

Transit Service Contract Design, Tender and Monitoring – Case of Frankfurt

Burkhard Proske
traffiQ

Local Public Transport Authority
for the City of Frankfurt am Main
Germany (Europe)

**Training on Transit Alliance
and
Contract-based Transit Service**
Foshan, China
July 12-14, 2016



But what is it ...
making **traffiQ** unique in Germany



Linienbündelung Busverkehr in Frankfurt am Main



Bündel A Rödelheim

56-60-71-72-73-n3

Bündel B Höchst

50-53-54-55-58-59-n1-n11-n8

Bündel C Südmain

33-37-51-61-62-68-77-78-79-80-n7

Bündel D Ost

30-31-36-38-41-42-43-44-75-n5-n62-n63

Bündel E Stadtzentrum

32-34-39-63-64-66-n2

Bündel F Sachsenh.

Teilnetz Midibus: 35-45-47-48
Teilnetz Standardbus: 46-52

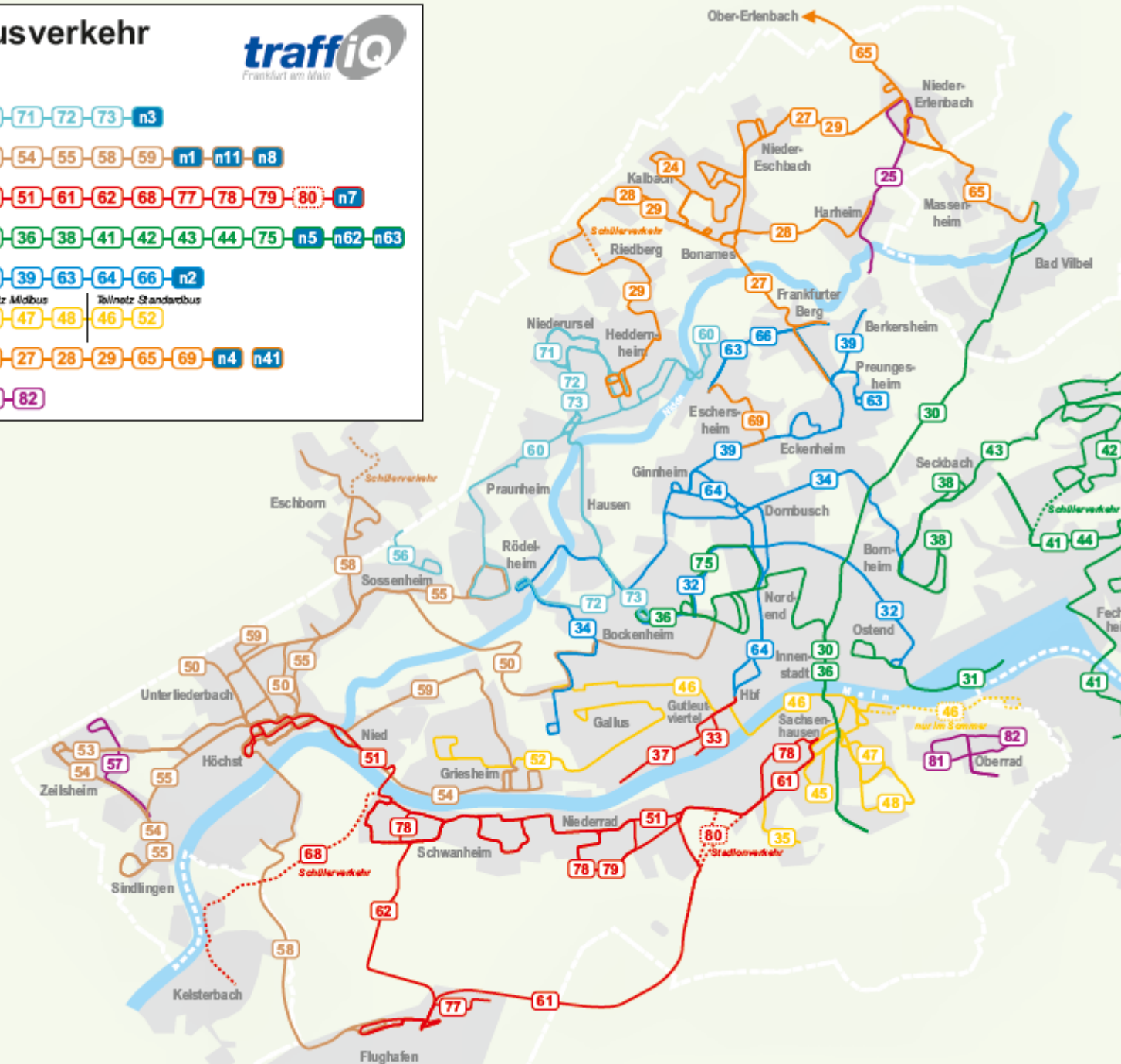
Bündel G Nord

24-25-27-28-29-65-69-n4-n41

Bündel H Kleinbus

57-81-82

Busnetz Planungsstand: 06/2016



Tendering vs. Direct Awarding



- 6 bus bundles are **tendered**
- Several private bus companies are on the market
- Easy accessible infrastructure



- light rail and 2 bus bundles:

Direct awarding to
VGF/ ICB (city owned
public transport
company)

Setting high quality standards

**increase the number of customers for
public transport**



Fundamental Contents of the Transit Service Contracts

- ▶ Duration of services, scope of services
(including operating schedule, time schedules, routes)
- ▶ Compliance with all laws, standards and requirements
- ▶ **Quality requirements for vehicles, staff, distribution**
- ▶ Reporting obligations
- ▶ Financing, provision of collaterals
- ▶ Bids are not allowed to contain public subsidies in order to be comparable
- ▶ Observance of high environmental standards are obligatory



Quality to win and keep customers

Setting high standards

Quality requirements for operation and infrastructure

Same standards for all modes (bus and rail)

Control quality

Measure hard (objective) and soft (subjective) criteria

Give incentives

Bonus payment for good services, penalty for bad ones
to fulfill standards and motivate operators

Success

Continuous increase of customer satisfaction
Saving money whilst increasing quality



Quality to win and keep customers

Setting high standards

Quality requirements for operation and infrastructure

Same standards for all modes (bus and rail)

Vehicle, infrastructure and staff requirements, e.g.

- >> Average age (vehicles)
- >> Technical equipment features (vehicles, infrastructure)
- >> Minimum space - seat partition (vehicles)
- >> Customer information (vehicles, infrastructure)
- >> Exhaust standard (vehicles)
- >> Cleanliness (vehicles, infrastructure)
- >> Knowledge of rules and regulations, network and routes, fare rates and types of tickets (staff)
- >> Good conduct of the German language and pleasant appearance (staff)
- >> Behaviour: general conduct, conversational skills, social skills relating to passengers restricted in their mobility, driving skills (staff)



Quality to win and keep customers

Setting high standards

Control quality

Measure hard (objective) and soft (subjective) criteria

Objective Criteria, e.g.

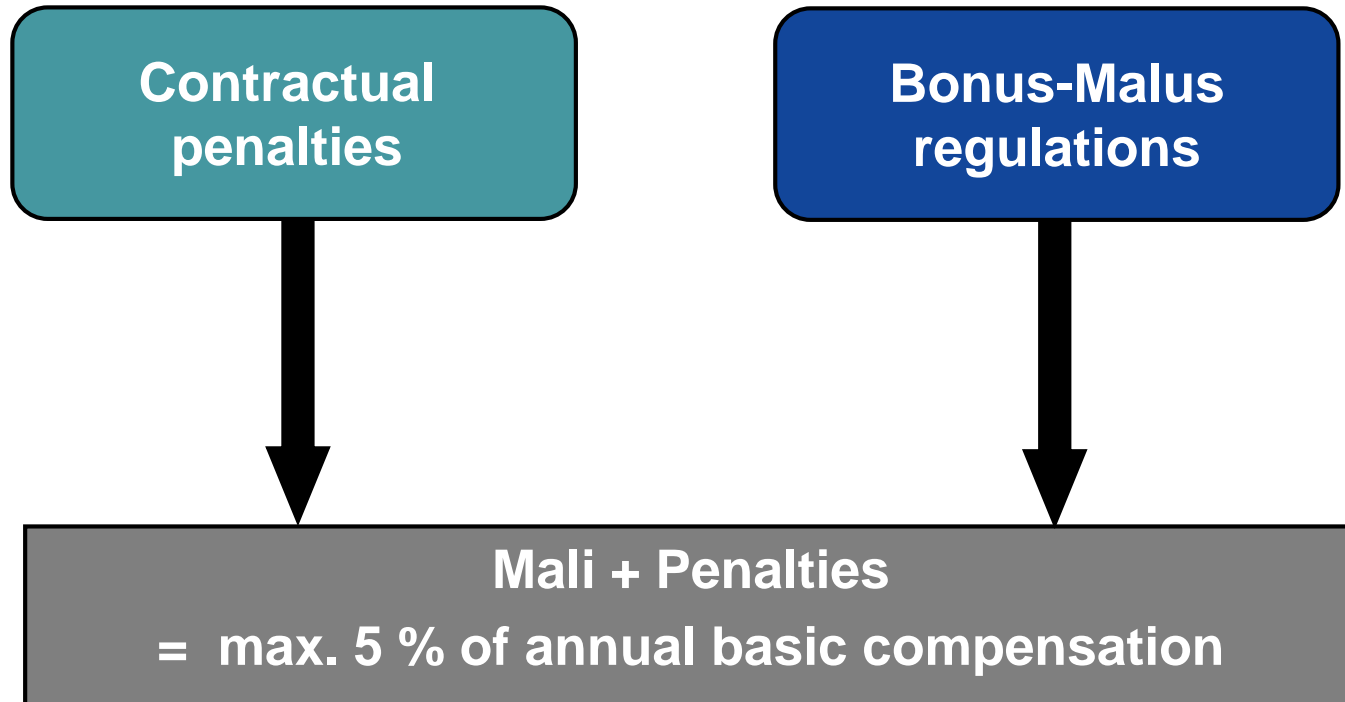
- Accuracy and efficiency of passenger information outside and on board the vehicle
- Standardized appearance of staff
- Sale of tickets
- Driving staff's knowledge of rates and location (tariff test)

Subjective criteria - Customer satisfaction, e.g.

- Punctuality
- Personal safety on board
- Temperature on board
- Cleanliness of vehicle
- Quality of information
- Style of driving
- Friendliness/responsiveness
- Appearance



Assessment and sanctioning *by means of the “Bonus-Malus-System”*



Objective (hard) quality gains

Correctness and function of the passenger information on the vehicle

A1: destination front

A2: destination door side

A3: line number front

A4: line number door side

A5: line number rear side

Correctness and function of the passenger information in the vehicle

A6: display of the next stop

A7: display of the following 3 stops

A8: display of the transfers

A9: announcement of the next stop and transfers

A10: recent network plan

A11: display stop after using the stop button

A12: acoustic „stop“ signal after using the stop button

Distribution of tickets

A13: ticket purchase possible



Subjective (soft) quality gains

Offer

B1: Punctuality

Vehicles

B2: personal security in the vehicle

B3: temperature in the vehicle

B4: cleanliness of the vehicle

Drivers

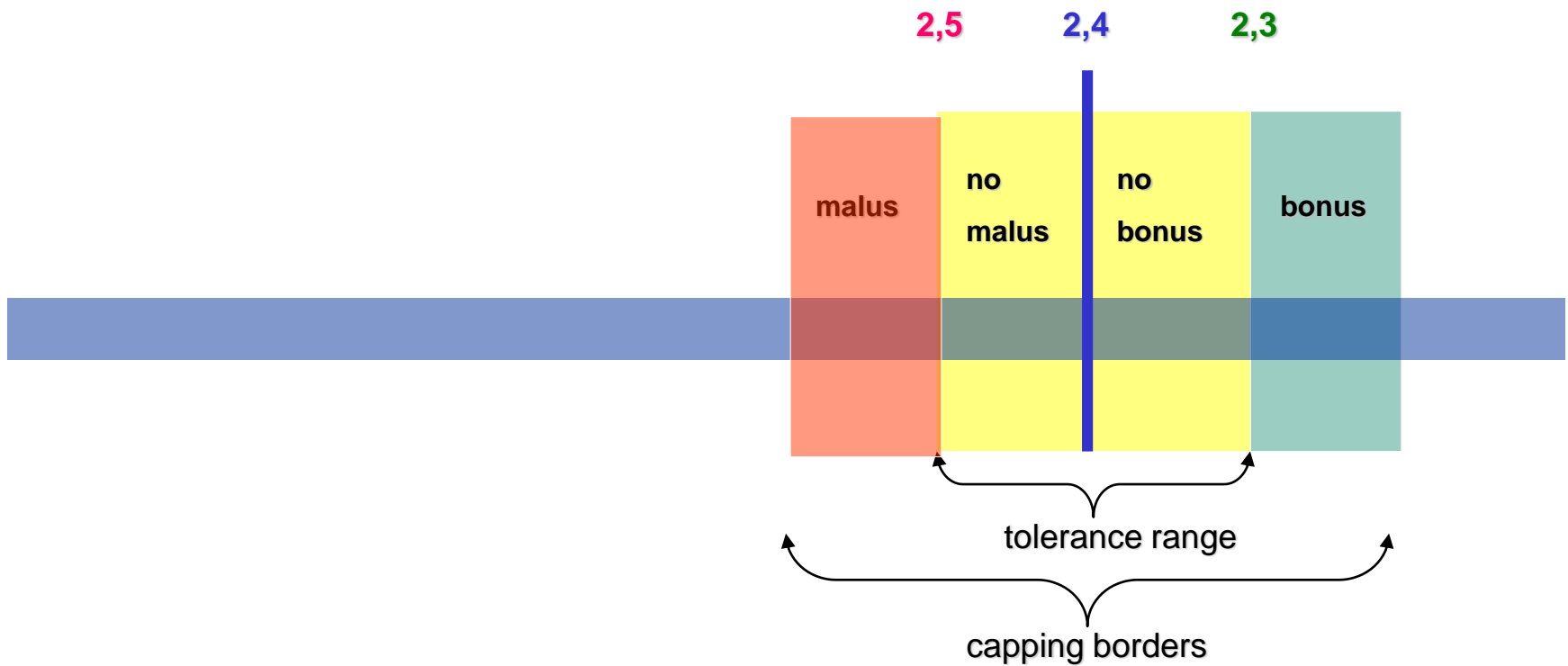
B5: quality of information

B6: way of driving

B7: kindness readiness to help



Bonus-Malus system



Verteilung des Bonus- und Malus-Budgets auf die Qualitätskriterien

Malusbudget
5% der
Grundvergütung

40%

60%

Aufteilung auf die A-Kriterien:

A1: 5%	A5: 5%	A9: 15%
A2: 5%	A6: 10%	A10: 5%
A3: 5%	A7: 5%	A11: 5%
A4: 5%	A8: 5%	A12: 5%
		A13: 25%

Aufteilung auf die B-Kriterien:

B1: 20%	B5: 12,5%
B2: 10%	B6: 12,5%
B3: 10%	B7: 12,5%
B4: 10%	B8: 12,5%

Bonusbudget
5% der
Grundvergütung

100%

Aufteilung auf die B-Kriterien:

B1: 20%	B5: 12,5%
B2: 10%	B6: 12,5%
B3: 10%	B7: 12,5%
B4: 10%	B8: 12,5%

	1	2	3 A	3 B	4	5
Bezeichnung	Kriterium	M-Grenze	Soll	B-Grenze	Ist	Ergebnis
Zufriedenheit mit der Pünktlichkeit	B1	2,5	2,4	2,3	2,3	-
Zufriedenheit mit der persönlichen Sicherheit	B2	2,0	1,9	1,8	2,0	-
Zufriedenheit mit der Temperatur im Fahrzeug	B3	2,1	2,0	1,9	1,9	-
Zufriedenheit mit der Sauberkeit des Fahrzeugs	B4	2,3	2,2	2,1	2,0	Bonus
Zufriedenheit mit der Qualität der Auskünfte des Fahrpersonals	B5	2,2	2,0	1,8	2,2	-
Zufriedenheit mit dem Fahrstil des Fahrpersonals auf der Linie	B6	2,5	2,4	2,3	2,4	-
Zufriedenheit mit der Freundlichkeit/Hilfsbereitschaft des	B7	2,2	2,1	2,0	2,1	-
Zufriedenheit mit dem äußeren Erscheinungsbild des Fahrpersonals	B8	2,0	1,9	1,8	1,9	-



Malus-Berechnung

1	2	3a	3b	4	5 a	5 b	6	7
Kriterium A	Toleranz-Wert	ermittelter IST-Wert	ermittelter IST-Wert (gerundet)	Differenz	erreichte Schrittzahl (je angef. 2%-Pkt. je Schritt)	angesetzte Schrittzahl	Malus in € pro Schritt (aus Pkt. 2a)	Malus in € pro Merkmal
A1	98%	97,9%	98%	0%	0	0	1.798,20 €	- €
A2	98%	97,8%	98%	0%	0	0	1.798,20 €	- €
A3	98%	100,0%	100%	0%	0	0	1.798,20 €	- €
A4	98%	100,0%	100%	0%	0	0	1.798,20 €	- €
A5	98%	100,0%	100%	0%	0	0	1.798,20 €	- €
A6	98%	94,8%	95%	3%	2	2	3.596,40 €	7.192,80 €
A7	98%	95,7%	96%	2%	1	1	1.798,20 €	1.798,20 €
A8	98%	97,3%	97%	1%	1	1	1.798,20 €	1.798,20 €
A9	98%	97,8%	98%	0%	0	0	5.394,60 €	- €
A10	98%	99,0%	99%	0%	0	0	1.798,20 €	- €
A11	98%	97,0%	97%	1%	1	1	1.798,20 €	1.798,20 €
A12	98%	98,1%	98%	0%	0	0	1.798,20 €	- €
A13	98%	98,8%	99%	0%	0	0	8.991,00 €	- €



Frankfurt Sustainability

green Energy (on tramway and underground)
low emission (on bus)



Environmental innovation

Demanding exhaust emission standards

traffiq as Germany's pioneer

EEV standard in all new busses since 2007

Even before low emission zones in metropolises were considered

Vehicle industry pulls along

Market for EEV busses is growing

Following development

Hybrid busses (starting early 2011)

Electric vehicles (starting late 2011)

Tramway & underground traffiq

operating completely with green energy

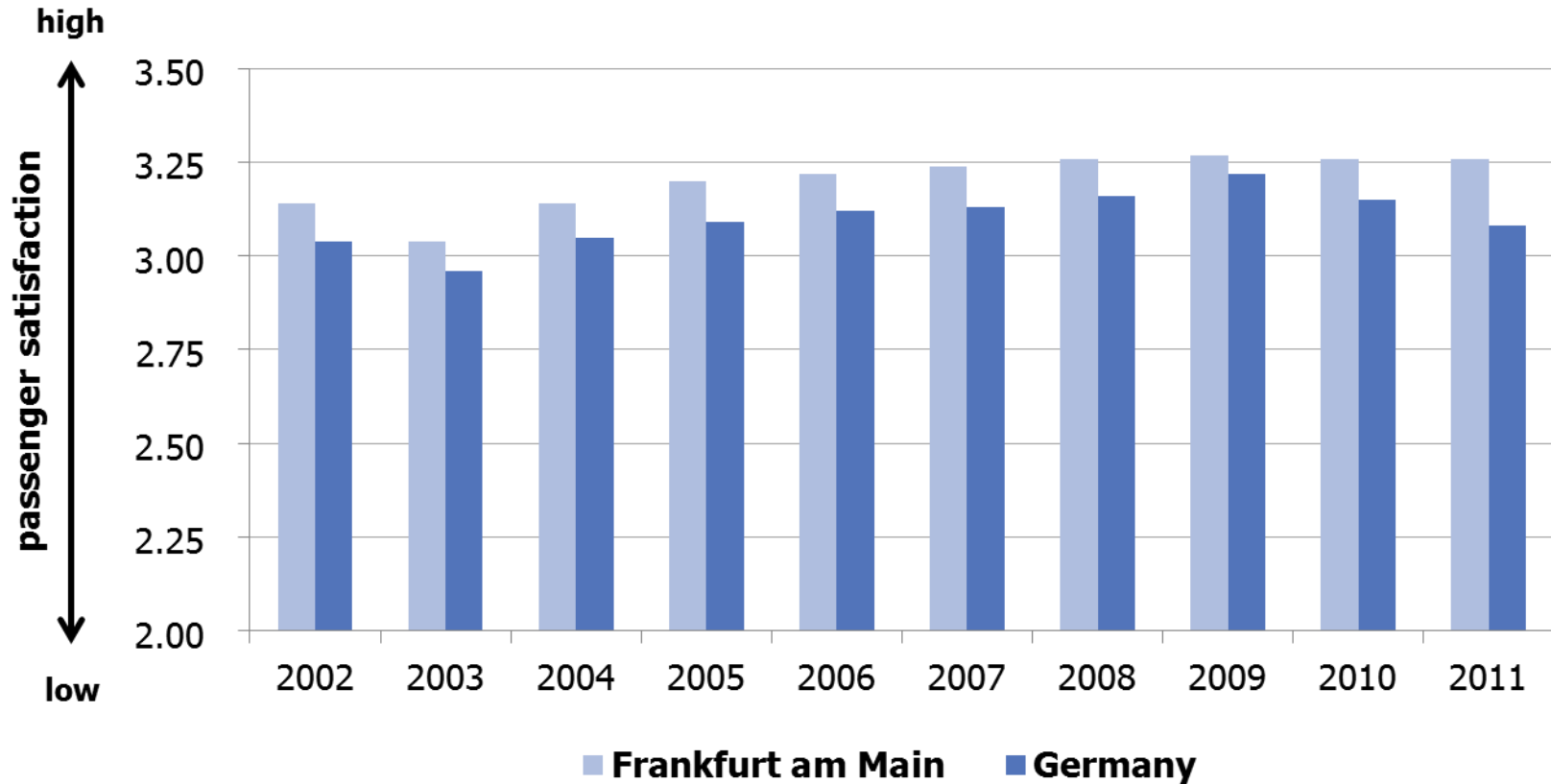
Success

Less polluting PT, reduced costs at the same time



Measure of the quality

The passenger satisfaction has increased



Passengers

2006 – 2014

Bus | Tram | U-Bahn

from **183,6 Mio.**

To **214,3 Mio.**

+ 16,7 %



Customer satisfaction also increases

We create.
Networkers for mobility!



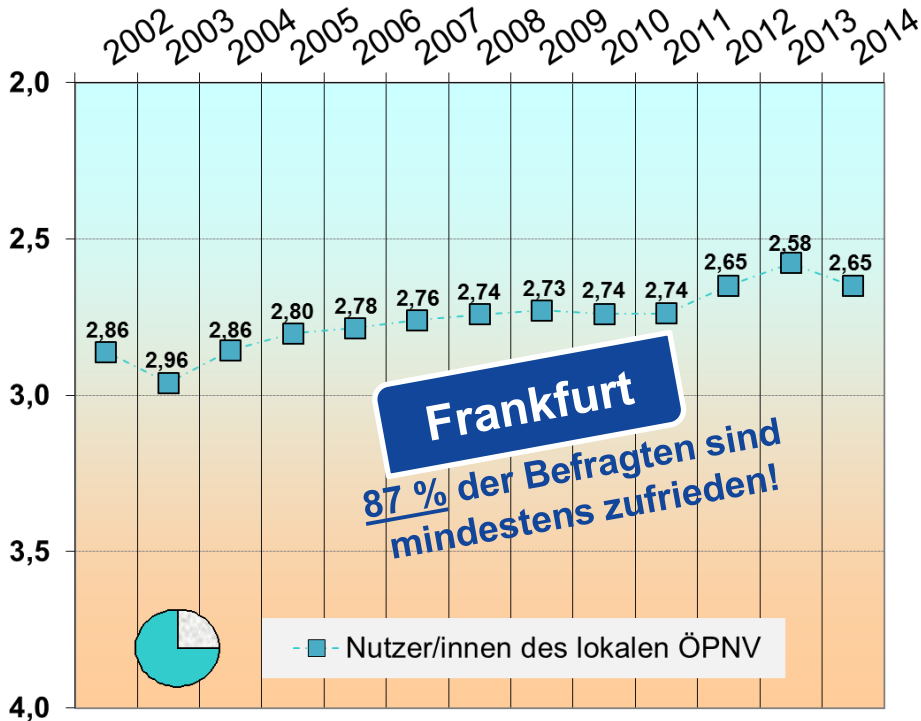
traffiQ – Local public transport authority for the City of Frankfurt, Germany



Frankfurter Fahrgäste sind zufriedener



Globalzufriedenheit mit dem Frankfurter ÖPNV
Nutzer/innen des lokalen ÖPNV



Globalzufriedenheit
Frankfurt (lokaler Verkehr) vs. Deutschland gesamt

