Night trains versus airlines

Why are trains about to lose, and
why is it so terribly wrong?

By Poul Kattler

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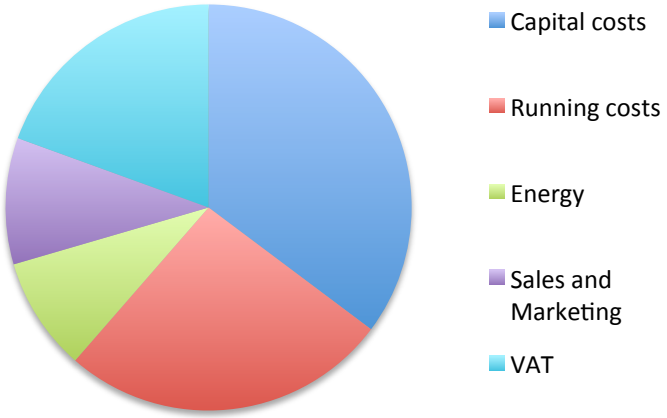
- Organised the demonstration against the termination of the Copenhagen Night Train last November
- Active in Back on Track
- Professional working as exhibition developer at the Danish Science Centre in Copenhagen

Why are low-cost airlines about to sweep out night trains? A business case.

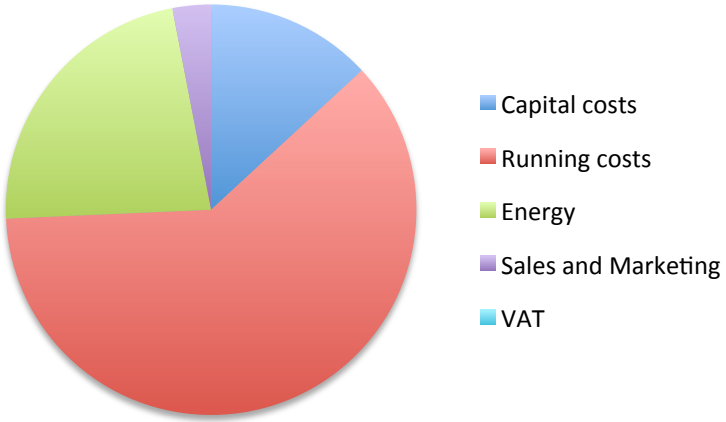
- What are the costs?

Night train new concept



88 € per passenger

Easy Jet



86 € per passenger

Almost the same

1000 km run – rather typical inter-EU journey

- Night train = 88€ with occupancy 67 %
- Easy jet = 86€ with occupancy 89 %

Trains pay the price for running on tracks for all kilometres and station halts.

- Air traffic is free in the air, pay at airports
- (Long distance buses are also enjoying ”free air”)

But so different

- Energy consumption as part of running costs is 9 % to train, 27 % to plane (IATA)
- In Euro it is 8€ compared with 19€
- Trains are paying all taxes on fuel, incl. green taxes on energy from windmills. Planes pay nothing (notice a special CO_2 market)
- With the same tax on fuel the comparison will be 8€ to 58€

Also VAT is so different

- Trains pay VAT in many countries, in Germany full 19 %.
- Airlines pay nothing.
- On the ”basis price” in € of 1000 km this means

❑ Train 17€ in any case

❑ Airline 0€ compared with 16€ (incl. VAT)

So: If taxes were equal

Train 1000 km trip

Capital costs = 31€

Running costs = 23€

Energy = 8€

S & M = 8€

VAT = 17€

Total = 88€

Plane 1000 km trip

Capital costs = 11€

Running costs = 52€

Energy = 58€

S & M = 3€

VAT = 23€

Total = 147€

(before = 86€)

Europe is subsidising air traffic

- With 61 Euro per travel !!!
- Do you wonder why train traffic is having a hard time?
- Is it good, anyway? Because we save travel time, isn't?

Why are air planes so much worse than trains in relation to the climate?

CO_2 emissions for passenger transportation is calculated in CO_2 (g/pkm)=(g/person km)

In 2013 it was like this:

- Trains = 17 g/pkm
- Air plane = 286 g/pkm

on typical European distances

Will it change?

- Not very likely. Air planes has been almost the same since year 2000, trains has as the only mean of transport improved – using more green electricity.
- Air planes has no green technology in the future, - no really hope.
- Trains can go on 100 % renewable energy – will do it soon!

CO_2 emission and climate change

Unfortunately air planes are causing much more harm than ”just” CO_2 in the height where stuff is emitted:

- Methane, ozone and other gasses
- Air stripes and contribution to high clouds

In a 20 years horizon CO_2 shall be multiplied by 2 – 4 to give the real negative influence to the climate. Let’s call it a “climate accelerator”

The real difference to climate

- In pure CO_2 the train/plane ratio is 1:17
- With a climate accelerator set on 3
- The difference between train and air planes is 1:50
- This means you can travel between London and Paris 50 times on train to disturb the climate as much as by one time on plane!

Obviously a wrong direction

- In 2050 there shall run no air planes in Europe on fossil fuels (:European Commission 2011)
- The increase in European air traffic from 2012 – 2050 with no interventions will be 270 % (:Eurocontrol 2013)

Why are closures of night train special painful to Scandinavian countries?

- Oslo, Stockholm and Copenhagen are too far away from high speed day railway transport.
- The night train from Copenhagen was the only way to make a long rail journey – it closed 4.11. 2014. It left 185.000 yearly journeys to other means of transport or no transport – DB count ¾ to airlines.
- No real alternative is left to us. People with bikes, large luggage and those who can not take planes are completely lost.

Sources

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