

More passengers and reduced costs – The optimization of the Berlin Public Transport Network

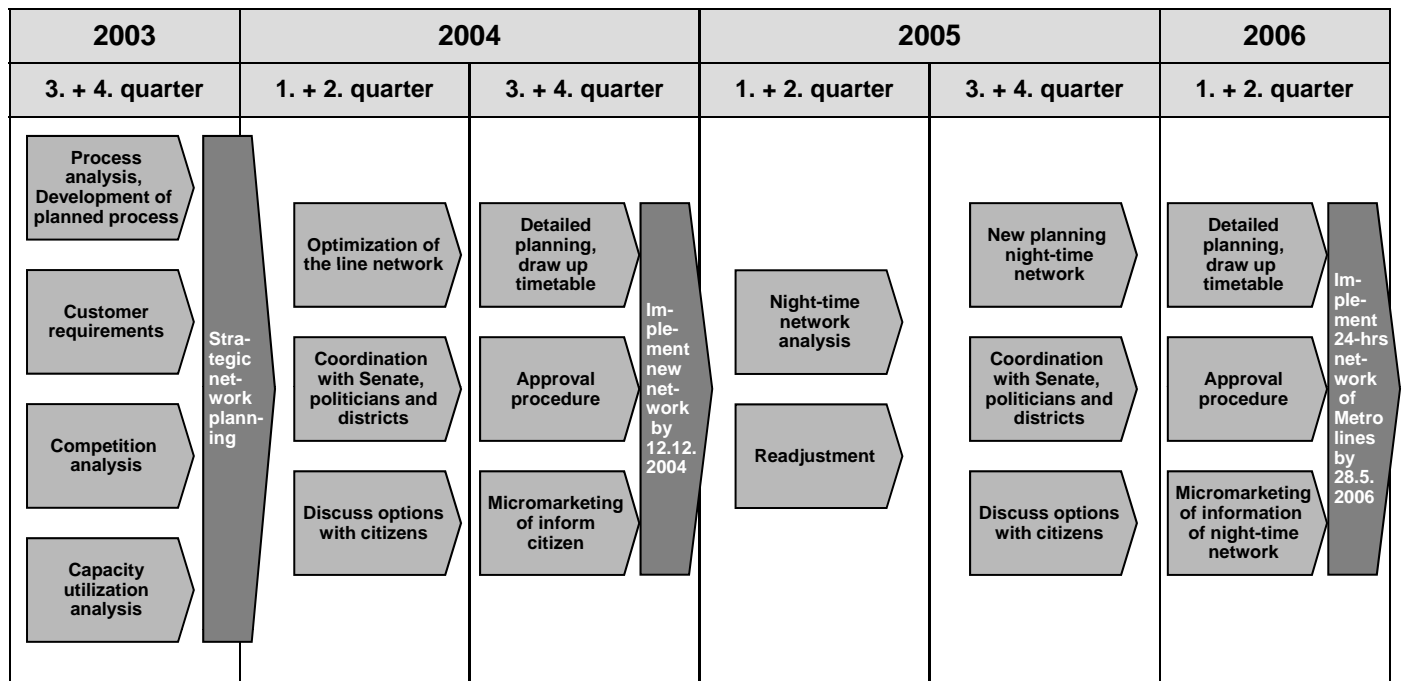
TDM 2008, Vienna

Tom Reinhold



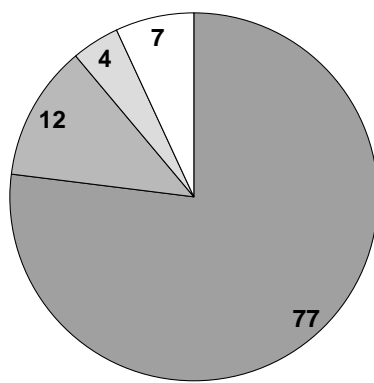
The new network was implemented after 18 month of preparation in 12/2004 and the 24-hour-service in 05/2006

Overview of project plan



Short total travel is the decisive purchase criteria and the main lever for acquiring new customers – at least in Berlin

Factors determining purchase decision (%)

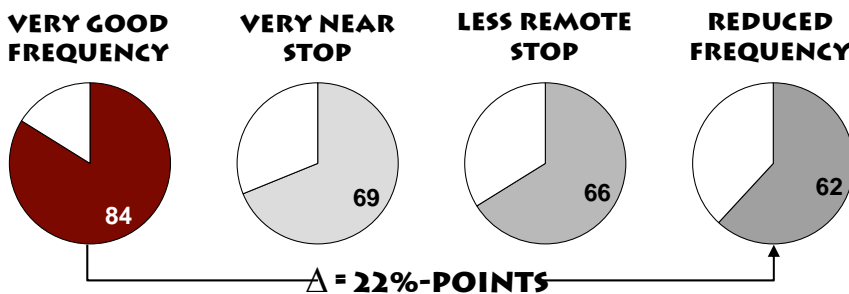


- Short travel time
- High safety/cleanliness
- High comfort
- Other

- The travel time – influenced by speed of the trip connection, frequency, ease of reaching the stops and connection certainty – is the decisive purchase criteria
- Even such important criteria as safety and cleanliness are much less important for the purchase decision
- Additional comfort, e.g. a 1st class, is not important for Berliners – a high standard is achieved already, further improvements will not acquire new customers

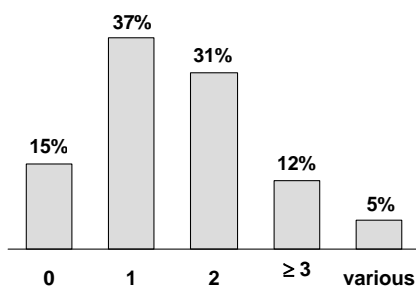
In order to achieve a short travel time, a dense frequency is even more important than a high stop density

BVG market penetration¹⁾ for ...



A good frequency is important; it increases usage of public transport even more than a nearby stop

Changes²⁾ per trip



65% are satisfied with the changes they have to make, at the same time ...

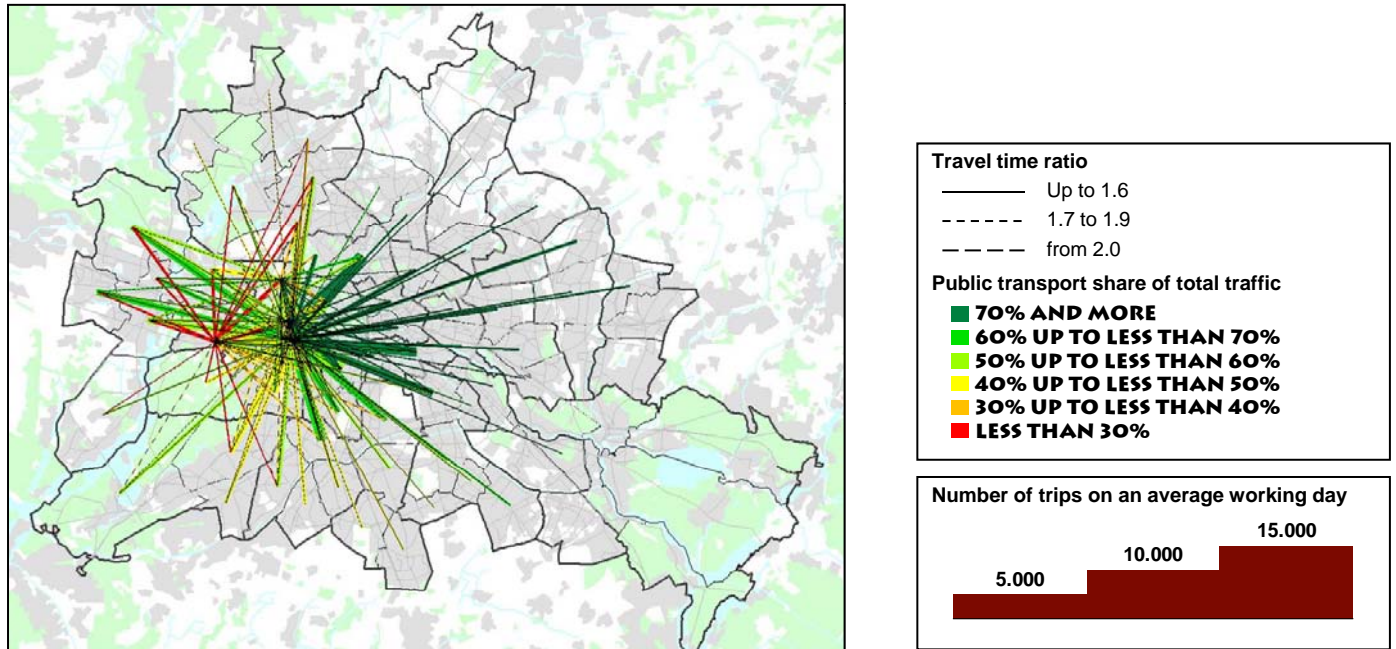
- Accepted average waiting times: approx. 5 min in rush-hour periods, otherwise 10 Min.
- Improvement wishes: weather protection and seats during long waiting times, clear directional information

More than 80% of the customers change lines on their main journeys; they expect the most convenient and comfortable processes possible

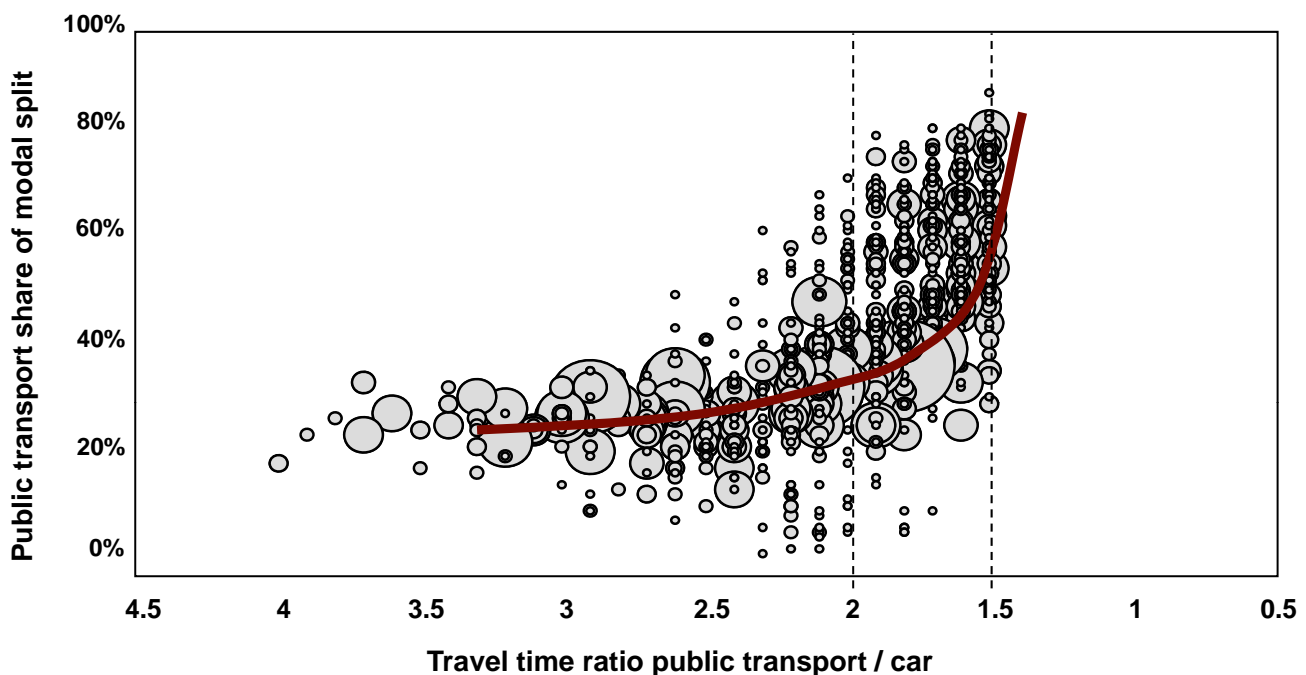
1) Proportion of regular customers in the neighbourhood
 2) On main lines for frequent and rare users

Traffic flows were analyzed according to their volume, their public transport share and the travel time ratio PT/car

Example: Charlottenburg transport districts
(more than 1,000 trips per day)

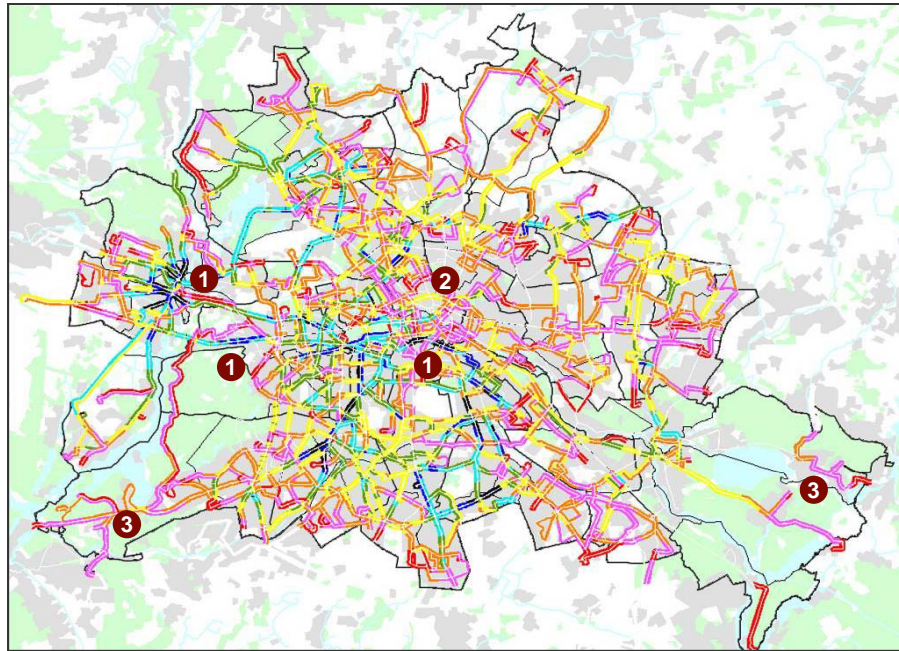


High market shares result for public transport as soon as the trip by car is maximum twice as fast

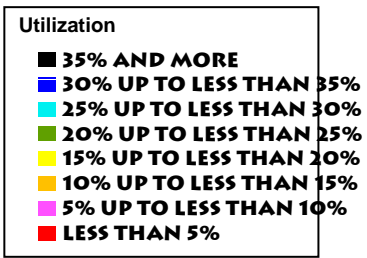


The bus network is working well at centerlines with backbone function – however exhaustive potential of savings

Utilization in the bus network Mon-Fri: 4-24 hrs; Average: 16,5 %

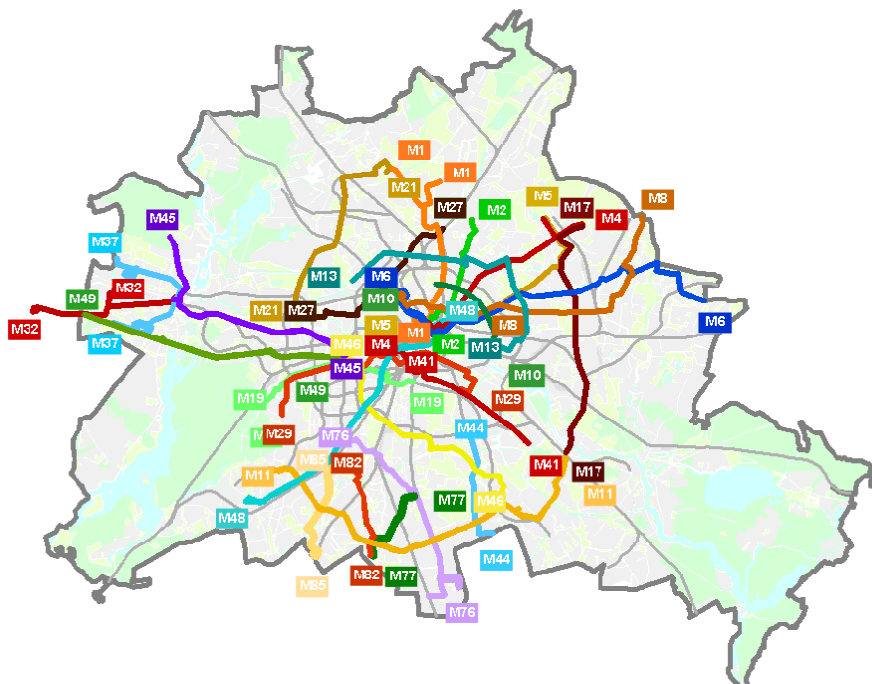


- 1 Very high utilization, where the bus has backbone function or operates towards the centers
- 2 Numerous line sections with little utilization within the Ringbahn of the urban rail (S-Bahn)
- 3 Lines with little utilization in areas with small settlement density



The new Metrobus lines run 24 hours a day – at least every 10 minutes during the day

Metrobus / -tram network overview

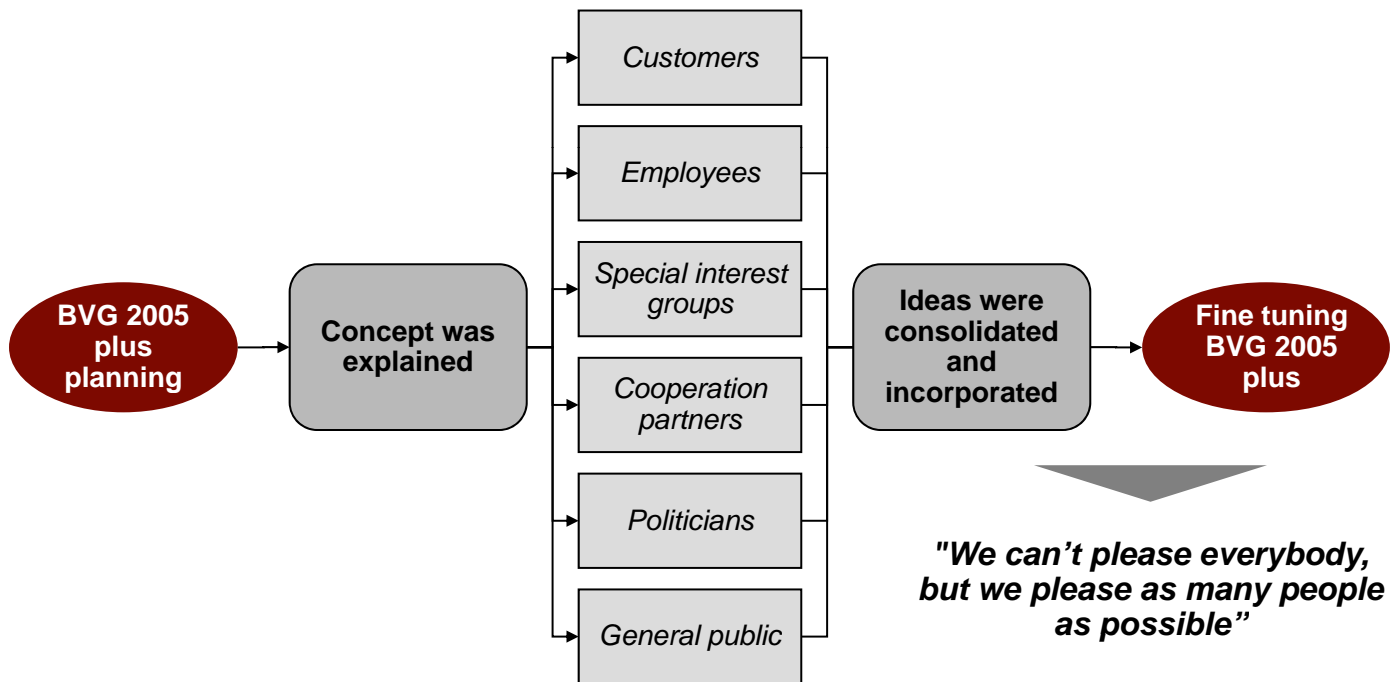


Metro bus network service

- **Main and off-peak traffic periods**
 - Mon-Fri: 6-21 hrs; Sat/Sun: 9-20 hrs
 - Metrobus lines run at least every 10 minutes
- **Base traffic period**
 - Mon-Fri: 4:30-6 hrs and 21-0:30 hrs;
 - Sat/Sun: 7-9 hrs and 20-0:30 hrs
 - Some lines run every 10 minutes, at least every 20 minutes
- **Night-time**
 - Mon-Fri: 0:30-4:30 hrs
 - Sat/Sun: 0:30-7 hrs
 - Metrobus lines run partly every 15 minutes, at least every 30 minutes

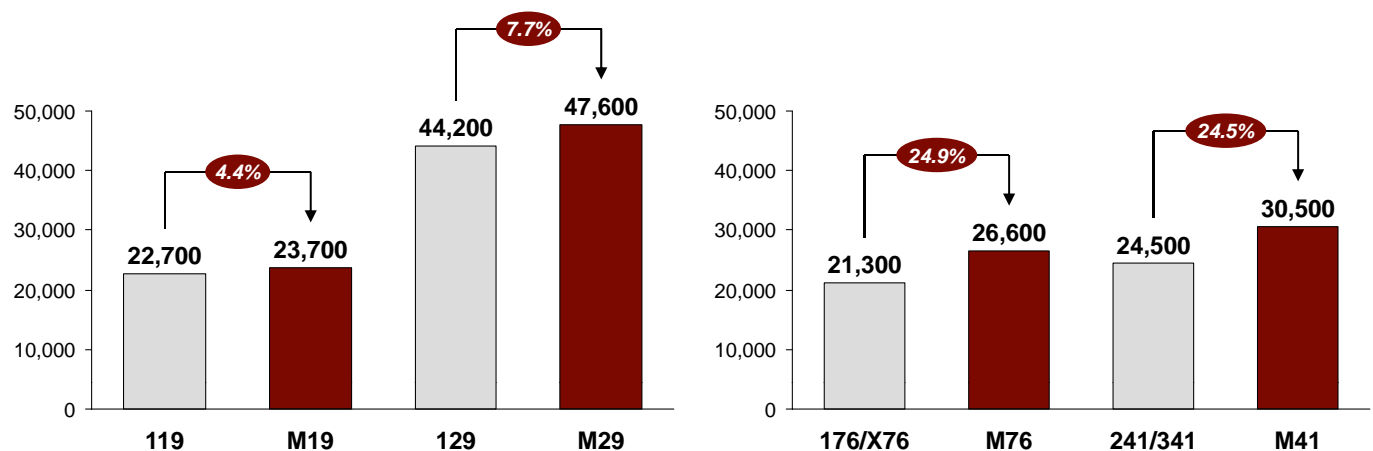
BVG sought discussion and received ideas from all sides – these have been incorporated in the planning

Involvement of all parties



All planning objectives have been confirmed – above all the significant acquisition of passengers on the Metrobus lines

Passenger trips/day



SLIGHT GROWTH IN PASSENGER NUMBERS ON ALMOST UNCHANGED METRO LINES THROUGH:

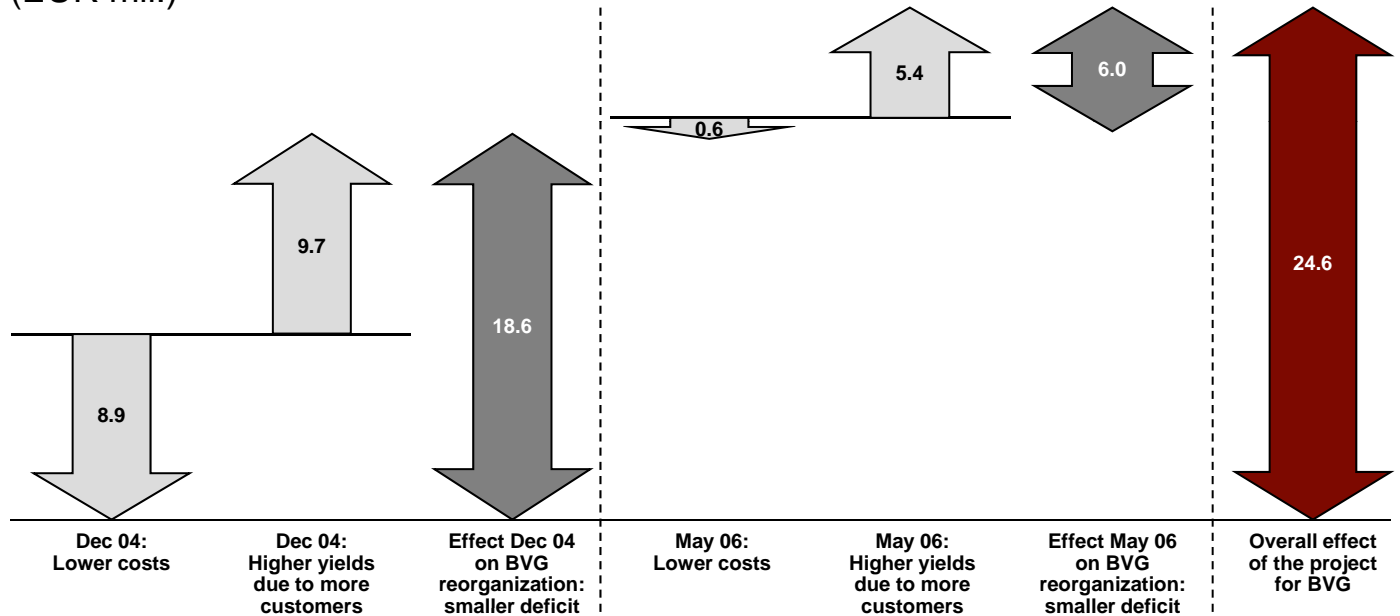
- ADVERTISING EFFECT
- NETWORK EFFECT

SIGNIFICANT PASSENGER GROWTHS ON METRO LINES WITH IMPROVEMENTS IN OFFER

- INCREASED FREQUENCY
- IMPROVED LINE ROUTE

Through greater efficiency BVG has not only succeeded in acquiring customers but also in saving costs

**Total contribution to restructure p.a.
(EUR mil.)**



Thank you very much for your interest!

Dr. Tom Reinhold

Head of Railway and Public Transport, Central Europe

tom.reinhold@atkearney.com