



ROAD TRANSPORT MASTER PLAN for District Prague 9



Project 13-P2-26

EXECUTIVE SUMMARY

Title: **Road Transport Master Plan for district Prague 9**

Client: District Prague 9
Sokolovská 14/324, 180 49 Praha 9

Contractor: HaskoningDHV Czech Republic, spol. s r.o.
Sokolovská 100/94, 186 00 Praha 8

Project: 13-P2-26

Part: **Executive Summary**

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Table of contents

Introduction.....3

Reasons for the acquisition of the road transport Master Plan for district Prague 94

Cooperating organizations and bodies6

Problems dealt by the Master Plan7

A summary of the achieved findings processed by the Master Plan.....10

 Part A – Input data and core files11

 Part B – Analysis of transport accessibility in the district12

 PART C - Evaluation of future infrastructure needs.....13

 PART D - Feasibility study, ISMD of the area of Prague 9.....14

Conclusions and recommendations of the Road Transport Master Plan of district Prague 917

Annexes (a separate parts of the Master Plan)18

Glossary of terms

C	Cars
Cy	Cyclists
IPR	Prague Institute of Planning and Development
IRS	Integrated Rescue System
ISMD	Integrated Traffic Management System
OMI	Department of City Investor
P	Parking
P+R	„park and ride“ parking
PID	Prague Integrated Transport
Ped	Pedestrians
PuT	Public transport
ROPID	Regional Organiser of Prague Integrated Transport
TSK	Technical Administration of Roads of the City of Prague
TSK-UDI	Technical Administration of Roads – Dep. of Transportation Engineering

Introduction

In order to effectively address transport issues and to gradually reduce the negative effects of transport in the area of Prague 9 a particularly detailed knowledge of the current traffic situation, existing transport infrastructure and credible forecasts of future traffic demands are required. After gaining such knowledge conceptual proposals and recommendations can later be established.

Therefore, to improve the current unsatisfactory situation, district of Prague 9 commissioned an extensive analysis - project entitled "Master Plan for Road Transport of Prague 9." During the selection process the company HaskoningDHV CR, spol. s.r.o., a consulting engineering firm (based in Sokolovská 100/94, Praha 8, 186 00) was selected as the processor.

The subject of the procurement contract under the name "**CITY REGIONS - Increasing the competitiveness of city regions through integrated urban-rural development - Road transport Master Plan of the district Prague 9**" was the analysis of public transport in Prague 9, further assessment of future infrastructure needs and lastly also processing the so-called Integrated Management System for the transport within this district. Part of the contract was also closer cooperation with representatives of municipalities and cities in the Central Bohemian Region.

Transport services of the City District Prague 9 cannot be addressed in isolation from other parts of the City of Prague or from other related areas of the Central Bohemian Region. For this reason, in the creation period of the final documentation, the traffic demands placed on existing infrastructure in terms of transport relations arising from or terminating in adjacent territories were taken into account. Above all, transport links to or from Prague's agglomeration zone between D8 and I/2 communications in the partner municipalities were taken into account. These include cities like Brandýs nad Labem, Čelákovice, Nymburk, Český Brod, Čelákovice and Říčany.

Master Plan for Road Transport of Prague 9 is processed with the support of the project of City Regions - Increasing the competitiveness of city regions through integrated urban-rural development, which the City District Prague 9 participates in. The Master Plan is funded by the European Union from the resources of the Operational Programme for transnational cooperation within Central Europe, the ERDF.

Reasons for the acquisition of the road transport Master Plan for district Prague 9

The main reason for the acquisition of the study for road transport Master Plan is the steadily worsening traffic situation caused by the increasing intensity of road transport and also significantly delaying the completion of superior communication system of the City of Prague (City Ring, following road radials, Prague outer Ring).

Due to the amount of passing and parked cars in the streets and constantly thickening traffic circumstances, there occurs today the phenomena in selected sections of communication networks of Prague 9 - firstly the reduction of the flow of traffic of motor vehicles, and secondly a significant delay of surface public transport vehicles. With the delay of buses and trams in traffic congestion, availability of a car and the prevailing lifestyle in the metropolis, there is a further move away from public transport towards individual transport. Despite the relatively recent completion of the subway lines and their launching in the direction of districts Hloubětín and Letňany, the volume of passengers transported by public transportation system is stagnant. This situation has largely signed also a number of commuters from areas downstream of the area of Prague 9 (ie, from the neighboring boroughs of the City. Prague and the Central Bohemian Region of the areas), who traveled on a private car use mode of transport. This situation has largely been influenced by the number of commuters from areas downstream of the area of Prague 9 (ie, from the neighboring districts of the City and of the areas in Central Bohemian Region), who as a mode of transport use their private cars.

The remaining systems in the area, i.e. walking and cycling transport are still missing a completed communication system in a way that would allow a surface permeability of the area without having to navigate within the corridors intended primarily for motor traffic without the risk of bullying one or the other.

Another reason is the ongoing preparation or completion of the prior-industrial development that still have the status of deprived development sites located in district of Prague 9. In the plans of developers this area appears as a function for housing, possibly with mixed functions, allowing either administrative buildings or commercial office buildings. Either way, there is a large number of development areas in district of Prague 9 today, whose secondary effect (if we disregard the growth of new housing and job opportunities) will be growing number of cars in the streets imposed by the process of the newly built functions.

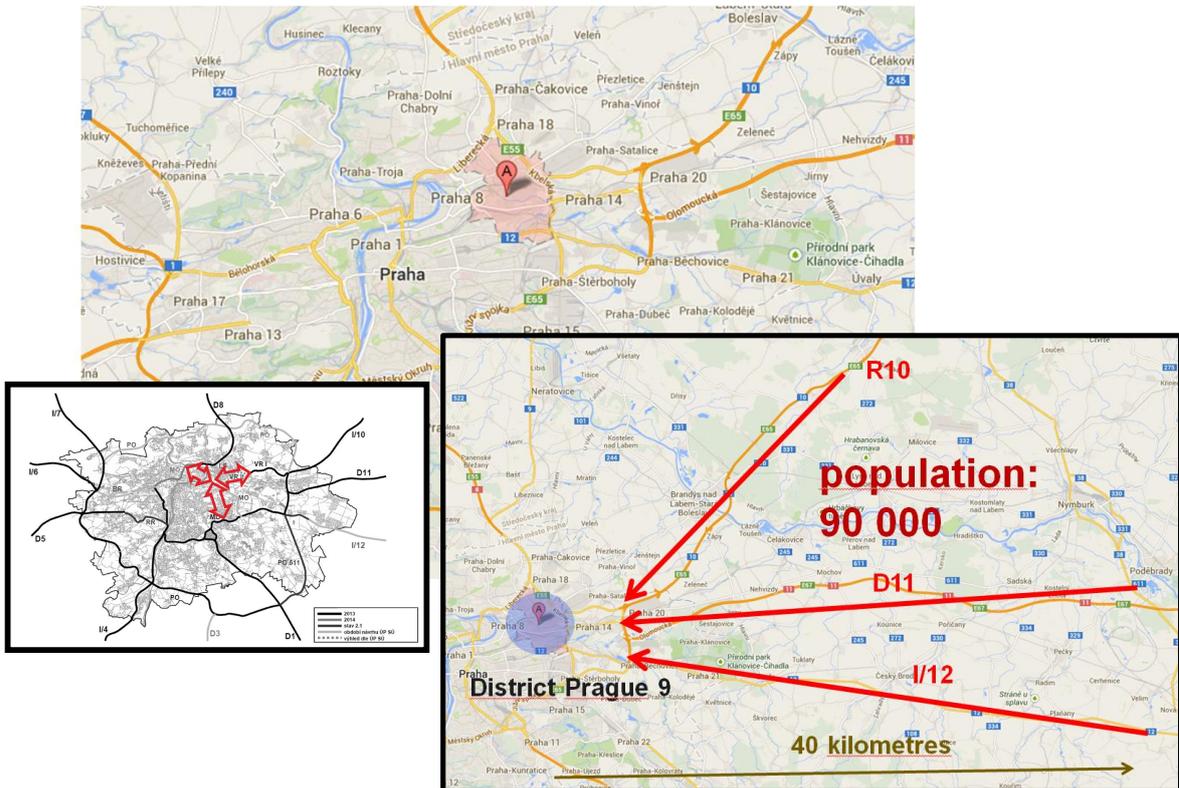
Finally, the reason for the acquisition of the Master Plan is the need to establish close cooperation with the representatives of district Prague 9 with representatives of organizations and entities engaged in a long-term solution to the traffic situation in the City of Prague. Cooperation and mutual awareness was during the resolution period of the project **City Regions – Increasing the competitiveness of city regions through integrated urban-rural development** also established in the direction of representatives of neighboring districts, villages and towns located in the agglomeration zone eastward of the district of Prague 9.

The position of the District Prague 9 in relation to neighboring territories in terms of lack of superior transportation infrastructure and a number of permanent residents in the catchment area of the Central Bohemian Region:

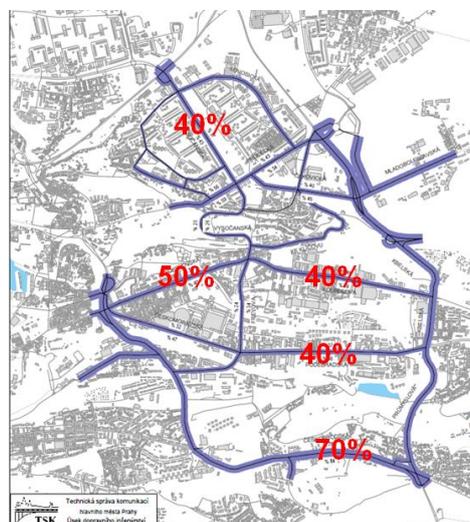
District Prague 9

Area: 13,56 square km

Population: 54 000



The consequences of the missing superior road infrastructure in terms of the amount of transit traffic on roads led through territory of the City District Prague 9 (percentage of total transit vehicles of passing automobile traffic):



Cooperating organizations and bodies

In the course of the project solving cooperation with selected entities and companies involved in the processing of long-term traffic engineering, urban and other conceptual materials for the field of development CD Prague 9, by extension, the entire territory of Prague and other involved areas of the agglomeration zone was established. During the course of closer cooperation there were several consultations held with representatives of selected departments of the City District Prague 9 (primarily the Department of Environment and Transport), as well as close cooperation was established with the TSK as the successor organization to the Institute of Transportation Engineering of the City of Prague, as well as with the Regional Organizer of Prague Integrated Transport ROPID and selected departments of Institute for planning and development of the City of Prague (previously known as Unit for development of the City of Prague) and the Capital City Development Authority of Prague (for example, Department of urban investor OMI). Finally, the representatives of the contracting authority were in close contact with representatives of the related city districts and selected Central Bohemian municipalities and cities relevant to the district of Prague 9.

Department of Environment and Transport in district of Prague 9 was the main source of information about the area in question, both in terms of detailed knowledge and experience concerning the functioning of the existing transportation system, as well as the history of the construction and the planned development area in their administration.

TSK, hence the Institute of Transportation Engineering of the City Of Prague, provided information on the current traffic load of the communication network located in the city and Prague 9, as well as on the composition and direction of traffic flow, the transit traffic volumes and the expected impact of the planned road constructions of the superior communication system on the communication network of Prague 9

Regional Organizer of Prague Integrated Transport (ROPID) provided information and permission for further use of information on passengers quantities and links in various modes of urban and public transport, the number of on-boarding/off-boarding passengers on each stop situated in the investigated area, and other information necessary for a detailed understanding of the functioning of public transport in the city district.

More information on the development and direction of the transport system were drawn from scientific publications and outputs of URM of the City of Prague, OMI and other organizations and institutions.

Due to the long-term existence and operation of the company HaskoningDHV in the capital city of Prague and the Prague Municipal District Prague 9, an extensive database of information and knowledge accumulated in recent years in solving traffic-engineering issues was also used with the permission of the representatives of this district.

Problems dealt by the Master Plan

The presented Master Plan for Road Transport is mainly engaged in the problems solving in the district Prague 9 and the related districts caused by the individual car transport in motion and parking.

Linked to the traffic in motion is transit traffic in the streets of the city, traffic jams and congestion caused by demand exceeding supply capacity of key intersections, as well as the risk of conflicts of cars and vulnerable road users in both the isolated location of pedestrian passages, and in places in connection with public transport stops. Unavoidable negatives of the automobile traffic are also increased noise emissions and harmful substances in the air, and limited traffic flow of surface transport.

Transit traffic today is presently characteristic for the entire significant road network of the city, and because it is concentrated in all directions and transit corridors it causes many problems during peak times. In the east-west journeys undertaken through the district Prague 9 there occurs commonly 40 or more percent of automobile traffic, the same phenomena occurs in north-south transport relations. In these traffic jams the surface public transport vehicles are delayed especially buses that share lanes with individual car transport.

Related to the transport at rest is linked the limited passibility of the vehicles of Integrated Rescue System (IRS), reduced availability of the area for residents and subscribers, reduced aesthetic value of street profiles, occupation and damage to green areas and other property of Prague 9. These issues can be found throughout the territory of Prague 9, depending on the lines of main transit communications, distribution of traffic sources and destinations (residential complexes of buildings, industrial areas, commercial or business-administrative activities) and direction of lines of surface transport area.

Parked cars cause significant problems today not only in areas with dense concentrated buildings (housing estates Prosek, Střížkov), but also in places with loose building development, apartment houses and family houses (such as the area Pod Balkánem). Problematic are also sites with links to the capacity public transport (the area around the metro station Českomoravská or Railway station Vysočany and metro station Vysočanská). Problems are also evident along roads with a mixed function of housing and commercial and administrative activities (Harfa, Nová Harfa, Sokolovská, Ocelářská, and Českomoravská near O2 Arena). Additional problems with traffic at rest (parking) and the amount of parked vehicles are characteristic during the organization of events with significant demands on transport (O2 Arena).

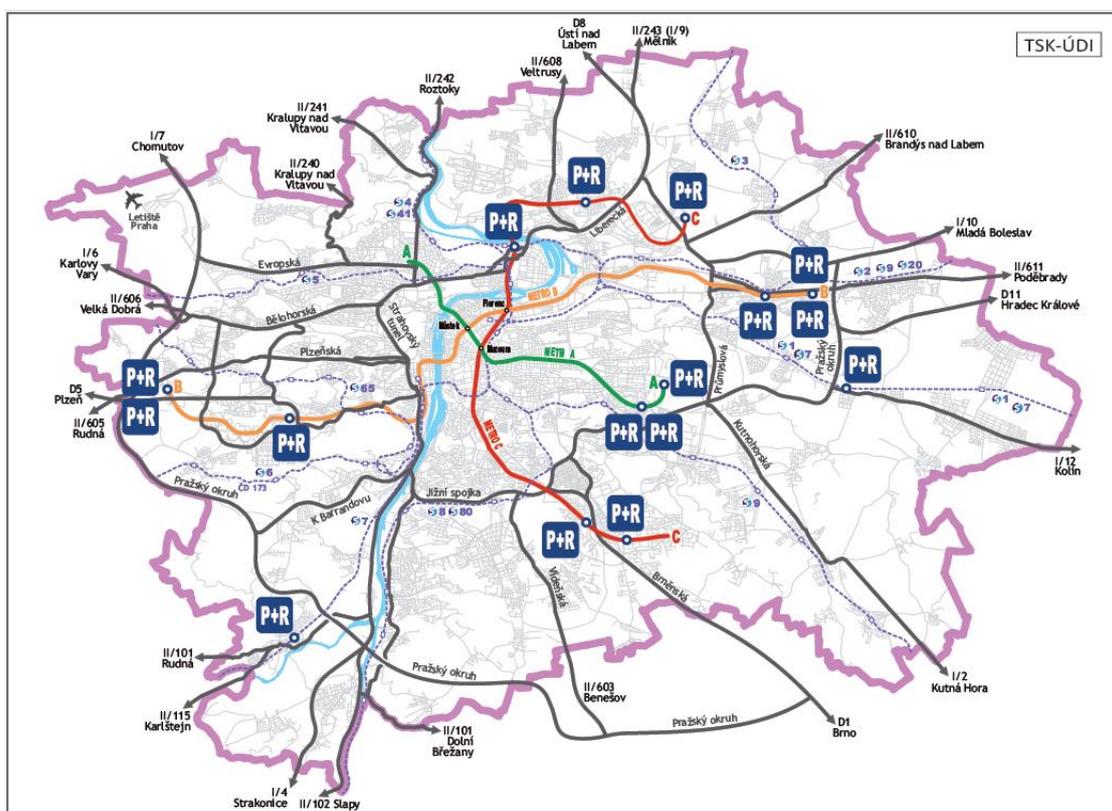
From the point of view of the intended decrease in amount transit vehicles the expedited completion of the superior communication system can help and more space devoted to alternative transport modes can be also helpful. In terms of surface public transport vehicles are should be dedicated lanes for buses and fully segregated trams traffic, further preference to the selected transportation modes on light-signalized intersections and greater involvement of telematics applications into daily operations. From the perspective of non-motorized road users there should be safe pedestrian

crossings, new paths and walkways for pedestrians and cyclists, which allows a surface permeability of the territory, regardless of the barriers in this area (river Rokytká, roads and railways lanes and neglected industrial sites, etc.).

Within the problematic context of static traffic it is necessary to approach the solution especially with regard to addressing the specific location and occurrence of the dominant functions in the linked area. Problems in the housing estate can be dealt with immediately by changing the organization of stationary traffic and increased police surveillance, then in the future by increased capacity of parking building facilities. In mixed-function development, the needs of parking and stopping of vehicles of residents and subscribers should be primarily met, within a reasonable extent then for visitors or staff.

Locations within the capacity public transport system reach should be resolved by P+R parking capacity. The issue of construction of car park facilities or parking areas is not and cannot be the privilege and the obligation of the city districts, which are serviced by subway. The offer of car parks must be prospectively focused also on the important railway lines to enable accessibility by the catchment area of the Central Bohemian Region. In the case of solving the issue of parking and stopping of vehicles in the direction from Central Bohemian Region to the City District Prague 9, these following railway tracks are to be focused on: the track No. 231 to Čelákovice, as well as track No. 011 to Úvaly and the Český Brod and track No. 070 to Čakovice and Neratovice.

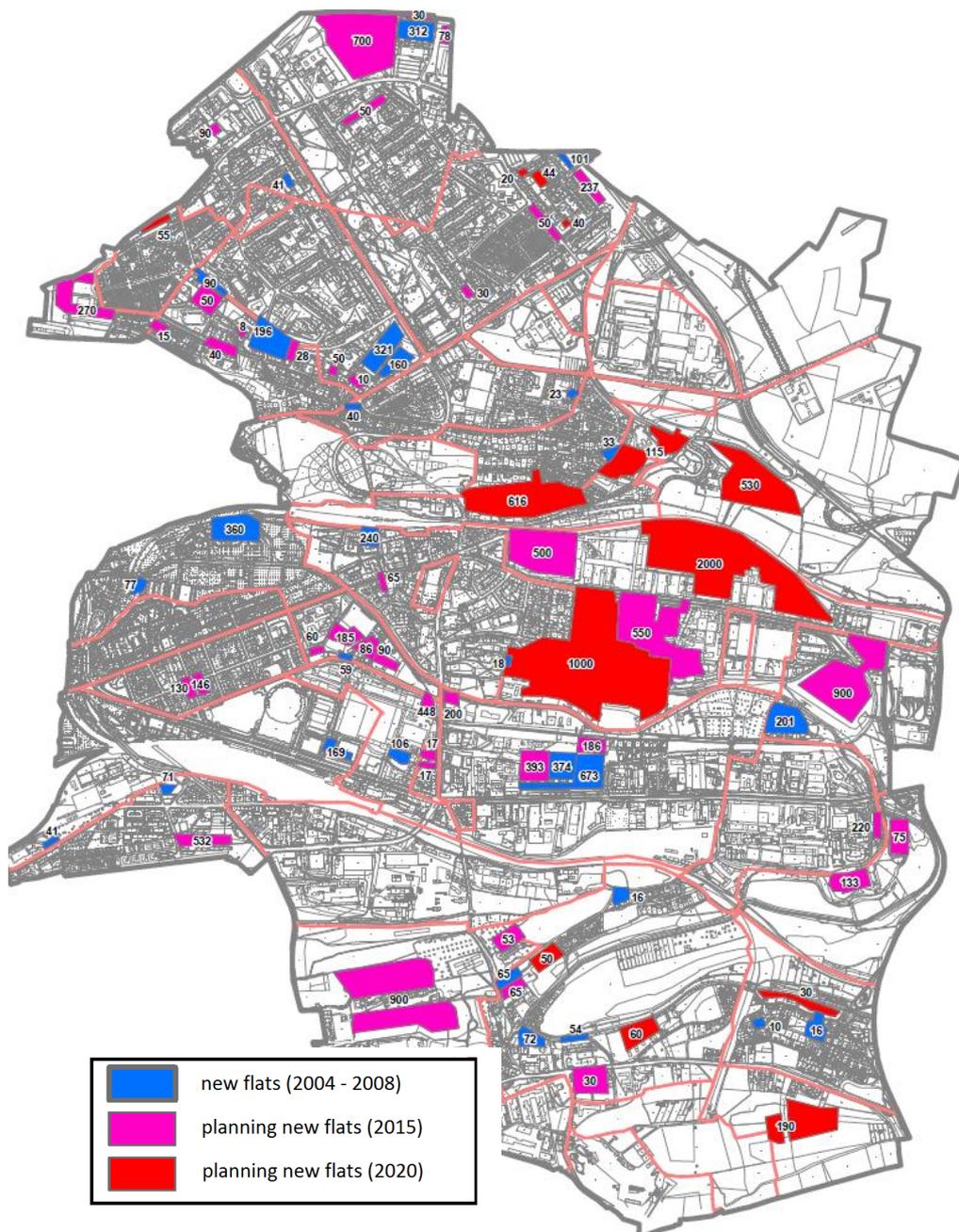
Current offer of the Park and Ride parking lots in the area of City of Prague



Static traffic demands of the forthcoming development of new areas (housing and offices) must then be addressed mainly in these areas as parking on the surface or below the surface.

Blending of the problems caused by traffic in motion and at rest can then be seen in connection to major development projects on the existing communication network. Taking into account the experience of other districts and other cities in the Czech Republic it is therefore necessary to consider a way of connection that allows non-problematic transfer of both existing traffic and traffic caused by new development plan.

Expected development of the residential function of the area of Prague 9:



A summary of the achieved findings processed by the Master Plan

The presented Master Plan for Road Transport District of Prague 9 was processed into several separate but mutually interlocking and complementary parts.

The first part of the Master Plan "Summary of the Project information" deals with basic information about the project, the reasons for its acquisition and detailed specification of circuits of monitored problematic transport modes. Also included is a brief definition of the area of Prague 9, description of the prepared outputs and a list of upcoming set of indicators of the project.

The next part of the Master Plan "Input data and fundamental analysis" provides basic planning and traffic analysis. Within the descriptive part of the project is described the use of literature and sources of data, a view of spatial planning at the development of the city district Prague 9 and the surrounding districts and Central Bohemian Region, basic socio-demographic assumptions and the planned development of the area.

The third part of the Master Plan "Analysis of the transport serviceability" is devoted to the analysis of transport services and transport availability of district Prague 9. It provides an analysis of traffic characteristics, highlights the narrow and risky places in terms of surface transport mode, parking, pedestrian and bicycle traffic. Part of the proposed measures prepared based on the detailed analysis of the current traffic-engineering indicators are proposals to increase the availability of the selected area using public transport vehicles, reducing the risk of injury for non-motorized transport and increased permeability of the area for pedestrians and cyclists. When addressing the issue of stationary traffic the basic procedures and measures to calm the current traffic situation in the transport segment are describes.

The part "Evaluation of future infrastructure needs" of the Master Plan deals with the analysis of existing and future claims of motor traffic in motion. These analyses are based on the outputs of the transport model of Prague, which is capable while using modern computational methods to take into account the effects of the construction of major road construction and development projects in the investigated area of Prague 9, or in the areas linked to it. The outcome of the study is the information which support the needed acceleration of the completion of superior road network system significantly, which affect traffic in Prague 9.

Last part of the Master Plan " The Feasibility study" provides a list of proposed measures, including the defined priorities for the implementation of these measures into operation. A part of this is also the so-called Integrated Transport Management System for District Prague 9 (ISMD), which lays down updated urban transport policies often supplemented by specific measures proposed for the different modes of surface transport, the implementation of which should improve the current unfavourable traffic situation in Prague 9 as well as the surrounding districts and Central Bohemian Region.

Part A – Input data and core files

The principal outputs of the second part of the Master Plan are the following findings:

- Pedestrian traffic in the district Prague 9 is limited by a number of artificial and natural barriers. The inability of surface permeability is not only created by the corridors of rail and road transport, but also by the neglected area of former industrial sites. From the point of view of pedestrian safety and the risk of injury to pedestrians, especially important are existing pedestrian crossings located in the district, which have major traffic safety deficiencies.
- Bicycle transport should be seen as one of the alternative modes of transport by car. Due to the everyday increasing use of bicycles by inhabitants and visitors it is necessary to gradually adapt services and secure infrastructure to these requirements, which in the light of current situation seems to inadequate.
- The network of public transport has been gradually adapted to the distribution of individual functions in the district, as well as to the existing road network. Despite the on-going construction and optimization of public transport in Prague 9 there are still observable problems with surface serviceability and fluency of public transport vehicles. These problems are partly caused by the delays of public transport vehicles in traffic jams with cars and insularity of some settlements. Part of the problem of public transport is closely connected with the need to ensure safe pedestrian access to existing public transport stops.
- Current status of urban planning documentation does not give much hope for a speedy solution of major traffic problems caused by motor transport. The planned road constructions for the entire city are to be directed through the district (City Ring, Vysočanská radial road), but their construction is constantly postponed. Until the completion of these quite fundamental transport structures we cannot expect a significant improvement in traffic conditions.
- Due to the delayed completion of superior communication system may be a future risk to the continuity and safety of transport in the city district for the prepared massive housing development as well as business and administrative functions. This development may lead to an increase of the current population in the district of thousands to tens of thousands of people. The planned construction would increase the useful value of the developing areas today, also brings the possibility of new housing and new jobs, but at the same time causes traffic demands that must be adequately addressed.

Part B – Analysis of transport accessibility in the district

The principal outputs of the third part of the Master Plan are the following findings:

- Problematic pedestrian crossings were investigated with respect to their existing construction and technical design and the existing standard requirements/norms for the implementation of safe crossings. In the evaluation of the importance of the necessary adjustments to the risk of pedestrian crossings were proposed changes or additions to these transitions, as well as the prioritization of the proposed measures.
- Detailed spatial analysis of existing bicycle routes within the district pointed to significant gaps in the current directing and marking of bicycle network as well as the major local deficiencies caused by for example the on-going construction in the linked area. Processed recommendations primarily aim to outline the necessary steps and principles leading to supplement of the existing cycling infrastructure in the district in such a way as to allow cyclists in the future to have an undisturbed permeability of the district, as well as surface operation in newly emerging and existing residential areas.
- In the Prague 9 district in the near future we can generally expect one of the most massive expansions in the city. The planned development of housing and commercial and administrative activities will result in the prospective period of significant influence on the demand for transport capacity of public transport. From the perspective of the existing service territory of Prague 9 by public transport processor, attention was concentrated on the existing narrow parts in communication networks, as well as access to passengers on selected bus stops and last but not least, the possibility of increasing the surface area of the selected operator of Prague 9. In addressing the issue of availability by public transport was a proposal to introduce new bus services into the area of Nové Vysočany and Hrdlořezy, i.e. parts that in long-term are cut-off from the centre of the district. Attention was also paid to the public transport network management in the streets of Prague 9. In places, where up-to-date preferential measures are still not implemented, these measures were recommended to complement and simultaneously their implementation was prioritized.
- Due to the necessity of dealing with stationary traffic conceptual designs were prepared, whose principle is to primarily satisfy the demand for parking by residents and subscribers in predominantly residential areas, a gradual reduction in parking and stopping of vehicles employee and visitor traffic at the same place, satisfying the requirements for parking areas at the transfers to capacity public transport systems, and last but not least, the parking of vehicles in connection with the expected massive development of the concerned area. Among other things, the principle of solving problems with transport at rest was the declared support for paid parking zones in Libeň and Vysočany around the metro station Českomoravská. The study also provides proposals for sites which might prospectively be used to build new parking capacity to meet the needs of residents of the area Prosek and Strážkov and parking facilities of operated car parks in the style of P+R parking for the needs of the drivers coming in from the surrounding districts and the adjacent area of Central Bohemian Region.

PART C - Evaluation of future infrastructure needs

The principal outputs of the fourth part of the Master Plan are the following findings:

- The territory of today's Prague 9 was the territory, over which the most important roads in Prague lead, the first railway, nearby the first line of the Prague tram (horse tram) was started and the first electric railway used for everyday transportation of persons lead here. All the modern development of this area was closely linked to the development of roads, highways, railways, tram tracks and major roads citywide.
- Even in 2013 historically formed contradiction persists and is still visible. This part of the city, despite the on-going construction of residential, administrative and business activities consists of still not very strong residential enclaves surrounded by nearly abandoned industrial areas, neglected green spaces and a large unused developing territory. The territory has a street network of high traffic load that passes through all residential areas which causes a degrading impact on the quality of the environment, safety and quality of the residential environment. Besides Prosek and Krocínka the district, as such, is not generally equipped with a utility network, which could very well be some of today's communications function after their replacement by the new superior transport system (City Ring, Vysočanská radial road). Traffic load in future (not only with respect to the projected development of the territory) is likely to grow, while in Prague 9 no major transport investments are currently planned.
- In terms of road capacity it can be clearly stated that the obstacle to the smooth operation of car traffic on the road network of the area of Prague 9 is not the permeability of sections, but nodes – the crossroads.
- Part of this is also an expert assessment of the impact of individual automobile transport in Prague 9 and processing transport model solutions and parking spaces for commuters from the surrounding settlements (selected parts of the city and Central Bohemian region). Part of the expert activities were carried out using the macroscopic examination of the impact of the likely scenarios for the development of communication networks, the design of optimization measures for the mode of car transport in motion, that will help to mitigate the negative effects of transport and their impact on the local population. Study outcomes are formed by not only verbal ratings but also graphically processed outputs carried out by macroscopic traffic simulation (TSK – UDI) to combine the communication network. There are comments added of the likely impacts of the currently built and planned transport construction. The model examined the influence of the development of superior communication networks (such as the influence of the completion of the tunnel Blanka, completion of the remaining buildings in the City Ring (section from Pelc - Tyrolka to Jižní spojka), incompleteness of Vysočanská radial road, etc.). The proposals are focused mainly on traffic control devices using the light-signalling devices and the higher use of telematic applications in everyday operation on the superior communication network of Prague.
- Prague 9, can not solve the further development of the network of streets alone, because it has an unusually high proportion of road network in collective communications managed by the City of Prague. However, Prague 9 took the initiative in the negotiations on the future development of transportation and suggestions of this study should be the beginning of the

road leading to the joint action of responsible authorities and city decision makers, districts and areas related to the peripheral areas of the city to "tune" the quality of network operation of surface transport to the level in 21st century.

PART D - Feasibility study, ISMD of the area of Prague 9

Lastly, the fifth part of the Master Plan sets out a plan of the proposed measures, including the setting of priorities for these measures. The proposed changes fit into the concept of the development of the transport system in the district and surrounding areas - the spirit of sustainable mobility. The chapter of integrated traffic management system in a lucid manner summarizes the outcomes of previous analyses and outlines the spirit of the new transport policy, district procedures necessary in the implementation of the proposed measures into practice. Based on the outcomes and recommendations of the fifth part of the Master Plan it may in future be decided on the priority of a process of modernization of selected transport systems operating in the territory of the district, depending on the actual needs of the residents and visitors of Prague 9.

Selected proposals to ensure operation continuity of surface public transport vehicles in the city district Prague 9:

measures	localization	modes	priority	price
completion of preferences for BUS on traffic lights	intersection Spojovací x Pod Šancemi	PuT	HIGH	MEDIUM
lane for BUSES + CYCLISTS + TAXI	Spojovací between Jarovem and K Žižkovu street	PuT+Cy	MEDIUM	LOW
lane for BUSES + CYCLISTS + TAXI	K Žižkovu street	PuT+Cy	MEDIUM	LOW
lane for BUSES + CYCLISTS + TAXI	Freyova street	PuT+Cy	MEDIUM	LOW
lane for BUSES + CYCLISTS + TAXI	Vysočanská street	PuT+Cy	MEDIUM	LOW
new traffic light intersection with preferences for TRAM	Kolbenova - depot Hloubětín	PuT	MEDIUM	MEDIUM
reconstruction of tram track Kolbenova	nám. OSN - Nový Hloubětín	PuT+Ped	MEDIUM	VERY HIGH
new bus line	Českomoravská - Skloněná - Za Mosty - Českomoravská	PuT	VERY HIGH	MEDIUM
new bus stop	Za Mosty street	PuT	VERY HIGH	MEDIUM
new tram stop	Kolbenova street	PuT+Ped	MEDIUM	VERY HIGH
new traffic light intersection with preferences for BUS	intersection Vysočanská x Litoměřická	C+PuT+Ped	VERY HIGH	MEDIUM
new traffic light intersection with preferences for BUS	intersection Prosecká x Lovosická	C+PuT+Ped	VERY HIGH	MEDIUM
reconstruction BUS stop Poliklinika Vysočany	K Moravině street	PuT	HIGH	LOW
reconstruction BUS stop Špitálská	Kolbenova street	PuT	MEDIUM	LOW
reconstruction BUS stop Poštovská	Kolbenova street	PuT	MEDIUM	LOW
reconstruction BUS stop Kolbenova	Kolbenova street	PuT	MEDIUM	LOW
reconstruction BUS stop Nademlejnská	Poděbradská street	PuT	MEDIUM	LOW
reconstruction BUS stop U Elektry	Poděbradská street	PuT	MEDIUM	LOW
reconstruction BUS stop Podkovářská	Poděbradská street	PuT	MEDIUM	LOW
reconstruction BUS stop Nádraží Libeň	K Žižkovu, Freyova	PuT	HIGH	LOW
reconstruction BUS stop Odlehlá	Novovysočanská direction Ohrada	PuT	HIGH	MEDIUM
reconstruction BUS stop Skloněná	Novovysočanská street	PuT+Ped	VERY HIGH	MEDIUM

Selected proposals to satisfy claims of parking in the city district Prague 9:

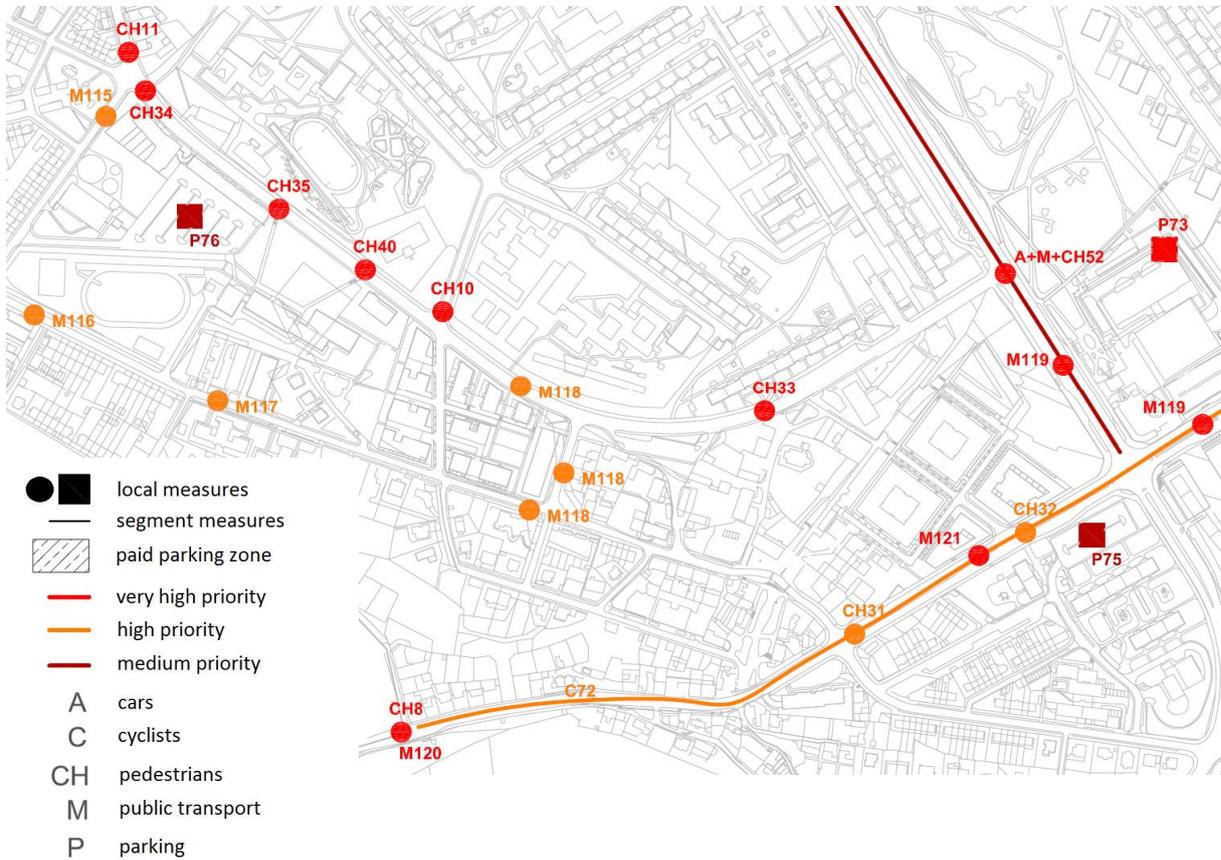
measures	localization	modes	priority	price
increase parking capacity	near business center Billa na Proseku	P	VERY HIGH	VERY HIGH
increase parking capacity	Jiřetínská street	P	VERY HIGH	VERY HIGH
increase parking capacity	Pískovcová street	P	MEDIUM	VERY HIGH
increase parking capacity	Na Pokraji street	P	MEDIUM	VERY HIGH
increase parking capacity	Lovosická street	P	MEDIUM	VERY HIGH
paid parking zone	central part of Libeň and Vysočany	P	VERY HIGH	VERY HIGH
new P+R parking	Metro Střížkov	P	VERY HIGH	VERY HIGH
new P+R parking	Metro Českomoravská	P	VERY HIGH	VERY HIGH
new P+R parking	Prosek, near to cemetery	P	VERY HIGH	VERY HIGH

Selected proposals to ensure surface permeability of the city district Prague 9 for cyclists:

measures	localization	modes	priority	price
lane for BUS + CYCLISTS + TAXI	Freyova street	PuT+Cy	MEDIUM	LOW
lane for BUS + CYCLISTS + TAXI	Vysočanská street	PuT+Cy	MEDIUM	LOW
integration measures and traffic signs on the route A28	Vysočanská street	Cy	HIGH	LOW
traffic signs on the route A27	Kytlická street	Cy	VERY HIGH	LOW
integration measures and traffic signs on the route A27	Lovosická street	Cy	HIGH	LOW
integration measures and traffic signs on the route A43	Lovosická, Letňanská, Ke Klíčovu street	Cy	HIGH	LOW
new infrastructure on the route A43	crossing of rail corridor	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A43	reconstruction of railway track	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A43	Pod Smetankou street	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A44	connection between Pod Smetankou - Rokytka river - Nad Táborem street	Cy	VERY HIGH	MEDIUM
integration measures on the route A43	Pod Táborem street	Cy	HIGH	LOW
integration measures and traffic signs on the route A26	Kolčavka - Podvinný Mlýn	Cy	HIGH	LOW
new infrastructure on the route A26	crossing in Podvinný Mlýn street	Cy	VERY HIGH	LOW
new infrastructure on the route A26	crossing Sokolovská street	Cy+Ped	VERY HIGH	LOW
new infrastructure on the route A26	connection between Sokolovská and Ocelářská street	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A26	near housing Eliška	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A26	homogenization of surfaces in Hloubětín	Cy	VERY HIGH	MEDIUM
new infrastructure on the route A25	homogenization of surfaces and new traffic signs on the route Balkán - Za Horou	Cy	VERY HIGH	MEDIUM
integration measures and traffic signs on the route A254	Harfa - Nademlejská street	Cy	HIGH	LOW
integration measures and traffic signs on the route A262	Kolbenova street between nám. OSN - Kbelská	Cy	HIGH	LOW
integration measures and traffic signs on the route A265	Prosecká - Čakovická street	Cy	HIGH	LOW

Sample of the graphic design of the Master Plan drafts for road transport in Prague 9

for the area of Prosek:



Conclusions and recommendations of the Road Transport Master Plan of district Prague 9

Main outcomes of the Master Plan

- Information on structural and technical condition of existing transportation infrastructure and its current use by the relevant modes of transport within the city district, accompanied by any proposals optimization measures that will help the development of the road system in the spirit of sustainable transport development.
- Outputs of the macroscopic transport model of Prague, which in a clear and understandable way informs about the likely impact of the completion of superior communications network situated in the district, or in its immediate vicinity, looking at the distribution of traffic intensity in the territory of the district. The findings follow traffic modelling optimization proposals addressing the issue of traffic in motion and at rest (permeability of the intersection nodes, car parks, permeability of communications network for public transport vehicles).
- The integrated traffic management system, which in the spirit of the new transport policy of Prague 9 provides information on the required optimization and development of the existing transport system on the basis of measures aimed at ensuring the permeability of the area for non-motorized transport, availability of bus stops and increasing the security of access of vulnerable road users at these public transport stops. Finally, it alerts on the need to pay attention to the proposals connecting the transport to major development projects on the existing road network in relation to ensuring their adequate operation and availability.

Final recommendations of the Master Plan

- **Give attention to the existing local traffic problems (pedestrian crossings, bus stops, fragmentation of cycling infrastructure, difficult parking of vehicles) on the communication system of Prague 9. In the context of sustainable development, transport and gradually eliminate these deficiencies.**
- **Initiate steps to assess the potential impacts of major development projects on the territory of Prague 9 in relation to transport operation and the connection of these areas to the existing road network.**
- **Collaborate with relevant institutions and use all available resources to help accelerate the completion of superior communications network situated in the territory of the district.**
- **Based on the established Integrated Management System of Transport prepare and implement an action plan for traffic engineering and traffic-organizational measures to reduce the negative impacts of transport on residents and visitors of Prague 9 (increased permeability of the area for bicycle traffic, increase pedestrian safety at pedestrian crossings, ensure the claims the local static traffic in exposed areas and increase the availability of public transport in isolated areas of Prague 9).**

Annexes (a separate parts of the Master Plan)

PART 0 – Summary of the information for the project

PART A – Input data and basic analyses

PART B – Analysis of public transport in the district of Prague 9

PART C – Evaluation of future infrastructure needs

PART D – Feasibility study, an Integrated System of Traffic Management in the area of Prague 9

The company **HaskoningDHV Czech Republic, spol. s r.o.** (Formerly DHV CR) is working on the Czech market since the year 1992. In more than 20 years of its existence on the market of consulting and engineering the company has built a strong position among the leading companies in the transportation and infrastructure, environment and spatial planning. The scope of HaskoningDHV CR includes analyses and strategies of tourism, planning bike paths and bicycle master plans, traffic engineering, environmental audits and analyses of environmental risks; and strategic transport policy, traffic surveys, geographic information systems, geological assessments, hydrogeological surveys, EIA , SEA, Czech and EU legislation in the field of environmental policy of the EU and OECD, operational programs and their evaluation plans and projects of territorial systems of ecological stability, programs of urban and regional development, feasibility studies, investment and non-investment plans, training and education , urban planning and other disciplines.



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