The Demand for Long-distance International Passenger Trains in Europe: Case study Vindobona

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8 April 2016

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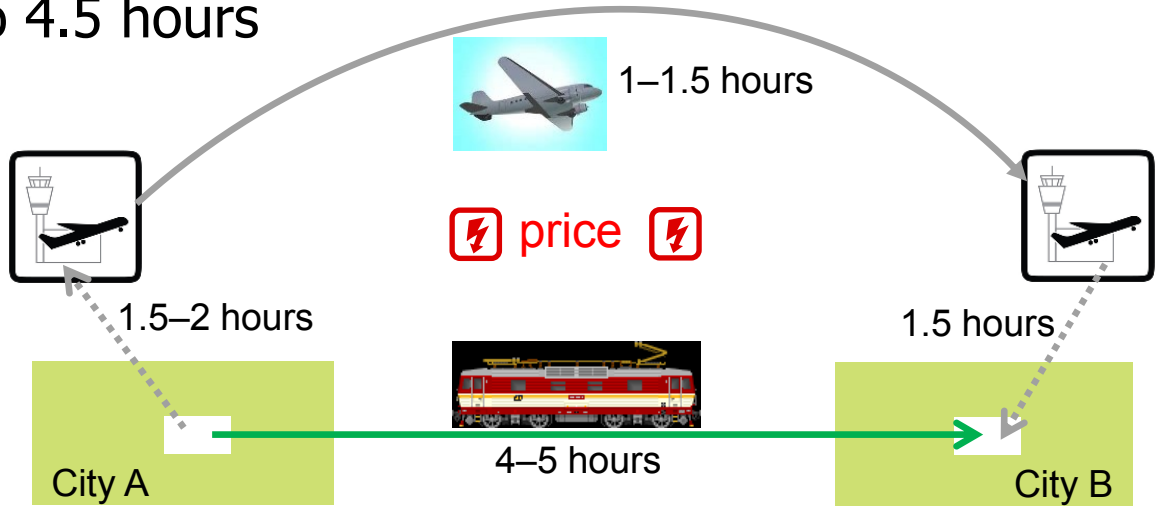
The demand for international rail travel

- Conventional wisdom: rail is competitive with air for journeys of up to 4.5 hours



Mehdorns Geständnis: Lange Bahnfahrten sind eine Tortur

Länger als vier Stunden hält es der Chef der Deutschen Bahn in seinem eigenen Produkt nicht aus: Für weitere Entfernungen läuft Hartmut Mehdorn zur Konkurrenz über.

Montag, 21.10.2002 - 15:43 Uhr

Drucken | Merken

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Berlin - Er reise die Strecke Berlin-München mit dem Flugzeug, bekannte Mehdorn in der Sendung "Unter den Linden". Der Bahn-Chef sagte laut Mitteilung des Fernsehsenders Phoenix vom Montag: "Zugfahrten über vier Stunden sind eine Tortur." Die Bahn braucht für die Verbindung nach München derzeit 6,5 Stunden. Auf Dauer wolle man die Fahrtzeit auf unter vier Stunden verkürzen, sagte Mehdorn.

DDP

Hartmut Mehdorn: Bahn ja, aber wehe, wenn's länger als vier Stunden dauert

Source: Der Spiegel

The demand for international rail travel

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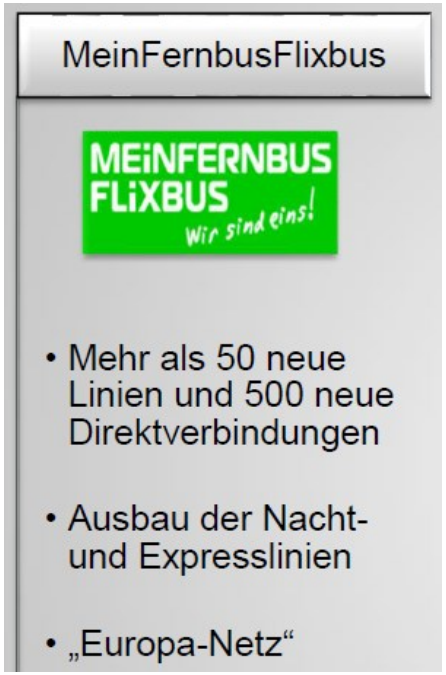


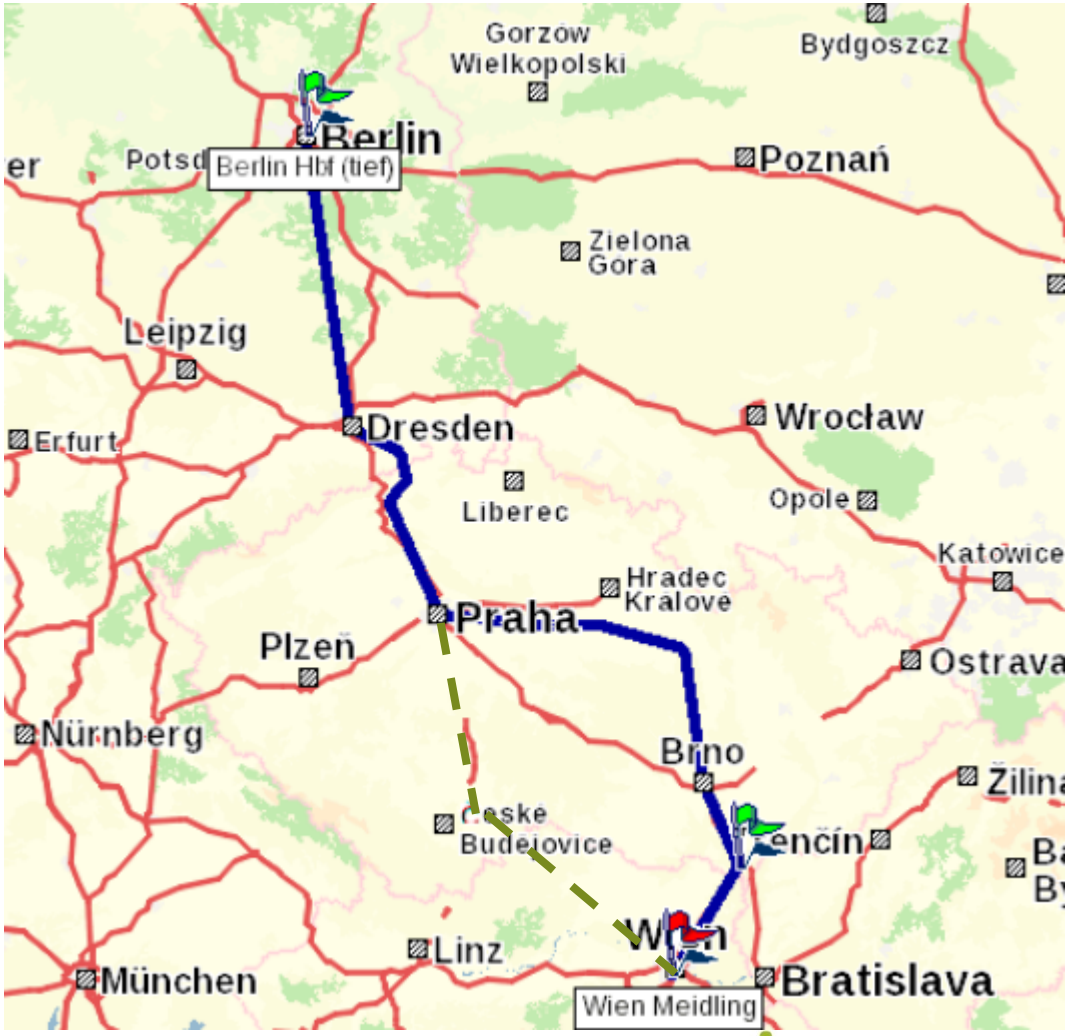
Source: SBB (September 2015)

- Inconsistent approach in recent years...

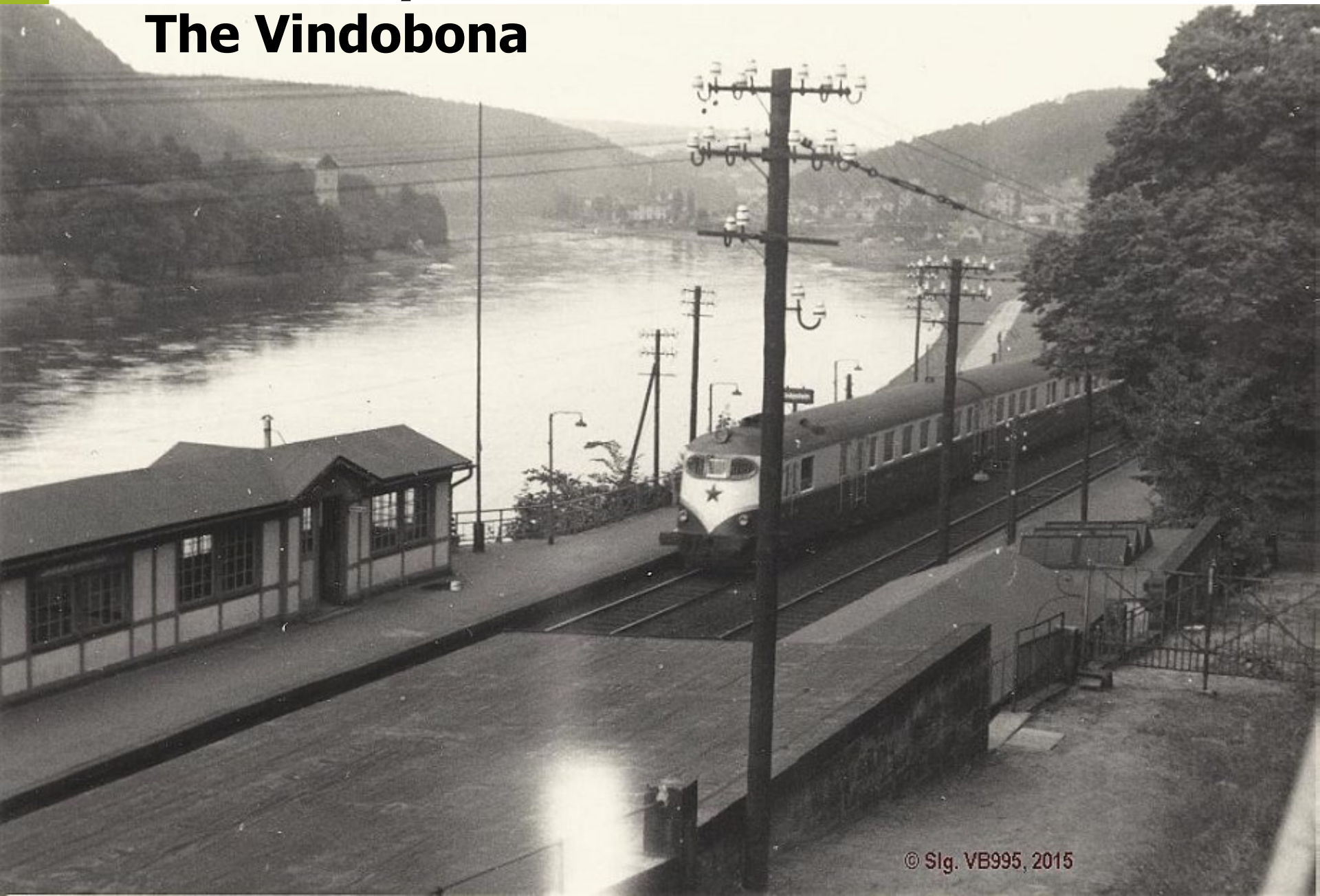
Route cuts	Status quo	Better marketing	New / reinstated routes
Brussels – Basle 6h30 Berlin – Cracow 9h30 Berlin – Vienna 9h30 / 8h50	Amsterdam – Berlin 6h25 Berlin – Interlaken Ost 9h40 Berlin – Budapest 12h00	Munich – Innsbruck – Verona (5h45) – Bologna/Rimini/ Venice (7h00+)	Paris – Barcelona 6h30 Marseille – Milan 7h30 Frankfurt – Marseille 7h50

Case study Berlin – Vienna: The Vindobona

- Express later EuroCity service on core route **Vienna – Prague – Dresden – Berlin**
- Operated continuously from 1957 until 13.12.2014
- Until 1992 ran via Tábor und Gmünd
- Later extensions to/from Hamburg and Villach
- Journey time progressively reduced



Case study Berlin – Vienna: The Vindobona



Case study Berlin – Vienna: The Vindobona

Case study Berlin – Vienna: The Vindobona

EC
EuroCity
172 Vindobona
Wien Südbf–Hohenau–Břeclav–
Brno Hlavní Nádraží–Praha Holešovice–
Děčin Hlavní Nádraží–Dresden–
Berlin-Schönefeld ✈–Berlin Ostbahnhof–
Berlin Zoo–Hamburg-Altona
DB
180 018-4

Case study Berlin – Vienna: The Vindobona

Case study Berlin – Vienna: The Vindobona

Case study Berlin – Vienna: Background to study

- Withdrawal of the EuroCity *Vindobona* in December 2014
  - only direct day train Berlin / Dresden – Vienna
  - anecdotal evidence that train well used by through passengers despite lack of marketing
  - theses:
    - significant demand for direct service exists
    - withdrawal of train would lead to loss of rail passengers

- Estimation of demand Vienna – Berlin in 2013:
  - 2,741,000 return trips by train AT – DE and v.v. (Source: Eurostat)
  - Vienna – Berlin = ca. 6% of total (Source: Eurostat)
    → ca. 165,000 return trips Vienna – Berlin
    → 226 single trips / day → plausible?

Case study Berlin – Vienna: Background to study

- Alternatives…

Mode / route	Journey time	Number of changes	Frequency / day	One-way fare range in second class / EUR
Direct EuroCity day train Vindobona	9h30	0	1	39 – 129
Other EuroCity trains via Břeclav	9h30	1	1	39 – 129
Overnight train via Břeclav	10h40 / 12h00	0	1	29 – 219
ICE via Fulda / Würzburg	9h30	1	1	39 – 197
ICE via Fulda / Würzburg	9h30	2	3	39 – 197
Long-distance buses	8h45	0	11	19 – 80
Direct flights Tegel – Schwechat	2h00 + 1h20 + 1h00 = 4h20	0	10	99 – 155 (Air Berlin)

Based on published information in September 2014

- Note no direct flights Dresden – Vienna

Case study Berlin – Vienna: Background to study

- Alternatives…

Berlin Hbf	Tu, 30.06.15	dep	09:34	9:38	2	ICE	No special fares available	197,00 EUR → Purchase
Wien Hbf	Tu, 30.06.15	arr	19:12					

Station/Stop	Date	Time		Platform	Products	
Berlin Hbf	Tu, 30.06.15	dep	09:34	13	ICE 597	Intercity-Express Direction: München Hbf
Fulda	Tu, 30.06.15	arr	12:45	4		Bordrestaurant
Transfer time 11 min.						→ Adjust the transfer time
Fulda	Tu, 30.06.15	dep	12:56	4	ICE 787	Intercity-Express Direction: München Hbf
Würzburg Hbf	Tu, 30.06.15	arr	13:27	5		Bordrestaurant
Transfer time 6 min.		Connecting train may not be reached in time.				→ Adjust the transfer time
Würzburg Hbf	Tu, 30.06.15	dep	13:33	4	ICE 27	Intercity-Express Direction: Flughafen Wien
Wien Hbf	Tu, 30.06.15	arr	19:12	12A-C		Bordrestaurant

- 4 EasyJet flights / week since October 2015

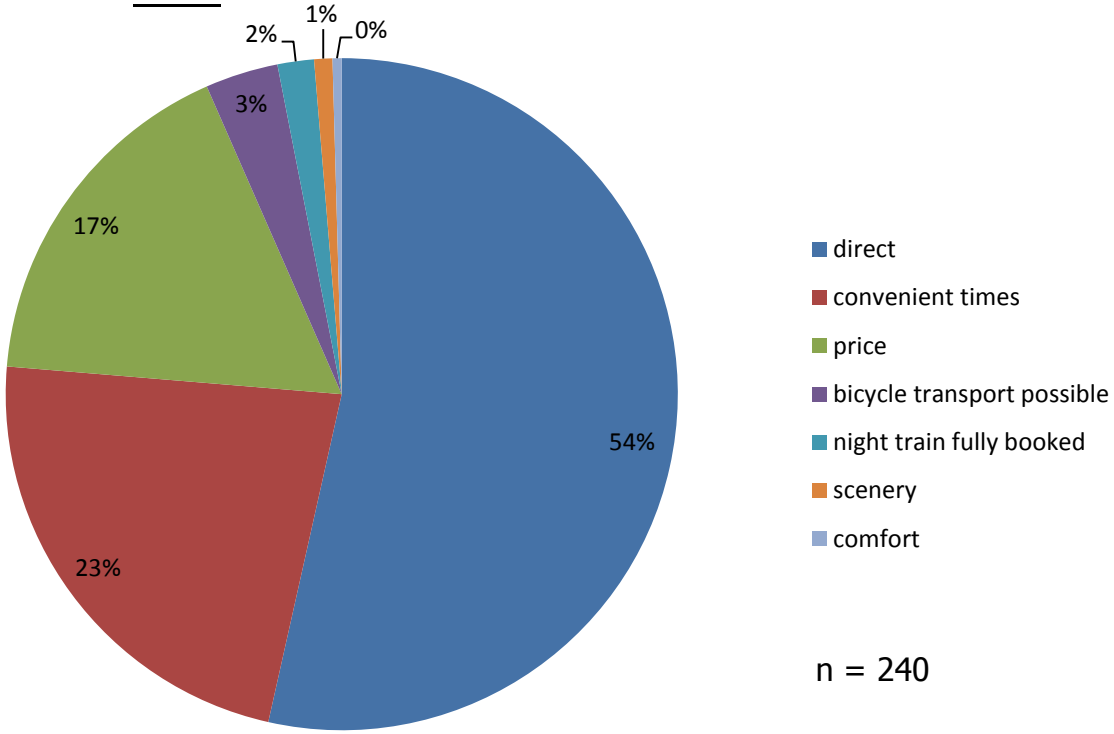
Case study Vindobona: survey results Passenger counts

- In summer: up to 90 through passengers per train between DE und AT; 54 on average
- In autumn: up to 69 through passengers per train; 34 on average

AT – DE reservations in northbound EC 172	Maximum without scaling	Maximum with scaling	Average without scaling	Average with scaling	Scaling factor
August 2014	82	90	49	54	10%
September 2014	34	41	22	26	20%
October – November 2014 (affected by strikes)	55	69	27	34	25%

Case study Vindobona: survey results On-train questionnaire

- Why do you use <u>this</u> train?



n = 240

- 54% said "no change"/"direct"
- BUT convenient departure/arrival times and attractive prices play an important role → 68% of respondents used advance purchase ticket

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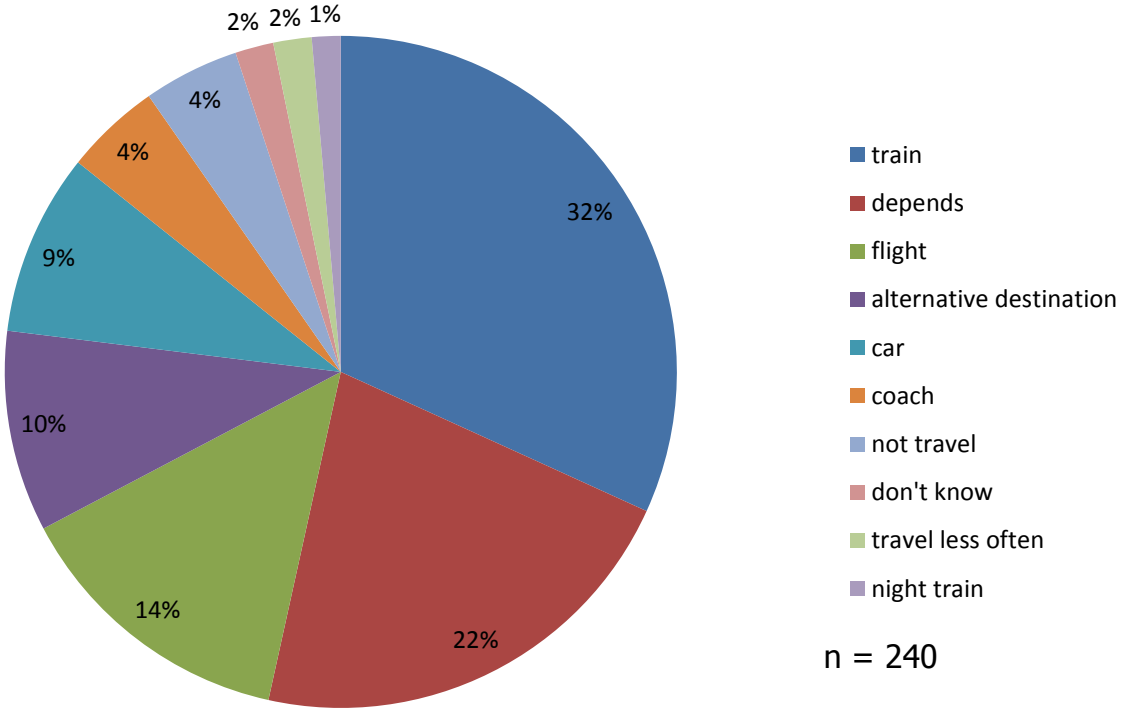
Case study Vindobona: survey results On-train questionnaire

- What would you have done, if <u>this</u> direct train did not exist?



n = 240

- 64% of respondents would change or consider changing behaviour
- 23% of respondents would fly or use a car
- 22% said it depends on alternatives

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Case study Vindobona: conclusions

- Thesis 1. The demand for direct trains between Berlin and Vienna is non-trivial despite the journey time
  - up to 90 passengers AT – DE per train ☑
- Thesis 2. Passengers use the Vindobona because it is direct
  - yes according to 54% of respondents ☑
    - but price and convenience influence decision-making
- Thesis 3. The loss of the Vindobona would lead to a significant loss of rail passengers
  - one third of respondents would use alternative modes, not travel or travel less often ☑
    → commercial and environmental implications
  - additional 22% said it depends
    → attractiveness of alternative rail connections decisive → price, number & nature/reliability of connections

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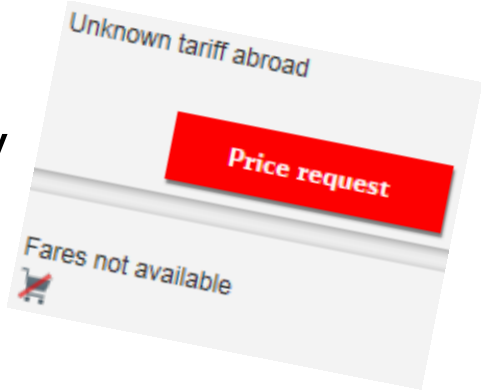
Case study Vindobona: concluding thoughts

- Should Vindobona be reinstated?
  - follow-up study? Requires demand data from operators...
- Direct connections make rail more attractive vs. other modes
  - interchange is a major deterrent
- Booking international trains must be easy



- Study urgently needed on state of international passenger train network
  - what has been cut and why? which city pairs are badly served and why?
  - what runs and why? what are the success factors?
  - more research needed on the characterisation of demand for > 4.5 hours:
    - the environmentally aware
    - those with a fear / dislike of flying
    - Der Weg ist das Ziel: fans of *slow travel*
    - those who particularly value <u>direct</u> services: seniors, the disabled, families, those with luggage

How big are these target groups?

Thank you for your attention!

Questions / Fragen?

Contact: maarfield@kcw-online.de