# Description of the subject matter of the Public Contract - Textual part

# 1. Territorial scope of the Public Contract and description of the selected sections

The Public Contract “PPP project of railway connection Prague - Václav Havel Airport Prague” is part of a comprehensive modernisation of the railway connection Prague Masarykovo nádraží station - Kladno-Ostrovec, which will bring its double-tracking, electrification of the AC 25 kV and equipment with modern communication and signalling technologies. New platforms with barrier-free access will be built in all stations and stops.

The Prague-Veleslavín - Prague-Ruzyně section represents a complete new construction on the route of the historic "Buštěhrad" railway No. 120, the Prague-Ruzyně - Prague-Václav Havel Airport section is being built completely newly, will be double-tracked and electrified. This section will be followed by the so-called "rounding", i.e. an extension of the line under the airport area and a connection to the Prague - Kladno line in the direction of Jeneč and Hostivice. This connection will enable the future routing of some trains from Prague to Kladno via the airport, including the possibility to serve the airport with long-distance trains directly from Prague Central Station in accordance with the EU Regulation on the Trans-European Transport Networks TEN-T.

A map with green and blue circles

Description automatically generated

**Structures A-46, A-47, A-48 and A-33 are then included in the Public Contract.**

### Construction A-46: Modernization of the line Prague-Veleslavín (included) - Prague-Ruzyně (included)

Modernisation of the line Prague-Veleslavín (included) - Prague-Ruzyně (included) will provide connection of the lines from Kladno and Václav Havel Airport to the Prague metro at Nádraží Veleslavín station. This construction can be implemented simultaneously with the following constructions of connection to the Airport, or it can be implemented in advance. In the direction of Kladno, the section is connected to the construction Modernization of the line Prague-Ruzyně (excluded) - Kladno (excluded) To the centre of Prague, the A-46 construction will be connected in phases to the existing single-track non-electrified line in the direction of Prague-Dejvice, prospectively to the tunnel section Prague-Dejvice (excluded) - Prague-Veleslavín (excluded).

The railway line route is modified in direction and height in connection with the double-tracking and the requirement to increase the line speed. After the modernisation, all crossings with roads will be designed off-line. At the railway station Prague-Veleslavín, part of the track will be built below the level of the current terrain. The outer platforms of the main tracks will be located approximately at the level of the metro vestibule; the other platforms of the single tracks, intended for the turnaround of lines terminating here, will be at ground level. The length of the platforms will be 220 m. The traction substation TNS Liboc will be located between the Prague-Veleslavín station and the Prague-Liboc stop.

Between the stations Prague-Veleslavín and Prague-Ruzyně, the Prague-Liboc stop will be built with two outer platforms 220 m long and off-level access via an underpass.

The Prague-Ruzyně railway station will be built west of Drnovská street. The station will have an isle platform between the main tracks with an edge length of 220 m. The platform will be accessible via an underpass. Behind Ruzyně, the track extension continues in the direction of Kladno and Václav Havel Airport.

Currently, the documentation for the building is being processed for the project permit. The submission of the request for the project permit is expected in the first half of 2025. At the same time, zoning proceedings under the previous Building Act were initiated in the past, while the procedural method of achieving the project's approval under the new legislation has not yet been finally decided.

Key technical specifications:

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| Section:  Length: 5 451 m  Load class:  D4 (22.5 t/axle / 8 t/bm)  Maximum line speed:  85 km/h  Space permeability: UIC-GC  Tracks:  Type: 60E2  Number of tracks: double track  Traction:  Electrified  Voltage: 25 kV Wed.  Traction substation (Liboc)  Switching station (Prague-Ruzyně)  Required ITS:  ETCS - level 2, GSM-R  RTMS (controlled from CDP Praha)  GTN  ASVC  IS  Main road modifications:  Removal of all at-grade crossings and change some of them to off-grade and construction of new roads and pedestrian access roads around all stations and stops. | Veleslavín railway station:  Platform: 2 external (220 m),  1 double-sided (220 m) with edge height 550 mm  Underpasses to platforms: 2  Without P+R  Ruzyne railway station:  Platform: 1 double-sided (220 m) with 550 mm edge height.  2 underpasses to platforms.  Without P+R  Liboc stop:  Platforms: 2 external (220) with edge height 550 mm  1 underpass to platforms.  Without P+R | Total volume of ground works:  Excavation: 165 460m3  Embankments: 144 260m3  Bridges:  5 railway bridges  2 railway culverts  8 pedestrian underpasses  Tunnels:  1 single track (135 m),  1 double-track (51 m).  Total length: 186 m  Noise barriers:  8 (height 1 to 4.85 m)  Total length: 2 525 m  Number of trains in peak hours:  **Passenger trains:**  Prague Mas. nádraží - Airport:  6 pairs/h  Kladno-Ostrovec - Prague Mas. nádraží: 4 pairs/h  Kladno - Prague-Veleslavín: 2 pairs/h  **Freight trains:**  No regular freight trains are planned on this section. |

### Construction A-47: New construction of the line Prague-Ruzyně (excluded) - Prague-Václav Havel Airport (excluded)

The line section starts from the station Prague-Ruzyně, passes under the Prague ring road (D0) and then turns to the stop Prague-Dlouhá Míle. The section before and after the Prague-Dlouhá Míle stop will be built in a tunnel. There will be two 220 m long outer platforms at the stop. Further to the airport, the line will run parallel to the Prague ring road (or D7 motorway).

The section will include the construction of 1 new railway bridge, 6 new road overpasses and 3 pedestrian overpasses. In addition, 2 new tunnels will be built before and after the Dlouhá Míle terminal, both double-tracked with a total length of 429 m (99 m + 330 m).

The newly constructed railway station Dlouhá míle will become an important multimodal transport hub, connecting the railway line with other means of public transport (tram and trolleybus network) and a high-capacity parking lot (parking area) of the P+R type (especially for traffic from motorways D6 and D7 and the Prague ring road).

The project has a detailed project documentation for the implementation of the construction, the procedure for the project permit according to the new Building Act is currently underway at the Transport and Energetic Building Authority.

Key technical specifications:

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| Section:  Length: 3 781 m  Load class:  D4 (22.5 t/axle / 8 t/bm)  Maximum line speed:  110 km/h  Spatial permeability: UIC-GC  Tracks:  Type: S49  Number of tracks: double track  Traction:  Electrified  Voltage: 25 kV Wed.  Required ITS:  ETCS - level 2, GSM-R  RTMS (controlled from CDP Prague)  GTN  ASVC  IS  Main road modifications:  Construction of a new road and pedestrian access roads in the vicinity of the Dlouhá míle bus stop | Stop Long Mile:  Platform: 2 outer platforms (220 m), with an edge height of 550 mm.  The stop is located below street level as part of a multimodal transport hub. The platforms are accessible by several staircases, 4 escalators and 2 lifts. Passenger access is provided by overpasses inside the terminal.  P+R (parking area) with a capacity of 863 parking spaces and a bus terminal with 28 parking spaces | Total volume of ground works:  Excavation: 347 000 m3  Embankments: 11 000 m3  Bridges:  1 railway bridge  6 off-grade crossings  3 pedestrian overpasses  Tunnels:  2 double-track tunnels  Total length: 429 m  Number of trains at peak times:  **Passenger trains:**  Prague Mass Railway Station - Airport:  6 pairs/h  **Freight trains:**  No regular freight trains are planned on this section. |

### Construction A-48: New construction of railway station Prague - Václav Havel Airport

The section consists of the underground station Prague - Václav Havel Airport, which will be located under Aviatická Street and ends at the edge of the existing Terminal 2. The section connected to the station construction itself consists of the construction of one 518 m long double-track tunnel.

The station will consist of two-piece tracks (with dynamic stops) with one double-sided 225 m long platform. The platform will be accessible by stairs and escalators leading to the level of Aviatická Street to the area between Terminal 2 and Car Park C, construction readiness will be ensured for a direct connection to Terminal 2. The new surface will be designed as a pedestrian zone. The new station will offer passengers public spaces (lobbies), facilities and commercial areas.

The project has drafted documentation in the detail of the project documentation for the implementation of the construction. Section A-48 has a final zoning decision. The request for building permit, which has already been submitted, will be withdrawn and a new application for building permit will be submitted to the Transport and Energy Construction Authority, taking into account legislative changes in the field of building law.

Key technical specifications:

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| Section:  Length: 888 m  Load class:  D4 (22.5 t/axle / 8 t/bm)  Maximum line speed:  110 km/h  Space permeability: UIC-GC  Tracks:  Type: 60E2  Number of tracks: double track  Fixed guideway  Traction:  Electrified  Voltage: 25 kV Wed.  Required ITS:  ETCS - Level 2, GSM-R  RTMS (controlled from CDP Prague)  GTN  ASVC  IS  Main road modifications:  Complete modification of traffic flows in Aviatická Street and other adjacent streets and airport car parks. | Railway station at the Airport:  Platform: 1 double-sided (225 m), with 550 mm edge height.  The project does not include the construction of P+R. | Total volume of ground works:  Excavation: 1 650m3  Embankments: 16m3  This section consists mainly of tunnels and an underground station.  Tunnels:  1 double-track tunnel  Total length: 518 m  Number of trains at peak hours:  **Passenger trains:**  Prague Mass Railway Station - Airport:  6 pairs/h  **Freight trains:**  No regular freight trains are planned on this section. |

### Construction A-33: Rounding of the railway connection FROM Václav Havel Airport to the line Prague - Václav Havel Airport - Kladno

The section is connected to the railway station Prague - Václav Havel Airport. The construction includes the extension of the station and the addition of a piece of track for the turnaround of trains from Prague. The double-track tunnel section under the airport area (approx. 2.8 km long) continues. After undercutting the D6 motorway, the line comes to the surface; the double-track continues in the direction of Jeneč and Kladno. At the same time, a single-track connection is led from the Průhony branch line back to the Hostivice railway station.

In the western part of the airport area, there will be space created for the possible addition of the future railway stop Prague - Václav Havel Airport West Terminal.

The total length of the double-track section will be 4,065 m, maximum line speed 120 km/h.

Construction A-33 (the so-called rounding) has a lower degree of investor readiness compared to construction A-46, A-47 and A-48. However, it has a high potential for improving the operational concept of the entire railway link. Moreover, it allows for a significantly more developed cooperation with the selected contractor also in the design and investor-engineering phase, which will be the subject of negotiations in the competitive dialogue

## Detailed description of individual phases of the Public Contract implementation

### Design phase

As part of the performance, SŽ will secure the relevant valid building permits[[1]](#footnote-1) or planning permissions[[2]](#footnote-2) (i.e. permits enabling the construction of the sections in question to start).

SŽ will also hand over the project documentation prepared so far and the rights to build on the land concerned to the contractor for use. The subject matter of the public contract will be the preparation of the subsequent implementation project documentation in accordance with the specified requirements of SŽ, or the possible modification and supplementation of the project documentation submitted by SŽ.

The contractor may modify the submitted project documentation (possibility to submit a different solution), while the Minimum Technical Requirements will set out restrictions on the possibility of designing deviating solutions (typically in relation to ensuring the necessary operational parameters of the railway, taking into account the risk of major changes to the issued permits or claims for new land). It is assumed that if there is a need for a change to the permit resulting from an approved minimum technical requirement or from changes proposed by the contractor, it will be the contractor's responsibility to secure such a change to the permit.

The exception is construction A-33, for which it is assumed that SŽ will not have a valid permit for the construction nor the relevant project documentation in detail for the execution of the construction at the time of the start of the competitive dialogue phase (the assumption is that this will probably only be available at a later stage of the procurement procedure or only after the contract with the selected contractor has been concluded). In this section it is assumed that the contractor will have a more significant opportunity to influence the design of the project documentation.

* 1. CONSTRUCTION PHASE

The section delimitation of the Public Contract for the construction phase is defined as follows according to the track boundaries[[3]](#footnote-3):

Construction A-46

* km 6.884 - km 7.916 - temporary connection to the existing section Prague-Dejvice - Prague-Veleslavín
* km 7,916 - km 8,915 - railway station Prague-Veleslavín
* km 8,915 - km 9,971 - double track section Prague-Veleslavín - Prague-Liboc
* km 9,971 - km 10,193 - double-track railway stop Prague-Liboc
* km 10,193 - km 11,042 - double track section Prague-Liboc - Prague-Ruzyně
* km 11,042 - km 12,485 - railway station Prague-Ruzyně (direction Prague - Kladno)
* km 11,506 - km 12,335 - railway station Prague-Ruzyně (direction Prague - Václav Havel Airport)

Construction of A-47

* km 1,060 - km 1,773 - double-track line section Prague-Ruzyně - Prague-Dlouhá Míle
* km 1,773 - km 2,409 - double-track railway stop Prague-Dlouhá Míle
* km 2,409 - km 4,841 - part of the double-track section Prague-Dlouhá Míle - Prague- Václav Havel Airport

Construction of A-48

* km 4,841 - km 5,360 - part of the double-track section Prague-Dlouhá Míle - Prague- Václav Havel Airport
* km 5,360 - km 5,731 - railway station Prague- Václav Havel Airport

Construction A-33

* km 5,730 - km 7,500 - double-track line section Prague-Václav Havel Airport - Prague-Václav Havel Airport Western Terminal
* km 7,500 - km 7,900 - double-track railway stop Prague- Václav Havel Airport West Terminal
* km 7,900 - km 8,400 - Průhony branch station
* km 8,400 - km 9,200 - double track section Průhony - Jeneč
* km 9,200 - km 9,795 - modifications of the railway station Jeneč
* km 8,227 = km 0,300 - km 1,750 - single-track section Průhony - Jeneček

The above-mentioned boundaries are according to the track layout, outside this range there are other construction objects and operational files (cabling, ground communications, etc.).

### Operational phase

The extent of the construction objects and installations that will be managed by the contractor in the operational phase is lower than in the construction phase because some of the objects and installations will be managed by other entities after their construction completion (typically utilities, road relocations, etc.). The operational phase covers all the selected sections.

The operation of the railway within the meaning of the Railway Act remains the responsibility of the SŽ, while the contractor is responsible for ensuring the operational status of the railway. For some objects and installations, the competences may be defined slightly differently, especially with regard to the network interconnection of certain technologies, cyber security, etc. It will be necessary to define the exact boundary of responsibility between the contractor's sections and the connected sections, as these facilities have a complex impact within the technological installations. The prerequisite is the definition of 'boundary' network elements which will form a boundary beyond which the contractor will no longer have access and which, from the point of view of network configuration, will be purely under the management of the railway operator (RU). It will be necessary to set up a system, both procedural and technical, which will make it possible to monitor and trace the causes of problems.

The A-46 section will include the construction of the Liboc traction power station, which will supply the catenary of the entire line from Prague-Veleslavín to Kladno (together with the Kladno traction power station). The purchase of electricity for traction (TNS Liboc) and related activities will be provided by SŽ. Control of the equipment (power equipment and traction equipment) will be carried out from the SŽ electronic control room. For all activities on and near the overhead contact line, it is necessary to provide for overhead contact line closures (to create an electrically safe environment before and during the works). These shutdowns are normally carried out only by the railway operator (SŽ), both for planned and unplanned shutdowns (fault clearance). The procedure for securing and coordinating the activities will be the subject of negotiations in the competitive dialogue. When employees work on electrical equipment, the relevant legislative requirements for work on the railway must be met[[4]](#footnote-4). At the same time, intensive communication with the electrodispatcher is necessary.

Data from monitoring and diagnostic systems will be available to both parties - the SŽ and the contractor.

The basic assumed distribution of activities (competences) for the individual construction objects and operating sets is given in Annex 10b[[5]](#footnote-5).

In the operational phase, the contractor will mainly perform the following activities:

Administration and asset management

* Asset registration and transmission of necessary data to the formal asset manager (SŽ)
* Provision of the necessary documents and information to SŽ in order to fulfil the legal obligations of SŽ as a railway operator
* Insurance relevant for ensuring the operational capability of the railway
* Participation in the investigation of incidents

Railway operability

* + Supervision activities
  + Cleaning
  + Maintenance and its planning
  + Repairs and their planning
  + Equipment renewal (reinvestment)
  + Lockout planning in coordination with SŽ
  + Emergency response in coordination with SŽ
  + Provision of electrical power for the facility's own consumption (excluding traction power for train operation)

Maintenance of installations and facilities

* + Administration and setup of network elements in cooperation with the SŽ

Regarding the nature of the individual activities, the administration and property management as well as the operation of the facilities and equipment remain primarily the responsibility of SŽ, whereas ensuring the operational availability of the railway will be primarily the responsibility of the contractor. For some objects and facilities, the competences may be set differently.

# 3. Further information

The Contracting Authority reserves the right to narrow the scope of the Public Contract in the course of the procurement procedure, inter alia, following the course of negotiations with the participants in the competitive dialogue. The Contracting Authority also reserves the right to change the scope of performance after the conclusion of the contract with the selected supplier for the performance of the Public Contract, under the conditions and in the manner set out in the contract.

In particular, the subject of performance of the Public Contract may be narrowed in relation to the following parts of the performance:

1. the part of the Public Contract corresponding to section A-33 in the scope of some or all activities (design, construction, maintenance and financing)
2. the supply, installation and maintenance of communication and signalling equipment on the railway line which is the subject of the Public Contract.

1. In the sense of Act No. 183/2006 Coll., on spatial planning and building regulations (Building Act), repealed as of 01.01.2024 by Act No. 283/2021 Coll., Building Act. [↑](#footnote-ref-1)
2. Within the meaning of Act No. 283/2021 Coll., Building Act. [↑](#footnote-ref-2)
3. The stated mileage is according to the current version of the documentation, which is still subject to change. The markings may therefore vary slightly in the future. [↑](#footnote-ref-3)
4. In accordance with the valid and effective legislation, including the requirements for the qualification of persons carrying out the work (especially Decree 100/1995 Coll.) [↑](#footnote-ref-4)
5. The object composition and the assumption of the scope of the maintained infrastructure is determined according to the current documentation and can be further supplemented or changed in accordance with the minimum technical requirements and the development of contractual relations. [↑](#footnote-ref-5)