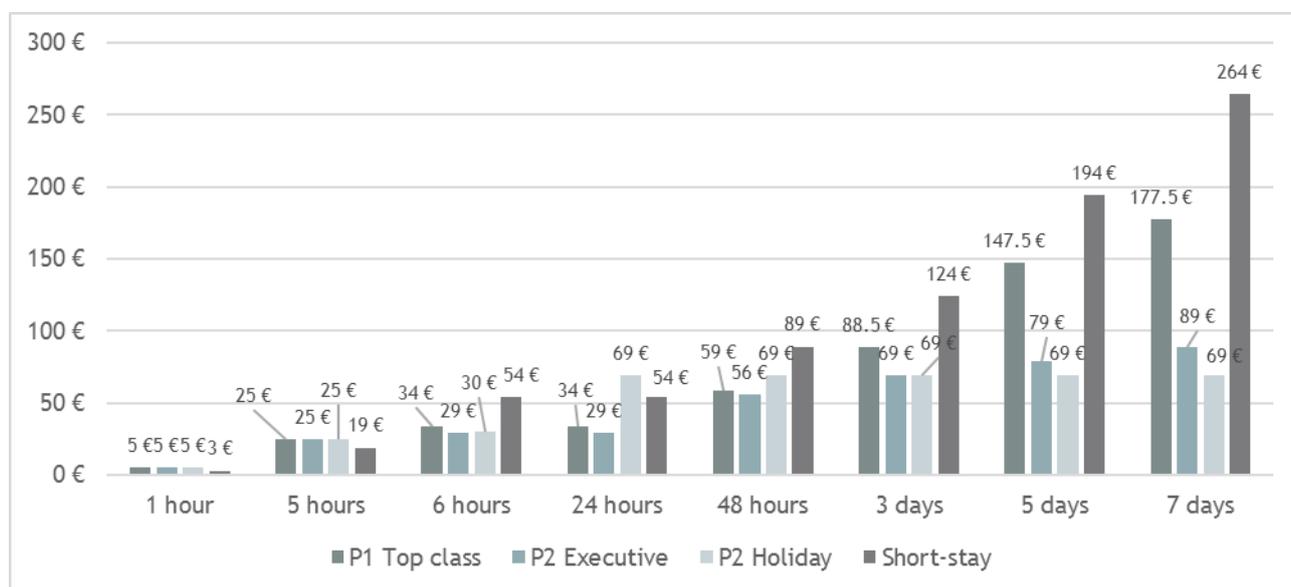
Source: Steer analysis on ViaMilano parking data

3.2. Malpensa Airport

3.2.1. Rail transport

Malpensa Airport has connections without changes to the city of Milan and to Switzerland.

The Malpensa Express service runs from Milano Centrale and Milano Cadorna railway stations to Malpensa Airport. Trains departing from Milano Centrale run through the following route (stops en-route can vary): Milano Centrale – Milano Porta Garibaldi – Milano Bovisa – Saronno – Rescaldina – Castellanza – Busto Arsizio Nord – Ferno-Lonate Pozzolo – Malpensa Terminal 1 – Malpensa Terminal 2. Trains departing from Milano Cadorna do not stop at every station, as most trains from Centrale do, but they follow the same route: Milano Cadorna – Milano Bovisa – Saronno – Busto Arsizio Nord – Malpensa Terminal 1 – Malpensa Terminal 2.

Connections to Switzerland are operated by the rail company TILO, which provides the S40 service from Canton Ticino to Malpensa Airport. The service starts at the Italian municipalities of Albate-Camerlata and Como San Giovanni and then to Chiasso – Balerna – Mendrisio – Stabio – Cantello Gaggiolo – Arcisate – Induno-Olona – Varese – Gallarate – Busto Arsizio FS – Busto Arsizio FN – Ferno – Malpensa Terminal 1 – Malpensa Terminal 2.

The following Table shows the services.

Table 10. Malpensa Airport railway connections

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare
Train - Milano Malpensa Express	FS Milano Centrale (railway station)	Trenord	68	51 min (T1) 58 min (T2)	€13.00
Train - Milano Malpensa Express	FS Milano Cadorna (railway station)	Trenord	79	37 min (T1) 43 min (T2)	€13.00
Train	S40 Milano Malpensa Terminal 1 and 2 – Bellinzona	TILO	18	135 min	From CHF20.00
Train + Coach	S30 Milano Malpensa Terminal 1 and 2 - Laveno - Luino - Cadenazzo	TILO	Bus: 56 Train: 12	From 130 min	Bus from CHF6.50 Train from €6.70

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

3.2.2. Road public transport and coach services

We analysed road public transport and coach services according to their geographical origin, including: the metropolitan and central Milan area, other provinces (either than Milan), other airports in Lombardy region and Switzerland.

- **METROPOLITAN AND CENTRAL MILAN AREA**

Three main companies operate between Milano Centrale railway station and Malpensa Airport. Moreover, there are additional not-regular coach services between Milan trade fair (Fiera Milano City) and Malpensa Airport; these are active only during trade fair events.

Table 11. Bus and coach connections between the metropolitan and central Milan area and Malpensa Airport

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Coach	FS Milano Centrale (railway station)	Air Pullman	106 workdays 107 Sunday / public holidays	50 min	€10.00	54
Coach	FS Milano Centrale (railway station)	Autostradale	110	55 min	€8.00	54
Coach	FS Milano Centrale (railway station)	Terravision	80	55 min	€8.00	Up to 64
Trade fair bus (not regular service)	EXPO/Fiera Milano City	Autostradale	11	30 min	€10.00	54
Trade fair bus (not regular service)	EXPO/Fiera Milano City	Air Pullman	12	30 min	€10.00	54

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

- **OTHER PROVINCES**

Provinces outside Milan Metropolitan area connected to Malpensa Airport both by regular and seasonal or on-demand services (on-demand services need advanced book and run based on demand). Services are operated by local public buses (from the province of Varese – Gallarate and Somma Lombardo - in which Malpensa Airport is located), or by coach services (regularly from Genoa, Novara, Turin, Rome, and seasonal or on-demand from Aosta and Domodossola).

Coach services extend to Malpensa Airport catchment area but also to central Italy. The following Table reports the service details. The fleet capacity is 50 passengers per vehicle for all the listed regular services.

Table 12. Local public bus and coach services between of Malpensa Airport and other provinces except the province of Milan

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare
Local public bus	Gallarate FS (Varese)	S.A.C.O.	Variable	15 min	€1.40 - €1.80
Local public bus	Somma Lombardo (Varese)	S.A.C.O.	22	27 min	€1.30 - €1.50
On-demand coach	Domodossola	COMAZZI	14	80 min	€15.00
Winter-time coach	Aosta bus station	Sadem-Sauda	6 Workdays 4 Weekends and Holidays	160 min	€25.00
Coach	Genoa	VOLPI	2	180 min	€25.00
Coach	Novara	STN	16	60 min	€3.00 – 9.00
Coach	Turin	SADEM-Autostradale	30	115 min	€22.00
Coach	Rome	Flixbus	4 Monday, Friday, Sunday 1 Tuesday, Thursday	600 min	€25.00

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

- **OTHER AIRPORTS IN LOMBARDY REGION**

Malpensa Airport has connections with Linate Airport and Orio al Serio Airport (in the province of Bergamo) as reported in the following Table.

Table 13. Connections between Malpensa Airport and other airports in Lombardy region

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Coach bus	Milano Linate	Air Pullman	10	90 mins	€13.00	35
Coach bus	Bergamo Orio Al Serio	Air Pullman	15 Workdays 8 Weekends	110 mins	€18.00	55

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

- **SWITZERLAND**

Due to the relative proximity of Malpensa Airport to Switzerland, there are frequent bus connections from different swiss cities. We report details on the mobility services between Switzerland and Malpensa Airport in the table below.

The train and bus service is active on the route Bellinzona – Malpensa Airport (the bus operates between Luino and Cadenazzo).

Table 14. Bus connections with Switzerland of Milano Malpensa

Service	Origin	Operator	Daily return rides (n.)	Travel time	Fare	Vehicle capacity
Coach	Castione FFS (railway station)	AIRPORT GIOSY TOURS SA	18	115 min	€40.00	53
Coach	Lugano Piazzale Besso	LUGANO SERVIZI/ADA TOURS	20	70 min	€25.00	30
Coach	Lugano Stazione FFS (railway station)	Jetbus	18	80 min	€25.00	19
Train + Bus	Bellinzona	TILO	8	185 min	From €21.80	N/A

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

3.2.3. Taxi and limousine services

- **TAXI SERVICES**

Taxi services at Malpensa Airport are mostly nearby Terminal 1: there is a taxi station with about 30 cars and an additional waiting area for taxies with about 300 cars. Terminal 2 has about 40 cars divided equally between a waiting area and a taxi station. Currently 7 taxi operators provide services at Malpensa Airport[29]:

- ✓ Radiotaxi 6969;
- ✓ Radio Taxi Freccia;
- ✓ Taxi Blu;
- ✓ Radio Taxi;
- ✓ La Martesana;
- ✓ Taxi 8585 Autoradiotassi;
- ✓ ICTM Consorzio Taxi Malpensa.

- **LIMOUSINE SERVICES**

Limousine services are available at both Malpensa terminals; however, they are mostly concentrated at Terminal 1, serving business clients.

---

[29] Please see Chapter 5 for more details on taxi fares.

3.2.4. Car-sharing and car-rental

- **CAR-SHARING**

The E-Vai electric car-sharing operator provides services at Malpensa Airport. It has 5 parking slots at Terminal 1 and two recharging stations. We understand the car-sharing offer is more limited compared to Linate Airport because Malpensa Airport is further to Milan compared to Linate.

- **CAR-RENTAL**

The majority of car-rental services are located at Terminal 1, even if some operators plan to expand their car rental offer to Terminal 2. Currently there are 774 car-rental parking spaces at the Terminal 1 and 190 at Terminal 2. Thirteen car-rental companies operate at Malpensa Airport.

The following Table provides a detail of the number of cars offered in the low and high seasons.

Table 15. Car-rental companies at Malpensa airport[30]

Terminal	Car-rental company	Car offer	
		High season	Low season
T1-T2	Budget-Avis	350	350
T1	Maggiore	70	80
T1	Sicily by car-Autoeuropa	400	800
T1	Sixt	10	12
T1	Locauto	100	100
T1	Europcar	150	250
T1	Gold Car	40	150
T1	Win Rent*	50	50
T1	Herz,Dollar,Thrifty*	100	100
T2	Europcar*	20	20
T2	Sixt*	20	20
	TOTAL	1170	1792

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

3.2.5. Mobility service supply saturation

The following Figure presents the saturation level of the mobility services at Malpensa Airport as a ratio of the current demand (passengers/day) and current supply (service capacity/day)[31]. Data are available by terminal for car-sharing, car-rental and taxi services. Data concerning other services are not split by terminal.

Concerning car-sharing, we understand that the 100% saturation level has not particular significance due to the limited offer (5 parking slots).

---

[30] Numbers marked with * are estimated by PwC.

[31] Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

Concerning car-rental services the saturation level differs significantly by terminal. In particular, the high level of saturation at terminal 2 may depend on the fact that only three out of eleven companies (the total number of companies in Malpensa) operate at the terminal.

The different saturation level of taxi services at the two terminals may follow the same logic.

Train and coach services have the same saturation levels (22%), while local public buses have a 46% saturation.

Figure 6. Mobility service supply saturation at Malpensa Airport: car-sharing, car-rental and taxi by terminal
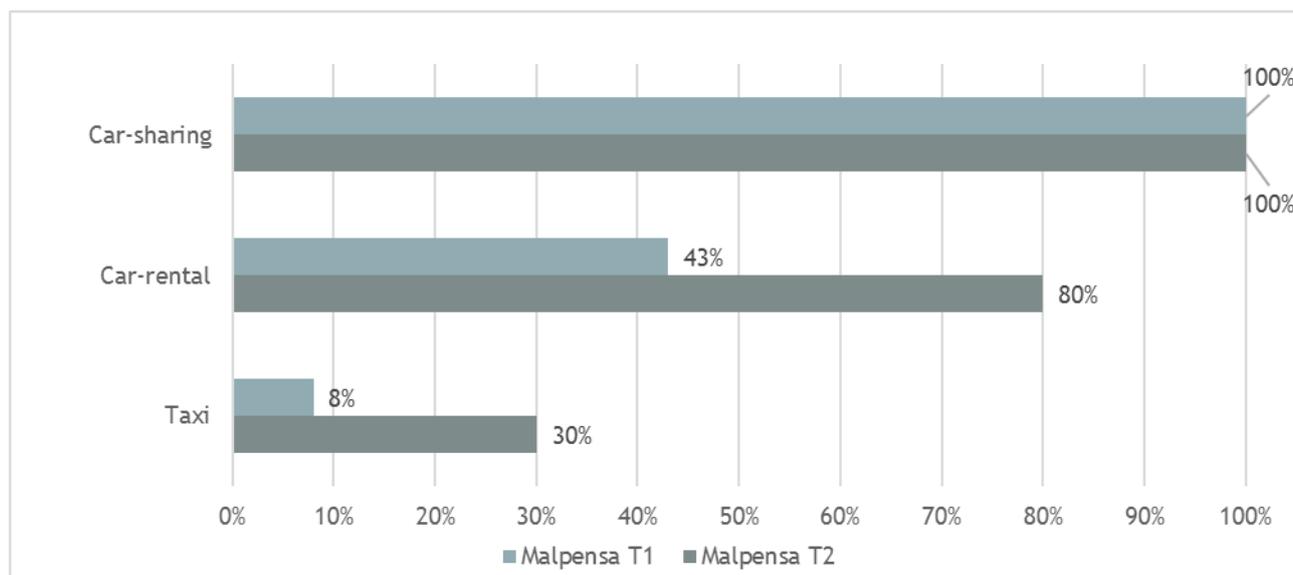
Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

Figure 7. Mobility service supply saturation at Malpensa Airport: train, local public bus, coach
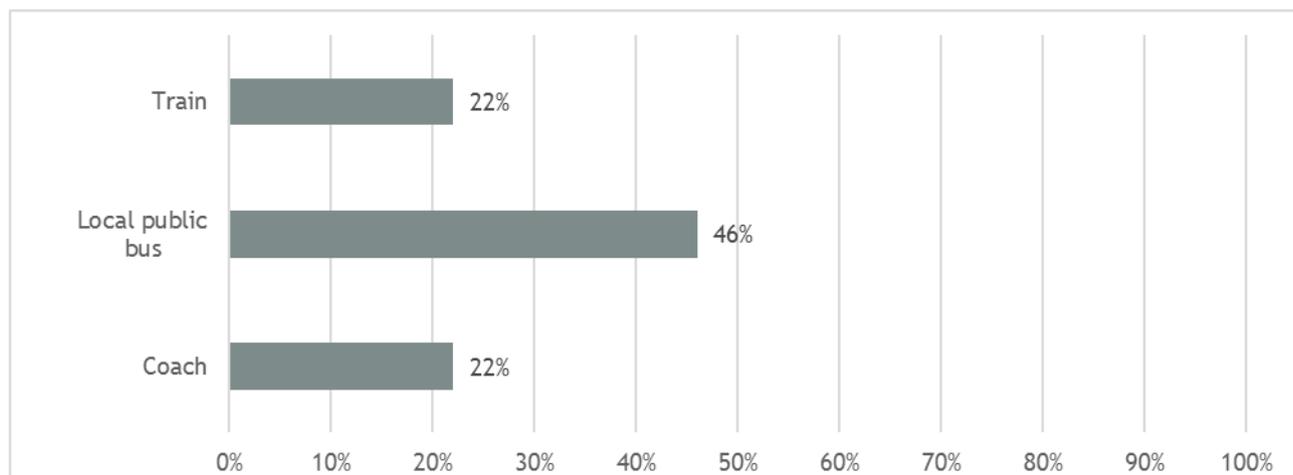
Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018)

3.2.6. Parking infrastructure

Malpensa Airport has a wide parking offer, both indoor and outdoor (10,700 parking slots). The following Table report details on parking facilities.

Table 16. Parking facilities at Malpensa Airport[32]

Terminal 1	
Parking	**Slots**
P1 Long term	1,200 (outdoor)
P2 Genius	500
P3 Express	1,600
P4 Holiday	1,200
P2 Executive	2,700 (outdoor), plus 130 slots P2 Top Car
Short-stay	205
Total Terminal 1	**7,535**
Terminal 2	
Parking	**Slots**
P5 Easy - long stay	3,000
Short-stay	165
Total Terminal 2	**3,165**
Total Terminal 1 and Terminal 2	**10,700**

Source: PwC for SEA, Piano Strategico dell'Accessibilità Terrestre degli aeroporti di Milano Linate e Milano Malpensa (February 2018) supplemented by Steer analysis

The figure below presents the analysis of parking fares at the Malpensa Airport:

- P2 Genius and P2 Holiday are more convenient for longer stays;

- P3 Easy is generally cheaper than other parking facilities;

- In general fares reflect the parking market positioning in terms of parking duration.

---

[32] Source: Malpensa Airport official web site

Figure 8. Parking fares at Malpensa Airport
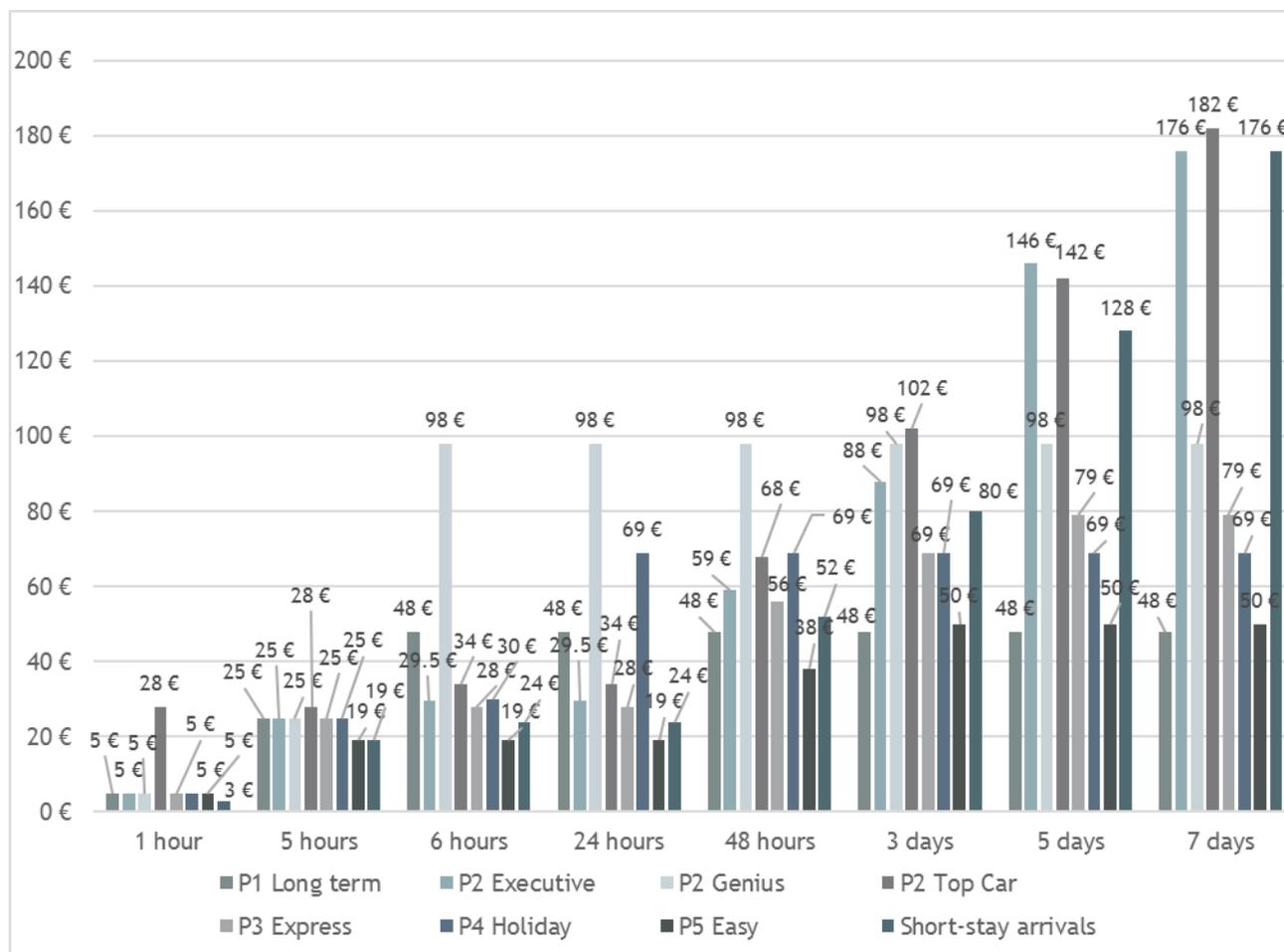
Source: Steer analysis on ViaMilano Parking data

4. Focus on international benchmark of taxi services

This Chapter includes a benchmark analysis of taxi services at European airports. The analysis mainly focuses on the topic of fares and it includes further publicly available information concerning taxi facilities or services at some European airports. The purpose of the analysis is understanding how Milan Airport taxies position compared to other European Airports.

The topic of taxi fares at airports is complex because the taxi industry is deregulated or regulated on the national, regional or municipal level. This brings challenges in making comparisons.

We found different fare schemes defined by Municipalities or operators:

▪ flat fares to/from the airports;

▪ specific airport fares on a per km / per hour / per zone basis;

▪ minimum fares negotiated by operators with authorities or maximum fares imposed by law;

▪ market / not-regulated fares.

We selected airports with distances from the city centre similar to Linate and Malpensa Airports.

Linate Airport

Linate Airport is located in the nearest suburbs of Milan and is a city airport. The majority of European airports are located relatively close to the city centre. This ensures there are several airports which are comparable to Linate.

We found more operators and information on fares for the airports that we compared to Linate than those that we compared to Malpensa. This is probably linked to the fact there is a higher taxi demand for airports nearer to the city centre.

The following Table shows the fare structures and the fare that we calculated for an airport - city centre trip on a weekday and without traffic and stops.

Table 17. Linate - Taxi fares benchmark

Airport	Approximate distance to the city centre (Km)	Initial fare	Minimum fare from airport	Fare of 1 km		Fare for 1 hour stop		Fare to city centre	Average fare per km
Milano Linate	9.6	€3.30	€13.10	Simple €1.09	After €14.62 €1.64	Simple €28.32	After €14.62 €42.48	€13.76	€1.43
Milano Linate shared taxi	9.6	€1.32	€5.24	Simple €0.44	After €5.70 €0.66	Simple €11.33	After €5.70 €16.99	€5.24	€0.55
Roma Ciampino	15.0							€30.00 (flat)	€2.00
Valencia	10.0	€1.45	€12.00	€1.08		€19.15		€12.25	€1.23
Frankfurt	13.5	€3.50		€1.75 - €2.00		€33.00		€27.13	€2.01
Dusseldorf	9.0	€4.50		€2.20		€35.00		€24.30	€2.70
Paris Orly	17.0							€30.00 - €35.00 (flat)	€1.76 - €2.06
Madrid Barajas	16.0							€30.00 (flat)	€1.88
Amsterdam Schiphol	22.00							€39.00 (flat)	€1.77
Brussels	20.00	€2.40		€1.80 - €2.70		€30.00		€45.00	€2.25
Bordeaux	13.00	€2.00		€0.83 - €2.50		€33.70		€13.00	€1.00
Nice Cote d'Azur	8.00							€32.00 (flat)	€4.00

Source: Steer analysis on multiple sources

The analysis shows that taxi fares in Milan are more complex than those at the other airports that we analysed. Further than the information reported in the Table above, boarding fares in Milan differ by time, day and destination, and the fare per km varies after reaching a certain cost threshold or according to the change in the taxi speed; per hour waiting fares may also vary during the trip.

We found that Milan taxis also provide a shared taxi service, which applies lower fares to each passenger. On a per person-per km basis, the shared fare from Linate is the lowest that we found in the selected cases.

Several cities have flat fares on taxi services from the airport to the city centre (e.g. Rome, Paris, Amsterdam, Nice), generally when distance is greater than 15 km. On average flat fares ensure per km fares in the range €1.7 – €2.0 with a peak of €4.0 in Nice. The average per km fare for the taxis that use a taximeter system ranges from €1.0 to €2.5 depending on the city.

Generally, we did not find specific services to passengers using taxi service at the airports[33]: passengers simply queue outside of the terminal to get the first available car. All authorized taxis must have a clear taxi sign, visible fares and they must stop at a dedicated area at the airport. Some airports, as Dusseldorf, are also served by a special "airport taxi", which allows payment by card or on account; moreover, drivers speak English and all cars are equipped with child seats.

Malpensa Airport

We found few airport cases with distances from the city centre which are comparable to Malpensa Airport and some airports that we identified do not belong to the Euro area[34]. We included airports in United Kingdom, Norway, Sweden and Italy.

Taxi systems in the United Kingdom, Norway and Sweden substantially differ. London taxis are regulated and charge a fare range assigned to a specific distance. Norway and Sweden taxis are deregulated, which means that every operator sets its own fares; the only requirement is to display fares clearly on the car.

We analysed fares by making simulations on the web sites of various taxi operators and we present in the following Table the medium values taken as a reference for the minimum and maximum fares.

Table 18. Malpensa - Taxi fares benchmark

Airport	Approximate distance to the city centre (Km)	Fare to city centre (min - max or flat)	Average fare per km
Milano Malpensa	53	€95.00 (flat)	€1.79
Roma Fiumicino	35	€48.00 (flat)	€1.37
London Gatwick	48	€75.00 - €100.00	€1.56 - €2.08
London Stansted	68	€95.00 - €100.00	€1.40 - €1.47
Stockholm Arlanda	40	€66.00 (max)	€1.65
Oslo Gardermoen	50	€58.00 - €117.00	€1.16 - €2.34

Source: Steer analysis on multiple sources

The benchmark among the selected airports shows that only Italian airports (Malpensa and Fiumicino) have flat fares to the city centre.

The other airports have per mile / per time tariffs. London airports taxis are paid according to the mile range and a time of travel, and various operators may offer different fares. Private carriers may provide a "private transfer service" for a lower or a greater fare than the official fare.

[33] We specify that we did not analyse Apps to book taxis and that the analysis was desk based.

[34] We converted tariffs to euro according to current exchange rates.

The average cost per km ranges from €1.16 to €2.54 which is in line with short-distance rides.

Finally, we found that there is the possibility for passengers to share a taxi ride:

- the official private taxi provider at Stansted Airport requires online booking or booking at a special kiosk and it indicates the car to the passengers. Such a system allows proposing passengers to share a ride if they travel in the same direction.

- Oslo airport has a special taxi information desk showing prices for all companies and allowing booking taxi for one or more passengers travelling to the same place.

5. Mobility information system

This Chapter includes a brief analysis of passenger mobility information systems at Linate and Malpensa Airports.

Milan Airports' web site and App[35] provide several information to passengers concerning flights, directions and parking, shopping & food, and Airports' services and facilities. The web site and App functionalities on "directions and parking" provide information on the Airports' accessibility according to the preferred travel mode:

- Passengers travelling by car find road directions, parking services information and the possibility to book parking on-line. The section also provides real-time traffic data through Google Maps and web-streaming from 6 video cameras that shows the level of congestion on the main roads to the Airports.

- Passengers travelling by bus can find information on the main services, operators, schedules and fares.

- Passengers travelling by taxi find companies' phone numbers, as well as information on limousine services.

- Concerning car-rental the web site and App provide a list of operators, phone numbers and web sites.

- The web site pages and App functionality concerning car-sharing describe in detail the service and cars' location.

- Finally, passengers can find information on rail services and schedules, including real-time updates.

SEA is not only engaged in providing information to passengers but also in collecting feedback. In particular during 2017 SEA has surveyed passenger satisfaction through dedicated multimedia displays at the Airports. The survey concerned different aspects of the Airports' service, including satisfaction on the quality of information provided and on modal integration at Airports.

The following Figures reports the results. Concerning information to passengers all the surveyed aspects got very positive feedback from passengers.

Figure 9. Customer satisfaction with information quality at Linate and Malpensa Airports
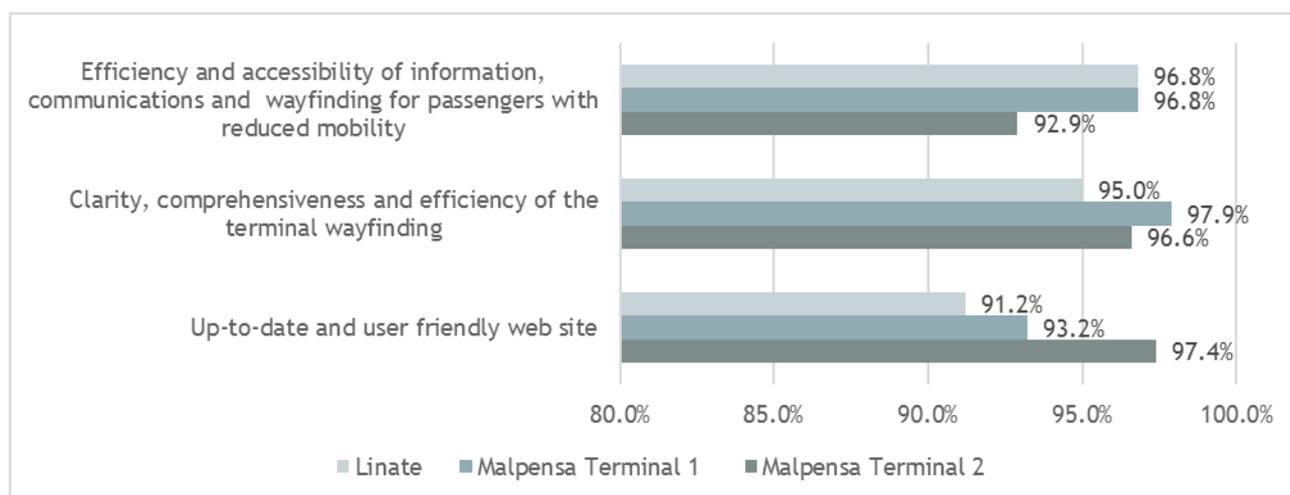
Source: Service Charter Milano Linate, SEA (2018), Service Charter Milano Malpensa, SEA (2018)

---

[35] The App is available at AppleStore and GooglePlay

Figure 10. Customer satisfaction with transport modal integration at Linate and Malpensa Airports

Source: Service Charter Milano Linate, SEA (2018), Service Charter Milano Malpensa, SEA (2018)