# Správa železnic Headquarters

**P01. Competition Brief** 





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# Správa železnic, state organisation

Správa železnic, a state organisation, performs, on the basis of the current law, the function of a railway operator and owner. Správa železnic manages, administers and innovates the railway network throughout the Czech Republic, which has one of Europe's densest railway networks.

The long-term objective of Správa železnic is to ensure safe and smooth transport on all lines and increase the speed and capacity of the railway infrastructure. The organisation currently manages over 9,400 kilometres of railway lines; 6,800 bridges; 160 tunnels and 2,500 stations and stops. With a workforce of over 17,000, Správa železnic is also a major employer in the Czech Republic.

# **New Headquarters**

The General Directorate and organisational units of Správa železnic are currently based in various locations in Prague, which is inefficient in terms of their cooperation and communication. In addition, many of these locations are old buildings and premises that do not meet the current standards and are, from a structural and technical perspective, difficult to operate and maintain. As this situation is unsustainable, Správa železnic is seeking to centralise virtually the entire administrative part of the company's management in a single location.

The aim behind the construction of the new Správa železnic Headquarters in Smíchov is to create a central facility that meets the current architectural, technical and operational demands while enhancing work process efficiency and flexibility and representing the future vision of Správa železnic as an entity managing a comprehensive transport system for the 21st century. At the same time, the building is to be designed in line with the principles of environmental friendliness and sustainability.

The Headquarters are to house the General Directorate of Správa železnic and five organisational units, i.e. approximately 1,350 employees in total. The Contracting Authority prefers the General Directorate (GD) to be housed in a separate building that may be linked to the remaining buildings (e.g. through subtle structures). The remaining buildings are to house the Construction Administration - West (CAW), Centre for Telematics & Diagnostics (CTD), Railway Geodesy Centre (RGC), Shared Services Centre (SSC) and the Fire & Rescue Service (FRS).

• A detailed building programme is provided in Annex **P02** to the Competition Terms and Conditions.

#### **Prague Smíchov Area**

The surroundings of the Smíchov station are a major development and transformation site in Prague.

Following the development of the area around the Anděl metro station, where capacity is no longer available, construction efforts are starting to move south, focusing on the area from the current Na Knížecí bus station towards the plots of the former Prague Smíchov rail yard and transshipment station and all the way to the southern part of the Smíchov railway terminal. Several large development projects are being planned for this area.

Smíchov City - North: a new city district in the northern part of the area.

https://sekyragroup.cz/pages/developersky-projekt-praha5-smichov-city-sever

Smíchov City - South / Campus Prague: a new office complex of Česká spořitelna.

https://cshq-citycampus.cz/

Smíchov Terminal: a new transport hub for municipal, suburban and international transport.



https://www.iprpraha.cz/terminalsmichov

**Výpravní budova ŽST Smíchov:** rekonstrukce a dostavba železniční stanice.

 A detailed information on related projects is provided in Annex P10 to the Competition Terms and Conditions.

#### **Smíchov Terminal**

The study approved by the Council of the Capital City of Prague merges the existing hubs for municipal, suburban and international transport in Smíchov, allowing for a faster and easier passenger transfer. The investor of the bus terminal including the access ramp is the Capital City of Prague.

The entire Terminal project is coordinated with the planned modernisation of the railway station and with future railway projects, such as a multi-track railway bridge crossing the River Vltava, new high-speed lines and Metro S, and means better connectivity for Prague and its surroundings. Suburban and long-distance buses currently terminate in Na Knížecí Street and in front of the Smíchov railway terminal. This bus traffic is to move into a new terminal located above the railway station platforms. Municipal buses, on the other hand, will terminate in the newly arranged area in front of the station. Municipal bus services will remain in Na Knížecí Street.

The new Terminal is designed to minimise the strain on its surroundings. The P+R car park will only be accessible from the ring road in order not to increase traffic in Nádražní street. The P+R car park will have up to 1,000 parking spaces. Although the Smíchov district itself will become a wider city centre in the future, it is the most distant point from the centre where the metro line and the city/Prague ring road will meet, so it is necessary to locate the P+R car here. The B+R facility will have 1,000 parking spaces for bicycles.

An access ramp between the southern wing and the area of the railway platform and tracks allows buses to access the Terminal located above the platform. The ramp cannot be repositioned and it is obligatory to maintain its position including the passing clearance in the competition entry. The adjoining administrative building (building "C" in the plan) should also form an acoustic barrier for the surrounding structures (shielding them from traffic noise on the ramp - this requirement does not apply to buildings "A" and "B"). Trolleybus traction lines are planned to be placed on the ramp. The design of the administrative building C is such that the access ramp may, but need not be, integrated in the building. However, the structural and design solution should allow for phasing and separate construction of both plans in any order. It is essential that both investment projects be coordinated.

#### The competition entry is required:

- the location of the terminal access ramp and its clearance dimensions under the Regulation (P06).

# Reconstruction of the Prague Smíchov railway station/Southern Wing

According to the study, the historic station building with a passenger hall from the 1950's will be retained and extended with a new section housing shops and passenger facilities. Správa železnic, a state organisation, is the investor of this separate investment project.

The hall will connect both station underpasses and metro entrances. The study envisages that the station will be linked to the new Headquarters of Správa železnic.

The space where the expected level of the 2nd aboveground floor and the 1st underground floor of the planned buildings will meet the level of the train platform and the underpass of the Southern Wing and the existing carpet store respectively should be connected in height, and it is desirable to make this connection in a manner that is both functionally and architecturally appropriate.



#### The competition entry is required:

- to comply the point 19 of the Regulation (P06) entitled "Axis of outside track" The competition entry must observe the line (building line) defined as a minimum distance of 5.0 metres from the axis of outside tracks (point 19. of the Regulation; see also the part of Competition Brief called "Regulations and limits"), i.e.
  - The competition entry must strictly observe the minimum 5.0-m distance from the axis of outside tracks nos. 5, 7 and 9, which includes a 3.0-m distance for a free passable and handling area and a 2.0-m distance for the placement of railway facilities such as traction line supports, cable routes low-voltage distribution system, safety and communication equipment:
  - In addition, a safety distance from this boundary to the facade must be taken into account due to future facade maintenance because one cannot assume the traction will be switched off for such maintenance;
  - The traction is not expected to be included in the structure of the new buildings, in particular because of future maintenance.

#### It is recommended that the competition entry satisfies the following requirements:

- In order to drain the substructure, space will be allocated for connection to the existing sewers in Nádražní Street, namely on new railway kilometre 4.735 – 4.745 (the beginning of existing platform 1A) and railway kilometre 5.050 – 5.065;
- It is necessary to observe the space with the newly located retention tank behind the end of the platform at track No. 5 (next to the station building) on new railway kilometre 4.790 4.825 at a distance of 9.6 m from the axis of the adjacent track. The limits defined in the first point can be used at the level of 201.790;
- Similarly, it is necessary to observe the platform area at track No. 5 (next to the station building) at a distance of 9.6 m from the axis of the adjacent track. As in the previous case, the limits defined in the first point can be used at the level of 201.790.

#### Reconstruction of Nádražní Street

The traffic and width arrangement results from the Nádražní Street reconstruction project and the competition entry should observe the width arrangement in passing clearance. The Capital City of Prague and Dopravní podnik hl. města Prahy (DPP, Prague Public Transport Company) are the investor of this investment project.

The unattractive street space in front of the station will be transformed by rearranging the tramway and bus stops, which will also facilitate passenger access to the station. The tramway track will be straightened and moved farther from the residential houses to reduce noise. The plan also includes planting new trees and upgrading the entire area for all of its users.

The competition entry may cover the pavement area from the lane boundary between the street and the proposed buildings (including potential modifications to the position of the parking spaces and trees, however the number of K+R bays should remain unchanged). It is also necessary to design suitably placed entrances to the underground car parks located below the buildings. This investment project also covers an extension of the roof of the outdoor parking spaces into the space in front of the administrative building, and the design of the administrative building must address this.

# **Territory concerned**

The new Headquarters of Správa železnic shall be a major architectural feat as well as a significant urbanistic momentum. The proposed buildings will be a starting point for the western frontage of Nádražní Street, which continues virtually uninterrupted, along its historical trail, all the way to Malostranské Square, the heart of Malá Strana. These buildings



will also fundamentally co-define the new look of the area in front of the future Smíchov railway station, which is expected to become one of the key and busiest public places of Prague.

The entire new western frontage will be 986 metres long (e.g. Wenceslas Square is 700 metres long), approximately a quarter of which will be formed by the facade of the Smíchov Terminal. The eastern frontage is formed by seven blocks across this length. Each block is divided into separate plots having a width of approximately 17 metres. This division into blocks is mirrored on the western frontage. However, the blocks of the western frontage are not divided into smaller plots. This presupposes different granularity of the look of the western and eastern frontage. The way how the authors address this situation will be a major factor in assessing the urbanistic qualities of the competition entry.

In terms of the newly defined area in front of the Smíchov Terminal, importance will be attached to clear identification of the Terminal building. Spatial regulations assume that the entire length of the Terminal will project in front of the western frontage, and yet that the Terminal height will not dominate the space. Therefore, it is up to the designers of the buildings how they will present their role in the area in front of station.

From the perspective of urbanism, the key topic is the dominance of the Správa železnic administrative buildings in the look of the city when arriving in Prague by train from the south and by road along Dobříšská Street and the ring road. While the spatial perception of the administrative buildings will be limited by Nádražní Street from the eastern side, from the west the buildings will dominate an extensive open area of the rail yard of the Smíchov station, and as such they will be perceived in a far wider context than from the east. This is another important fact to be taken into account in the competition entry.

The urbanistic structure of Smíchov is characterised by a regular grid, into which older, organically shaped roads were integrated. The surroundings of the Smíchov station were until recently an industrial suburb, which are only now transformed into a fully-fledged city district. The grid is one of the tools linking the old part of Smíchov with the new one. Although Nádražní Street represents a historical footprint predating the modern regulation, there is an option to link the extension of its western frontage to the grid and deliberately refer to the regular geometry of the grid rather than simply filling the space dictated by the transport infrastructure.

The territory concerned delineates the boundary and the expected scope of the competition entry.

• The territory concerned is specified in Annex **P04** to the Competition Terms and Conditions.

# Regulations and limits

A draft Regulation has been prepared for the planned development of the Nádražní Street section extending to the south and north of the Smíchov Terminal, setting out the maximum possible volume of the future buildings. The three main buildings in the southern section are marked as "A, B, C".

With its scale, volume and height, the Regulation draws on the existing and planned block structure of this city district. The competition entry must observe the line (building line) defined as a minimum distance of 5.0 metres from the axis of outside tracks (point 19. of the Regulation). The competition entry is recommended to observe the remaining points of the Regulation. It is up to the contestants to decide whether to place the required building programme into two or more buildings. However, the competition entry should show the idea of urbanistic and functional solution of the whole area concerned. Building height regulations allow a maximum height of 6 floors plus 1 set-back floor (the height of set-back floors and possible dominants is governed by the Prague Building Regulations). The Regulation also covers visual openings including an option to place subtle structures between buildings.

The Contracting Authority expects the entrance, representative and assembly areas (i.e. in particular the foyer and the conference hall in particular) to have a higher clearance (headroom); the clearance in these areas should be at least 5.0 metres. The remaining floors should preferably also have a higher clearance,



considering the spatial, operational and economic appropriateness and technical solution of the competition entry. However, it is recommended that the competition entry provides a higher clearance (recommended height: 4.0 metres) on the floor housing the General Directorate and a minimum clearance of 3.3 metres on other administrative floors.

Given the emphasis on public greenery and due to the limited possibilities in the territory concerned, Správa železnic allows the contestants to make, in the competition entry, full use of the ground area with a possibility to place underground structures (e.g. tanks for the retention of water in the territory and its use) and aboveground areas (a park for public or private/business use) if the conditions for their placement so allow and subject to adherence to the aforementioned requirements (noise barrier). In addition, the Contracting Authority expects a generous public area to be created in front of the administrative buildings and to become a living space and a destination.

 More details on the Regulation are provided in Annex P06 to the Competition Terms and Conditions.

# Metro buildings and metro protection system

The Smíchov station is included in the protection system of Prague metro. There is the station, tunnels and buildings of the protection system in the territory concerned. Dopravní podnik hl. města Prahy (hereinafter "DPP") is the operator and investor for this investment project.

The design of the underground and aboveground parts of the buildings must observe these spaces and their structure as follows:

#### The competition entry is required:

- not to spatially interfere with the structure of the station, metro tunnels and the metro protection system (MPS) except for the expected alterations to ventilation shafts;
- not to spatially interfere with the load-bearing structure of the underground car park that is structurally connected to the MPS through the shared ceiling structure;
- to preserve the additional entry chamber (AEC) that must be situated in non-collapsible space, and to adjust the height and the location of the proposed facility accordingly.

#### The following is required in the next project phase:

- Designing a modification to the ventilation shafts and AAC structures and garages in line with the requirements set out in DPP fire prevention policies for the designing and construction of the Prague metro;
- Designing appropriate measures to prevent stray currents and to separate ground and energy networks;
- Minimising the time required for future construction works in the vicinity of these structures and the time for which these structures will be exposed;
- Works interfering with the MPS shall be assessed and approved by the DPP unit 850000
  Technological Equipment and MPS, MPS specialist designer and by the OPO Safety Department of
  the Prague City Hall.

MPS-related sensitive information is confidential and DPP provides such information only to entities that enter into a Non-Disclosure Agreement (NDA) with DPP. Therefore, the next project phase requires that the selected contractor signs the NDA with DPP.

 More information on the metro structures and the MPS is provided in Annex P05 to the Competition Terms and Conditions.



# Transport solution and accessibility

The entrance to the underground car park is expected to be from Nádražní Street and may be designed via buildings "A, B or C", taking into account the overall urbanistic and transport solution, anticipated traffic density and the draft Regulation.

Since the station building and Southern Wing house retail units, it is necessary to create the required number of parking spaces (31-116 spaces according to the Prague Building Regulations). Due to property relations, the contracting authority expects the parking spaces to be located under the administrative building C (close to the Southern Wing), not in the building of the existing carpet store (the capacity of a potential car park in that building shall not be included in the competition entry). Its future use depends on the owner (DPP), however access to it must be possible (expected to be via building C).

The car park on the first underground floor is expected to provide access for bigger delivery vehicles to the archive, material storeroom and retail units. The car park on the second (and possibly third) underground floor will be reserved for passenger vehicles.

The car park on the first underground floor is required to provide barrier-free pedestrian access to the first underground floor of the station building.

 More requirements for the transport solution are specified in Annex P02 to the Competition Terms and Conditions.

#### Sustainable development requirements

The architectural and technical design of the buildings should reflect the current trends in sustainable development. These include, in particular, savings in the construction, use and disposal of buildings with environmental, social and economic impact.

In the next phases, the project will be subjected to a quantified certification and assessment of building sustainability (e.g. BREEAM, Green Globes, LEED, CASBEE, HK-BEAM, NABERS, LEnSe or a similar system).

#### Land Use Plan and Prague Building Regulations

In the current Land Use Plan of the Capital City of Prague, the territory concerned is part of the major development area Prague-South and construction is banned there.

However, the construction ban is not an absolute one and an exception may be granted if the construction does not put at risk the subject of protection that was the reason for imposing the construction ban. The decision on granting an exception from the construction ban lies with the Council of the Capital City of Prague. An application for an exception from the construction ban shall be submitted to the Building Regulations Department of the Prague City Hall; the Department processes such applications and submits them to the Council of the Capital City of Prague for approval.

The developable territory is outside the territorial system of environmental stability, is not a flood-prone area, and is designed to have the following functional use:

Area	Functional use			
DZ/SV	DESIGN HORIZON / DZ - tracks and facilities of railway transport, freight terminals			
	<b>Main use:</b> Areas and facilities for railway transport and terminals for freight transport connection with railway transport.			
	<b>Acceptable use:</b> Areas, buildings and facilities used for railway transport including operational and technological facilities, facilities used for operations on sidings outside premises. Buildings, facilities and areas for Prague Integrated Transport including P+R car parks. Buildings, areas and facilities for goods and material storage, land used for intermodal transfer of cargo in			



connection with railway transport. Employee apartments, clubs, business facilities, administrative facilities and services related to the main use. Greenery, footpaths and pedestrian spaces, private roads intended for structures and facilities that meet specific needs of the area, technical infrastructure.

**Conditionally acceptable use:** Cultural facilities may be located in the area to meet the needs connected with the main and acceptable use.

The following may also be located in the area: roads, cycling paths, garages, parking spaces, small waste collection depots. The conditionally acceptable use must not restrict the main and acceptable use.

**Unacceptable use:** Unacceptable use is such use that is incompatible with the main and acceptable use, is contrary to the conditions and limits applicable in that particular location, or is otherwise in conflict with the goals and tasks of land use planning.

#### LAND RESERVE / SV - generally mixed

**Main use:** Areas for the placement of multi-purpose buildings or a combination of single-purpose buildings for housing, commerce, administration, culture, civic amenities, sports and services while maintaining the multifunctional nature of the territory.

Acceptable use: Multi-purpose buildings for housing and civic amenities in accordance with the main use, with the predominant function from the second aboveground floor (e.g. housing or administration in the case of a vertical functional division, with retail on the ground floor), commercial facilities with the total gross floor area of not more than 8,000 square metres, administrative buildings, cultural and entertainment facilities, schools and other educational facilities, colleges, after-school facilities for children and youth, healthcare facilities, social services facilities, public catering facilities, accommodation facilities, religious buildings, buildings for public administration, sports facilities, minor non-disturbing production and services, public health offices, veterinary facilities as part of multi-purpose structures and buildings for housing, fuel stations without car repair shops as an integral part of garages and multi-purpose buildings, buildings, facilities and areas for the operation of Prague Integrated Transport, small waste collection depots. Small bodies of water, greenery, cycling paths, footpaths and pedestrian spaces, roads, technical infrastructure facilities to the necessary extent and lines for technical infrastructure. Parking areas and garages.

**Conditionally acceptable use:** Single-purpose buildings for housing or civic amenities in accordance with the main use, in justified cases where consideration is given to the character of the public space and territory defined in the Territory Analysis Documents. Multi-purpose facilities for culture, entertainment and sports, commercial facilities with a total gross floor area not exceeding 20,000 square metres, facilities for rescue and security services, veterinary facilities, P+R car park, petrol stations, road maintenance centres, waste collection depots, garden centres, buildings for small-scale agricultural activities and breeding facilities. The conditionally acceptable use must not impair or endanger the usability of the land concerned.

**Unacceptable use:** Unacceptable use is such use that is incompatible with the main and acceptable use, is contrary to the character of the location and conditions and limits applicable in that particular location, or is otherwise in conflict with the goals and tasks of land use planning.

#### DH DESIGN HORIZON / DH - areas and facilities for public transport

Main use: Areas and facilities for public transport including P+R car parks.

**Acceptable use:** Buildings, facilities and areas for the operation of Prague Integrated Transport, bus stations. Administrative facilities and services connected with the main use. Greenery, cycling paths, footpaths and pedestrian spaces, private roads, technical infrastructure. Parking areas connected with the main use.

Conditionally acceptable use: Accommodation facilities and employee apartments may be located in the area to meet the needs connected with the main and acceptable use. The following may also be located in the area: roads, retail units with a total gross floor area not exceeding 300 square meters. The conditionally acceptable use must not restrict the main and acceptable use.

Unacceptable use: Unacceptable use is such use that is incompatible with the main and



acceptable use, is contrary to the conditions and limits applicable in that particular location, or is otherwise in conflict with the goals and tasks of land use planning.

• The draft Metropolitan Plan of the Capital City of Prague is available on the Internet.

https://app.iprpraha.cz/apl/app/vykresyUP/

Prague Building Regulations (PSP) in Annex P06 to the Competition Terms and Conditions.

http://en.iprpraha.cz/praguebuildingregulations

# **Metropolitan Plan**

In the Metropolitan Plan, the area of the Smíchov station is defined as a location with a hybrid structure.

The aim of the proposed regulations is to determine the spatial layout, finalise the network of public places, complete the district streets of Nádražní, Radlická, Strakonická and Svornosti, create a network of civic amenities and parks according to the proposed parameters of transformation areas, integrate the modernised railway lines that pass through the district into the structure of the built-up area, create an integrated interchange hub, and to improve access to the River Vltava, a local recreational site, in the following areas:

Area	Functional use
072	Smíchov Station
Potential for development	Developable, construction
Structure type (03)	Hybrid
Area use	Residential
Stability	Transformational

The draft Metropolitan Plan of the Capital City of Prague is available on the Internet.

http://plan.iprpraha.cz/cs/metropolitni-plan

# **Land Register**

The wider area for the construction of the administrative complex covers the plots specified below. The construction is conditioned upon the property relations being settled, however the competition entry need not address that.

Plot number	Owner	Title deed
5093/5	Dopravní podnik hl. m. Prahy, akciová společnost	1943
5093/6	Dopravní podnik hl. m. Prahy, akciová společnost	1943
5093/7	Dopravní podnik hl. m. Prahy, akciová společnost	1943
5093/8	Dopravní podnik hl. m. Prahy, akciová společnost	1943
5006/2	HLAVNÍ MĚSTO PRAHA	2838
5006/3	HLAVNÍ MĚSTO PRAHA	2838
5006/5	ČR/ Správa železnic	8786
5006/6	ČR/ Správa železnic	8786
5006/7	České dráhy, a. s.	549
5006/8	HLAVNÍ MĚSTO PRAHA	2838



5006/9	České dráhy, a.s.	549
4990/1	HLAVNÍ MĚSTO PRAHA	2838
5018/1	České dráhy, a.s.	549

A cadastral map is provided in Annex P03 to the Competition Terms and Conditions.

# Heritage conservation in the territory

The territory concerned is located in the protection zone of the Prague Heritage Reservation and the competition entry should observe this.

The protection zone serves to protect the outer appearance of the heritage reservation or heritage zone, ensure the urbanistic and architectural quality of its immediate vicinity and preserve the visual relations of the protected territory with the wider surroundings.

The competition entry shall contain two panoramic drawings of the proposal in a 3D model (a view from Vyšehrad and Dívčí hrady).

• The 3D model with the set views is provided in Annexes **P07.3** and **P07.4** to the Competition Terms and Conditions.