

Park-and-Ride in Munich

København

1st of October 2012

Presented by

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P+R Park & Ride GmbH





- ▷ ***1: P+R Park & Ride GmbH***
- ▷ ***2: Road traffic in Munich***
- ▷ ***3: Park-and-Ride***

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Shareholder:

- Capital City of Munich

Kuratorium (advisory commission):

- ADAC Südbayern (german automobile club)
- ADFC Landesverband Bayern (german bicycle club)
- Handwerkskammer (Chamber of Trade)
- Industrie- und Handelskammer
(Chambers of industry and commerce)
- Einzelhandelsverband
(Association of Retailers)
- MVV GmbH
(central management organisation for public transport in the Greater Munich Area)
- SWM GmbH
(public utilities organizing underground, tram, bus in Munich)



- Founded in 1992
- Our initial target - managing Park-and-Ride in and outside Munich
- Start of operation with one multi storey park with 1270 parking spaces dated on the 30th of Juni 1994



Car parking

- 37 P+R car parks (11.400 spaces) in and around Munich
- 5 residential garages
- 7 city car parks in Munich



Bicycle parking

- 3 multy-storey bike parks

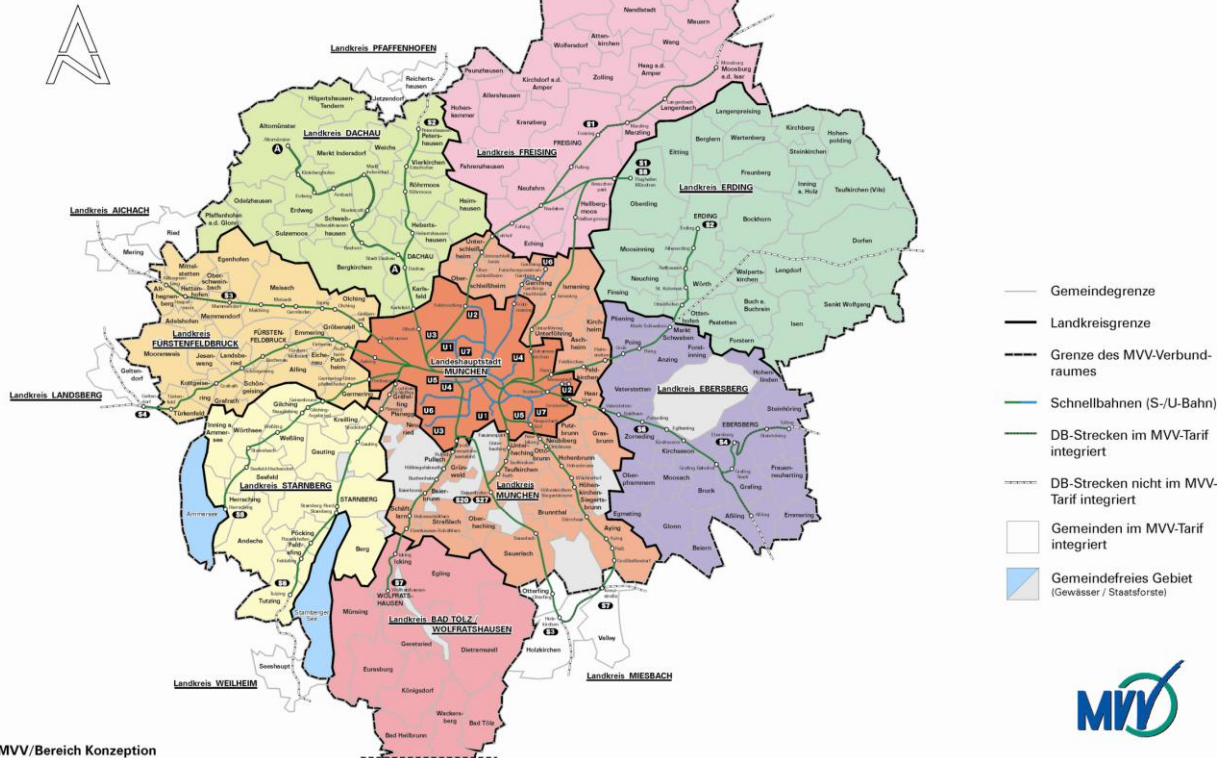


Bus parking

- 2 Bustrminals in the outskirts of Munich

MVV - Verbundraum

Stand: Dezember 2011



MVV - area of public transport:

- 26.500 P+R spaces
- responsibility: municipality

We manage:

In Munich:

- all P+R spaces (7.484)

Outside Munich:

- 3.920 spaces on behalf of 9 municipalities



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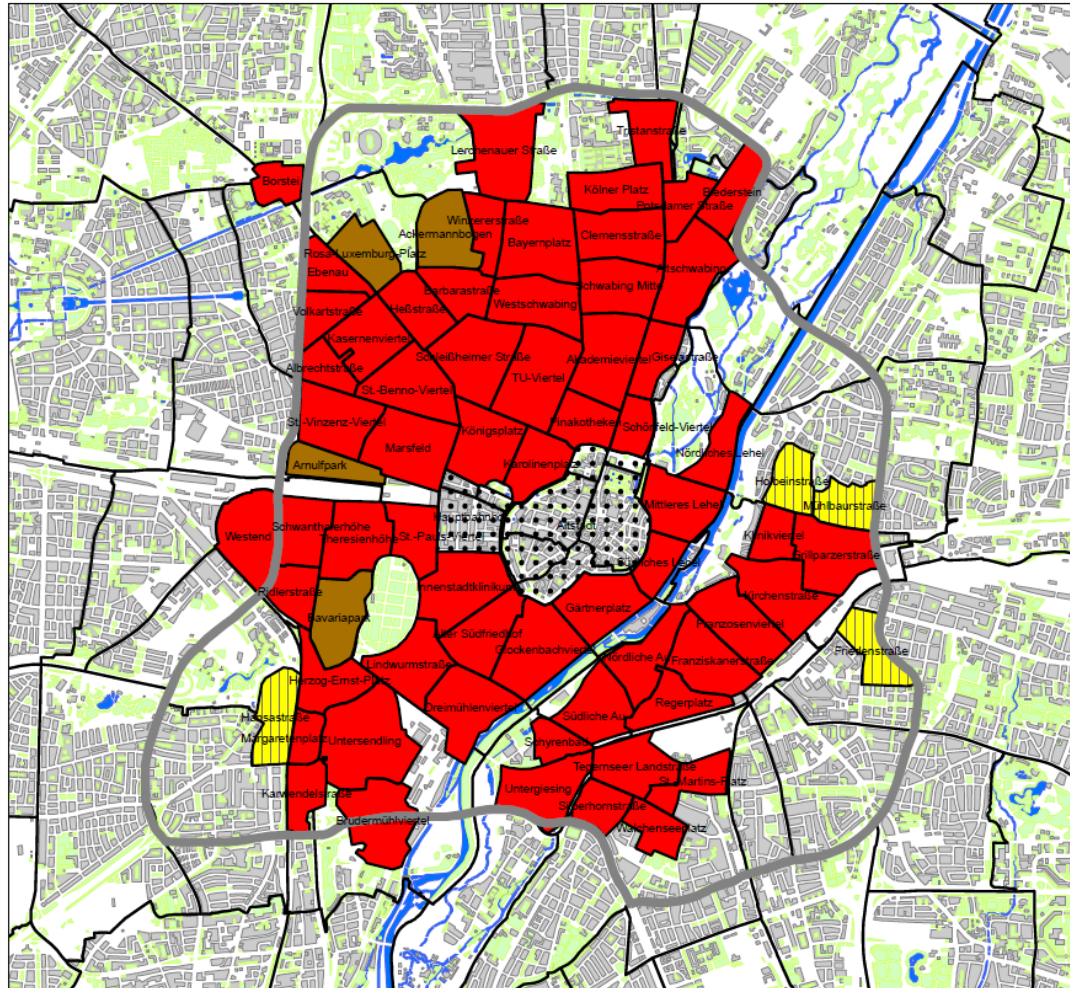


Diesel-Fahrzeuge mit Partikelemissionen nach der Abgasnorm Euro 3 bzw. D 3 oder Euro 2 mit Partikelfilter







Diesel-Pkw mit Partikelemissionen nach der Abgasnorm Euro 4, D4 oder Euro 3 mit Partikelfilter oder Euro 5 oder Euro 6
 Pkw mit Ottomotor und geregelterm Katalysator, G-Kat (auch US-Kat)
 Kfz ohne Verbrennungsmotor (z.B. Elektromotor, Brennstoffzelle)





Kartengrundlage: Landeshauptstadt München - Kommunalreferat Vermessungsamt - www.geoinfo-muenchen.de



**PARKRAUMMANAGEMENT
 IN DER
 LANDESHAUPTSTADT MÜNCHEN**

Maßnahmengebiete

-  Altstadt
-  in Betrieb
-  in Planung, Umsetzung ausgesetzt
-  ggf. gesonderter Handlungsbedarf

-  bebaute Fläche
-  Grünflächen
-  Wasserflächen
-  Mittlerer Ring

Kartengrundlage:
 Dig. Stadtkarte (VAmT)
 Stand: September 2011
 Maßstab 1:35.000



0 0,5 1 1,5 2 km

**LANDESHAUPTSTADT MÜNCHEN
 PLANUNGSREFERAT HA I/3**

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- Blue zones for parking (2,50 €/h)
- Pedestrian zones

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P+R Park & Ride GmbH

Parking prices downtown



Top 50 monthly parking rates

Unreserved median rates in USD

London – City	932.99
London – West End	873.50
Hong Kong	744.72
Tokyo	654.00
Rome	615.00
Zurich	605.64
Sydney	591.00
Perth	516.88
Brussels	
New York – Midtown	538.00
New York – Downtown	529.00
Copenhagen	516.88
Vienna	496.22
Amsterdam	482.28
Brisbane	469.47
Manchester	462.87
Calgary	432.93
Geneva	431.34
Birmingham	428.05
Oslo	425.98
Boston	425.00
Bristol	419.34
Antwerp	393.70
Milan	382.70
San Francisco	
St. Petersburg	
Stockholm	332.80
Munich	322.09
Toronto	321.09
Chicago	320.00
Hamburg	307.58
Philadelphia	300.00
Melbourne	296.07
Leeds	294.55
Seattle	285.00
Paris	282.97
Taipei	279.00
Shanghai	278.73
Madrid	276.82
Auckland	272.44
Montreal	267.96
Moscow	267.30
Wellington	265.63
Edmonton	262.60
Frankfurt	259.59
Vancouver	254.78
Athens	246.06
Washington	245.00
Glasgow	243.77
Dubai	240.00

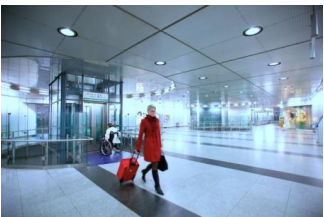
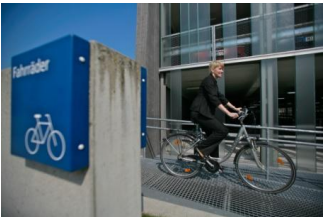
Top 50 daily parking rates

Unreserved median rates in USD

Abu Dhabi	55.00
Oslo	54.52
Tokyo	54.50
London - City	52.24
Sydney	51.18
London - West End	50.70
Amsterdam	
Vienna	
Athens	46.14
Copenhagen	41.68
Stockholm	40.96
New York – Midtown	40.00
Dubai	40.00
The Hague	38.14
Zurich	34.61
Paris	34.45
Honolulu	32.75
Boston	32.00
Chicago	31.00
New York – Downtown	31.00
Düsseldorf	30.76
Madrid	30.76
Los Angeles	29.63
Brisbane	29.61
Melbourne	29.61
Helsinki	29.53
Frankfurt	29.53
Hamburg	29.53
Hong Kong	28.25
Edinburgh	27.57
Manchester	26.84
Geneva	26.26
Philadelphia	26.00
San Diego	26.00
St. Petersburg	25.92
Tel Aviv	25.89
Rotterdam	25.84
San Francisco	25.00
Seattle	
Perth	
Moscow	24.62
Munich	24.61
Stuttgart	24.61
Rome	23.38
Birmingham	23.22
Bristol	23.22
Toronto	22.36
Berlin	22.15
Utrecht	22.15
Leeds	21.77

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Park-and-Ride is just one step in solving traffic problems. It is not the only solution but in combination with other means of an integrated traffic concept Park-and-Ride is one of the major parts in solving traffic problems.



The decision to build or to enlarge a P+R-terminal is typically a joint decision of the following stakeholders:

- Municipality
- German railway (Deutsche Bahn)
- Responsible authority for public funds (for Greater Munich: government of Upper Bavaria)
- MVV

Parking demand in close proximity to railway stations as a (political) catalyst for building new P+R terminals or enlarging existing ones

- Demand analysis by
 - department of urban planning and building regulations (Planungsreferat) for Munich
 - MVV for the surroundings

The final decision is made by the Munich city council

- Funded by
 - the free state of Bavaria
 - Stellplatzablösemittel
 - if applicable capital resources from the municipalities

- Built by
 - the German Railway
 - the Municipalities / City of Munich
 - a third party

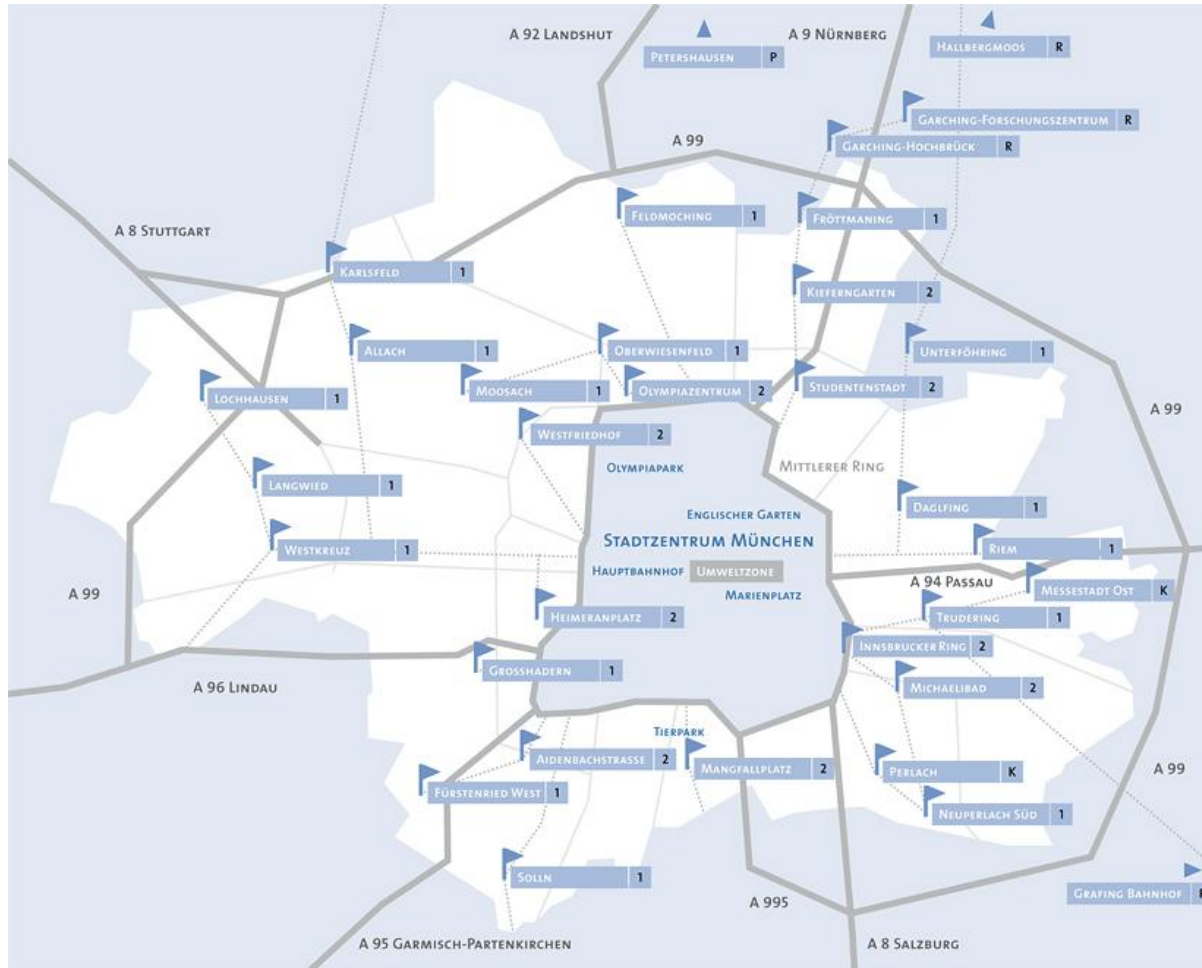
- Operated by
 - Municipalities
 - P+R Park & Ride GmbH



Predicting the demand for spaces on a theoretic approach is very difficult. It depends on a number of different factors e.g. catchment area and willingness to change to public transport

For P+R Messestadt Ost the initial demand analysis showed a daily use of 917 cars.

Now the daily use is only 300 – 600 cars although parking is for free.



P+R should intensify the use of public transport and minimize the traffic volume in the inner city

- No P+R terminals within the main circular road
- P+R should be located as close as possible to the home of the user
- Small and middle-sized P+R terminals (up to 300 - 400 spaces) for regional demand
- 2 big terminals at the city boundary for national demand

- P+R Standortebeschluss
decision of the Munich city council as a long-term planning of P+R in accordance with traffic policies
- Additional building of P+R-terminals in close connection with building the underground
- Additional use of „Stellplatzablösemittel“ for financing the building costs of P+R terminals in and outside Munich
- Foundation of the P+R Park & Ride GmbH

Parking lot
7.000 €



P+R Daglfing
completion in 11/2012

Multi storey parking garage
16.000 €



e.g. P+R Messestadt Ost
Built in 2002
1.070 parking spaces

Underground parking
36.000 €



e.g. P+R Moosach
Built in 2010 – 282 parking spaces
*Costs can be reduced by using
cavities which can be a result from
building the underground railway*

Costs per space without costs of ground and VAT

Building costs

Due to public funds (Gemeindeverkehrsfinanzierungsgesetz, Finanzausgleichsgesetz) the building costs are secured.

Running costs

There are no similar funds for the running costs. Public transport is loss-making and does not pay for P+R. Municipalities pay for the running costs.

Earmarking because of the use of public funds

- 1) Parking is only allowed to users of public transport
- 2) Parking fees are limited. We are not allowed to make profit just reduce the loss-making. The maximum fee is 1,50 € per day.



Petershausen

(834 P+R spaces, 6000 inhabitants)

P+R Running costs

smaller municipalities cannot afford or are not willing to pay for the running costs. As a consequence they often block the building of new terminals.

Parking Chaos

the lack of any control on the car parks results in parking chaos and misuse by neighbouring employees.

This situation does not help to motivate people using Park-and-Ride.



Customer surveys shortly after completion of P+R Mangfallplatz and P+R Westfriedhof showed completely different results.

The question was:

„How did you make this trip in the past?“

P+R Mangfallplatz

- 70 % switched from car to P+R

P+R Westfriedhof

- 31 % used only public transport
- 23 % used P+R before, thus increasing the mileage by car

(These surveys were made before establishing P+R fees)



	Price categorie Region	PS 1	PS 2
Dayticket (single use)	0,50 €	1,00 €	1,50 €
Ticket for ten times parking	4,00 €	6,50 €	13,00 €
Monthly ticket (multiple use/month)	7,50 €	8,50 €	17,00 €
Annual ticket (multiple use/year)	75,00 €	85,00 €	170,00 €

- Basis for the fees is the distance to the city center, „the closer to the center, the higher“. By this we improve the environmental result of P+R, because the fees lead users to switch earlier to public transport.
- The parking fees make a contribution to the running costs and thus reduce the financial burden for the municipalities.



Use of „Off-the-shelf“-components

- pay-and-display machines in car parks and small multi storey car parks
- entrance/exit barriers and ticket machines in multi storey car parks



Parking lot
170,00 €



- Service and maintenance
- Cleaning and Winter services
- Green care

Multi storey parking garage
245,00 € resp. 391,00 € (staffed)



- Service and maintenance
- Cleaning
- Electricity
- Technical equipment

Underground parking
354,00 €



- Service and maintenance
- Cleaning
- Electricity
- Technical equipment

Costs per space and anno without VAT



- reserved spaces
(for women, families and disabled persons)



- 24 hours service-call



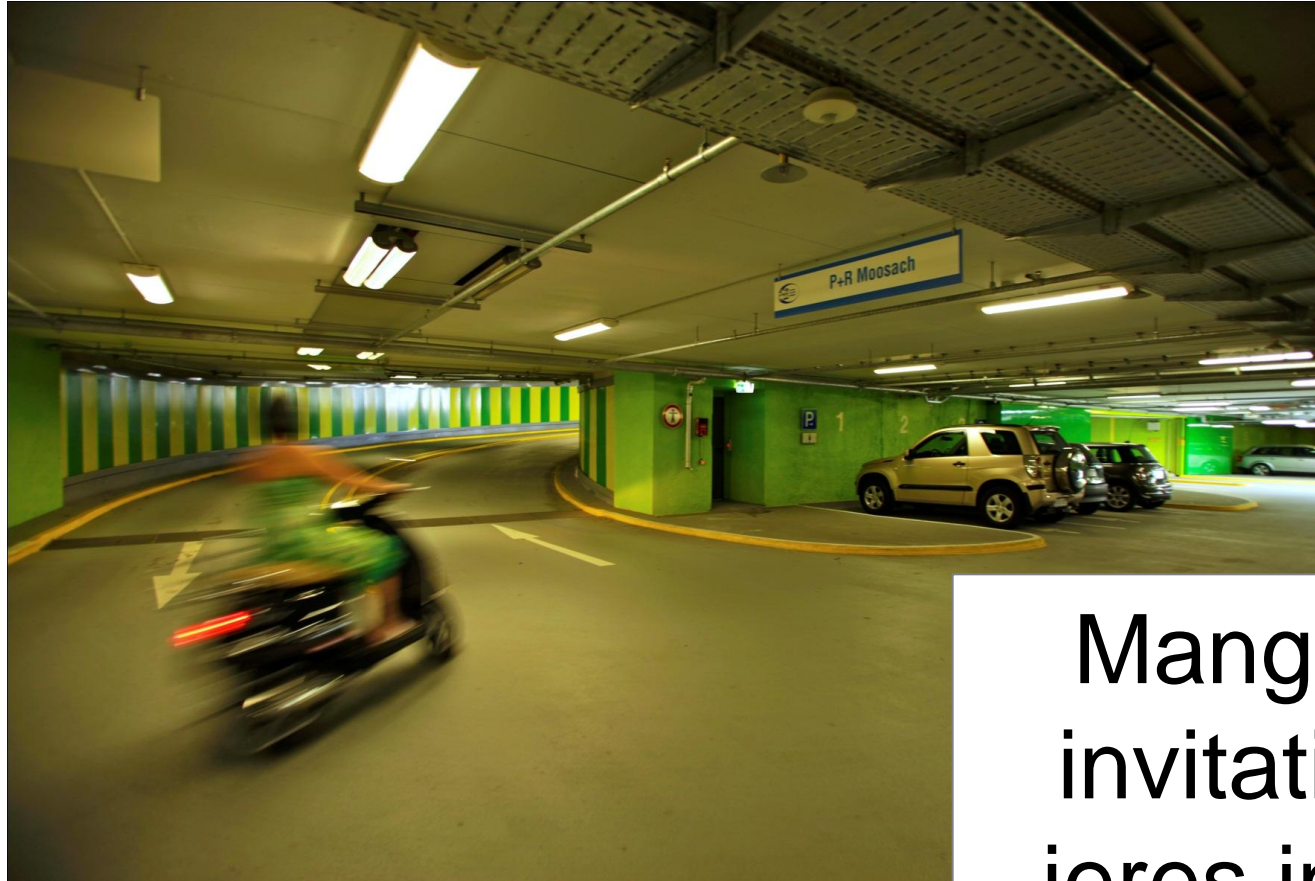
- permanent control of technical systems



Certified by the ADAC (German Automobile Club):

- P+R Fröttmaning
- P+R Großhadern
- P+R Heimeranplatz
- P+R Westfriedhof
- P+R Mangfallplatz
- P+R Messestadt Ost
- AWG Donnersbergerstraße

P+R Park & Ride GmbH
Thank you for your attention



Mange tak for
invitationen og
jeres interesse.