INFLUENCE OF LIBERALIZATION ON LONG-DISTANCE RAIL TRANSPORT IN THE CZECH REPUBLIC

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Abstract: In the Czech Republic, the rail transport market has been liberalized for several years - in addition to public services, commercial services of individual rail carriers operate too. Public services in long-distance rail transport are ordered by the Czech Ministry of Transport. In December 2019, the 10-year contract between Czech Ministry of Transport and Czech Railways will end. The approaching end of this contract was connected with great interest of other rail carriers, which led to the fact, that the Czech Ministry of Transport demanded individual long-distance rail lines in the form of so called "market consultations". Preparing of the operational performance of individual long-distance rail lines for the needs of market consultations was a great challenge on the field of transport-planning. As a result, from December 2019 there will operate 4 different rail carriers in ordered long-distance rail transport in The Czech Republic and this situation is unique in its form and unparalleled throughout the EU.

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1. Order of public rail services in the Czech Republic

Since 2005, rail transport in the Czech Republic regionalised. 14 regions is responsible for ordering regional rail transport, the Ministry of Transport is responsible for long-distance rail transport order.

Public transport services in the Czech Republic are characterized by the fact that they represent in general a performance for which the sum of revenues is not sufficient to cover costs associated with the services.

Order of the Ministry of Transport is focused on the fixed interval connection between each regional capitals and other major residential areas in the Czech Republic.

Overall, in 2018 in the Czech Republic, the total volume of train-kilometers in ordered long-distance transport was about 35 million train km.

A feature of public rail services in the order of Ministry of Transport and the Regions is also the fact, that it is an "open" system, which works across the network unified fare system, so there is time, space and tariff interconnection of services. A feature of the system is not "denial of passengers" (i.e., inability due to lack of transport capacity of lines), while no reservations required (no link between a ticket and particular train). It is natural, that such a generally high quality parameters of public services cannot be met without compensation from national budget.

The total amount of payments from national budget for compensation for ordering of long-distance transport rail passenger transport was in 2018 CZK 4.1 billion (approximately EUR 158 million)

The main direct awarded 10-year public contract between Czech Ministry of Transport and Czech railways ends in December 2019.

Before 2009, contract award after competition of TOC’s was made on long-distance lines Pardubice - Liberec and Plzeň - Most. Both of these competitions were won in 2005 by Czech railways. Despite the victory of the national carrier, these competitions led to a reduction of compensation.

However, in 2009, there were timewise unable to prepare further competitions into the process.

Despite the fact, that the majority of transport volume in long distance rail transport has been selected directly, reported by the Czech Republic to support the liberalization of rail transport.

This declaration liberalization of passenger rail market has two specific implications:

1) official timetable for market opening in long-distance transport, the opportunity to compete in selected contracts
2) liberal access to railway infrastructure - Open Access

After closing of the 10-year contract between Czech Ministry of Transport and Czech Railways, the private TOC’s in the Czech Republic focused on developing open-access services.

2.1. Open-Access in the Czech Republic

In the Czech Republic, additionally to the public services, there is a fully liberal approach to infrastructure – Open Access, without any restriction. Each TOC can apply to the transport infrastructure access authority (ÚPDI) and then may ask the infrastructure manager (IM) for capacity and IM (Railway Infrastructure Administration – RIA - SŽDC) will be required to allocate infrastructure capacity.

The first project in the Czech railway network, which had features of Open Access approach were the SC Pendolino trains between Prague and Ostrava. These SC-trains operate Czech Railways on their commercial risks, with mandatory reservation and limited passenger capacity and costs for transportation of these trains is significantly above the level of fares on trains, which are ordered and form a public service.

The second Open Access project are the Regiojet trains of (former) Student Agency company running on the route Praha – Ostrava – Havířov (- Žilina). Again, these are trains to TOC commercial risk, with mandatory reservation (seat reservation is included in the ticket), with limited passenger capacity, but the price for the carriage of these trains is comparable to fares on trains, which are ordered and form a public service.

The third Open Access project is a LEO Express, i.e. Leo Express trains again on the route Praha - Ostrava. As in the case of
RegioJet, in this case, the connections to the commercial risk of the TOC will have to provide mandatory seat reservation will have a limited capacity for passengers.

All Open-Access projects began to develop. Czech Railways, for example, has taken over the international night trains to their commercial risk. RegioJet expanded its activities to include connections Prague - Wien and Prague - Bratislava. Leo Express expanded its range of services to include connections Prague - Krakow and Prague - Staré Město u Uherského Hradiště.

This battle of TOCs in Open-access services is unprecedented in the European railway area. Already less than one year of sharp competition between three different TOC’s has been indicated, that commercial Open-Access services are very unstable in time. Changing time position of the trains, changing and different stops, variable and unstable number of connections etc., such services cannot be reasonably operationally integrated into the open transport system and they can hardly serve as a fixed part of the territory's transport service.

2.2. Market opening in long distance transport

Market opening in long-distance rail transport should solve as a possibility to increase quality / price ratio in the Czech rail transport. Ministry of Transport expects, that the current level of compensation will be held and serve to reach higher quality or higher range of passenger rail services performance. A prerequisite is the case, that it can maintain a stable long-term financing of the railway sector and there will be no significant changes in the amount of available financial performance.

After one-off competitions in the year 2005 (lines Pradubice - Liberec and Plzeň - Most) has the Czech Ministry of Transport already in 2011 published a schedule for market opening in long-distance rail transport. In March 2012 have been published specifications for the first competition (line Olomouc - Krom - Ostrava).

Although the tender for the line Olomouc - Krom - Ostrava was canceled for formal reasons in 2013, the competition trend continued. In 2014, the preparation of the tender for the line Plzeň - Most (where the contract from 2006 was to end in 2015) was launched. Due to procedural delays, the contract from 2006 was extended by 2 years - but the tender was in the end finally canceled on the basis of objections from Czech Railways. However, there occurred a breakthrough situation, when the Ministry of Transport used the possibility of direct awarding institute and assigned directly to the winner of the canceled competition (TOC GWTR) the operation on the line Plzeň - Most (with level of compensation offered in the cancelled tender). It was a clear signal sent to the market of rail operators, that the liberalization of the rail market would not be stopped due to procedural obstruction.

For a main contract with Czech Railways from 2009, which ends in December 2019, the Ministry of Transport prepared a follow-up of direct assignment of the contract. The rules for access to public services are laid down in the amendment to Regulation (EC) No 1370/2007, which is part of the fourth railway package. Applicability of direct award of the contract in the passenger rail services is in force to 25. December 2023.

However, as the private TOC’s in the Czech Republic have announced their relevant interest for participating in long-distance rail-services, the Ministry of Transport has notified the order of long-distance after 2019 transport in the Official journal of the EU on a per-line basis, with a different duration, so that this corresponds to the published schedule for competitions in rail public services planned in years 2020 - 2034.

3. Procedure for concluding new contracts after 2019

The Ministry of Transport access is clear that the priority-driven process in which is preserved the networked public rail transport (in Czech and Central European scale) and will clearly set in advance in market access conditions, including rules on mutual recognition of travel documents and the use of station buildings.

The principle is, that the Czech Ministry of Transport published in spring of 2017 in the Official journal of the EU, that all long-distance lines from 12/2019 will be reassigned. Each line had its own notification - all as a direct allocation for CD.

Until spring 2018 have The Ministry of Transport negotiated with Czech Railways, what transport parameters (vehicles, performance quality, timetable) of which lines is possible to offer for next contract period.

Approximately in March / April 2018 got The Ministry of Transport offer from Czech Railways on all lines and additionally also offers on some lines from another TOC’s.

Than was necessary to sort, on which lines are the offers of another operators more favorable, than the offer from Czech railways. Because the third operators have not previously negotiated with The Ministry of Transport, were the offers not comparable. The Ministry of Transport has then made operational “packages” and asked with these packages new request to all interested TOC’s (including Czech Railways) - for to update offer specification.

Content of each operational “package” was line (or more lines) with such timetable and quality requirements, which was negotiated with Czech Railways between 2017 - 2018. So the assignment of each package was always direct assignment - only based "market consultation". The requests to TOC’s for offers for operating these "package" - so called "shoot-out" - ran between June - November 2018.

3.1. Technological structure of operational "packages"

In order to formulate the content of each operational package, it was necessary to set their structure, in particular the operational closeness and consistency.

A task was the basic determination of number of trains and their position in nodes (marketing timetable), defining the size of train-sets including regular and seasonal capacity strengths and timetabling (calculation of travel times).

Existing interconnected traffic provides a variety of synergies (typically vehicle-to-line transitions) and it was not desirable to lose these benefits.

For the operational separation of the lines and the arrangement of the operating structure of the packages, it was necessary to reflect the number of vehicles in relation to the timetable. On the operational side, such lines were grouped into individual packages, taking into account the operational background, necessary transport capacities and traction.

From the timetable point of view, it was often necessary to add new connection or links, for to isolate individual packages and close them to the functional cycles. In this step, it was necessary to reflect IPT nodes, bindings and schedule boundary conditions, transfer / changing nodes and intended length intervals for peak-and-off-peak hours.

The author’s team used their previously published approach, which combines timetable proposal and operational concept with cycles of vehicles, in mutual repeating iteration steps.

Approach to the timetable creating is as follows:

1) defining IPT nodes and intervals, calculate the number of vehicles for "basic periodical operation"

112

YEAR IV, ISSUE 3, P.P. 111-113 (2019)
2) defining a specific operation in the peak hours and minimizing the number of vehicles in peak period; ideally for the number required in previous point 1

3) operational optimization and ensuring operational efficiency (refueling, maintenance, cleaning...)

4) adaptation of timetables in the evening hours (to minimize the number of vehicles, reduction of total working times)

The aim is to ensure maximum operational efficiency within a defined operational file.

4. Conclusion

Based on so operationally and transportly defined content of packages were made so called "shoots" - every interested TOC gave its offer to the Ministry of Transport.

As first package, there was already in June 2018 direct assigned a package including a line Pardubice - Liberec. The winner of this "shoot-out" was Czech railways.

As second package, there was direct assigned a package including lines Praha - Olomouc - Žilina and Praha - Olomouc - Luhačovice. The winner of this "shoot-out" was Czech railways too.

As third package, there was direct assigned a package including line Brno - Bohumin. The winner of this "shoot-out" was Czech private railway operator Regiojet.

As fourth package, there were direct assigned a package including large network of fast trains in diesel-traction in middle Bohemia (Praha - Tanvald, Praha - Rakovník, Praha - Písek - České Budějovice, Kolin - Nový Bor). The winner of this "shoot-out" was international operator Arriva.

Market opening in long-distance rail transport should solve as a possibility to increase quality / price ratio in the Czech rail. The whole money, which was saved by "shoot-outs" of these packages, will be from December 2019 inserted in broad timetable extension - and not only on the lines included in these packages, but nearly on all lines in the fast-train network.

This way of liberalization of public rail services using direct assignment has currently in Europe no analogy. Although there has been a clear commitment to a functional operational arrangement, it will be exciting to see, how this system will work in practice, with the launch of a new timetable in December 2019, and above all, how passengers will react to this new system. A major challenge will be the coordination of individual transport services in operation to maintain the functionality and integrity of the rail transport system.

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