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Basic principles of market pricing for high-speed railway transport services in world practice

The construction of high-speed highways is one of the priority directions in the creation of a modern transport infrastructure. High-speed railway lines are characterized by high cost, but at the same time, their presence leads to a significant effect that justifies the costs of their creation. Such projects have a long-term impact on the level of economic development of the country, the national transport system and its development, on the level of well-being of citizens. That is why studies on the development of a network of high-speed highways are relevant.

World experience shows that market principles attract many more passengers, increase income and reduce the need for subsidies. Charging higher fees from those who value their time makes it faster to justify the higher investment in building lines to run trains at higher speeds and frequencies.

In France and the UK, operators are market driven, charging higher fares during peak hours or for tickets without a specific date, which allow for last minute travel plans. The trip is much cheaper for those who buy tickets in advance or without the right to return, and for those who travel outside rush hours.

China Railways sets high-speed train fares based on distance-only fares, that is, fares are based on the national fare. China's railways became the leaders among countries with high-speed rail services, organizing train traffic on the Wuhan-Guangzhou highway with a maximum speed of 350 km / h. However, on other lines the speed is limited to 300 km / h in order to reduce operating costs.

Cost-conscious passengers (migrant workers, students, even middle-class families) would prefer a less expensive ride, but less expensive trains are selling out rapidly and many are forced to pay for travel on higher category trains (category G).

The travel time of 6 hours is not competitive enough with air travel, so the majority of wealthy passengers continue to use air despite the high fees (double that of rail). As a result, high-speed trains in China are too expensive for ordinary passengers who are not overly concerned with the time factor, and often not fast enough (albeit cheap) for passengers who value their time.

When using tariff policy on China's railways, the population ratio does not exceed 50%. Investments in a network of high-speed lines are aimed at solving many problems. In addition to being one of the prerequisites for sustainable development of society, the new lines free up capacity on conventional freight lines.

State-of-the-art tariffs cover operating costs and some of the capital costs.

The French National Railways (SNCF), setting its sales policy for the first 409 km Paris-Lyon high-speed line, initially focused on attracting passengers for business purposes, offering a 2-hour journey - a time that is competitive with air travel. By that time, SNCF already had a practice of charging surcharges to the basic fare (calculated depending on the distance traveled) on prestigious express trains, for example, Le Mistral.

However, SNCF set the fees on the new line at the same level as on the rest of the network, i.e. trains at 260 km/h at 160 km/h. As a result, the company was able to live up to its forecast of doubling traffic and revenue shortly after the new line was opened, so that specific (per passenger) operating costs fell.

In 1993, with the opening of a third high-speed line from Paris to Lille, SNCF shifted to market-based pricing and revenue management, thus matching projected and actual demand. The goal of maximizing revenues began to be addressed by setting higher prices for tickets during peak hours and for tickets purchased at the last minute. Travel is much cheaper for those who buy tickets in advance and for a trip in the middle of the day.

So, a trip from Paris to Marseille (780 km) in case of advance ticket purchase can cost 25 euros (0.03 euros / km), and a ticket for the Paris - Lille train (220 km), bought just before departure, will cost 78 euro (0.35 euro / km).

Because passengers favored the ability to pay less if they buy a ticket in advance, or pay more but buy a ticket for the next train, the government allowed SNCF to raise the ceiling ahead of inflation.

The ratio between the maximum and minimum charge levels corresponds to the ratio adopted for air transport 10: 1. The cheapest tickets are non-refundable and non-exchangeable. Tickets in the mid-range price range cannot be returned, but can be used on another train for some additional cost.

The operation of France's high speed lines provides sufficient income to cover the operating and maintenance costs. The investment in the construction of the first line Paris - Lyon paid off within 10 years. The train population is currently at 80%.

In the UK, market principles have been implemented in stages and

the results are comparable to France:

1. Since the 1960s Former national operator -

British Railways established the InterCity service network, served by frequent, fast, long-distance trains. InterCity trains cannot be categorized as high-speed trains, as their top speed on regular lines was limited to 200 km / h, but they and their successors have proven competitive in the fight against road and air transport, especially when traveling to central London, where roads are congested and parking very expensive.

2. In the 1970s, British Railways introduced two categories of long-distance train tickets: open dates and times, and less expensive off-peak departures. The subsequent development of computer technology made it possible to introduce prices depending on the depth of sale with advance purchase.

3. Since the start of privatization in the 1990s, operating companies have expanded their offerings by leveraging the power of the Internet and mobile phones to sell tickets, but this has been done under government regulation. Operators

expanded their offerings by leveraging the Internet and mobile phones to sell tickets, but all of this was done under government regulation.

In 2002, German railways made the transition to a new tariff system in long-distance traffic (market pricing) based on the experience of air transport. Numerous passenger complaints have given impetus to a return to the old tariff system at the insistence of the government, with the approval of any increases by the federal parliament.

The Normalpreis tariff in Germany has the following

characteristics:

- in high-speed electric trains of the ICE family, the maximum operating speed of which is 320 km / h, the tariff is determined at the rate of 0.30 euros / km and is valid on any train;

- in electric trains of the Intercity category, even on those directions where ICE trains operate at their usual speed, a lower tariff applies.

In the absence of discounts on travel outside rush hours and mandatory

seat reservations, trains are overcrowded during peak periods. Regular passengers can purchase a BahnCard with a 25-50% discount over the Normalpreis fare. In fact, the BahnCard 50 reduces the unit fee to € 0.15 / km. These offers are popular with passengers, but for the German Federal Railways (DB) with a worsening overcrowding situation. The German Federal Railways are currently offering pre-sale tickets at a discount of 50 to 75% on the Sparpreis fare, which are valid until trips remain at least 3 days, and for trains that, according to DB estimates, will have free seats.

The potential of this offer in terms of attracting additional passengers is limited by the popularity of BahnCard.

Traditional distance-based rail fares seem fair and easy to administer. But they operated before railways faced stiff competition from road and air transport.

Operators are currently trying to set carriage charges at a level that generates enough revenue to cover costs, but at the same time attract passengers.

Paying too high guarantees that income will be raised from those willing to pay, but many potential passengers will travel less often or even refuse to travel.

If fees are low, passenger traffic will increase, but trains will be overcrowded during peak hours, and the company will eventually lose money, since even the increased volume of traffic is unlikely to compensate for the losses from reduced fees.

New high-speed lines create a capacity that is difficult to fully realize with tariff pricing. Business trips tend to be concentrated at the beginning and end of the day.

Trains are overcrowded during the morning and evening rush hours, but in the middle of the day the population drops to 20%. With normal tariff pricing, the starting point is the costs, which are allocated to the volume of traffic (number of passengers).

With the market approach, they start from the limit value that each passenger is willing to pay for a trip, depending on the priority of saving time or money. Railways, like air transport companies, are developing methods of market segmentation, pricing more travel during peak hours and imposing restrictions depending on the time and conditions of sale (changes in the date of travel, return conditions in case of refusal).

Development of high-speed and high-speed rail transport: ensures the improvement of transport links; creates more attractive conditions for passengers; increases the comfort and safety of passenger transportation; reduces travel time.

This allows attracting additional passenger traffic from air and road transport to rail transport, reducing the unprofitableness of passenger traffic and the negative impact of transport on the environment.

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