



Hochgeschwindigkeitsverkehr zu niedrigen Kosten – Analogien und Unterschiede zu den Billigfliegern

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Introduction

Over the last couple of years, no-frills low-cost airlines have enjoyed a phenomenal success in Europe, and they have now become an integral part of the intra-continental airline industry. Today, passengers are familiar with the low-cost no-frills concept, with its focus on internet-distribution, as well as with the fare restrictions that come with a typical low-fare e-ticket. In fact, many people that had never flown before, have now become frequent flyers on low-cost airlines – some of them have even started flying on the traditional full-frills carriers. In other words, a completely new air services market has been generated: on the one hand more people are travelling at lower prices, with the traditional and new low-cost airlines alike; on the other hand a completely new – and very loyal – customer base has been created at secondary airports, where people prefer either the relative convenience (e.g. local businesses) or the fantastic value-for-money that is being put on offer.

Throughout Western-Europe, very high speed rail (H.S.R.) has enjoyed an impressive, although somewhat slower overall success as well: services like TGV and Thalys being the most striking examples of this popularity. However, the high speed infrastructure that is required for trains to run at very high speeds is very expensive and will probably never be profitable as such – which is why it has been built and financed with taxpayers' money. Moreover, the available infrastructure is not always interoperable – especially on international routes. As a result, and this can be quite expensive too, the rolling stock has to be made multifunctional to provide for the necessary interoperability. Nevertheless, economic and political imperatives – especially on the mid-range distances between international and/or regional decision making centres – call for ever longer, faster and more interoperable High Speed Lines, once again to be co-financed by public authorities. Nowadays, H.S.R. is an important part of the Trans-European Networks – as are most of the airlines.

Too bad therefore, that many ICE, TGV or Thalys tickets that are being put on offer by the incumbent railways, are not really democratically priced at all – on the contrary! Too bad therefore also, that some high speed trains are actually running virtually empty. And too bad therefore as well, that there is no real competition in the H.S.R. market – driving railway management to better follow the decisions of their sales & marketing department and to better serve the real needs of the (potential) customers. In fact, we have all had to pay for the hefty investments that were required to build the new H.S.R. infrastructure, and we will continue to do so for many generations to come. But why ??? For the sake of moving air instead of passengers? For the travelling comfort of a few privileged business people and politicians? For the pleasure of those happy few that can afford to use the high speed trains on a regular basis, and do not seem to care about the mobility and/or the financial well-being of their fellow taxpayers? And if it is true indeed that tourists and other "second





class" citizens are allowed to board the high speed trains too, in the back of the train of course, isn't that only after they have first emptied their pockets?

Talking about an institutionalised rip-off: remember the times when the airspace was reserved for "our" national flag-carriers? Well, at least back then we didn't have to put up for such an extra-ordinarily piece of infrastructure that was to be put in place between our origin and destination cities. And just try to imagine what would happen if the access to our highways, airports and seaports were to be turned back into a big state-run monopoly – people in the East sure know what we're talking about here... With one major difference however: high speed trains are NOT democratically accessible to all, at all. The incremental operating costs are way too high, and the present price structure and yield management techniques are nothing more than a scam: pricing is either non-transparent and very difficult to understand (ICE), or it is oversimplified and under-optimised (Thalys). What it basically comes down to is that the lower social classes, as well as many small businesses, are simply being kept out as much as possible, although they also have to pay taxes to cover for the high speed privileges of the rich and the beautiful. But then of course it is always possible to get a job, cleaning and tidying up the train after the fat cats have gone home...

Today it has become cheaper to fly from Berlin to Cologne on a private low-cost airline, than it is to travel over the infrastructure that was financed with our public funds. True, maybe it makes more sense for people to fly over long distances, but still: more than often flights are fully booked, while the high speed trains are running virtually empty. E.g. many high speed trains out of Brussels-Midi are running almost empty early in the morning and late at night – at the same time however Ryanair-flights in and out of Brussels-South airport are crowded with people; so the argument that people are simply not interested in travelling at such 'impossible hours' is untrue. Besides, isn't it a lot harder to get to those remote secondary airports than it is to get to the downtown railway station? And for sure, there are no bar-cars on Ryanair planes!!!

So what is being the problem then??? Why did the incumbent railways invest such colossal amounts of taxpayers' money in public works that are now being under-utilised? And why do the incumbents insist on providing for bar cars and on-board-entertainment systems (e.g. on the ICE trains), if it has now become clear that most people really cannot afford or simply do not want to pay for any such frills? Sure, there seems to be a profitable market of business travellers – but in many circumstances low-cost railways would be perfectly able to serve this market too. And of course it should have been possible to carry a lot more passengers, at a far lesser cost - if it weren't for the interests of those jumpy politicians and hungry construction companies; not to mention the "inefficiencies and ineffectiveness" of a typical state-owned enterprise. But that shouldn't make the case for the railways' commercial policies – imagine Deutsche Post charging 2€ extra per letter it has to deliver, because of the exorbitant costs and investments it took to build the German Autobahn network...





Anyway, taking a look at other segments of the transportation industry - ranging from free public buses in Hasselt-Belgium, over the "regular service" taxi-vans in Africa, to the TGV-Prems special offers on www.sncfvoyages.fr - one can see that for the majority of the "potentially" travelling public, overall transportation remains a price-elastic rather than a service-elastic product. Until the arrival of the low cost airlines, many people simply preferred to stay at home and watch T.V. - less could they care about that crazy tower in Pisa or about the Big Ben in London. And likewise: until the arrival of low-cost high-speed trains, many potential business travellers will simply hang around in the office; students will skip classes and study trips; family fathers will spend their hard-earned money on beer and lap dancing in the local pub - instead of on a day out with the family; overseas backpackers will get stuck in London and in Paris; and loved ones will break up; while a lot of pensioners, many of whom are also potential high speed train customers, will stay at home and watch T.V., cultivating their always increasing fear of self-imagined dangers... Similarly, until the arrival of low-cost high speed rail, other travellers will continue to prefer the relative comfort and the privacy of their own car, or the fantastic value-for-money offered by the (very polluting) low-cost airlines. So in the end only a few privileged travellers, most of whom do not really have to care about the price of a ticket (maybe the boss is paying anyway?), or many of whom have no other choice, will opt for the over-costly, overpriced high speed railway services of incumbent operators like ICE or Thalys, travelling in trains with occupancy rates between 180% and 20%.

Bashing big bureaucratic incumbent railways like SNCF and DBAG is easy. Bashing the SNCB probably even more so – obviously. But clearly, there are also a lot of problems with "high profile" services like Thalys and TGV. Of course the big incumbents have their own cost structures, as they have to look after the going concern of their many different business activities and as they very often are tied by what the politicians and unions tell them to do. In fact, it has now become absolutely clear that the incumbent railways will simply never be able to embrace any really low-cost transportation business model: DBAG's new fare and ticketing system is a striking example of said paradigm. Big incumbent airlines like BA, KLM or Air France themselves have never been able to successfully operate low-cost business units either, even though they have been able to fine-tune and optimise their own full-frills network costs as well as their already successfully yield-managed revenues, in an apparent reaction to the phenomenal success of Europe's low-cost airlines. In the following pages – within the very limited scope of this presentation – we will explain why and how this is, and we will also examine the case of some particular low cost airlines such as Virgin Express, Virgin Blue and GermanWings, which have been successfully incorporated as completely independent low-cost sister-operations of both Virgin Atlantic and Lufthansa – modelled on benchmarks and best practices that were set by independent low-cost airlines such as Southwest, Ryanair and Easyjet.

As the railway industry is now slowly evolving towards deregulation and increased competition, the European high-speed railway sector will have to adapt lower-cost business models – even on routes where monopolies are still in place. There is no doubt that some of the major incumbent railways will start competing against





each other – despite all the ongoing talk about their natural monopolies – whereas others might simply disappear. At the same time, the emergence of new, really low-cost companies, who will take on the incumbent operators, can be expected; just as has happened in the airline industry. In this article we will highlight some of the major similarities and differences between both industries, we will present the case for the low-cost business model, and we will also present VENGO RAIL – Europe's first low-cost high-speed railway. As we will see, low-cost business practices throughout the railway industry are not only necessary from a financial and political point of view; they also offer some amazing opportunities for the future leaders in the international mid-range high-speed railway market.

COMPARISON: SOME MAJOR ISSUES

LOW COST AIRLINES	LOW COST H.S.R.
LOW COST AIRPORTS (2 MODELS)	STATIONS (1 MODEL)
Accessibility	Accessibilty
Intermodal Feeder traffic	 Inter- and intra-modal Feeder traffic
Airport facilities – Conversion of military airports	Station facilities
Third party payments and incentives	 Third party payments and incentives
FLIGHT-FEEDERS	HIGH SPEED TRAIN-FEEDERS
Virtually inexistant	• Virtually inexistant (except when bridging cities)
MARKET GENERATION – VALUE FOR MONEY	MARKET GENERATION – VALUE FOR MONEY
Accessibility of new destinations	• ± IDEM: less exotic destinations / easier to travel
Democratize air travel, make it available to the masses	 Democratize H.S.R., make it available to the masses, turnaround rail malaise
Stunt fares and super promos	Stunt fares are necessary !!! (price elasticity)
Fair and Transparent prices – Communication	Fair, Transparent and Simplified fares: necessary
Cheap, Automated internet-based distribution	 Opportunities for Internet-based distribution
VALUE FOR MONEY	VALUE FOR MONEY
Sometimes extremely high, very spectacular	 Sometimes extremely high, less spectacular
AIRLINERS POOL	NO HST POOL
Liquid market for airplanes – fully interoperable – maintenance is a secondary problem	 no secondary market for H.S.R. E.R.S. – often not interoperable internationally – maintenance is a major problem



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AIRLINER ASSET FINANCE	ERS – NRS H.S.R. ASSET FINANCE
 Developed market – competitive 	 Under-developed market – public works
 Transparent – reliable residual value forecasts 	 Residual value forecasting more difficult (e.g. E.R.S./N.R.S. life span and lifecycle costs)
PLANE MANUFACTURERS	HST MANUFACTURERS
Dynamic duopoly	 Imperfect market (5 players)
International, customer focussed product range	Public works mentality – economic compensation
 Developed maintenance market 	Tailor-made product range – RAMS efficiencies
	Underdeveloped maintenance market
RUNWAY SLOT ALLOCATION	RAIL SLOT ALLOCATION
 Focus on airports: grandfather rights 	Focus on rail slots: NO grandfather rights
 Business-like interaction between airports, ATC and operators 	 Slots re-allocated annually, nationally
	• International H.S.R. has priority art.22, 2001/14
	Competition on some routes
	 Monopoly mentality prevails
INFRASTRUCTURE MANAGEMENT	INFRASTRUCTURE MANAGEMENT
Independent	Dependent
Privatised	H.S.R. infrastructure publicly funded
Universal – Standardised communication	• Line-side signalling and communication systems
	• PPP (HSL-Zuid – Chunnel) – anti-competitive
State-of-the-art ATC (e.g. Eurocontrol)	???
AIR / SERVICES INDUSTRY	RAIL / SERVICES INDUSTRY
• Well developed, international business – sometimes vertically integrated, but competitive (e.g. Lufthansa Technics is in charge of the maintenance of most of the Ryanair planes)	• Under-developed industry – often anti- competitive behaviour, or "ententes" between incumbent state-owned operators.





LEGAL FRAMEWORK	LEGAL FRAMEWORK
"Freedoms of the air" - Cabotage	• 1st Railway package (E.U.)
Eurocontrol (1960)	2001/12/EC amends 91/440/EC, (TERFN). 2001/13/EC amends 95/18/EC, (EU licensing) 2001/14/EC replaces 95/19/EC, (infrastructure)
 3 Air Services Packages (E.U.) 1st Package: Rules relaxation (e.g. fares) 2nd Package: More Freedoms of the air 3rd Package: Complete intra-EU Liberalisation - EC/2407/92 : E.ULicence - EC/2408/92 : Free market access (PSO) - EC/2409/92 : Free fares 	• E.N.S. Ltd, (§182), international grouping Art.3 EC/91/440
	• Art. 81, Art.82, Art.86, Regulation 17/62, Regulation 141/62, Regulation 1017/68
	• Reg.1191/69, amended by Reg.1893/91 (PSO)
FLIGHT TIMETABLES	TRAIN TIMETABLES
Flights: 3-dimensional	Trains: 1-dimensional
Robustness required	Reliable and Robust Timetables required
• Virtually no interaction between operators (ATC)	 Interaction between operators – new communication and navigation systems required
Seasonal changes - flexibility	Yearly changes – relative inflexibility
Very short turn-around times	Shared platforms
LOW COST AIRLINE ROUTE NETWORK	LOW COST H.S.R. ROUTE NETWORK
Point-to-point, based in big catchment areas	Point-to-point, cross-border routes
Regular changes	In competition with incumbents' corridor lines
Mid-range distances	Mid-range distances
FREQUENCY	FREQUENCIES
Depending on market conditions	Very high on trunk routes
Case 1: BA/GO, KLM/BUZZ	Case 1: ICE/PLAN&SPAR, SNCF/PREMS
Incumbent / followers	Incumbent / monopolists: future followers ?
Case 2: EASYJET, RYANAIR	Case 2: VENGO RAIL
New entrants / leaders	New entrant / future leader
Case 3: VIRGIN EXPRESS - VIRGIN BLUE GERMANWINGS	Case 3: NONE SO FAR
 Incumbent / leaders – major players 	





AIR LEGACY	RAIL LEGACY
 Very good – positive change – safe image (Southwest, Ryanair, Easyjet) 	 Privatisations U.K. – bad, expensive and unsafe (Railtrack, B.R., Amtrack,)
AIRLINERS - GEOPOLITICS	HIGH SPEED RAIL - GEOPOLITICS
Economy – Military – Flag carrier protection	 Economy – Overall mobility – Social politics
COMPETITIVE ENVIRONMENT	PUBLIC-WORKS MENTALITY
Very competitive – Cut-throat	Monopolies
 Fast – sexy jobs (high turnover) 	 Slow – 'state' jobs (job for life)
 Fun – Sexy babes – Lots of smiles 	 Bureaucracy – Unions
Employee incentive programs	NEED FOR CHANGE !!!

THE VENGO RAIL BUSINESS-CASE

The thrills not the frills

VENGO RAIL is a new low-cost high-speed railway, based in Brussels, that will provide an offer that customers simply cannot resist: the speed and convenience of an ordinary Thalys trip, at as low a cost as possible. On mid-range connections under 3 hours 'ordinary people' do not really care about the comfort of a 1st class ticket, which comes at too high a price for most of us anyway. People travel to business meetings at La Défense or to the Eiffel Tower in Paris, they go on a weekend trip to the Walletjes in Amsterdam or they go Christmas shopping under the Dom in Cologne. With thrills like that, who needs the frills??

The business case of any low cost airline shows that the demand elasticity for mid-range transportation is essentially price- and not service-driven and that low-cost businesses can be very profitable. Micro-yield-management and stringent cost controls are far more important value drivers - to VENGO RAIL, its employees and its customers - than any frills, bar cars or 1st class seating comfort. The VENGO RAIL strategy says, go to proper places – big catchment areas or big destinations – and blitz them on frequency whilst focusing on:

· COST CONTROLS: reduce operational costs and frills - increase rolling stock utilisation and seating capacity

• YIELD MANAGEMENT: differentiate the service offer on the basis of booking time, distribution and fare restrictions





Who will board our trains? Anyone and everyone.

VENGO RAIL can do better than Thalys. Today fares, capacity and frequencies are set by the railways, at levels to suit them and their employees – not their customers. Revenues are pooled within so-called 'offer entities' like Thalys or Eurostar, which means that there is no point in trying to outshine the competition. The fierce competition of no-frills airlines on some of the routes (e.g. Köln-Paris) may have sparked some price reaction, but the message to the customer is still 'take it or leave it' and mostly they leave it, because fares are too high. VENGO RAIL believes high-speed-rail should be accessible to absolutely everyone – so we will make it FREE if we have to ! (market conditions permitting)

Vision

High speed rail is enjoying a phenomenal success in Europe, and will continue to do so. The network is being further extended and ever more people and businesses are relying on it as a convenient way of transportation. When compared to road and air traffic, high speed trains have some striking competitive advantages - especially on mid-range routes between cities at under two hours of travel time. The sustained efforts by the EC to deregulate rail services whilst promoting cross-border interoperability, will have a dramatic impact on the market: Infrastructure Management and Rolling Stock Operations are to be separated from each other and many activities will be liberalised, opening commercial opportunities on trunk routes between big cities. In reaction to the high price-sensitivity of the market, the traditional TGV industry will be turned on its head: general cost reductions, increased competition and yield management techniques will result in higher yields and lower ticket prices. The incumbents will have to cede most international point-to-point routes to new low-fares railways. In the next decade the price- elasticity of mid-range transportation services will become THE key driver for international high speed rail, which is a de facto liberalised but not yet competitive In fact, there are numerous analogies with deregulation in other industries such as airlines market. (operations) and telecommunications (network interconnection charges), but in contrast to the airline business, there are no grandfather rights for infrastructure slots, which have to be completely re-allocated annually. The rail industry will be marked by consolidation, increased standardisation and interoperability which should allow for higher residual values, reduced risks and increasingly leveraged asset investments resulting in higher returns for future market leaders.

The VENGO RAIL mission statement

Create value for shareholders, employees and customers by offering cross-border point-to-point TGV services that are cheap, convenient, safe, on-time and low-cost. Our purpose is to liberate people and businesses, reclaiming what was theirs in the first place – the infrastructure that was built with their tax money, but which many cannot afford to use now.





The VENGO RAIL strategy

• We will make the customers an offer they cannot resist by applying best low-cost practices to the railway industry: keeping trains riding, because that is how they make money, and keeping fares low enough to keep people travelling.

• We will get in early and do it big – by generating, knowing and growing new market segments and by drawing customers away from the competition.

• We aim to establish a proprietary position in the market, and we will always protect that position in every way possible: our ticket prices will be fair and transparent and we will let nobody, but nobody, match our fares – and if they do, we will simply lower ours straight away - no compromise.

• We will not tolerate any anticompetitive behaviour against our business and we will turn any such action into a big media event / promotion stunt.

• We will conclude exciting but sustainable partnerships.

• We will not restrain from competing head-on, but we will always focus on trunk routes between cities with a large growth potential and relatively few competitors

• We will simply reinvent the railway business, and we will not do anything the other railways do unless there is a good reason to do so.

• We will focus on branding, feeder traffic and ticket distribution.

• We will recruit competent, outgoing, ambitious and confident people to assist us in building up the company and we will let staff share in our profits.•

We will take the greatest care when dealing with our corporate image and public relations.

• We will ensure sufficient capitalisation by deep pocket investors through high gross margins, leveraged investments and structured finance deals.

• We believe all of this would be a pretty FUN thing to do...

In short: We will hit them where they ain't !





CONCLUSION

1. The potential for low-cost high speed rail operators to serve international routes is there – on some of the trunk routes at least. Over the last couple of years, price-elasticity has become a major issue in the transportation business, and it is the reaction to the public's price-sensitivity – and not more service – that will drive the railways' future growth. Markets of millions of customers are waiting to be generated. However, the incumbent operators, who have so far only reluctantly tried to introduce new I.T.- and yield management systems, should realize that there is no room for a half-hearted approach. The experience in the airline industry has shown that it is impossible for big, traditional operators to transform part of their business, or some of their departments, into so-called 'low-cost divisions' – they just haven't got the cost base or the corporate culture it takes to be a really low-cost company. At best they could opt for the Virgin-Express / Virgin-Blue or GermanWings scenario, where completely independent sister-companies were set up to serve market segments that are completely different from the ones traditionally served by Virgin Atlantic and Lufthansa. Exceptional synergies could then be exploited, and there could also be a positive impact on the overall corporate image of both the holding company and its subsidiaries.

2. It is only normal – and highly urgent in fact – for incumbent H.S.R. operators, such as ICE, Thalys, TGV or Eurostar, to further fine-tune their yield management and booking systems, and to make prices more transparent and sensibly cheaper. At the same time, the incumbent state-owned railways should re-focus on their core-business: public service passenger transportation – e.g. they could start by better serving secondary cities on or off high-speed routes. Anyway, the bottom line stays the same: there is no joy in running empty trains; you can't save souls in empty churches – in order to be able to attract new customers, the overall cost base has to come down dramatically. More people can and should be transported for less money.

3. Any new railway has an automatic advantage over an old railway; so it can be expected that completely new low-cost railways will enter the market – just like Southwest, Ryanair, and Easyjet were able to carve out a chunk of the air services market, generating their own business by offering low fares on particularly interesting routes. Keep in mind however, that some rail-specific elements indeed do require special consideration and analysis. To name a few: security issues, interoperability, national multi-voltage traction systems and line-side signalling infrastructure, feeder traffic and inter-operator ticketing, rolling stock pools, the attractiveness of corridor vs. point to point services, ...

4. Customers are extremely reactive to fantastically low fares and promotion stunts, which are perceived to be excellent value-for-money. Above all, ticket prices have to be fair and transparent. On the other hand, extremely complicated and sometimes outright arrogant price-fixing and ticket distribution systems, as applied by the traditional airlines, are increasingly mistrusted by a large part of the travelling public – this phenomenon





now also exists in the railway business. Fare communication and ticket distribution have become a real art – accurate pricing, which is crucial for good yield management, is an even more tricky thing to do. Matching supply and demand, by managing the price structure and price elasticity, while maximizing revenues in each market segment, is in fact THE critical success factor in the low-cost railway business model. The key is filling up the train – occupancy, driving demand and everything else will follow.

5. In the future, the newly-built H.S.R.-infrastructure will have to be written off anyway – it's a so-called 'sunk cost' – so setting infrastructure charges at prohibitive levels will have no other effect than reducing competition and hampering the further development of the overall railway business. We believe that infrastructure charges should come down significantly, if regulators and public authorities are really serious about promoting a better and safer public transportation system. The development of low-cost low-fare passenger services has the potential to drive the rail revival and the impact on passenger numbers could be dramatic. Millions of customers can be tempted back into our stations and onto our trains. Increased competition and lower infrastructure charges are an undisputable leverage to enhance any such a price-based turnaround of the ever falling trend in relative passenger numbers.

6. The argument as though the alternative operators will destroy value by harming the public service, clearly is a no-brainer... The activities that are described here will not at all be harmful to the public service – on the contrary. A lot of taxpayers' and customers' money will be saved by transporting more people in more trains in more rail slots, for less money at lower prices. Isn't that exactly what everyone says they want? Long gone are the days that the likes of Lufthansa and Sabena were trying to stop Ryanair from setting up base in their home markets, claiming that any 'unsafe', low-cost competition would harm the public service and predicting that globally, customers would be worse off because of the so-called cherry-picking. Public service obligations of companies like DBAG and the regional railways deserve to be defended, but that is not to say that the company's monopolistic structure is to remain in place, or that none of its operations should be tendered. Furthermore, it is obvious that the infrastructure management should also remain publicly managed, preferably by a completely independent organisation. Everything else however, should be further opened up for competition – especially on the international routes.

7. For some reason, airlines that are giving tickets away can also report an increase in paying passengers as well as higher earnings... In fact, the most effective low-cost yield-management technique consists of FREE TRANSPORTATION: either giving the overcapacity away or having third parties, such as public authorities, covering for lost revenues. This way, transportation enterprises can focus on bringing costs down, whilst allowing more people to travel: as a result, average costs pkt could fall dramatically. In Belgium (e.g. Hasselt) there are some very interesting business cases of any such free transportation services. However, the free-for-all (or free-for-some) third-party-payment model is not immediately applicable to high speed rail services –





certainly not on the international routes, which are not part of the public service obligations. We believe a better alternative consists of transposing the low-cost airline business model, and where possible its best practices, to high speed rail.

8. There is no doubt that the incumbent and the new low-cost high-speed railways can co-exist next to each other, at least on some of the routes – but they will each have to focus on their respective markets. Overcapacity – which is now too often completely ignored by the incumbent operators, who do not seem to care about riding empty seats – can in the future be used for anti-competitive practices. Both the national Competition Authorities and the European Commission should look after the fair and level-field orderly deregulation of the market. It is our view, that an increasing number of "competition issues" are likely to arise in the coming years.

9. Low cost rail should be subsidized by public authorities, either directly or indirectly, as it is compliant with many fundamental political goals in the field of the economy, the environment and the population's overall mobility. On some routes there should definitely be calls for tenders.

10. You better believe it: LOW FARES REQUIRE LOW COSTS, that's a simple law of nature. There is simply no room for a half-hearted approach - and that is in part where DBAG got it wrong. For people to be tempted (back) to the train, one has to difer fantastically low prices, for a service that is not substantially different from what is currently on offer. Every low-cost high-speed train has to be micro-yield-managed, so fares can be fair and transparent - no more, no less. The low-cost railway's structure has to be flat, dynamic and very reactive to the market conditions - with an extremely low-cost, but safe, cost base. The focus should always be on very targeted markets, serving routes and timetables that guarantee extremely low-fares and a competitive service-offer, with convenient time-schedules, end-to-end travel times, feeder connections and overall frequencies - in combination with high rolling stock utilisation and optimised staff rosters. Unfortunately, there is simply no way that the incumbent railways could ever transform their organisation to operate in such a way. That's not how they work - and that's probably not what they are there for in the first place. Unfortunately, that is part of where DBAG's Plan&Spar-program got it wrong, as people have now gotten used to the advantages and the excellent value-for-money of the low-cost airlines. Every low cost, yield-managed type of activity has to operate separately, away from any other business, for management to take decisions and to be held accountable in a completely independent way - with its own branding, management organisation, finance, partnerships, product definition and distribution channels. Particularly on the mid-range distances, there are some striking similarities between the low-cost airlines and low-cost highspeed rail indeed.