3 Improving subnational infrastructure investment

This chapter analyses the challenges in the Czechia infrastructure governance system at the subnational level and makes recommendations to address them. After providing an overview of the main features and challenges of subnational infrastructure in Czechia, it focuses on ways to implement a place-based approach to infrastructure planning and to build strong and fruitful partnerships across governments. It also looks at the importance of strengthening inter-municipal co-operation and increasing subnational administrative capacity to improve the quality and efficiency of infrastructure investment. Finally, the chapter examines how to increase the funding and financing capacity of Czech subnational governments to meet infrastructure investment needs.

Summary of recommendations

Given the challenges of implementing a full suite of reforms simultaneously, Czech authorities could consider sequencing concrete actions under broader recommendations. By grouping actions according to the time horizon (short term, and medium to long term) needed to implement them effectively, Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. However, it should be noted that the concrete actions listed below, irrespective of their time horizon, are complementary and interconnected.

	Short term	Medium to long term	
Subnational level recommendation	ation 1: Implement a place-based approach to infrastructure planning	g among levels of government	
Concrete actions to support the implementation of recommendation 1	1.1. Foster effective co-ordination across sectors and levels of government to enable place-based infrastructure planning. There are several venues that Czechia can explore. Regardless of the platform, it is crucial to involve both decision-makers (e.g., ministers) and technical infrastructure planners in the dialogue.	1.3. Promote high-quality joint municipal infrastructure plann especially at the scale of functional areas (e.g., micro- regions) to maximise local investment outcomes. Czechia could provide financial and non-financial incentives as well as targeted capacity building activities in this regard.	
	1.2. Support regions to achieve more integrated and forward- looking infrastructure planning. Regions play a critical role in place-based infrastructure planning, both in co-ordinating sectoral infrastructure in the regions and co-ordinating local infrastructure planning beyond administrative jurisdictions – this significant role should be further recognised in the multi-level infrastructure planning system.		
Subnational level recommend	ation 2: Establish strong and fruitful partnerships across levels of go	overnment	
Concrete actions to support the implementation of recommendation 2	2.1. Establish an overarching co-ordination platform in which national and subnational actors could align the planning, prioritisation, and implementation of infrastructure investment projects. A co-ordination platform needs to bring	2.2. Develop formal contractual agreements across levels of government to align objectives for efficient and resilient infrastructure investments and make national and subnational governments real partners. Contracts may help	

Table 3.1. Summary of recommendations and concrete actions to support their effective implementation

	Short term	Medium to long term	
	together at a minimum representatives from the Ministry of Regional Development, Ministry of Transport, Ministry of the	Czechia identify common targets, set clear and transparent objectives, share information, and make credible engagements.	
	Environment and the Ministry of Finance as well as the different association of municipalities, including representatives from Prague and the 13 regions.	2.3. Strengthen stakeholder engagement at all levels of government to better assess investment needs, the environmental and social sustainability as well as the social acceptability of infrastructure projects, among other benefits.	
Subnational level recommend	ation 3: Reinforce inter-municipal co-operation		
Concrete actions to support the implementation of recommendation 3	3.1. Reinforce co-operation across Czech municipalities throughout the investment cycle to enhance the quality and effectiveness of infrastructure. To address high administrative fragmentation at the local level, it is crucial to reach a relevant scale and the adequate capacities to invest in infrastructure.	3.2. Target and encourage inter-municipal co-operation for infrastructure investments at the functional scale. In urban and rural areas, investments are best planned when seen from the perspective of functional areas with networked villages, towns and more dispersed areas as economic relations and flows of goods and people do not stop at the administrative border.	
Subnational level recommend	ation 4: Enhance subnational administrative capacities for quality in	frastructure investment	
Concrete actions to support the implementation of recommendation 4	4.1. Diagnose capacity gaps in all type of regions and municipalities. In order to properly target assistance and capacity building at the subnational level, it is crucial to have a clear picture of which capacities are missing and where.		
	4.2. Strengthen national and regional support and assistance to plan, prepare and implement infrastructure investments at the local level. The national and regional levels – which often have higher capacities than small municipalities – together with the associations of municipalities, play a key role in supporting, advising and providing municipalities with specific knowledge and skills.		
	4.3. Embed a cross-sectoral and multi-level perspective into capacity-building activities. One the most important barriers for		

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	Short term	Medium to long term
	quality place-based infrastructure is the siloed approach to infrastructure at all levels of government.	
	4.4. Provide special resources and tools for regions and municipalities to better prepare and procure infrastructure projects. One of the major bottlenecks for quality infrastructure at the subnational levels is at the preparation phase.	
	4.5. Leverage the role of national and regional governments and the associations of municipalities to build capacities at the local level. In line with the current efforts to better prepare local staff workforce, it is important to provide co-ordinated capacity building activities to create institutional capacities within municipal administrations to better plan, prepare and deliver infrastructure projects.	
Subnational level recommend	ation 5: Reinforce funding and financing sources for subnational inf	rastructure investment
Concrete actions to support the implementation of recommendation 4	5.1. Address funding gaps to support quality subnational infrastructure by regions and municipalities. There are different complementary avenues for this.	5.2. Adopt innovative financing instruments to boost subnational infrastructure investment. Mobilising finance is essential to help subnational governments meet the high up-front costs of infrastructure investment and to spread those costs across the future beneficiaries of an investment.

Introduction

Regions and local governments play a key role in making our societies more resilient and sustainable. It is they who are confronted with, and have to manage, the health, economic, and environmental challenges that often arise locally or have an impact on local populations and communities. COVID-19 and the energy crisis, for example, have shown that much of the infrastructure affected falls under the responsibility of subnational government, including health care (hospitals, primary care health centres, etc.), social services, education (primary and secondary schools, higher education), public transport, roads, social housing, utility networks (water, waste, energy, etc.), and ICT infrastructure (OECD, 2021_[1]). Across all OECD countries, subnational governments define and execute key infrastructure investments in strategic sectors such as energy, transport, water and telecommunication infrastructure, and also in access to quality health and education services (OECD, 2022_[2]). In OECD countries on average, subnational governments are responsible for 57% of total public investment; in Czechia the share is 46%.

At the same time, it is now more urgent than ever to invest strategically in place-based infrastructure to bridge territorial disparities and tackle the big challenges of climate change, demographic trends, and digitalisation, among others. Megatrends and shocks create different public investment needs, challenges and opportunities across regions. This is also true for Czechia, where regional differences are stark: in 2021, the population density ranged from 66.9 inhabitants/km² in South Bohemia to 2 752.8 inhabitants/km² in the Prague region (OECD, 2022_[3]). The regional GDP per capita for Prague was 3.6 times higher than in Karlovy Vary region, and twice as high as the average regional GDP per capita (OECD, 2022_[4]). Disparities are also evident in infrastructure provision. Some regions are not sufficiently connected to the backbone transport infrastructure (road and rail) (e.g., the Karlovy Vary, South Bohemian and Liberec regions). Some regions are under-served by public transport, and in others there is generally poor access to public and commercial services (e.g., highspeed internet access) (Ministry of Regional Development, 2019_[5]).

Investment therefore needs to be place-based and tailored to the needs and realities of different localities and regions. However, designing and implementing place-based infrastructure investment in Czechia is particularly challenging, as regions and municipalities need to deliver while navigating a complex administrative structure. As described in Chapter 1, the Czech multi-level governance system is complex, with challenges including the large number of small municipalities; the different types of municipalities with different responsibilities; the absence of mechanisms to co-ordinate investment across levels of government; and siloed approaches to investment. Other critical issues are linked to the capacities of regional and local governments to plan and deliver infrastructure. This all puts pressure on the efficiency of the public administration and the capacity of regions and municipalities to deliver quality infrastructure.

Adequate multi-level governance mechanisms that allow for place-based infrastructure will be crucial for Czechia to maximise the returns on infrastructure investment, invest in a smarter way and put resilience and environmental objectives at the core of infrastructure investment across all levels of government. Such mechanisms need to ensure proper co-ordination, both vertically within levels of government and horizontally across sectors and jurisdictions. The OECD Recommendation on Effective Public Investment Across Levels of Government – an OECD legal instrument with 40 adherents – provides guidance on all the challenges outlined above (Box 3.1).

Box 3.1. The OECD Recommendation on Effective Public Investment across Levels of Government

In 2014, the OECD Recommendation on Effective Public Investment Across Levels of Government was endorsed by the OECD Regional Development Policy Committee (RDPC) and adopted by the OECD Council. The recommendation aims to help countries assess the strengths and weaknesses of their public investment governance capacity for regional development across all levels of government. It serves as a guide to setting priorities for improving the co-ordination mechanisms and capacities of subnational governments in the management of public investment.

The recommendation sets out 12 principles grouped into 3 pillars of policy recommendations that represent 3 systematic challenges to efficiently managing public investment at both the national and subnational levels. These 12 principles cannot be seen in isolation: they offer a whole-of-government approach that addresses the roles of different levels of government in the design and implementation of a critical and shared responsibility. All the principles are complementary and there is no hierarchy among them. They are also intended to be used in conjunction with other OECD policy guidance and tools.

Figure 3.1. Effective multi-level public investment governance rests on three pillars and 12 principles

Pillar 1: Co-ordinate across governments and policy areas	Pillar 2: Strengthen capacities and promote policy learning across levels of government	Pillar 3: Ensure sound framework conditions at all levels of government			
 Invest using an integrated strategy tailored to different places Adopt effective co-ordination instruments across levels of government Co-ordinate across subnational governments to invest at the relevant scale 	 Assess upfront long term impacts and risks Encourage stakeholder involvement throughout investment cycle Mobilise private actors and financing institutions Reinforce the expertise of public officials and institutions Focus on results and promote learning 	 Develop a fiscal framework adapted to the objectives pursued Require sound, transparent financial management Promote transparency and strategic use of procurement Strive for quality and consistency in regulatory systems across levels of government 			
Source: OECD (2019), Effective Public Investment across Levels of Government: Implementing the OECD Principles, OECD, Paris,					

Source: OECD (2019), Effective Public Investment across Levels of Government: Implementing the OECD Principles, OECD, Paris, https://www.oecd.org/effective-public-investment-toolkit/OECD_Public_Investment_Implementation_Brochure_2019.pdf

Fine tuning multi-level governance and adopting a place-based approach to infrastructure is particularly urgent for making the most of EU funds for investment. Over 2014-2020, Cohesion Policy funding accounted for 40% of total public investment in Czechia. Over 2021-2027, Czechia will invest EUR 26 billion under the Cohesion Policy (for details, see Chapter 1). Nearly a quarter of these funds will be used to support integrated regional development, especially regional connectivity, urban and regional infrastructure, local education infrastructure, etc. The new Just Transition Mechanism (EUR 2 billion) will also have a strong territorial dimension, targeting the Karlovy Vary, Moravian-Silesian and Ústí regions (European Commission, 2023_[6]; Ministry of Regional Development, 2023_[7]; Ministry of Environment, 2023_[8]). Much of the implementation of the Czech Recovery and Resilience Plan (RRP), supported by EUR 7 billion in grants, rests in the hands of Czech regions, cities and towns. With physical infrastructure

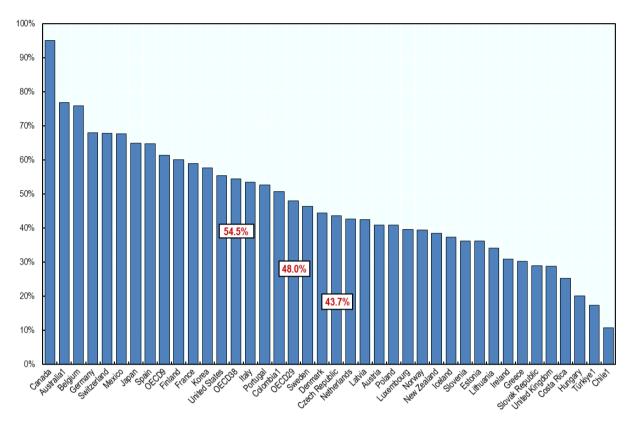
and green transition being at the core of the plan's 26 components, the main building block of the Czech RRP is investment geared towards cross-cutting policy issues, such as energy efficiency through residential and public building renovation (EUR1.4 billion); sustainable mobility through improving railway infrastructure, and promoting electric charging stations and cycle pathways (EUR 1.1 billion); as well as the circular economy through upgrading recycling infrastructure (EUR 141 million) (European Commission, n.d.^[9]) (European Commission, 2021^[10]). The recovery plan is a unique opportunity for regions and municipalities to adopt a place-based approach to infrastructure while investing in quality infrastructure, addressing long-term priorities for sustainability and resilience, and achieving more balanced development across the country.

This chapter begins with an overview of subnational infrastructure investment in Czechia, including an assessment of territorial inequalities and the various needs and challenges facing the Czech regions, including administrative fragmentation (section 3.2). Section 3.3 focuses on implementing a place-based approach to infrastructure planning, in particular on how to improve strategic place-based infrastructure planning across levels of government to ensure that infrastructure responds to local needs and is planned at the right scale. After providing some insights into how to improve the way in which national and subnational levels co-ordinate on infrastructure issues (section 3.4), the chapter focuses on how to strengthen inter-municipal co-operation for investment, recognising that this is one of the most prominent challenges for subnational infrastructure (section 3.5). Finally, the chapter focuses on administrative and fiscal capacities of regions and municipalities – and ways to strengthen them to ensure quality infrastructure (section 3.6).

3.1 An overview of subnational infrastructure investment in Czechia

Regions and municipalities play a central role in public infrastructure

Subnational governments in Czechia are key providers of economic and social infrastructure. They have broad responsibilities for economic infrastructure (transport, energy/electricity, water and sanitation, telecommunication, waste) and social infrastructure (health, aged care, education, community, social housing, social protection, and emergency services), which in many cases are shared with the national government. Regions and municipalities differ in their areas of responsibility. Municipalities are responsible for primary schools and nurseries; social services, including housing and water infrastructure; local roads and health centres and small hospitals, among others. Regions are responsible for hospitals, secondary schools and second-class roads. A detailed breakdown of the infrastructure roles and responsibilities between municipalities and regions is shown in Table 1.1 in Chapter 1. In 2021, subnational government investment, including regions and municipalities, represented 43.7% of total public investment, below the OECD average for unitary countries, which was 48% (Figure 3.2).





Note: OECD38: weighted average for all OECD countries; OECD29: weighted average for unitary countries; OECD9: weighted average for federal countries ¹ Data from IMF Government Finance Statistics: <u>https://data.imf.org/</u>. Source: (OECD, 2023_[11]), *Subnational Governments in OECD Countries: Key data*. <u>https://www.oecd.org/regional/multi-level-governance/NUANCIER%202023-3.pdf</u>

Capital expenditure at the regional level started to increase slightly after the de facto establishment of autonomous regions in 2000, although municipalities remain the principal investors. Between 2010 and 2020, regional capital expenditure per capita grew from CZK 2 404 to CZK 4 152 – a 72.6% increase (Figure 3.3). The same trend can be seen at the municipal level – over the last 10 years, municipal public investment has grown by 50%. The municipal level remains the primary subnational government investor, accounting for 64.3% of subnational government investment in 2020, while regions only account for 35.7%. In contrast, while the City of Prague – which has a unique dual status as both a region and a municipality – remains the most important investor in the country, public investment in the city has decreased by almost 36% over the last 10 years. It is also worth noting that municipal investment per capita in small municipalities (below 500 inhabitants) is very low, representing less than half of investment in small municipalities compared to medium or large cities is largely due to a lack of skills and administrative capacity to deal with complex investment projects (OECD/UCLG, 2022_[12]).

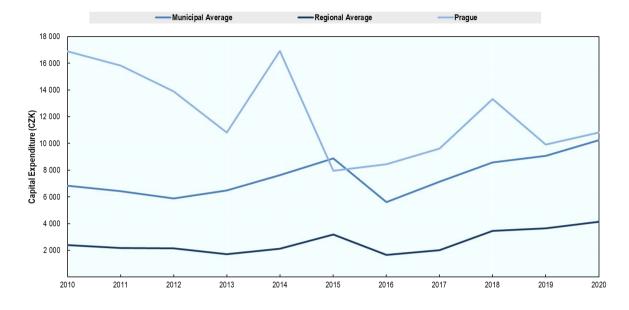


Figure 3.3. Evolution of regional and municipal capital expenditure in Czechia, 2010-2020

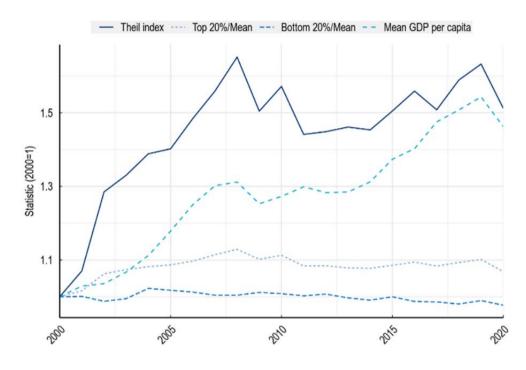
Source: Ministry of Finance Monitor data portal, https://monitor.statnipokladna.cz/; Czech statistical office.

Quality and effective infrastructure investment is needed to address important regional disparities

Czechia faces important territorial inequalities that have increased over the last 20 years. Regional income inequality, as measured by the Theil index at the small region level (TL3 level), has increased overall since 2000 (Figure 3.4). This tendency also holds true for 15 out of 27 OECD countries with available data. Regional inequality has plateaued at relatively high levels after decreasing slightly from its peak in the aftermath of the 2008 global financial crisis. Importantly, regional inequalities in Czechia have increased faster than GDP per capita growth. One of the explanatory factors behind the increasing regional inequality is regional productivity (OECD, 2023[13]). As can be seen in (Figure 3.4), Czechia experienced an increase in the Theil index of GDP per capita over 2000-2020. Inequality reached its maximum in 2008. It means than over the last 20 years, while labour productivity has increased overall, it grew much more in high-productivity regions than in low-productivity regions. The Top 20%/Mean ratio was 0.054 higher in 2020 compared to 2000, indicating increased polarisation. The Bottom 20%/Mean ratio was 0.036 lower in the same period, indicating bottom divergence. (OECD, 2023[14]).

Figure 3.4. Trends in GDP per capital inequality indicators, TL3 OECD regions, 2000-2020

GDP per capita growth/regional inequality trajectories based on GDP per capita at the TL3 level, 2000-2020. Indexed to 2000 (2000=1)



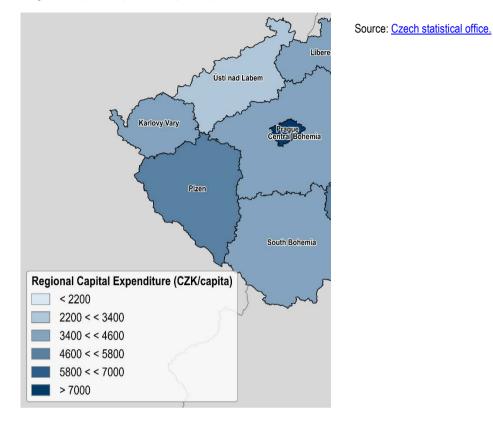
Note: Top/bottom calculated as population equivalent (top/bottom regions with at least 20% of the population). The interpretation of top/bottom 20% GDP per capita is that 20% of the population in the country holds 20% of the value. Top 20%/Mean calculated as mean GDP per capita in top 20% regions over mean TL3 GDP per capita in a given year. Bottom 20%/Mean calculated as mean TL3 GDP per capita in bottom 20% regions over mean TL3 GDP per capita in a given year. To improve data consistency, input series are aggregated when TL3 regions are part of the same FUA. To improve time series, TL3 missing values have been estimated based on the evolution at higher geographic level. The figures are normalized, with values in the year 2000 set to 1.

Source: (OECD, 2023[13]), OECD Regional Outlook 2023: The Longstanding Geography of Inequalities. https://doi.org/10.1787/92cd40a0-en

The capacity of regions and municipalities to invest also differs across the country. Regional public investment varies strongly – from less than CZK 2 000 per capita in the Zlín Region to almost CZK 6 400 per capita in the Hradec Králové Region. The City of Prague is an outlier, with over CZK 10 000 in capital expenditure per capita (Figure 3.5), despite having decreased. Regional investment per capita is only above the country average in four other regions: Pilsen, Vysočina, Pardubice and Hradec Králové (Figure 3.6). In practical terms this variation means that the availability, accessibility and quality of existing infrastructure – including transport, energy, education and health infrastructure – also varies across regions.

Figure 3.5. Capital expenditure varies significantly across Czech regions

Regional capital expenditure per capita, 2020

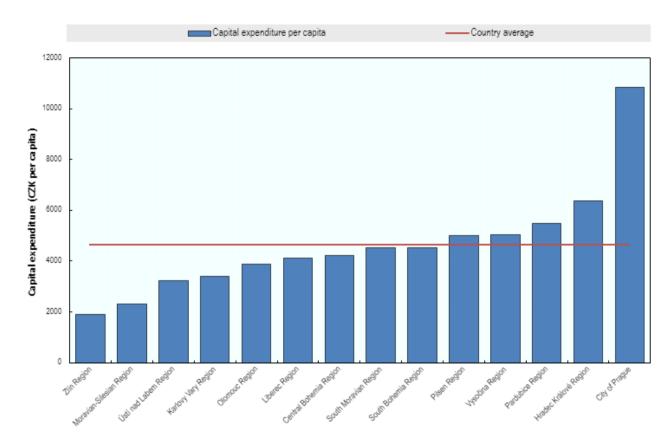


| 99

100 |

Figure 3.6. In most regions, per-capita capital expenditure is below average

Regional capital expenditure per capita, 2020



Source: Czech statistical office.

The efforts needed to address the twin transition, attain EU targets and achieve the objectives of the Czech Recovery and Resilience Plan also vary across Czechia's regions. While in the majority of large regions per capita greenhouse gas emissions are below the OECD average of 11.5 tCO2e, the Central Bohemian Region, Moravia-Silesia and Northwest all have per capita emissions that are above the OECD average (OECD, 2021_[15]). The Moravia-Silesia and Northwest Bohemia regions also lag behind the rest of the country in terms of productivity, unemployment rate, educational outcomes, share of people at risk of poverty and life expectancy (European Commission, 2021_[10]). These regions, along with Prague, Central Bohemian and the Northeast Region, also rely largely on coal. As highlighted by the EC, the situation in the Northwest Region is particularly challenging as living standards have diverged from the rest of the country over the last two decades (European Commission, 2021_[10]).

This means that not only are there significant disparities in existing infrastructure quality, but also that Czech regions will have different transition pathways with different future infrastructure needs and investment capacity. If Czechia aims to reduce total GHG emissions by 14% by 2030 compared to 2005 (Government of Czech Republic, 2019_[16]), targeted and place-based infrastructure investments by regions and municipalities will be needed. As recognised by the RRP, regional and local governments need to invest in renewable energy, local energy community networks as well as in a modern and attractive public transport network. This includes, for example, investing in active mobility infrastructure such as bike lanes and a clear strategy to further develop zero/low emission vehicles (European Commission, 2021_[10]). It is thus crucial to design and implement place-based and regionally-balanced infrastructure investments that

Administrative fragmentation is a key challenge

Czechia is one of the most fragmented OECD countries, both at the local and regional levels. It has one of the highest number of municipalities of all OECD countries, and the smallest (Box 3.2). As we saw in Chapter 1 (Section 1.1), in 2020, the average municipal size in Czechia was 1 710 inhabitants, well below the OECD average of 10 250 and the EU average of 5 960 (Figure 1.2, Chapter 1). In 2023, 96% of municipalities had fewer than 5 000 inhabitants and 89% had fewer than 2 000 inhabitants. The average municipal area is also the lowest in the OECD: on average, Czech municipalities have an average area of 13 km², compared to 234 km² across the OECD. Regions are also small by international standards. Only 3 of the 14 regions are large enough to qualify as NUTS 2¹ regions for EU regional funding purposes (Prague, Central Bohemian and Moravian-Silesian regions). The remaining 11 regions are NUTS 3 regions which, for statistical purposes, are grouped to form 5 additional NUTS 2 regions (OECD, 2020_[17]) (OECD, 2023_[18]). The average size of Czech regions is 2.5 times smaller than the average size of the EU28 NUTS 2 regions in terms of inhabitants, and 4 times smaller in terms of area (Ministry of the Interior of the Czech Republic, 2018_[19]).

The high number of small municipalities represents one of the greatest challenges to infrastructure investment. It undermines the capacity of Czech regions and local governments to design and implement quality and efficient infrastructure investments at the right scale. Large municipalities, particularly those that have more delegated competences and more staff, can tap into a more diverse range of professional skills. Meanwhile small municipalities face severe difficulties in attracting, hiring or retaining adequate skills for public investment. In the housing sector, for example, one of the reasons for the low level of investment in new social housing is that a large share (71%) of all municipally-owned land belongs to municipalities that have less than 1 000 inhabitants (OECD, $2021_{[20]}$). Such small municipalities might not have the capacity needed to provide affordable housing on their land. When municipalities do intend to develop social housing, they are faced with several obstacles, the most important being the shortage of funds (both from their own financial resources and from the state) (OECD, $2021_{[20]}$). In such a context, inter-municipal co-operation is largely the only option for running quality investment projects.

Box 3.2. Czechia's highly fragmented territorial organisation

Czechia's administrative fragmentation is partly due to a law passed in the early 1990s that enabled municipalities to split. In the 1990s, and contrary to many OECD countries where mergers have been the rule, municipal fragmentation in Czechia increased sharply – from 4 100 municipalities in 1990 to 6 230 in 1994. In 2000, the rising fragmentation ended with the 2000 Act on Municipalities, which introduced a requirement of having at least 1 000 inhabitants to create a new municipality and includes an option for voluntary municipal mergers. However, it did not offer any concrete incentive for municipalities to do so. To minimise the effects of municipal fragmentation, the 2000 Act on Municipalities also promotes inter-municipal co-operation through public contracts for performing certain functions, and voluntary municipal associations.

Source: (OECD, 2023[18])

3.2 Implementing a place-based approach to infrastructure planning

Czechia has substantial potential to integrate a place-based approach to infrastructure planning across all levels of government but needs to overcome its deeply rooted sectoral silos and limited territorial dimension in infrastructure planning. Czechia already has a place-based Regional Development Strategy (Ministry of Regional Development, 2019_[21]), well-developed inter-governmental dialogue platforms, and a mature multi-level spatial planning system, all solid foundations for place-based infrastructure planning. Even so, infrastructure planning is still predominately led by individual sectors, without effective co-ordination or being anchored to the regional development strategy. This results in weak strategic prioritisation of infrastructure across all levels of government, and ineffective investment. Overcoming these obstacles will require long-term institutional reforms to drive changes in the country's infrastructure planning system and culture.

Another obstacle to place-based infrastructure planning is Czechia's high territorial fragmentation, as outlined above. This hinders the achievement of economies of scale and undermines capacity in local infrastructure planning, resulting in significant gaps in planning quality (e.g., a weak evidence base, lack of prioritisation, etc.). While some supra-local investment planning does take place – such as Sustainable Urban Development Strategies and Community-led Local Development (CLLD) strategies and plans – joint municipal infrastructure planning based on socio-economic linkages across jurisdictions is far from being common practice in Czechia. The question is how to consolidate existing knowledge and systems to build institutional capacity for place-based infrastructure planning.

Align place-based infrastructure planning across government levels

Czechia has three pillars that together guide infrastructure planning at all levels (Table 3.2): regional development policy, spatial development policy, and sectoral policies (transport, waste, water management, etc.). Each pillar includes several planning documents at the national, regional, supra-local and local levels. The spatial planning system is the only legally hierarchical system among levels of government – higher level documents contain binding decisions that must be considered in lower-level documents -, underpinned by a widespread network of planning offices (ESPON, 2021_[22]).

	Regional development policy	Spatial development policy	Sectoral policies
Relevant law/regulation	Act on Regional Development Support	Act on Spatial Planning and Building Rules ("Building Act")	Sectoral planning regulations (e.g., transport, water, etc.)
National Regional	Regional Development Strategy 21+; Rural Development Concept; Smart Cities Concept Development Strategy of the Region; Regional Action Plan	Spatial Development Policy Territorial Development Principles	Sectoral strategic documents (e.g. Transport Policy 2021-27 with an outlook to 2050; National River Basin Management Plans, etc.) Sectoral strategic documents
Supra-local	Sustainable Urban Development Strategy (SUD); Community-led Local Development (CLLD) Strategy; Integrated Territorial Development Plans		
Local	Local development strategy/programme/plan	Local Territorial Plan; Regulatory Plan	Sectoral plans (mostly in cities)

Table 3.2. Three policy pillars guide multi-level infrastructure planning system in Czechia

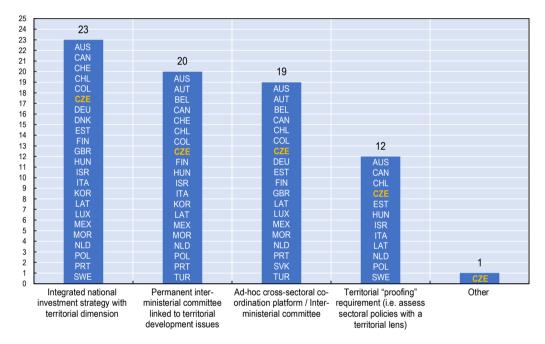
Source: Authors, based on (Ministry of Regional Development, 2022[23]; Ministry of Regional Development, 2021[24]).

Within regional development policy, Czechia, like many other OECD countries, has developed or strengthened multiple mechanisms to better co-ordinate investment strategies for regional development

(Figure 3.7). These include an integrated national investment strategy with a territorial dimension, permanent and ad hoc inter-ministerial committees for territorial development issues, and territorial proofing requirements, as fostered by the OECD Recommendation on Effective Public Investment across Levels of Government (OECD, 2014_[25]). The Regional Development Strategy 21+, for example, serves as an integrated national strategy to guide public investment in regions and municipalities (Box 3.3). The National Standing Conference and the 13 Regional Standing Conferences are regular dialogue platforms for national and subnational actors to exchange on investment needs and priorities in the territories (Ministry of Regional Development, 2023_[26]).

Figure 3.7. Czechia has several mechanisms to co-ordinate regional investment strategies

Question: "At the national/federal level, has your country developed or strengthened any of these mechanisms as a means to better co-ordinate public investments strategies for regional development?"



Note: Results from the 2018 monitoring survey of the OECD Recommendation on Effective Public Investment across levels of Government. N=27

Source: (OECD, 2019[27]), Effective Multi-level Public Investment: OECD principles in action. https://www.oecd.org/effective-public-investment-toolkit/Full_report_Effective_Public_Investment.pdf.

The Regional Development Strategy 21+ (RDS 21+) defines five different types of territories in Czechia based on their potential and specific needs: metropolis, agglomeration, regional centre, structurally affected region, and economically and socially vulnerable area. Through these, it seeks to offer tailored support for the development of the country's regions. For example, for metropolises it prioritises a more integrated public transport system, enhanced urban mobility, and affordable housing, while for agglomerations priorities include accessibility to education infrastructure and affordable housing, especially for vulnerable groups and those outside segregated and excluded localities. The RDS 21+ also includes a thematic focus on national subsidy schemes and other long-term instruments that will help address regional disparities. It also aims to mainstream the territorial dimension in sectoral policies.

The Spatial Development Policy of Czechia (4th edition) sets national priorities for sustainable development as a framework for regional and local spatial planning. It defines development areas, development axes and specific areas where balance between environment quality, social cohesion and the economy is distorted. It also assigns specific tasks for national and regional authorities, as well area-specific requirements to consider the territorial impact of large infrastructure projects (new motorways, roads, etc.). For example, for each motorway section, there are explicit criteria and conditions to guide decision making and planning, such as connecting with existing roads to certain cities to better serve the region, ensuring connections with bordering countries, giving priority to transport flows in certain areas, or minimising the impact on the environment, and so on. In Czechia, it is binding to consider requirements in all planning documents and during the issuing of planning permissions. The spatial development policy also has a mandate to co-ordinate any plans for changes in transport and technical infrastructure in the territory.

Source: (Ministry of Regional Development, 2019[5]; Ministry of Regional Development, 2021[24])

Despite these opportunities, the fragmentation and lack of co-ordination in the infrastructure planning system are fundamental obstacles to implementing a place-based approach to infrastructure investment. This challenge is multifaceted:

- 1. Lack of systematic co-ordination across sectoral infrastructure planning. While some sectoral infrastructure planners consult other relevant planning sectors to ensure policy synergies and alignment, this depends on the practices of individual line ministries. Overall, the Czech public administration system operates under a well rooted siloed approach (OECD, 2023_[18]). There is a low awareness among infrastructure planners about the wider context of their investment decisions and the possible externalities for other fields. Most officials representing different institutions and levels tend to take a 'zero-sum game' approach to interactions with others, instead of seeking for 'win-win' solutions. This tendency to go beyond one's own institutional remit hinders active coordination (ESPON, 2021_[22]), including the much-needed dialogue among different planners and stakeholders on the strategic objectives of infrastructure investment, the pursuit of criteria to prioritise and select them, and the seizing of potential complementarities across infrastructure sectors.
- 2. Infrastructure planning that is not anchored to regional development priorities and objectives even when it has strong territorial impact. According to stakeholders, the Ministry of Regional Development provides comments, feedback and methodological advice to sectoral infrastructure planners on the territorial dimension of sectoral infrastructure investment. There are ad hoc cases where infrastructure planners in line ministries consult with the Ministry of Regional Development, typically when considering the territorial aspect is a funding requirement (e.g., for

EU funds), but this does not happen systematically. There is no incentive, mandate, or any effective mechanism to make sure that the infrastructure planning process or prioritisation criteria properly take into account regional development policies. The RDS 21+ also identifies the lack of clear definitions or methodology to support infrastructure planners in addressing the territorial dimension in planning.

- 3. A spatial planning process that does not proactively co-ordinate infrastructure investments, and is not connected with regional policy. Spatial planning in Czechia is heavily influenced by sectoral policy, which appears to address the impact of sectoral infrastructure investment plans rather than co-ordinate them. This applies to all levels for example, it is not unheard for sectoral departments in local authorities to simply request to transfer a decided infrastructure investment project to the Local Territorial Plan. Additionally, regional and spatial policy in Czechia operate at the national, regional and local levels in parallel, without many links or much cross-influence. For example, spatial plans are not updated in synchronisation with regional development strategies and programmes (ESPON, 2021_[22]). Therefore, the strategic and development perspective of infrastructure investment (e.g., advancing regional development goals) is often not considered in spatial planning.
- 4. Lack of systematic, effective and regular dialogue between national infrastructure planners and subnational governments. The approach to consulting and engaging with subnational actors may vary across line ministries and is often passive and one-way (e.g., asking for written comments). For example, line ministries may ask for written comments from the Unions of Municipalities and Towns, Associations of Regions and other subnational government associations in infrastructure planning. They also occasionally consult subnational governments on planning matters, including through participating in the National Standing Conferences. Given the fragmented and sector-driven system, subnational government representatives indicated that they do not always have the capacity or time to provide detailed and constructive inputs to all the infrastructure planning documents. Subnational stakeholders also identified, in some cases, the lack of clarity and frequent changes in national policies, which hinders their implementation of national infrastructure investment, and/or subnational infrastructure planning.

There is a need for a dialogue platform spanning sector and subnational governments to regularly exchange infrastructure investment needs at all levels and to reach consensus on priorities and key principles in place-based infrastructure planning. There are several venues that Czechia could explore. First, Czechia has been planning to develop a Regional Policy Committee for inter-ministerial co-ordination. This committee has the potential to serve as a platform for ensuring synergies across sectors in infrastructure planning and prioritising infrastructure investment in order to advance regional development goals. Second, as highlighted in Chapter 2, Czechia could make greater use of the Council on Public Investment. The council's agenda and mandate could include a focus on strengthening the place-based approach to infrastructure planning. Third, the National and Regional Standing Conferences could be a venue for the Ministry of Regional Development to co-ordinate periodically with line ministries, regions and municipalities through dedicated discussions on strategic infrastructure planning. Inter-ministerial co-ordination models developed in Sweden and Italy could also offer inspiration to Czechia (Box 3.4). The Italian example in particular offers concrete measures for building inter-ministerial partnerships and engaging effectively with subnational governments.

Box 3.4. Examples of cross-sectoral fora for co-ordinating place-based investment

Sweden's Forum for Sustainable Regional Development

In Sweden, it is the job of regional development policymakers to convince other ministries that they should put on their "territorial lenses" when planning and designing sector policies. The Forum for Sustainable Regional Development 2022-2030 is one important co-ordination platform. It is positioned

106 |

as part of the implementation of the National Strategy for Sustainable Regional Development throughout Sweden 2021-2030. The forum is chaired by the Secretary of State for Regional Development. It is divided into two groups: one promotes dialogue between national and regional politicians, and the other fosters dialogue between national and regional civil servants (at director level). Sweden has also created policy labs; for example, to explore concrete policy approaches to rural development. In addition, Sweden relies on involving state agencies – including public servants/operational staff and decision makers – in regional matters. This is because these agencies support the implementation of regional development policy by different sectors while taking into account regional specificities that influence the achievement of sectoral aims.

Italy's inter-ministerial committee to co-ordinate infrastructure in deprived areas

Italy has 20 regions and 7 904 municipalities, and an average municipal size of 7 535 inhabitants. Over half of municipalities are located in "inner areas". These areas far from large and medium-sized urban centres have experienced demographic decline and land abandonment, their essential infrastructure and services – education, health, and mobility – are relatively low quality and opportunities for economic activities and jobs are limited. To counteract marginalisation and demographic decline within these inner areas and unlock their development potential, Italy developed the National Strategy for Inner Areas for the 2014-20 programming period. Within the framework of this strategy, the national government defined a set of integrated projects and their expected outcomes through an inter-ministerial committee created to align objectives, adapt sectoral policies to territorial specific needs and match different sources of financing.

Partnership among various line ministries is key to the design and implementation of this place-based strategy. Its implementation is financed by allocations from multiple operational programmes, as well as national funds and other public/private funds. An ad hoc Technical Committee was created to govern the strategy, co-ordinated by the Cohesion Policy Department at the Presidency of the Council of Ministers and consisting of representatives from the ministries of education, health, agriculture, transport, etc. The Technical Committee, together with subnational government representatives (regions and autonomous provinces), was responsible for selecting inner areas to be funded under the strategy. Seventy-two inner areas were selected, covering over 1 000 municipalities. The main criteria for selection included their distance from infrastructure and services, demographic trends, as well as local authorities' capacity to implement projects. There were two selections phases:

- Desk research, which assessed the various proposals submitted by the reference regions (quantitative assessment). The assessment included demography, availability and accessibility to various infrastructure and services (e.g., digital, health, schools, among others).
- 2. Field missions, which were essentially focus group discussions for each submitted inner area (qualitative assessment). They were organised by the Technical Committee in collaboration with regional and local territories. These focus groups followed a standard methodology covering four sessions local development, healthcare, education, and transport. Each session typically included one expert from the relevant ministry, as well as regional and local actors such as education and health facility managers, infrastructure users, businesses, local associations, etc.

The selected inner areas then prepare their individual investment strategies, which will be submitted to the Department of Cohesion Policy for approval. Once approved, a Framework Programme Agreement will be signed by the relevant national, regional and local authorities to secure the implementation of the inner area strategy. The agreement includes detailed financial commitments from different parties, as well as objectives and expected outcomes, etc.

Source: (OECD/UCLG, 2022[28])

Support regions to adopt more strategic and forward-looking infrastructure planning

Infrastructure planning in Czechia tends to focus on individual investments rather than be driven by a strategic and long-term vision, which increases its vulnerability. During the OECD interviews for this report, stakeholders highlighted two weaknesses of infrastructure planning at both national and subnational level:

- 1. Strategic plans are not used effectively to prioritise and select infrastructure investment projects, or to guide design and implementation. Instead, they are used to draw on funds for investment projects.
- 4. Infrastructure planning is not forward-looking or driven by any long-term vision. For example, infrastructure planners only start to think about embedding resilience measures into infrastructure investments when there are floods or other climate-related crises.

This piecemeal approach and lack of resilience planning often increases costs, including recovering the costs and renovating or upgrading existing infrastructure; these could have been avoided if a forward-looking perspective had been incorporated into infrastructure planning. Czechia has already seen a notable increase in the number of days of heavy rainfall, while droughts have also become more frequent and longer in duration (International Energy Agency, 2022_[29]). For example, the Southwest region of the country has a relatively high share of population exposed to floods (OECD, 2022_[30]). Building resilience into infrastructure requires a more strategic and stronger territorial dimension as well as technical expertise in projection and foresight. Equally critical is understanding the territorial dimension and engaging regional and local stakeholders in infrastructure planning to gain buy-in to the vision and the need to build more resilient and future-proof infrastructure.

Czech regions have relatively well-developed systems, and experience, in strategic planning, including for infrastructure investment (e.g., education, regional transport, etc.). The 14 regions are responsible for creating the development strategies (or programmes) for their regions and ensuring implementation. These strategies are expected to identify the regions' development objectives and priorities and co-ordinate sectoral policies and investment. Regions are also responsible for defining the Territorial Development Principles which regulate and co-ordinate infrastructure of regional importance and guide local land-use and spatial planning. Regions also develop sectoral strategies (Table 3.2). In particular, as an instrument to implement the RDS 21+, Regional Standing Conferences develop and approve Regional Action Plans (RAPs). The aim of RAPs is to enhance the integrated and efficient use of EU funds, and they cover topics such as regional transport, secondary education, health care and social services infrastructure, among others. They support the allocation of Integrated Regional Operational Programmes funds at the regional level based on assessment of regional needs (e.g., the total length of Class II roads in the region, numbers of students at secondary schools, etc.)

However, sectoral fragmentation in infrastructure planning trickles down to the regional level, hindering the effectiveness of integrated and long-term regional infrastructure planning. On average, Czech regions have to cope with 25 strategic documents, excluding implementation plans and supporting documents (Ministry of Regional Development, 2022_[23]). The extent to which these strategies guide and influence infrastructure investment in the region vary. For example, development plans for water supply and sewage, floods, roads and connectivity, and transport services are of significant importance for infrastructure. Yet these sectoral infrastructure plans have different timelines, are updated separately, and there is no mechanism to coordinate across sectors in order to capture investment synergies. Although each region has a regional development strategy and the Territorial Development Principles which serve as the umbrella framework, it is not yet common practice to use them to reconcile and co-ordinate sectoral interest or prioritise infrastructure investment for the region. In addition, the 14 regional development strategies often have a time horizon of three to seven years. Only two regions have a strategy in place with a horizon of more than ten years (and one of them is from 2009-2020, which has not been updated) (Ministry of Regional Development, 2022_[23]). Consequently, the regional development strategic documents appear to

accommodate and react to sectoral infrastructure investments, rather than defining the vision and guiding infrastructure decisions.

Stakeholders also noted that in some cases the lack of clarity and frequent change of national polices and guidance create difficulties for effective and sustainable regional infrastructure planning. The information provided by line ministries to regions is not always clear and sometimes open to interpretation. In some cases, the high staff turnover in line ministries leads to inconsistency in policy messages. Regions are often required to adapt to the changes without sufficient discussion or preparation. Political changes at both the national and regional level also introduce instability into infrastructure investment. Strategic planning is rarely used to guide and prioritise infrastructure investment; instead infrastructure programmes and projects driven by political priorities and agenda prevail.

Local infrastructure strategies are used as a pipeline to draw on funding, but are not always realistic. Some stakeholders stated that strategic infrastructure planning is not yet valued in many local public administrations in Czechia. Strategic documents are prepared as an inventory of pipeline projects and as a reference to support funding applications. While this is logical, local infrastructure planning is unlikely to be based on robust need assessment or stakeholder inputs. For example, some local development strategies include initiatives such as fairs and parks, which may be too ambitious considering the localities' assets, population, or resources. Others emphasise fashionable industries (e.g., cycling tourism, high-tech fields, etc.), without reflecting on the background, needs or assets of the given place. In some other cases, strategies are linked to the election cycle and serve as short-term political programmes. Strategic planning is viewed as a formal "tick-the-box" exercise rather than a meaningful process to better pursue and advance local development objectives. Another outstanding challenge is stakeholder engagement in infrastructure investment prioritisation. Active local participation and leadership are needed to secure ownership of strategies and their smooth implementation.

Along with increasing co-operation, there is a need for continuous capacity building on strategic infrastructure planning for local authorities. The Ministry of Regional Development has been providing substantial methodological support to municipalities in planning. There are several options that Czechia could consider in building local infrastructure planning capacity in a more targeted and effective fashion:

- Strengthen the focus on organisational arrangements to support more effective stakeholder engagement in local infrastructure planning. Given that strategic capacity is context-based and evolves over time, institutionalisation is particularly important for new organisational arrangements like networking platforms, joint working groups, new bodies created for strategy implementation, etc. The Centre for Advisory Support targeting Areas of Strategic Intervention could be one example, as their advisory support has a specific focus on partnerships and engagement (Box 3.16).
- Promote peer learning and knowledge sharing not only among municipalities, but also targeting LAGs or micro-regions. For small municipalities in particular, there is potential for the national government to support train-the-trainer programmes. Local consulting companies, universities, and other stakeholders that work closely with municipalities in infrastructure planning could be engaged in these networks of knowledge sharing. The "Small Towns in Germany" could be an inspiration, mobilising several formats and activities to promote exchange (Box 3.16).
- Deliver capacity building programmes that are better targeted to different types of territories and municipalities. The high number and diversity of Czech municipalities mean there is no one-sizefits-all solution to building local infrastructure planning capacity. Instead of providing templates and standardised training, the government could consider carrying out surveys and focus group consultations with representatives of municipalities and micro-regions/LAGs to identify their capacity needs in infrastructure planning specifically, and use the results to design capacity building programmes that address the most common challenges. An OECD project with the Bulgarian and Greek national Manging Authorities to build beneficiary capacity could be an

example to follow. In Bulgaria, an online survey was conducted to understand the main capacity gaps of beneficiaries and their preferred forms of support from the national level, with a special focus on the planning and use of ITIs. The survey received over 280 responses and resulted in an action plan for beneficiary support. In Greece, a similar survey was carried out to help identify the topics and modules that were most pertinent for beneficiary needs so as to design a series of knowledge-sharing workshops. The survey received over 310 responses from beneficiaries and the first knowledge-sharing workshop attracted nearly 100 participants.

- Encourage cooperation between regions would also lead to more territorially-oriented infrastructure development. Planning infrastructure across regions would help better pursuing place-based infrastructure investment while also making sure that big infrastructure projects reach relevant scale, specially when it comes to transport and connectivity. There are several countries that are moving in this direction. Chile, for example, has defined "macro-regions" that join four or five administrative regions to plan infrastructure for a territory with similar characteristics, acknowledging that the potential of infrastructure investment can be more fully exploited if territorial synergies exist. These macro regions might share a common identity, productive structures, and geographic and development challenges.
- Czechia would benefit from more direct and regular dialogue between regions and national infrastructure planners - not only to understand needs, but also to reach consensus on infrastructure prioritisation and provide clearer guidance and direction to regions on planning and prioritising investment. While regions should be responsible for their own development goals and priorities, a clear understanding of national policies and frameworks can help them generate plans that align with national agendas. There are many ways to construct and facilitate this dialogue. For example, the Ministry of Regional Development can facilitate thematic meetings between regions and national infrastructure planners from line ministries to discuss regional infrastructure priorities. Ireland offers an advanced example of a well-developed multi-level infrastructure planning system under the National Planning Framework which supports cross-sectoral regional planning (Box 3.5). Regional roundtables like those in the United Kingdom offer another way of engaging with regions, which might be closer to Czechia's institutional context (e.g., Regional Standing Conference). The key strength of the UK's initiative is its focus on long-term strategic planning and strengthening regional and local infrastructure planning (Box 3.5). In the long term, such dialogue could potentially lead to a set of principles co-designed by national infrastructure planners and subnational governments to help plan and prioritise infrastructure investment. This is the case for the Infrastructure Decision-Making Principles in Australia, which are used for both national and subnational governments.

Box 3.5. Enable strategic regional planning

Ireland's National Development Plan 2021-2030 (NDP) and National Planning Framework 2040 together serve as the investment plan for the country. They provide the structure for the Regional Spatial and Economic Strategies (RSES) prepared by the regional assemblies. These RSESs inform decisions related to regional public infrastructure investment aligned with the NDP, and guide local city and county planning, economic policy and investment. The RSESs take a cross-sector approach that combines a spatial strategy, an economic strategy and a climate strategy. Each strategy is prepared within a regional co-ordination framework to gather input from local authorities and other relevant stakeholders, including the Department of Housing, Planning and Local Government, the Department of Public Expenditure National Development Plan Delivery and Reform

In the **United Kingdom**, the National Infrastructure Commission is responsible for long-term strategic infrastructure planning through the 30-year National Infrastructure Assessment. Fact-finding tours to regions ("regional roundtables") are carried out to collect evidence and insights for the latest interim

Assessment report. The commission discusses various investment issues with regional and local stakeholders, with a focus on fostering resilience through investment in some regions, including enhancing flood mitigation measures and preparing for future weather extremes. The importance of adapting regional and local strategies to a changing context, such as the COVID-19 pandemic, is also highlighted. The commission recently launched a partnership programme for cities and city regions across the country to share knowledge and expertise and to help local leaders develop long-term strategies that link transport, housing, and job opportunities.

Source: (OECD, 2020[31]). (National Infrastructure Commission, 2022[32]; 2022[33]).

Among local authorities, especially small ones, building strategic capacity for infrastructure planning is a considerable challenge given their already stretched human resources and financial resource constraints. In OECD and EU countries, worrying gaps in local strategic capacity include a lack of focus in identifying development needs and problems, insufficient justification of objectives and their intervention logic and the need for better thematic integration. This need for better focus and thematic integration applies particularly to countries such as Czechia, which have less experience in integrated approaches, high Cohesion Policy budgets, or where the introduction of territorial tools has prompted policy experimentation.

With support, regions could play a more active role in co-ordinating local infrastructure planning, in particular to capture socio-economic linkages within functional areas. The role of regions in co-ordinating local infrastructure planning is currently very limited. Within spatial planning for example, even with the legally hierarchical system, regions can only intervene in local planning when it comes to infrastructure of regional importance. Territorial Development Principles must not infringe upon the planning powers of self-governed municipalities. This condition limits the regions' influence over, for example, cross-municipal co-ordination, especially for bigger infrastructure projects or projects that need to target populations across multiple municipalities (ESPON, 2021_[22]). Additionally, Territorial Development Principles and regional infrastructure planning overall do not typically look at functional areas and are often not sufficient to support economic, social or environment links across municipalities, especially between urban centres and surrounding municipalities.

Improve data for more strategic infrastructure planning

Abundant territorial data could be better used to support regional infrastructure planning and to co-ordinate local planning. According to a recent study, spatial planning authorities collect and regularly update data on territory, but the data models vary among regions. Other public authorities also collect geographical data on, for example, the environment, health, and transport services. Data are thus often fragmented, incompatible and sometimes unshared, in particular with spatial planners (ESPON, 2021_[22]). In addition, stakeholders indicate that national planning authorities usually only collect data for municipalities with extended power, yet regions are well positioned to collect and analyse more granular and local-level data. More importantly, there is a need to strengthen regions' capacity in using integrated data to forecast infrastructure needs. Such information can not only be used to reconcile sectoral interests and to prioritise infrastructure in the region, but also to showcase the socio-economic linkages across local administrative units within the region. The Milano-Bologna "regional imaginary" project could provide food for thought for Czechia (Box 3.6). The national government could consider creating a task force to support regions in enhancing infrastructure planning by developing integrated datasets and providing technical support, mobilising existing resources and platforms such as the regional information services.²

Stakeholders identified local-level data gaps as one of the barriers to high-quality local infrastructure planning and prioritisation. Indicators and data are critical for municipalities to understand local needs and development trends, set objectives and prioritise, and select and monitor infrastructure investment. However, many municipalities, especially the small ones, do not have the capacity and expertise to identify

the indicators, or collect and analyse the data needed to set objectives and priorities for infrastructure planning. Higher levels of government (national and/or regional) need to address these local data gaps. This can be achieved by developing municipal level data, providing manuals and catalogues on the various databases and sources, as well as offering training to local planners in using data for infrastructure planning.

Box 3.6. A metropolitan-regional "imaginary" to support infrastructure planning in the Milano-Bologna urban region

Italy's Milano-Bologna urban region, as a functional area, has a relatively complex territory composition: it encompasses the two metropolitan cities of Milan and Bologna, as well as the provinces of Piacenza and Pavia. There is no common governance framework that is sufficient to co-ordinate infrastructure investment to tackle the scope of the various socio-economic challenges within this urban region. A common narrative in strategic planning for infrastructure and other investments is also lacking.

ESPON, an EU funded programme that delivers quality expertise to public authorities responsible for designing territorial policies, carried out in 2002-2021 a project to support this urban region to develop a common narrative, or "imaginary". This included an overview and mapping of all existing co-operation initiatives and functional complementarities within the urban region. A case study on selected infrastructure (e.g., connectivity) was carried out, providing an overview of the main challenges and opportunities. Based on this, a step-by-step strategy to implement the relevant spatial integration scenario was produced, following the priorities identified and including the use of relevant tools. A visual platform was generated that maps "needs-based spatial imaginaries". The map compiles data such as population density, numbers of households served by high-speed internet connection, level of peripherality, housing dispersion, number of shares in public utilities per municipality, among others. This project visualises the socio-economic linkages, and most importantly, the investment needs within the urban region across municipal jurisdictions.

Source: (ESPON, 2021[34]; ESPON, 2021[35])

Summary of key recommendations

Given the challenges of implementing a full suite of reforms, Czech authorities could consider sequencing the recommendations made above. By grouping recommendations according to the time horizon needed to implement them effectively (short term, and medium to long term), Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. A potential sequencing is included below.

Short-term reforms

- 1. Foster effective co-ordination across sectors and among different levels of government to enable place-based infrastructure planning. There are several possible co-ordination venues that Czechia can explore, as indicated below. Regardless of the platform, it is crucial to involve both decision makers (e.g., ministers) and technical infrastructure planners in the dialogue.
- Operationalise the Regional Policy Committee proposed by the Ministry of Regional Development, with a focus on ensuring synergies across sectors in infrastructure planning and prioritising infrastructure investment to advance regional development goals.
- Explore further the use of the Council on Public Investment to strengthen the place-based approach to infrastructure planning.

- Engage periodically with infrastructure planners in line ministries to co-ordinate with regions and municipalities through the National and Regional Standing Conferences.
- 2. Support regions to achieve more strategic and forward-looking infrastructure planning. Regions play a critical role in place-based infrastructure planning, both in co-ordinating sectoral infrastructure in the regions and co-ordinating local infrastructure planning beyond administrative jurisdictions – this significant role should be further recognised in the multi-level infrastructure planning system. The national government can also provide technical support to fully materialise the potential of regions in infrastructure planning.
- Launch a series of thematic meetings or workshops involving regions and infrastructure planners in line ministries to discuss regional infrastructure priorities. The Ministry of Regional Development could facilitate the discussion between regional representatives and national infrastructure planners. Discussions could be based on the framework provided in RDS 21+ (the five types of territories and their infrastructure needs and priorities in each region) and the Spatial Development Policy (concrete measures in infrastructure planning to address the needs and issues in specific areas).
- Develop a common set of principles or a framework to help both national and subnational governments to plan and prioritise infrastructure investment. These should be co-designed by infrastructure planners at all levels and supported by regular regional-national dialogue.
- Create a task force to help regions build an integrated database of infrastructure needs, especially
 to capture infrastructure needs that cross local administrative units. The Ministry of Regional
 Development has various economic, social, environmental data structured around administrative
 units (regions, districts, municipalities) across the country. Building on this, Czechia could consider
 convening a task force made up of the Ministry of Regional Development, Czech Statistical Office,
 regional representatives, academia, line ministries (as advisors or on an ad hoc basis), etc. to help
 regions build similar database to capture, visualise, and analyse infrastructure needs in their
 region, especially highlighting the linkages/common needs beyond administrative jurisdictions.

Medium to long-term reforms

- 1. Promote high-quality joint municipal infrastructure planning, especially at the scale of functional areas (e.g., micro-regions) to maximise local investment outcomes. Czechia could provide financial and non-financial incentives as well as targeted capacity building activities to support this.
- Provide financial and non-financial incentives to encourage municipalities within a functional area to jointly plan infrastructure investments. For example, the national government could make joint municipal infrastructure planning based on functional areas a condition to unlock additional funding in some national funding schemes, or as one of the criteria in project selection/prioritisation for national funding.
- Map and identify data gaps at the local and micro-regional level and enhance the availability of infrastructure-related data for joint planning. This action could be undertaken in tandem with the action on creating an integrated database on infrastructure needs for regions.
- Start a pilot action to provide hands-on support to a group of municipalities to develop an
 infrastructure investment strategy, with a special focus on fostering data-sharing, agreement and
 partnership-building between large urban cities and small municipalities in the process (for
 example, agglomerations that plan to use ITIs). The lessons learned from the pilot should be then
 disseminated to other municipalities.
- Develop a continuous information campaign and capacity-building programmes to support municipalities to carry out joint infrastructure planning. These can include workshops and seminars that involve experts and local authorities from other countries to share experiences.

• Explore the possibility of creating an institutional structure at the functional area level (for example, micro-region councils or committees comprising local authority representatives and other non-public local stakeholders) responsible for infrastructure planning, in order to move away from standalone local plans for each municipality.

3.3 Establishing strong, fruitful partnerships across government

Aligning and co-ordinating actions across levels of government is essential for quality and inclusive public infrastructure investment. In all countries, not just Czechia, national and subnational governments share responsibilities on infrastructure investment. This means that co-ordination is essential to align investment objectives, address local needs and achieve long-term policy objectives. Aligned policy objectives favour investments that address the multi-dimensional challenges of climate change, urbanisation, and demographic pressures, among others. Co-ordination is also necessary to identify investment opportunities and bottlenecks, minimise the risk of investments working at cross-purposes, ensure adequate resources and capacity to undertake investments, and create trust among actors at different levels of government. As highlighted by the OECD Recommendation on Effective Public Investment Across Levels of Government (Box 3.1), the impact of public investment depends to a significant extent on how governments manage this shared competency across levels of government (OECD, 2021[1]).

At the same time, co-ordinated action when setting priorities and implementing investments is essential to harness the comparative advantages of both national and subnational governments. Subnational authorities tend to have an advantage in determining local needs, identifying which and where actions work best, and their greater accountability may contribute to a more efficient management of the investment process (OECD, 2022_[36]). National governments, arguably, are better placed to take into account economy-wide spillovers and returns to scale. They also tend to have adequate technical capabilities for accurate cost benefit analysis, which are often missing at the local level (OECD, 2022_[36]).

Build on important steps to improve co-ordination across levels of government

Co-ordinating investment priorities across levels of government is particularly challenging in Czechia, due to the absence of a legal or institutional framework and the high degree of territorial fragmentation. The COVID-19 pandemic underlined the difficulties that the country faces when it comes to co-ordination between national and subnational policymakers. A study of local government strategies during the COVID-19 crisis, for example, revealed that a complicated and bureaucratic administrative setting did not allow key decision makers at the national and local levels to quickly share information and take informed decisions to devise the optimal response in a short period of time (Plaček, Špaček and Ochrana, 2020_[37]). When it comes to specific investment projects or service delivery, there is no legal framework or dedicated mechanism for different levels of government to co-ordinate or co-operate (OECD, 2023_[18]). In some cases – especially for EU-funded investments – all levels of government co-ordinate investment projects when it is required to obtain funding. At the same time, it is extremely difficult to effectively co-ordinate the more than 6 000 municipalities that are responsible for infrastructure investment. An institutional setting that facilitates dialogue between national, regional and local representatives is thus of outmost importance.

Czechia has gradually strengthened co-ordination between national and subnational levels for a range of purposes through various mechanisms or initiatives that co-ordinate priorities among these levels:

The national and regional standing conferences gather subnational stakeholders to prepare action
plans that form the basis of the calls for tender for EU financed investment. Regional standing
conferences generally discuss the substance of calls for EU funding programmes, aligning their
timetables and communicating regional proposals for investment to the national level through the
National Standing Conference. The regional standing conferences also prepare documents for

managing authorities upon request, co-ordinate activities within their territory and prepare the annual report on the implementation of the regional action plan. There are also various working groups under the conferences for specific subjects. Various stakeholders highlight that since their creation, these conferences have been successful in co-ordinating EU-funded investment.

- The Ministry of Regional Development has also been active in ensuring proper co-ordination. For example, it actively collected inputs from and co-ordinates with regions for the design and implementation of the Regional Development Strategy 21+. While this process has been effective in ensuring that national policies reflect the development needs of regions and municipalities, it is not designed to co-ordinate infrastructure investment.
- The planned Government Committee on Regional Policy is another initiative that could further strengthen co-operation between the national and subnational levels. As specified in more detail below, for this committee to accomplish its objectives, investment policy should be at the core of its mandate.

However, there is still much room to improve how national and subnational governments work together towards the same objectives. Other than the mechanisms mentioned above, most initiatives or platforms in Czechia are either siloed or focus only partially on investment projects. And while the standing conferences offer potential for co-ordinating investments financed through EU funding programmes, their focus is not on co-ordinating overall investment priorities across all sectors (OECD, 2023_[18]). For infrastructure investment sometimes it is the regulatory process itself that requires some sort of co-ordination to happen. For example, the construction of a regional-level road requires each municipal government to issue a permit for the section located in their municipality.

To address these issues, OECD countries have resorted to a range of tools to strengthen the coherence of infrastructure investment among levels of government (Box 3.7). These include co-financing arrangements, contracts, formal consultation processes, national agencies or representatives working with subnational areas, and regular inter-governmental dialogue. A 2018 OECD survey shows that the vast majority of countries surveyed (24 out of 27 countries) have at least one of these mechanisms in place to co-ordinate across levels of government, especially co-financing arrangements and/or regional development strategies/programmes (OECD, 2019[123]). If well-designed, by limiting the potential for excessive procedures and red tape, these tools can help to better clarify responsibilities across levels of government, and thereby facilitate the effective implementation of investment (OECD, 2021[1])

Box 3.7. Mechanisms to ensure inter-governmental co-ordination in OECD countries

In the **Netherlands**, the Multi-Year Plan for Infrastructure, Spatial Planning and Transport (MIRT) is an investment programme set up by the Ministry of Infrastructure and Water Management, with the aim of improving investment coherence for several areas: spatial planning, economic development, mobility, and liveability. The MIRT is organised into "regional agendas" where co-operation among national, provincial, and municipal governments and third-sector actors can take place. Any Dutch Ministry and subnational public entities can participate in this programme. Each submitted project will pass through an MIRT Consultation Committee guided by those regional agendas and be finalised in a collective agreement.

In 2019, **Korea** introduced the balanced national development project, which includes a Regional Development Investment Agreement (RDIA) to enhance co-ordination and co-operation across levels of government and promote large-scale projects in the regions. These agreements help local governments – including municipalities and metropolitan authorities – establish multi-year regional development plans with corresponding financial support. RDIAs are based on four principles:

1. The "principle of co-operation" stipulates that all parties maintain a co-operative relationship.

- 5. The "principle of autonomy" guarantees local governments maximum autonomy to choose projects.
- 6. The "principle of strategy" ensures all parties agree that the project is strategic.
- 7. The "principle of specificity" means that the size, cost, duration, and method of financing are all specified.

These projects are jointly promoted and funded by all levels of government for specific regions. The ratio of co-funding by local governments varies depending on their financial situation. Additionally, the Balanced Committee – which includes representatives from ministries, the consultation body of the Local Autonomy Act, and a central administrative agency — and the Ministry of Land, Infrastructure and Transport may operate a support team if requested by the relevant ministries and local governments. Research on institutional improvement may also be provided.

Source: (OECD, 2022[38])

Mobilise a range of tools for collaboration and co-operation

The recent OECD Public Governance Review of Czechia highlighted the lack of an overarching crosssectoral and multi-level platform to facilitate and institutionalise dialogue among levels of governments (OECD, 2023^[18]). Such a platform would allow national and subnational actors to align the planning, prioritisation, and implementation of infrastructure investment projects. There are several options for Czechia to either create or reactivate a body to oversee and co-ordinate infrastructure investment across the country, whilst ensuring it contributes to regional development priorities. In all cases, a co-ordination platform needs to bring together, at a minimum, representatives from the Ministry of Regional Development, Ministry of Transport, Ministry of the Environment and the Ministry of Finance, as well as the different association of municipalities, including representatives from Prague and the 13 regions (see Chapter 2).

Since their establishment, the OECD advised expanding the role and scope of the national and regional standing conferences for EU-funded projects to all significant investment projects, cutting across ministries and levels of government (OECD, 2016_[39]). Czechia could leverage the experience of the conference members to make sure infrastructure investments are co-ordinated among ministries and levels of government at both national and regional levels. In particular, it would be important to give a prominent role to the regional standing conferences – through a dedicated working group in each of the conferences – to further discuss and decide on infrastructure investments within their territory as they have easier and more direct interaction with municipalities. If this alternative is pursued, it will be crucial to clearly define the regional conferences' role, responsibilities and decision-making capacity so they can contribute effectively to national and subnational regional development objectives.

There is an opportunity to give the Government Committee on Regional Policy a leading role in coordinating infrastructure investment and linking it with regional development priorities. As infrastructure investment is the backbone of regional development policy, if this committee seeks to enforce the implementation of the regional development policy across the country, it might be the right body to coordinate all sectoral investments across levels of government and take advantage of the political momentum of regional development policy. For this to work, however, not only should the MRD sit on the Committee, but also relevant sectors that have an impact on regional development and infrastructure as mentioned above.

Formal contractual agreements across levels of government may also help align objectives for efficient and resilient infrastructure investments. OECD countries are increasingly resorting to contractual arrangements to strengthen partnerships among levels of government. Contracts may have a range of benefits, including promoting dialogue and learning amongst the different actors involved. They are effective instruments for identifying common targets, setting clear and transparent objectives, sharing information and making credible engagements. While serving different objectives, contracts might help to ensure that national policies and regional and local priorities align and "synergetically" contribute to national development targets (OECD, 2017_[40]). Contracts can be adapted to the needs of different regions and city types. The key point is to specify the regional development priorities to be addressed by contracts and the infrastructure projects included in them, which can be supported by a careful assessment of the needs and opportunities in each place.

In the United Kingdom, the Netherlands and France, for example, city deals and other contracts between levels of governments have been implemented to support development and sustainability objectives. France, for example, which has similar challenges to Czechia in terms of local administrative fragmentation, has a strong history of contractual arrangements dating back to the 1980s. Recently, France has adopted so-called recovery and ecological transition contracts (*contrats de relance et de transition écologique*, CRTE) for inter-municipal co-operation bodies for the 2020-2026 period to territorialise the objectives of the ecological transition (Box 3.8). In Czechia this type of arrangement may help in aligning green objectives while also building capacities and encouraging infrastructure investments at the relevant scale.

Box 3.8. OECD examples of the use of contracts to align government levels

Chile's Programming Contracts (Convenios de programación - CP) are formal binding agreements between one or more regional governments and one or more national ministries, specifying measures and procedures to be undertaken in investment projects of common interest over a specified period of time. The steps for creating a CP are: 1) identification of projects; 2) signing of a protocol of purpose that initiates negotiations between the parties while defining the objectives and areas of intervention and the resources that each institution will contribute; 3) deciding on investments that will be included in the agreement, that have a technical recommendation from the National Public Investment System (SNI); 4) drafting the programming contract and negotiation (technical); and 5) presenting the agreement to the regional council for approval and signature. After the approval and execution of the agreement, a monitoring and evaluation stage follows during which a technical team with representatives from all parties involved is supposed to monitor its execution. Projects are carried out using the resources of both line ministries and regional governments. These agreements can also include other public or private national, regional or local institutions. The participants in a CP do not receive additional or complementary resources; they must re-allocate existing funds to invest in the project established in the CP, and the Budget Directorate (of the Ministry of Finance) has to approve the CPs before their implementation. These agreements offer a useful legal framework for co-ordinating regional and national priorities and responsibilities. They have been mostly used for shared planning and financing of large infrastructure projects.

France has a long history of contractual arrangements linked to the decentralisation of specific tasks to regions, departments and, to some extent, municipalities. State-region contracts, launched in 1984, initially aimed at building regional capacity through a long process of negotiation between subnational governments and the central government's deconcentrated bodies. These contracts established the objectives, implementation and funding modalities for specific tasks. They can also have implications for financial transfers from the central level to subnational levels. France is now in its sixth generation of state-region contracts, and through this process, regions have developed extended capacities and responsibilities for economic development, employment and vocational training, including larger budgets and the involvement of new actors (e.g. academics, civil society). In 2020, France introduced Recovery and Ecological Transition Contracts for inter-municipal co-operation bodies (*Contrat de*

relance et de transition écologique - CRTE). These contracts last until 2026 and provide a framework for the territorialisation and co-ordination of a range of public policies that, as a whole, contribute to the challenges of territorial cohesion and the ecological transition. The priorities of the contract are defined locally and agreed upon with the state. Inter-municipal cooperation bodies can access funding for the projects covered by the contracts from a variety of sources, including the Local Investment Support Grant (DSIL), EU funds, state government ministries involved in the contract, and the private sector.

Since 2013, **Iceland** has used successive five-year contracts between its regions and the national government to ensure the financing and implementation of regional-level plans. For example, the Northwest Region has signed three consecutive contracts with the Ministry of Transport and local authorities and the Ministry of Education and Culture to support implementation of its regional plan, which emphasises regional development, innovation, culture, environmental issues, education and population. These contracts ensure funding against clear and measurable success indicators established by the region. The Northwest Region's experience is that this approach has helped increase central government's trust in the region. Trust has also increased on the part of the region, as has its capacity. Over time, the region has had to abide by fewer rules, has seen its allowance for administrative costs increase, and constraints removed on the distribution of funding between priority projects and competitive funds. In addition, more autonomy has been granted to the region in appointing representatives to Competitive Fund Distribution Committees. There is also the option now for other ministries to be part of the contract.

Since 2010, the **United Kingdom** has developed a comprehensive policy on devolution and local economic growth. Government interventions to support economic growth are being pursued at different scales (cities, functional urban areas, regions, pan-regions) to ensure all parts of the country benefit from sustainable economic growth. "Devolution deals" build on previous "city deals" to cover city regions, as well as local authorities in both urban and rural areas, to improve policy co-ordination between cities and their regions. Devolution deals mostly involve the devolution of powers and governance changes (an elected city region mayor). They are agreements (contracts of usually ten years or more) signed between the government and "combined authorities" at the city-region level and are bottom-up proposals focused on leveraging investment for locally determined priorities. In England, key devolved policy areas include consolidated transport budgets, single place-based funding pots, long-term investment funds to support jobs and growth, greater local control of unemployment programmes and piloting of business rates (property tax) retention.

Source: (OECD, 2017[41]) (OECD, 2022[42]) (OECD, 2017[40])

To pursue the contractual path, Czechia could pilot some contracts between national ministries, regions, and municipalities for specific infrastructure investments that pursue the objectives of the Regional Development Strategy 21+ and the National Investment Plan 2020-2050, while encouraging co-operation across municipalities. Such an approach could be used to ensure collaboration at the micro-regional level in areas that are not covered by Integrated Territorial Investment (ITI) instruments and CLLD. Pilot contracts could target the housing sector – a top priority for the current administration – to ensure that housing policy not only involves the Ministry of Regional Development, but also the Ministry of Transport, the Ministry of Environment, the Ministry of Education and the Ministry of Health, together with regions and municipalities that are in charge of ensuring the basic infrastructure and services in their communities. Indeed, improving housing affordability in Czechia implies a concerted effort from a range of sectors and levels of government to ensure not only that people's ability to rent or buy housing is improved, but also that households are able to afford to live in their accommodation. Cheaper housing far away from a city centre may lead to a long commute with high fuel costs, increasing the overall cost of housing and decreasing well-being (OECD, 2021_[20]). The advantage of a pilot action is that the national government

can provide hands-on support and identify lessons learnt from the process, which can then be scaled up to other sectors or municipalities.

Engage with the private sector and civil society

A range of stakeholders, including the private sector, NGOs and citizens, can have a great influence on many aspects of an infrastructure project. This is highlighted in the OECD Recommendation on Effective Public Investment across Levels of Government. Large infrastructure projects are often highly politicised and susceptible of being undermined by a lack of consensus. Stakeholder consultation is of key importance to build consensus and ensure transparency around how the project meets the needs of directly affected citizens and society at large. Engaging stakeholders from the early stages of the investment cycle, and later, during feedback and evaluation, can enhance the quality of investment from an environmental, economic, and social perspective. It also helps build support for investment choices, while also preventing the risk of capture by specific interest groups (OECD, 2014_[25]). Well-managed participation may also help to limit corruption, capture, and mismanagement, in particular for big and complex infrastructure projects. Information on public investment plans, expenditure and results should be exposed to some level of public scrutiny to promote transparency, accountability and trust. Consultation processes should be inclusive, open and transparent, and promote transparency and integrity (OECD, 2022_[38]). In this sense, early stakeholder engagement can be a two-way virtuous circle enabling better policy and investment outputs and outcomes in the long term (OECD, 2019_[43]).

OECD countries are increasingly adopting mechanisms to involve stakeholders from the early stages of the investment process. This is particularly true when it comes to private sector involvement. The 2018 monitoring survey reveals that more than half of surveyed countries have established mechanisms to engage private sector representatives – often Chambers of Commerce – in identifying priorities for public investment. At the local level – especially in cities – stakeholder engagement for project prioritisation seems to be gaining ground. Proof of this is an increase in participatory budgeting at the local level that get citizens involved in a municipality's budgetary allocation and its investment priorities. Stakeholder advisory groups, citizen assemblies, open houses, workshops with residents and surveys are some of the main channels for obtaining citizen feedback on investment projects or urban (re)development projects. This type of participatory practice may contribute to improving information flows between government and citizens. It also enhances accountability as it stimulates frequent citizen checks on policy makers and politicians (OECD, 2019[27]).

While there are some good practices in Czech regions and municipalities to involve stakeholders in decision-making processes, there are still major shortcomings. The recent OECD Public Governance Review of Czechia (OECD, 2023_[18]) pointed to the lack of a participatory culture in the country, which translates into low engagement by stakeholders at the local level when it comes to planning. An analysis by the Ministry of the Interior identified that interest groups are often invited to provide comments and feedback at some stage in the planning or project design process, but their involvement tends to be reduced in later phases. There are also local governments that tend to assess development needs and set priorities without consulting local interest groups at all (Ministry of the Interior of the Czech Republic, 2020_[44]) (OECD, 2023_[18]). Indeed, stakeholder engagement can be costly for regions and municipalities as it requires funding and time – these processes can thus be perceived as an additional burden that subnational governments – especially small municipalities – may not be able to support (De Barbieri, 2018_[45]). It is thus necessary to provide incentives, tools and technical assistance for subnational governments to engage stakeholders more actively in the infrastructure investment cycle.

Stakeholder participation could be improved by promoting a standardised approach across ministries, agencies and state funds that could be applied and targeted to regions and municipalities. Chapter 2 states that providing central guidance which is actionable and specific to infrastructure could ensure that participation practices are applied systematically, improving their effectiveness. Such guidance for

subnational governments should be developed in partnership with the associations of regions and municipalities so that they address effectively the challenges they face to implement these processes – which might be different from the national-level challenges. For example, in accordance with the recommendations of the OECD Public Governance Review, this guidance could include a checklist with actionable practices to help municipalities organise stakeholder engagement activities, accompanied by concrete examples of those practices. The Ministry of Regional Development and the associations of regions and municipalities could take the lead in identifying good practice in stakeholder engagement at the local level so as to start creating an engagement culture at the subnational level. A study of stakeholder engagement in municipalities in the Slovak Republic identifies opportunities for creating a methodological framework for local governments to adopt fit-for-purpose tools for stakeholder engagement in local strategic planning (OECD, 2023^[18]). A similar study in Czechia could be led by the Ministry of Regional Development and could explore the challenges and ways forward to tailor support to different municipalities in helping them to engage effectively with stakeholders.

Subnational governments also need to map out different groups of stakeholders in their jurisdiction (as suggested in Chapter 2 for the national level). The guidelines could also outline how to conduct this mapping, as well as including a simple "decision-making tree" to help regions and municipalities choose appropriate channels and instruments for engaging with stakeholders for different purposes (e.g. identifying needs, priorities and opportunities for investment; discussing specific infrastructure projects in the pipeline, etc.) (OECD, 2023^[18]). In any case, it is important to consider that these guidelines will differ according to whether they are developed for big cities or regions, or small municipalities. Ideally, tools to support small rural municipalities should differ from those used by large cities, as they likely face different challenges and needs and have different capacities to engage stakeholders.

Regions and big cities can play a key role in integrating stakeholders' views in the investment cycle. Stakeholders targeted by the national and subnational levels are different. Given citizens' closer proximity to regions, together with greater capacity of regions than small municipalities, regions can ensure that the views of a range of stakeholders are considered effectively. In the Netherlands, for example, many urban regions have set up "Economic Boards", which consist of a triple-helix co-operation between subnational governments, knowledge institutes (e.g. universities), and the private sector to identify investment opportunities that can spur development in the regions (OECD, 2022_[38]). At the regional level, the Czech regional standing conferences might take on such a role through a dedicated working group that discusses and decides infrastructure investments (see above).

Summary of key recommendations

Given the challenges of implementing a full suite of reforms, Czech authorities could consider sequencing the recommendations made above. By grouping recommendations according to the time horizon needed to implement them effectively (short term, and medium to long term), Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. A potential sequencing is included below.

Short-term reforms

- 1. Establish an overarching co-ordination platform to allow national and subnational actors to align the prioritisation, and implementation of infrastructure investment projects. Whichever model is chosen, it will need to bring together, at a minimum, representatives from the Ministry of Regional Development, Ministry of Transport, Ministry of the Environment and the Ministry of Finance, as well as the various associations of municipalities, including representatives from Prague and the 13 regions. Some options include:
 - Create a new body that gathers together all sectors contributing to regional development, as well as regional and local representatives, and led by the Ministry of Regional Development. It could

include a working group focusing specifically on infrastructure investment based on the advisory group created by the Ministry of Regional Development to supervise this OECD review (see Chapter 2).

- Reactivate and expand the scope and representation of subnational governments in the Council for Public Investment.
- Expand the role and scope of the national and regional standing conferences for EU-funded projects to all significant investment projects cutting across ministries and levels of government. Clearly define the regional conferences' role and decision-making capacity while ensuring they can contribute effectively to national and subnational regional development objectives.
- Mandate the Government Committee on Regional Policy to co-ordinate infrastructure investment and link it with regional development priorities cutting across all relevant sectors and levels of government.

Medium to long-term reforms

- 2. Develop formal contractual agreements across levels of government to align objectives for efficient and resilient infrastructure investment and create real partnerships between national and subnational governments. Contracts may help Czechia identify common targets, set clear and transparent objectives, share information, and make credible engagements. Contracts need to be adapted to the needs of different regions and city types so that they help to ensure that national policies and regional and local priorities align and "synergetically" contribute to national development targets. A phased approach could be taken:
 - Pilot some contracts for specific infrastructure investments that pursue the objectives of the Regional Development Strategy 21+ and the National Investment Plan 2020-2050. The housing sector could be targeted.
 - Establish contracts with a group of municipalities at the micro-regional level to encourage intermunicipal co-operation in areas that are not covered by Integrated Territorial Investment (ITI) instrument and CLLD.
- 3. Strengthen stakeholder engagement at all levels of government to better assess investment needs, environmental and social sustainability, as well as the social acceptability of infrastructure projects. This engagement needs to happen from the very beginning of the infrastructure cycle, once an investment need or gap is identified. Czechia could adopt a series of complementary measures to improve stakeholder participation:
 - Target guidance developed at the national level to regions and municipalities. Such guidance for subnational governments should be developed in partnership with the associations of regions and municipalities so that they address subnational challenges effectively.
 - Ensure guidance is simple and clear to ensure subnational governments can make proper use of it. It could include:
 - A checklist with actionable practices to help municipalities organise stakeholder engagement activities, accompanied by concrete examples of good practices identified by the Ministry of Regional Development and the associations of regions and municipalities.
 - o Guidance on how to map out different groups of stakeholders in regions and cities.
 - A simple "decision-making tree" to help regions and municipalities choose appropriate channels and instruments for engaging with stakeholders for different purposes (e.g. identifying needs, priorities and opportunities for investment, discussion on specific infrastructure projects in the pipeline, etc.)

120 |

 Integrate key stakeholders in the discussions held by regional permanent conferences or any other platform that promotes dialogue across levels of government at the regional level. The Czech regional standing conferences might take on this role through a dedicated working group that discusses and decides on infrastructure investments.

3.4 Reinforcing inter-municipal co-operation

As economic relations and flows of goods and people do not stop at an administrative border, investments are best planned at the scale of functional areas made up of networked villages, towns and more dispersed areas (OECD, 2020_[46]). This is particularly true when it comes to an efficient green transition; authorities must consider land use and transport at a scale that considers central cities and suburbs together (Box 3.9). In Prague, for example, the lack of a functional approach to public transport planning meant there were no public transport options connecting the city and outlying areas, leading to increased car ownership and traffic (OECD, 2018_[47]).

Municipal infrastructure planning in Czechia is characterised by territorial fragmentation. The majority of municipalities are too small to have sufficient human and financial capacity to carry out integrated and robust infrastructure planning. Additionally, individual municipal infrastructure planning without coordinating with neighbouring municipalities is likely to lose out on economies of scale in infrastructure investment, leading to low efficiency in the use of public resources. The national government could play a more active role in providing targeted incentives and tools to promote joint municipal infrastructure planning. At the same time, joint planning alone cannot address all the existing gaps in municipal infrastructure planning (e.g., weak data and evidence base, lack of clear and robust investment prioritisation criteria, etc.). In fact, joint municipal infrastructure planning requires new capacities – in joint data collection and compilation, in stakeholder engagement processes, and setting up the governance mechanisms for joint strategising, among others. Along with offering incentives for joint planning, the national government therefore needs to ensure effective capacity building to allow municipalities to leverage joint planning to close planning gaps.

Czechia is striving for a stronger focus on functional areas for infrastructure planning, which does not fit within one jurisdiction only. The catchment areas of education and health care services, for example, often cross local boundaries. Mobility flows also often go beyond the boundaries of local administrations in Czechia, given its many small municipalities. Inter-municipal co-operation can help to ensure that infrastructure investments occur at the scale of these "functional areas" and can promote efficiency by reaping the benefits of economies of scale and by enhancing policy synergies among jurisdictions. Inter-municipal co-operation may be particularly useful for small municipalities with insufficient public resources to deliver quality public goods to their citizens efficiently and to derive economies of scale through their own investment projects. Cross-jurisdiction co-ordination can be encouraged through financial and non-financial incentives and agreements between jurisdictions.

Inter-municipal co-operation in Czechia has been a longstanding concern. Given the high administrative fragmentation at the local level, several OECD analyses have already pointed to the need to strengthen inter-municipal co-operation across the country, especially at the functional scale. More flexibility and stronger incentives for such co-ordination from the national and regional levels are needed to ensure that municipalities have the right incentives in place and the knowledge to act.

Box 3.9. Inter-municipal co-operation for joint infrastructure projects

In the **Netherlands**, the Hague Metropolitan Area (MRDH) brings together 23 municipalities to work towards a sustainable region with clean, quiet and energy-efficient transport. The current package contains a total of 26 measures, and each is carried out by an average of seven municipalities. The communities take on between 3 and 25 measures aimed at reducing CO_2 emissions. The MRDH picks up 14 measures based on its core tasks and supplements them with 2 new measures. A number of measures are being taken on by a larger group of municipalities, such as creating Metropolitan cycle routes (20 municipalities) and the expansion of charging infrastructure (18 municipalities).

In **France**, inter-municipal co-operation bodies with own-source taxes (*établissements de co-operation intercommunale à fiscalité propre* - EPCI) are playing an increasing role as local public investors as they are in charge, of water and waste management, transport, and infrastructure among others. While in 1993, their investment expenditure amounted to 8% of municipal investment, they now account for 25%. The 1 254 EPCI (grouping all 35 000 French municipalities) include 21 *métropoles* (including the three largest metropolitan areas, Paris, Lyon, and Aix-Marseille-Provence). EPCIs assume limited, specialised and exclusive powers transferred to them by member communes. They are governed by delegates of municipal councils and must be approved by the state to exist legally. To encourage municipalities to form an EPCI, the national government provides a basic grant plus an "intermunicipality grant" to preclude competition on tax rates among participating municipalities. EPCIs draw on budgetary contributions from member communes and/or their own tax revenues.

A law amended in 2020 in **Lithuania** reinforces the territorial concept of the functional area for implementing regional policy. This was preceded by a 2017 White Paper that defined the functional area, or functional region, as a system of economic development, worker migration, and urban-rural partnerships using common infrastructure, transport and service networks that go beyond administrative boundaries. Regional policymakers are now required to consider functional areas, as opposed simply to municipal administrative boundaries, when formulating regional development or multi-regional development plans.

Source: (OECD, 2021[48]) (OECD, forthcoming[49])

Make existing municipal co-operation more long term and stable

Czech municipalities are increasingly co-operating to overcome administrative fragmentation, but usually just for single-purpose projects. The increase in inter-municipal co-operation in Czechia is due to a vast legislative framework that enables formal and voluntary co-operation among neighbouring municipalities, in particular for autonomous competences. Voluntary associations of municipalities (VAMs) are the most basic and common form of inter-municipal co-operation (Box 3.10). As reported in various OECD studies, VAMs vary in nature, purpose and membership, but the majority are one-off single-purpose associations often related to infrastructure and public service delivery in transportation or sewerage (OECD, $2016_{[39]}$) (OECD, $2020_{[17]}$) (OECD, $2023_{[18]}$). VAMs often rely on external, temporary sources of financing, such as from the state budget or EU funds, rather than funding provided by member municipalities or their own revenues from service provision (OECD, $2020_{[17]}$). They also receive funds from their members, but mayors are reluctant to raise membership fees to ensure adequate and stable financing (OECD, $2020_{[17]}$) (OECD, $2020_{[17]}$). However, it is not common for VAMs to carry out joint infrastructure investment planning – i.e., developing cross-jurisdiction strategies either for sectoral or overall infrastructure investment.

Inter-municipal co-operation can occur through the use of contracts set up by small municipalities to delegate some services that they are required to provide, typically to a municipality with extended powers

- the so-called municipalities with extended area of competence (ORP). The ORPs are obliged to have a zoning plan (unlike smaller municipalities) that typically covers the area of smaller municipalities surrounding them. They also typically co-ordinate all the municipalities and stakeholders within their competence area. There are 205 municipalities of this type in Czechia.

Co-operation across municipalities also happens through the Shared Service Centres (CSSs), a project implemented by the Union of Towns and Municipalities. CSSs are established to undertake public procurement, especially responsible procurement, which not only considers the most economically advantageous alternative, but also the impact on employment, social affairs and the environment. The Union of Towns and Municipalities has recently released a report containing good practice examples to encourage their implementation across the country. According to the association, CSSs' most important achievement is knowledge sharing.

Box 3.10. Czechia's Voluntary Associations of Municipalities

VAMs vary in nature, purpose and membership. They may be established as joint stock companies (which can invest in another body alongside private companies) or public bodies. They can have a single purpose (e.g. an investment project) or offer the ongoing provision of a service (e.g. waste removal). Funding can come from members, user charges or grants, or they can be established without funding.

The number of VAMs has been growing steadily since 1990, with significant growth around 2000 following the adoption of the Law on Municipalities (128/2000) that banned other forms of intermunicipal co-operation (Box 3.2). In 2022, there were 702 VAMs registered in the country, but some of them do not perform any activities.

A new draft amendment to the Law on Municipalities is under discussion. This amendment would create a new, larger form of VAM: the Community of Municipalities. A Community of Municipalities should ideally join together the majority of municipalities with "extended powers", or ORPs (Type III) from the same administrative district. The objective is to strengthen inter-municipal co-operation at the scale of a "micro-region", to ensure co-ordination of public services (e.g. social services), joint delivery of administrative activities and territorial strategic development, including strategic and spatial planning. According to the draft law, the status of Community of Municipalities can be acquired if the union groups at least 20 municipalities or at least three-fifths of all municipalities from the administrative district, if fewer than 30 municipalities belong to this administrative district. Member municipalities should together include at least 60% of the population of the administrative district. A municipality can be a member of only one Community of Municipalities. The draft law envisages only voluntary membership at this stage.

Source: (OECD, 2016[39]) (OECD, 2020[17]) (OECD, 2023[18])

Local Action Groups (LAGs), established to deliver rural development policies under the EU LEADER/Community Led Local Development Strategy (CLLD), are also a popular form of inter-municipal co-operation. LAGs cover a wide area and share of the population in Czechia, spanning over 90% of the country's territory and 94% of all municipalities (Saradín and Zapletalová, 2022 [17]). Some evidence suggest that LAGs have been increasingly adopted for "soft" projects on education, employment and environment, in contrast to the "hard" infrastructure projects which were the main focus of the first LAGs in the country (Saradín and Zapletalová, 2022 [17]). LAGs can access European Structural and Investment funds such as the ERDF, ESF, Cohesion Fund, EAFRD and EMFF. There are several examples of successful LAGs (Box 3.11) and in some cases this success seems to rest on their participatory approach – which has had a positive impact on democracy at the local level. In the 2014-2020 programming period, 178 CLLD strategies were funded. Urban municipalities can also develop Sustainable Urban Development

Strategies for the use of the Integrated Territorial Investment (ITI) instrument. These groups, however, do not necessarily have a focus on joint infrastructure planning. The scope of the LAGs also remains unclear, including the extent to which they correspond to functional areas for investment.

While municipalities can be part of several VAMs, they can only belong to a single LAG. Often, LAGs and VAMs do not have the same partnering municipalities. This, coupled with the fact that VAMs work under the supervision of the Ministry of the Interior, carrying out only autonomous competences, while LAGs fall under the Ministry of Regional Development, undermine the synergies and coherence of both forms of co-operation.

Box 3.11. Local Action Groups in Czechia

Local Action Group of Mezilesí

The Local Action Group Mezilesí was founded in 2005 with the aim of supporting environmental, economic and social development of the Mezilesí region. It comprises five municipalities, as well as representatives from non-government organisations, business sectors and citizens. Mezilesí is a rural region and the members of the LAG are mostly small municipalities with around 500 citizens.

Besides implementing the CLLD, the LAG Mezilesí also supports municipalities in preparing projects financed by EU funds, focusing its efforts on sustainable development, energy efficiency, waste management and green energy. At the heart of the LAG is the municipality of Kněžice, which is Czechia's first village to be independent in heat and electricity through the Kněžice Bioenergy Centre. One of the key pillars of the LAG is in fact the experience of Kněžice; the LAG itself serves as a peer-learning forum.

The Bioenergy Centre has triggered an energy-saving attitude aimed at reducing greenhouse gas emissions in neighbouring towns. Mayors of the five municipalities signed the European Covenant of Mayors for the submission of a Sustainable Energy Action Plan (SEAP), with the view to cutting carbon dioxide emissions in their territory by more than 20% while attaining the same percentage of energy savings and renewable energy sources. The LAG's municipalities have also joined the project "Towards 100% RES rural communities".

Source: (European Development Agency, n.d.[50])

There is still substantial scope to strengthen inter-municipal co-operation further in Czechia, especially in sectors like spatial planning and housing, where it remains very limited. An OECD survey conducted in 2021 showed, for example, that only 30% of surveyed municipalities had a dedicated housing strategy and only 11% co-ordinated their housing policy with surrounding municipalities (OECD, 2021_[20]). Moving from single purpose and one-off co-operative arrangements towards long-term and stable inter-municipal co-operation throughout the whole investment cycle is necessary to foster quality infrastructure in the entire country. Joint action for investments – especially for physical infrastructure – makes it possible to reach a relevant scale and enhance synergies among policies of neighbouring (or otherwise linked) subnational governments. Reaching an efficient scale and viability for infrastructure investment can make private involvement more attractive and may also allow municipalities or regions to have a better chance of receiving the aid from national/supra-national organisations.

Several OECD countries have taken this approach. In the United States, for example, the Pennsylvania Department of Transportation aggregated the construction and maintenance of a few hundred small bridges into a single PPP project under its old bridge rehabilitation programme. With the average cost of an individual bridge as low as approximately USD 2 million, these did not make for a viable single PPP project. In the UK, the Partnerships for Church of England Schools was created to bundle several small

schools with a new built capital cost of around GBP 2 million into "geographically coherent" groups in order to facilitate the procurement of the private partner (OECD, 2019^[51]).

Introduce concrete incentives for inter-municipal co-operation

Offering financial incentives could help to strengthen inter-municipal co-operation. Co-ordinating investments is difficult, even when actors recognise the need for it. It can be hampered by transaction costs, competitive pressures, resource constraints, differing priorities, and fears that the distribution of costs or benefits from co-operation will be one-sided (OECD, 2022_[36]). This is probably why in the EU, fewer than 40% of municipalities co-ordinate with peers when planning infrastructure projects (European Investment Bank, 2021_[52]). Some recent evidence from Czechia points in this direction, showing that large Czech municipalities do not consider inter-municipal co-operation to be cost-effective (Bakoš et al., 2021_[53]). Establishing financial incentives for municipalities to co-operate from the planning phase onwards may help overcome these costs, especially when co-operative arrangements involve the participation of a large number of small municipalities (OECD, 2023_[18]).

An OECD survey conducted in 2019 revealed that 16 out of 27 surveyed countries had put in place specific incentives to foster co-operation across municipalities (OECD, 2019_[51]). Financial incentives might include special grants for municipalities that join in shared efforts, special tax regimes for associations of municipalities, additional funds for joint public investment proposals, or bonus grants for municipalities that generate savings through co-operation (OECD, 2019_[54]). For instance, France offers special grants and a special tax regime in some cases; other countries, like Estonia and Norway, provide additional funds for joint public investments. Slovenia introduced a financial incentive in 2005 to encourage inter-municipal co-operation by reimbursing 50% of staff costs of joint management bodies – which led to a notable rise in the number of such entities. In Galicia, Spain, investment projects that involve several municipalities get priority for regional funds (Mizell and Allain-Dupré, 2013_[55]; OECD, 2019_[56]). Poland is also gradually moving in this direction by providing additional funding for municipalities in a functional area that prepare a joint strategic plan (OECD, 2021_[57]). These incentives may also help overcome political costs linked to co-operation and the sustainability of an association or agreement that usually depends on the political will of the mayor or local administration (OECD, 2023_[18]).

Box 3.12. Financial incentives for inter-municipal co-operation in OECD countries

In **France**, a highly fragmented country, law no. 92-125 of February 1992 promoted inter-municipal cooperation schemes as integrated territorial projects with own-source taxation powers (EPCI à fiscalité propre). EPCIs can take various forms, such as "communities of communes," "communities of cities" or "agglomeration communities." In 2014, the law NOTRe simplified this complex system by setting up a minimum threshold for inter-municipal cooperation (15 000 inhabitants instead of 5 000), resulting in a decrease in the number of IMC structures with own-source tax from 2 456 in 2013 to 1 255 in 2022. EPCIs assume limited, specialised and exclusive powers transferred to them by member communes. They are governed by delegates of municipal councils and must be approved by the state to exist legally. To encourage municipalities to form an EPCI, the national government provides a basic grant plus an "inter-municipality grant" to preclude competition on tax rates among participating municipalities. EPCIs draw on budgetary contributions from member communes and/or their own tax revenues. They are in charge of water and waste management, transport and infrastructure, among others.

In **Slovenia**, inter-municipal co-operation has risen in recent years, especially for projects that require a large number of users. In 2005, amendments to the Financing of Municipalities Act provided financial incentives for joint municipal administration by offering national co-financing arrangements: 50% of the joint management bodies' staff costs are reimbursed by the national government in the next fiscal period. The result has been an increase in municipal participation in such entities, from 9 joint

management bodies in 2005 to 42 today, covering 177 municipalities. Their most common tasks are inspection (waste management, roads, space, etc.), municipal warden service, infrastructure planning and internal audit.

The region of Galicia in **Spain** has many small municipalities with limited institutional capacity and spread out geographically, which increases the cost of providing public services. The regional government has taken steps to encourage economies of scale. It provides financial incentives for voluntary ("soft") inter-municipal co-ordination arrangements. Investment projects that involve several municipalities get priority for regional funds. Such inter-municipal agreements tend to be popular in the water sector. Local co-operation is also being encouraged in the urban mobility plan for public transport, involving the seven largest cities in the region. The regional government has also imposed a "hard" co-ordination arrangement by creating the Metropolitan Area of Vigo, an association of 14 municipalities. Although the metropolitan area was defined by the regional government, it was based on a history of "light co-operation" among 12 municipalities (out of 14). Voluntary municipal mergers may be encouraged in the future.

Source: (OECD, 2020[58]; OECD, 2023[18])

Czechia could capitalise further on its existing structures by providing targeted incentives to promote joint infrastructure planning that looks beyond the focus on EU-funded investment to consider functional areas. For example, the national government could make joint municipal infrastructure planning based on functional areas a condition to unlock additional funding in some national funding schemes, or as one of the criteria in project selection/prioritisation for national funding. This is the approach taken by the Swiss agglomeration programme (Box 3.13). The idea is to encourage groups of municipalities to outline a clear vision and plan for infrastructure investment, with concrete criteria for selecting investment projects that could capture the functional linkages across municipalities and bring development benefits to the area. The national government could also provide technical support (e.g., experts, advisory services) for municipalities that would like to carry out joint infrastructure planning. At the same time, many municipalities do have a strong interest to plan and deliver infrastructure within their jurisdictions, but some potentially consider neighbouring municipalities as competitors for funding. This challenge is not unique to Czechia, but experience shows that with the right incentives and mechanisms, a co-operative culture could be fostered in the long-term. The national government has planned support to LAGs for investment planning and project preparation, including providing guidelines and methodological support. The LAGs and CLLD could be a good start and could be helped towards shifting the mind-set of municipalities, as in the example of the Brandenburg initiative in Germany (Box 3.13).

Box 3.13. Providing incentives for local strategic planning at the right scale

The Swiss federal agglomeration programmes

The Swiss federal agglomeration programmes, funded and administered through the Federal Road and Agglomeration Traffic Fund, provide competitive grants for public and individual transport infrastructure in agglomerations. The Federal Fund contributes 30-50% of the funding to the selected investment projects and higher quality projects can receive a higher share of grants.

The funding programme is designed to incentivise co-ordination and co-operation among local authorities. As a condition to access the grants, local authorities need to plan and implement projects in a co-ordinated way to address local needs. They need to harmonise their transport, urban development and land-use plans and develop their agglomeration programmes jointly across administrative units. Some local authorities have developed model projects precisely to build collaboration and create an agglomeration programme to access the fund. In 2015, the canton of Uri and eight municipalities in the Lower Reuss Valley jointly developed an agglomeration plan for the federal programme. The plan outlined the goals and strategies for the Lower Reuss Valley's future development with respect to housing, landscape and transport. Around 40 agglomerations across the country have participated in this programme.

"Strengthen our strengths" strategy in Brandenburg, Germany

The reunification of Germany required transforming the east German socialist planning economy and integrating it into the west German market-oriented capitalist one. The country struggled to achieve convergence in infrastructure development, competitiveness and employment levels, with the social security system serving as a key stabiliser. In 2004-2005, Brandenburg revisited its territorial development approach, and launched a strategy centred on the key strengths of 15 core regional growth areas, empowering them to "strengthen our strengths". It was implemented via an open access and "competitive" funding programme designed to encourage the active development of project proposals that built on an area's inherent growth potential. Under this strategy, Brandenburg's municipalities with over 25 000 inhabitants were invited to send proposals for growth that built on their unique assets and advantages. This "competition" encouraged towns to collaborate in putting forward proposals. The process for formulating the proposals was important as it required talking to various sectors in the public administration, businesses, education institutes and universities. This changed the mentality of regional and local officials from one of asking for direct support from the State Chancellery to one that actively explored what they needed and identifying potential areas for growth. In addition, in Brandenburg, as in many other countries and regions, there is risk that the investment scale becomes smaller and smaller without co-operation. To address this, the Chancellery focuses on projects in which local protagonists in the regions can co-operate for regional development, striking a balance between a bottom-up and top-down approach in investment.

Source: OECD (2020[31]);

Collaboration on infrastructure investment can also be encouraged by providing technical support to plan, design, prioritise, procure, implement and maintain infrastructure. Small municipalities in Czechia often lack this capacity. In this context, peer learning, pooling expertise and exchanging experiences becomes crucial. Some OECD countries have opted to encourage collaboration by providing consulting and technical assistance, promoting information sharing, or providing specific guidelines on how to manage such collaboration. Arrangements to solve capacity issues have been prevalent among the Nordic countries (Denmark, Finland, Norway and Sweden), but they have also been practised in Chile, France,

Italy and Spain, among others. Regions might play a key role by organising peer learning, offering technical support, and acting as political facilitators. As has been highlighted by the recent OECD Public Governance Review of Czechia (OECD, 2023_[18]), the development of a clear toolbox or guidelines on how to jointly plan and implement infrastructure investments should accompany this process. Capacity-building processes might particularly focus on infrastructure strategic planning at the micro-regional level, either by peer learning or through external experts who can support municipalities, for example in assessing need, prioritising and procuring infrastructure projects. Section 3.6 below discusses subnational capacity building in more detail.

The OECD Public Governance Review also suggests that to strengthen inter-municipal co-operation, Czechia could identify a specific set of tasks that should be performed by a group of municipalities, mandating inter-municipal co-operation over a legally defined set of public services. This could be extended to strategic infrastructure investments that contribute, for example, to the implementation of the recovery and resilience plan, or to achieve the green and digital transition objectives. This would need to be accompanied by appropriate financing mechanisms to properly prepare and execute the investment in joint infrastructure.

The success of joint municipal infrastructure planning relies on the political buy-in from municipalities and local communities, especially to generate support for long-term reforms. Joint municipal infrastructure planning needs to be fostered through a bottom-up approach. Citizens, local communities, and municipalities need to understand the value of such co-operation, i.e. that it could help advance their local agenda while also supporting regional development and the country. One study pointed out that the infrastructure and spatial planning culture in Czechia at both national and subnational level strongly relies on experts in architecture and urban design, without sufficient attention to collective intelligence and bottom-up stakeholder inputs to address cross-cutting development issues such as climate change, sustainable development, social inclusion, etc. (Maier, 2020[59]; ESPON, 2021[22]).

Summary of key recommendations

Given the challenges of implementing a full suite of reforms, Czech authorities could consider sequencing the recommendations made above. By grouping recommendations according to the time horizon needed to implement them effectively (short term, and medium to long term), Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. A potential sequencing is included below.

Short-term reforms

- 1. **Reinforce co-operation across Czech municipalities throughout the investment cycle**. To address high administrative fragmentation at the local level, Czechia needs to move from single purpose and one-off co-operative arrangements towards long-term and stable inter-municipal co-operation across sectors and throughout the whole investment cycle. The following complementary actions could be taken:
 - Introduce financial incentives for municipalities to co-operate from the planning phase onwards. Financial incentives could include special grants for municipalities that join efforts, special tax regimes for associations of municipalities, additional funds for joint public investment proposals, or bonus grants for municipalities that generate savings through co-operation.
 - Strengthen the administrative capacities of Voluntary Associations of Municipalities (VAMs). Provide systemic financial support so that VAMs have sufficient personnel and administrative capacities to implement investment activities. Encourage inter-municipal co-operation by providing consulting and technical assistance (e.g. on needs assessment, prioritising, and procuring

infrastructure projects), promoting information sharing, and developing specific guidelines on how to manage such collaboration.

 Identify key infrastructure investments that should be conducted by a group of municipalities, such as those that contribute to the implementation of the recovery and resilience plan, or to the green and digital transition. Financial incentives (e.g. specific transfers, funding or financing for joint infrastructure) could be directed towards these specific projects to ensure that the group of municipalities can properly prepare and execute them.

Medium to long-term reforms

1. Target and encourage inter-municipal co-operation for infrastructure investments at the functional scale. In urban and rural areas alike, investments are best planned at the scale of functional areas of networked villages, towns and more dispersed areas, as economic relations and flows of goods and people do not stop at the administrative border. For this to happen, it is crucial to develop data on functional areas to produce a more accurate picture of actual circumstances than administrative areas.

3.5 Enhancing subnational administrative capacity for quality infrastructure

Effective and quality infrastructure investment requires substantial institutional capacity. Smaller subnational governments often lack the broad range of skills needed to identify, plan, finance, construct and manage quality infrastructure. They can also face significant capacity challenges in public procurement and may rely on external support to undertake large or specialised investment projects (OECD, 2022_[2]). This is not only the case in Czechia, but also across OECD countries. In 2015, 65% of the subnational governments surveyed in a joint OECD-Committee of the Regions survey reported that the capacity to design adequate infrastructure strategies is lacking in their city/region (OECD-CoR, 2015_[60]). In 2020, a survey by the European Investment Bank showed that one-third of EU municipalities highlighted the lack of technical capacity as a major obstacle for infrastructure investment (European Investment Bank, 2021_[52]). Alongside regulatory red tape, lack of technical capacity was also highlighted as holding back investment in green and climate change-related infrastructure (European Investment Bank, 2021_[52]). Box 3.14 lists some of the priority areas for subnational government capacity building.

Box 3.14. Institutional capacities at the subnational level for quality infrastructure investment

Effective and quality subnational infrastructure investment requires substantial institutional capacity, including staff with appropriate skills and fit-for-purpose processes and systems.

Among other areas, subnational governments usually require greater capacity in:

- Strategic planning: to support the identification of long-term regional and local development priorities that guide infrastructure investments and other complementary policy actions (such as land use changes) in line with regional and local development strategies.
- Project planning and appraisal: to help ensure specific infrastructure investments are well defined, efficiently prioritised, provide value for money and contribute to regional and/or local development objectives. A useful tool can be online project preparation and monitoring platforms established by multilateral development banks to help national and subnational governments prepare quality infrastructure investment projects.
- Public financial management: to budget and manage life-cycle investment costs, align budget frameworks, monitor and account for financing flows, account for risks and contingent liabilities

and undertake auditing processes. For example, the World Bank and other partners have launched the City Creditworthiness Initiative to build the public finance management capacity of cities, aiming to enhance their creditworthiness.

- Public procurement: to clearly articulate and prioritise the objectives of procurement to private constructors and assess options against value-for-money criteria and other objectives.
- Monitoring and evaluation: to conduct regular and rigorous ex-post evaluation and use monitoring and evaluation information to enhance decision making.

Source: (OECD, 2022[38])

Prioritise capacity building at the regional and local levels

Czech subnational governments often lack the capacity to plan, prepare, procure and deliver infrastructure projects. This is one of the major infrastructure bottlenecks in Czechia. Several OECD reports, including the OECD Economic Survey 2020 (OECD, $2020_{[17]}$) and the OECD Public Governance Review (OECD, $2023_{[18]}$), have noted that strengthening municipal administrative capacity is a key priority for Czechia. This is particularly true when it comes to public investment – a task that requires a certain level of expertise. Small municipalities cannot always ensure sufficient and qualified staffing (Ministry of the Interior of the Czech Republic, $2018_{[61]}$), and it is also difficult for them to retain staff. In some cases, when an employee leaves who has gained experience in planning, prioritising or procuring they "take away" all their knowledge in managing investment projects. This trend is aggravated by population shrinking and ageing. This is in stark contrast with administrations in the big cities, which have a more stable structure and specialisation of tasks; even with a high turnover rate, they manage to build institutional knowledge and train new employees (OECD, $2023_{[18]}$).

The capacity gap is even more acute when it comes to future challenges like improving green and digital infrastructure in regions and municipalities. These challenges require innovative public procurement approaches such as green public procurement to ensure that contractors meet certain requirements (i.e. standards relating to energy efficiency, carbon emissions or water use). Green public procurement can help align purchasing decisions with wider subnational government objectives (OECD, 2022_[38]). To achieve this, subnational governments require a mix of technical and specialist knowledge together with a broad range of professional competences.

Czechia has set capacity building as a key priority. The country has undertaken a series of initiatives that aim at bridging the capacity gap in regions and municipalities (Box 3.15). The Czech public administration's reform agenda (Client-oriented Public Administration 2030), for example, sets an ambitious medium to long-term vision for the future and positions varied learning and development opportunities as a key part of building skills, particularly relating to analytical capability (OECD, 2023^[18]). One of the objectives of this agenda is precisely to improve the knowledge and skills of local self-government officials, as well as elected representatives of self-governing units. However, as of today, training for the local public workforce – led by the Ministry of the Interior – is mostly focused on the administrative aspects of officials' tasks.

In parallel to the training efforts led by the Ministry of the Interior, the Ministry of Regional Development has also taken a proactive role in supporting municipalities as part of the regional development policy. The ministry has created a web-based application that supports municipalities in designing their municipal development strategies and/or programmes, offering practical tools to develop them (e.g., statistical data, templates and samples of supporting documents and studies, e-learning courses, handbooks for municipalities, etc.). All municipal development strategies are published on the website to encourage peer-learning as a way of building strategic planning capacity among municipalities (OECD, 2023[18]). The MRD has also been active in professionalising public procurement. The Office for the Protection of Competition, for example, has offered seminars and training on public procurement, including an educational

programme for small communities focused on multi-criteria evaluation with the Union of Towns and Municipalities of Czechia (European Commission, 2020_[62]) (see Chapter 2).

As part of its implementation of the National Recovery Plan, Czechia is planning to put a strong emphasis on capacity building for investment. Under Component 4.1 (see Box 3.15), and through an amendment to its recovery plan, Czechia aims at preparing regional investors for the transition to a green and digital economy through training activities, methodological co-ordination and financial assistance for preparing projects to meet the objectives of a green or digital Europe, as well as to increase the efficiency of public investment, to strengthen investment readiness or absorption capacity and to increase the share of PPP projects in Czechia. Another key component of the National Recovery Plan is the creation of Regional Housing Investment Support Centres, which will bring expert support for municipal rental housing investment. These centres will disseminate investment know-how at both the regional and local levels through methodological support, linking municipalities with local experts, co-ordinating local housing policies and supporting the preparation of projects intended for support by national financial instruments.

Box 3.15. Building Czechia's subnational public workforce capacity

The role of the Ministry of the Interior

The Ministry of the Interior has formal responsibility for learning and development in local selfgovernments even though it is not the employer of local self-government officials. The ministry defines minimum standards for special training largely focused on the administrative aspects of officials' tasks. Senior officials are required to take mandatory training on management and human resource issues within two years of their appointment. Aside from some ad hoc initiatives, broader competences – 'soft skills' – are not currently a sustained focus of most learning content. The ministry also prepares the entry exam taken by all new subnational public employees, as set out in the forthcoming amendment to the Act on Officials of Territorial self-governing units. In the future, officials will have to pass a general entrance exam, as well as a separate exam ("special professional competence exam") to be taken within 18 months of taking up duty in order to exercise delegated powers.

A forthcoming amendment to the Act on Officials of Territorial Self-governing Units proposes changes to the training system to improve access to training by simplifying the accreditation system for training programmes, and through tighter quality controls by reducing the number of accredited training institutions.

The role of Czechlnvest

Czech Invest is an Investment and Business Development Agency subordinated to the Ministry of Industry and Trade of Czechia that supports business and investment. The agency helps to attract foreign direct investment and develop domestic companies through its services and development programmes. CzechInvest also promotes Czechia abroad and acts as an intermediary between the EU and small and medium-sized enterprises in implementing Structural Funds in Czechia. As part of its activities, CzechInvest works through its 13 regional offices to detect investment needs in the regions, including developing industrial zones, brownfield sites or any project that offers opportunities for working with the private sector. To make the investment ecosystem work better, CzechInvest supports municipalities in project preparation and funding options.

Czechia's Recovery and Resilience Plan

Component 4.1 of the National Recovery and Resilience Plann developed by the Ministry of Regional Developmentn focuses on systemic support to the public administration to increase the readiness and efficiency of public investment in Czech regions in view of the EU's green and digital economy and

housing affordability objectives. The main goal is to strengthen the capacity of public administrations to prepare and implement investment programmes financed by public funds, including EU funds.

As part of the component, Czechia has established a new national advisory centre and eight Regional Housing Investment Support Centres (RCs) under the State Fund for Investment Support. The RCs aim at supporting the implementation of housing investment in regions and municipalities by disseminating know-how and providing methodological and professional support. The Unit for Housing Investment Support within the RCs will be responsible for the management and methodological guidance of the RCs and will act as the secretariat of the Housing Investments Advisory Hub (HIAH) (see chapter 2).

Source: (OECD, 2023[18])

Across the OECD, national and subnational governments have implemented initiatives to build capabilities at the subnational level for planning, designing and delivering infrastructure investment projects (Box 3.16). According to the OECD monitoring survey, 17 out of 27 surveyed countries have developed a specific strategy to strengthen subnational capabilities to design and manage public investment strategies and/or projects (OECD, 2019_[51]). Providing technical assistance is another common form of capacity building for subnational governments. Some countries also use digital platforms (e.g., e-learning) with the aim to narrow the capacity gaps across regions and localities and facilitate peer learning. Other mechanisms include incentives for subnational government to pool expertise for infrastructure planning and implementation (OECD, 2019_[51]) and to build investment capacity, for example for PPPs (discussed below) and climate finance. National associations of municipalities are very effective as capacity-building and knowledge-sharing platforms, and for disseminating good practice and benchmarking local and international experiences.

For training to be successful and targeted to the actual needs of subnational governments, the Ministry of Regional Development should work together with regional governments and the associations of municipalities to identify needs, and define the scope, targeted audience and content of such training. Training can be targeted to a group of regions or municipalities facing similar challenges, or can be focused on specific issues such as technical, economic, environmental issues, or social analysis to support investment appraisal. Capacity building should take place regularly, in a structured manner, so that knowledge is retained at the institutional level in spite of the turnover of government officials.

Inter-municipal co-operation is also crucial to pool expertise across local governments and promote peerlearning. One of the greatest opportunities for gaining added value of inter-municipal co-operation schemes is for small or less prepared municipalities to learn from bigger or better prepared ones. In Czechia, the VAMs do not only help to reach the right scale for investment, they also offer economies of scale for sharing knowledge and skills for project preparation and management. Encouraging cities to partner with small municipalities will be crucial for this (see above). In this respect, the Shared Service Centres (CSS) might be a good practice to pursue (see Section 3.5). The Regional Centres – in coordination with associations of municipalities – could also act as hubs to gather good practice across municipalities and organise peer-learning exchange among local authorities to tackle specific and common issues within the region. The planned Regional Centres could also facilitate training, as in Poland, for example (Box 3.16).

Box 3.16. OECD country experiences in building subnational investment capacity

Chile's National Investment System offers specialised training courses for national and subnational officials in formulating and evaluating public investment projects. It has a dedicated module on field training and regional workshops for entities in charge of preparing investment initiatives (i.e., mainly municipalities and other public services at the local level). The objective is to develop the appropriate competencies of subnational civil servants in the design and preparation of investment projects, as well as in the methodologies of social evaluation. Training sessions take place in the municipalities and are organised by investment analysts from the Regional Office of the Ministry of Social Development in each region.

In **Germany**, the initiative "Small Towns in Germany" is a package of programmes and activities for small town development, aiming to strengthen their functionality. It targets over 2 100 towns across Germany, mostly in peripheral areas. In 2019, as part of this initiative, the Federal Ministry for Housing, Urban Development and Building launched a pilot called "Small Town Academy", which offers a purpose-built platform for networking, exchange of experiences and advanced training on urban development. A pilot phase (between 2019-2022) was used to define suitable content and formats, which led to the final launch of the platform in 2023. The planned activities include advice from experts who come to the municipality and forge creative strategies (mobile coaching teams), or tandems among mayors who exchange views on a common topic in urban development over the long term. These activities will generate model projects that test different urban planning and project management methods, and will lead to a collection of learning and exchange modules.

In **Poland**, to support the implementation of the National Strategy for Regional Development 2030 (NSRD 2030), the Ministry of Development Funds and Regional Policy launched a pilot project to create the Centre for Advisory Support (*Centrum Wsparcia Doradczego*, CWD), aiming to strengthen the institutional capacity of local authorities to participate in strategic development activities, including planning, designing and managing infrastructure projects in 894 Areas of Strategic Intervention (ASIs). The CWD aims at building capacity and strengthening the territorial approach to investment, i.e., helping build cross-jurisdiction partnerships with other ASI communes and with non-public socio-economic partners, such as civil society organisations, in order to tackle local development challenges and create competitive advantages.

In **Scotland** (UK), the Scottish Government has established the Scottish Futures Trust (SFT) as a centre of expertise to improve the efficiency and effectiveness of infrastructure investment in Scotland. The SFT has launched "Hub" programmes to improve the planning, procurement and delivery of smaller public infrastructure projects (primarily education and health). This programme was tailored to meet the specific needs of five designated hub territories across Scotland. It also provides an opportunity to share skills and experience across public entities at all levels (education and health boards, local authorities, etc.), enabling knowledge transfer and increasing public investment efficiency. In addition to this programme, the SFT also carries out independent expert reviews of various stages of local investment projects, using their expertise to support knowledge sharing among local authorities. It has also developed a step-by-step guide on place-based decision making for all levels of government to plan and deliver investment.

Source: (Malik-Kapler, 2021, Unpublished_[63]; European Commission Joint Research Centre, 2022_[64]) (European Commission Joint Research Centre, 2022_[64]); <u>https://www.kleinstadtakademie.de/.</u>

Strengthen national and regional support for infrastructure investments at the local level

The national and regional levels need to actively support municipalities to overcome capacity challenges resulting from Czechia's fragmented local administration. Often support to help small municipalities prepare investment projects might be preferable to training, which might not be targeted to the specific and varied needs of municipalities, or not be truly beneficial as municipal employees do not have sufficient resources or time to participate, and high turnover rates mean the knowledge may be quickly lost.

In this sense, the two initiatives that Czechia is planning to establish as part of the National Recovery Plan - the National Advisory Centre and the Regional Housing Investment Support Centres - are fundamental, if well managed and co-ordinated. The National Advisory Centre aims at supporting regions and municipalities with project preparation, especially for projects that support the green and digital transitions. This centre will use standardised tools and methodologies for public investment, including PPPs, building information modelling (BIM) projects, and setting long-term standards. While this centre will not necessarily only provide support to housing investments, the plan is for at least the first call for projects to focus on this sector. In parallel, the Regional Housing Investment Support Centres are to be established in eight regions to provide expert support to municipalities for rental housing investments through the dissemination of investment know-how, methodological support, and liaising with local experts. For the efficient implementation of these institutions, some preliminary issues might be considered:

- Establish concrete mechanisms and communication channels to ensure that the national and regional centres take a cross-sectoral perspective. The Ministry of Regional Development might consider piloting both institutions over 2024-2026. While their special focus is on the housing sector, it is important to recognise that at the territorial level, housing cannot be seen in isolation. Planned rental housing investments need to be accompanied by other sectorial investments: transport, roads and connectivity, education, water and sanitation, health facilities etc.. Both the national and regional centres need to put this cross-sectoral perspective up-front when selecting and supporting project preparation. The Ministry of Regional Development needs to establish concrete mechanisms and communication channels to ensure that the national and regional centres have this cross-sectoral perspective.
- Avoid duplication of tasks by the national and regional centres and instead create complementarities and synergies in the support they provide. This will require daily co-ordination, starting from setting the criteria for selecting projects to receive support from both centres and how they target the support. While support can be focused on appraisal and project preparation, it is also important to provide expertise and technical assistance in areas such as financial modelling and business case development.

There are also some online platforms to support project preparation and management that provide easyto-use documents. They usually provide a comprehensive map of all aspects to consider for the preparation of sustainable infrastructure projects and model documents. For example, multilateral development banks have developed SOURCE to provide a complete range of documents to support infrastructure planning and investment processes (OECD, 2022_[38]). In the same spirit, municipalities would also strongly benefit from accessing framework agreements established at the national level with larger contracting authorities. For frequently purchased goods, services and works, a framework agreement can reduce administrative burdens for contracting authorities and suppliers by allowing simplified ordering processes once the agreement is in place (see Chapter 2).

With the renewed interest in the use of PPPs, especially for affordable housing, special support for cities and municipalities will be essential. Czechia is currently developing national guidelines for the development of affordable housing through PPPs (see Chapter 2). PPPs are not risk-free and require careful consideration and implementation by subnational governments. Maximising their benefits and minimising their downsides requires substantial public sector capacity, especially at the subnational government level. A PPP Unit at the national level with dedicated and technically sound expert teams (in-house and/or

contracted) can strengthen subnational governments' capacity in undertaking PPPs. Most PPP Units are national, but some countries also have PPP Units at the subnational level. Although their specific role varies, PPP Units tend to perform a combination of five main functions: policy formulation and co-ordination, gate keeping and quality control, technical assistance, education and capacity development, and PPP promotion (OECD, 2022_[38]).

Regions and municipalities could also benefit from framework agreements and resources such as grants for project design and preparation (e.g. environmental impact assessments, technical feasibility studies). Chapter 2 provides some examples of how support from the Ministry of the Environment and the State Environmental Fund could be enhanced, by considering two-round calls, with the first-round funding project preparation and design or reimburse preparation costs after construction approval.

Summary of key recommendations

Given the challenges of implementing a full suite of reforms, Czech authorities could consider sequencing the recommendations made above. By grouping recommendations according to the time horizon needed to implement them effectively (short term, and medium to long term), Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. A potential sequencing is included below.

Short-term reforms

- 1. **Identify capacity gaps in all types of regions and municipalities.** In order to properly target assistance and capacity building at the subnational level, it is crucial to have a clear picture of which capacities are missing and where. With a proper diagnosis, assistance and capacity building can be better targeted and tailored to a group a regions or municipalities in a systemic and sustainable way, rather than offering technical assistance or building capacity on a case-by-case basis. This will involve two complementary and parallel measures:
 - Develop a comprehensive database on subnational public employment that captures not only the number of public employees, but also other crucial characteristics such as gender, education level, hierarchy, etc. This would provide a useful database of subnational public staffing and its evolution over time, helping to identify key capacity gaps.
 - Conduct surveys or consultations with regions and municipalities to better understand regional and municipal gaps in public administration and management and find common challenges. This diagnosis could be led by the Ministry of Regional Development or the Ministry of the Interior.
- 2. Strengthen national and regional support and assistance to plan, prepare and implement infrastructure investments at the local level. As the national and regional levels often have greater capacity than small municipalities they can provide direct support, instead of training, to small municipalities for preparing investment projects.
- 3. **Embed a cross-sectoral and multi-level perspective within capacity-building activities** to help in breaking down silos. Proper co-ordination among the National Advisory Centre and the Regional Housing Investment Support Centres could be a way forward:
 - Establish concrete mechanisms and communication channels to ensure that the national and regional centres take a cross-sectoral perspective. Use the 2024-2026 period to pilot both institutions with a special focus on the housing sector, but while taking a broader view when selecting and supporting project preparation. The State Fund for Investments Promotion, with the assistance of the Ministry of Regional Development needs to establish concrete mechanisms and communication channels to allow the national and regional centres to take this cross-sectoral perspective.

- Avoid duplication of tasks by the national and regional centres and instead create complementarities and synergies in the support they provide. This will require daily co-ordination.
- Use the pilot period as an opportunity to collect proper data at the territorial level or identify data gaps for assessing infrastructure needs across all sectors. This will require a co-ordinated effort not only involving the National Advisory Centre and the Regional Housing Investment Support Centres, but also all sectors and institutions developing or collecting data.
- 4. **Provide special resources and tools for regions and municipalities to better prepare and procure infrastructure projects.** One of the major bottlenecks for quality infrastructure at the subnational levels is the preparation phase. To strengthen these processes, some different measures can be taken:
 - Complement technical assistance provided by the Ministry of Regional Development and the
 national and regional centres with specific resources by including project preparation in eligible
 costs cities and association of municipalities might particularly benefit from these. For this,
 ministries and state funds could consider two-round calls, with the first-round funding project
 preparation and design or reimburse preparation costs after construction approval.
 - Promote the use of online platforms to support project preparation and management. These online tools usually provide a comprehensive map of all aspects to consider in preparing sustainable infrastructure projects, as well as model documents.
 - Make sure that regions and municipalities can access framework agreements established at the
 national level with larger contracting authorities. For frequently purchased goods, services and
 works, a framework agreement can reduce administrative burdens for contracting authorities and
 suppliers by allowing simplified ordering processes once the agreement is in place.
 - Provide special support for regions and cities to use PPPs given the renewed interest in this tool. PPPs require careful consideration and implementation by subnational governments. A PPP Unit with dedicated and technically sound expert teams (in house and/or contractual) established at the national level could strengthen subnational governments' capacity in undertaking PPPs.
- 5. Leverage the role of the national and regional governments and the associations of municipalities to build capacities at the local level. It is important to provide co-ordinated capacity-building activities to enable municipal administrations to better plan, prepare and deliver infrastructure projects. Capacity building can include classroom training, guidelines and training materials, or formative activities delivered by experts to subnational officials. Some important considerations include:
 - Target trainings to a group of regions or municipalities facing similar challenges or focus them on specific issues such as technical, economic, environmental areas, or social analysis to support investment appraisal.
 - Ensure that training activities are structured and sustainable over time so that knowledge is retained at the institutional level in spite of the turnover of government officials.
 - Work together with regional governments and the associations of municipalities to identify needs, and define the scope, targeted audience and content of training. The future Regional Centres could also facilitate the training.
 - Leverage inter-municipal co-operation arrangements to pool expertise across local governments and promote peer-learning, in particular taking advantage of the experience of the Shared Service Centres. Regional centres – in co-ordination with associations of municipalities – could also act as hubs to gather good practice across municipalities and organise peer-learning exchanges among local authorities to tackle specific and common issues within the region.

• Strengthen the administrative capacities of Voluntary Associations of Municipalities (VAMs) through systemic financial support so that VAMs have sufficient personnel and administrative capacities to implement investment activities.

3.6 Funding and financing subnational infrastructure investment

In OECD countries, subnational governments often face infrastructure funding and financing challenges due to their limited revenue sources. Funding, which is essential to pay for infrastructure investment, operations and maintenance, mainly comes from a mix of grants and transfers from upper-level government, as well as subnational own-source revenue such as taxes, user-charges and property income. Funding may also come from specific user-charges collected by a private operator of public infrastructure (e.g., through a concession agreement). Access to financing instruments – i.e. money from private or public financiers – is also crucial for subnational infrastructure as it helps subnational governments meet the high up-front costs of infrastructure investment, which could otherwise be unaffordable or may place substantial pressure on subnational government budgets. The appropriate use of finance can increase the ability of subnational governments to undertake needed investments and spread the burden of payment across future beneficiaries. In most countries, the 'golden rule' applies, meaning that financing for subnational governments is only permitted to cover investment needs and cannot be used to cover current expenditure. Opportunities for subnational governments to mobilise financing mainly relate to the use of debt (loans, bonds), but may also involve equity and guarantees if certain conditions are met (OECD, $2022_{[38]}$).

While financing can help cover up-front investment costs, by spreading costs over time, it will always need to be repaid by funding. Funding is also required for infrastructure maintenance and operation costs during the investment lifecycle. This means that unlocking funding for the infrastructure lifetime is essential to unlock investment, support maintenance and avoid creating a fiscal burden for future subnational governments. To increase infrastructure investment, subnational governments can harness a range of existing and innovative funding and financing instruments. Even well-known approaches (e.g. grants and subsidies, taxes, and user charges and fees) are often under-utilised by subnational governments (OECD, 2021[48]).

Increase subnational government funding capacity

The high reliance of Czech regions and municipalities on central transfers, as well as their limited tax autonomy, challenge subnational infrastructure funding. Czechia's regions and municipalities strongly depend on central grants and subsidies – mostly aimed at funding state delegated functions. Grants and subsidies represent 46.7% of subnational governments revenue, which is in line with OECD countries where on average almost 50% of revenue comes from transfers from the national government. While transfers include hundreds of subsidy schemes, which are mostly earmarked, grants for infrastructure investments often come from different state funds – especially the State Investment Support Fund, the State Fund for Transport Infrastructure and the State Environmental Fund (Box 3.17). State funds are also responsible, in most cases, for handling transfers from EU funds for investments. Subnational governments in OECD countries usually access a mix of unconditional and earmarked grants – the latter are usually provided to encourage them to undertake certain investments that align with national policy objectives. The United Kingdom government, for example, has rolled out a funding programme to support local authorities to develop electric vehicle charging infrastructure as a policy measure to achieve its fully zero emission agenda (OECD, 2022_[38]).

Tax revenues also represent a significant source of subnational government revenue in Czechia, especially for municipalities. However, municipal tax autonomy is limited as taxes are mostly shared; subnational governments have control over just 1.2% of total tax revenues (OECD, 2016[39]). Regions do not collect

their own taxes and the property tax on land and buildings is the only tax levied by municipalities apart from income tax from companies, which represents a tiny share of municipal revenue (OECD, $2023_{[18]}$). Limited tax autonomy together with a strong dependence on central transfers challenge the capacity of regions and municipalities – especially small ones – to fund, co-fund, and finance infrastructure investments. Consequently, regions and municipalities strongly depend on EU funds to invest. This dependence means that municipalities need to meet the eligibility criteria to access those funds, which are not necessarily aligned with the basic infrastructure needs of some municipalities.

Box 3.17. Czechia's state investment funds

The **State Investment Support Fund** (SPI) is an independent legal entity under the Ministry for Regional Development. The fund supports municipalities, cities and regions in housing and tourism investment, but in accordance with the Housing Strategy 021+, the fund's activities primarily focus on the availability, stability and quality of housing. The mission of the SFPI is to co-create quality conditions for housing development, whether this means the quality of buildings intended for housing, or the public spaces near these buildings and in their wider surroundings, as well as the motivation of entities operating in the housing market to take care of the housing stock, at the national and regional level.

The **State Fund for Transport Infrastructure** mainly finances road and rail infrastructure of national importance through national resources and EU funds.³ The fund also contributes to research, capacity building, and relevant expert support linked to transport infrastructure. It allocates resources from EU funds, road taxes, a percentage of the excise duties on hydrocarbon fuels and lubricants and the surplus raised by fees on certain motorways. The fund is administered by an elected committee composed of nine members, and headed by the Minister of Transport. The committee's responsibilities include appointing and dismissing the Director, approving proposed budgets, scheduling income and expenditures, setting timetables for the floating of tenders in accordance with legal requirements, and releasing funding for approved projects.

The Czech **State Environmental Fund** provides direct or indirect financial support to subnational governments and other beneficiaries through subsidies, soft loans, or a combination of both. The fund primarily co-finances projects to improve quality of water, air, waste management, protection of nature and the countryside, environmental education, utilisation of renewable energy and measures to improve the energy performance of buildings. It is responsible for administering financial resources from the EU, namely the Cohesion Fund, the European Regional Development Fund and The Next Generation EU Fund. It also administers resources from the state budget, and from fees collected from polluters – including wastewater discharge fees, fees for reclassifying agricultural land, air pollution fees and fees under the Waste Act.

The subsidies provided by the fund are designed to support the public sector, businesses and households, and can be used to improve heating systems, energy savings measures as well as funding green infrastructure in cities and municipalities. In May 2022, the government announced an additional CZK 4.75 billion (194 million EUR) in funds for 2022 for operating support related to the development of new renewable and other supported energy sources. Importantly, the Act on Promoted Energy Sources (Act No. 165/2012) was amended in 2022 to provide additional support for existing and new power plants with renewable energy sources. A key feature of the legislation was to move away from existing feed-in-tariffs and to introduce competitive bidding and auctions for renewable power generators and to offer green bonuses, also for heat generation. The revised legislation opens the door for support to renewable sources that has largely been lacking since the end of 2013.

Source: (State Environmental Fund of the Czech Republic, n.d._[65]) (State Fund for Transport Infrastructure, n.d._[66]) (OECD, 2023_[67]) (State Investment Support Fund, n.d._[68])

There are several avenues for increasing Czech subnational governments' funding capacities. OECD analysis suggests that subnational tax revenues can be increased by revising the tax-sharing formula and making better use of the property tax. Other OECD analyses have highlighted that the current tax-sharing formula, which allocates revenue from personal and corporate income tax and VAT based on several determinants among which the population size, implicitly sustains municipal fragmentation, by encouraging very small municipalities to remain small because on average they receive significantly more tax revenue per inhabitant that way. Given the need for more intermunicipal co-operation, the reports note that this formula could be better structured to acknowledge the differences in revenue-raising capacity among municipalities in order to enhance horizontal equity (OECD, 2021_[20]).

In addition to the issue of tax sharing, the OECD has long held the position that Czechia is not using the property tax to its full advantage. Property taxes are often a key source of revenue for subnational governments in OECD countries and the revenue raised from these taxes has a direct link to the quality of local infrastructure and public services. Property taxes have numerous merits: they are a stable tax base, they have solid return on tax collection, they prevent vertical tax competition, and they have a direct link to infrastructure provision (OECD, 2022_[38]). Various OECD studies have therefore suggested that the tax autonomy of Czech local governments could be strengthened by encouraging municipalities to raise more revenue from the property tax. Collecting higher levels of property tax may not only strengthen the local fiscal base, but may also act as a counter-cyclical revenue source that provides stability for local revenues (OECD, 2020_[17]) (OECD, 2023_[18]). For this, property tax evaluation should be based on regularly updated estimates of property value rather than the size of the property, as it is today. This has been the path adopted by several countries that calculate the value of the property based on the rental value or the market value.

To address demographic and territorial inequalities' challenges that Czechia is facing, the OECD has also recently highlighted that there is a growing pressure for horizontal revenue redistribution across subnational governments. For this, many OECD countries resort to fiscal equalisation. There are a wide variety of fiscal equalisation models. Most can be classified depending on whether they equalise fiscal capacity or expenditure needs, or a combination of both; whether they are funded by vertical or horizontal grants; and whether they pursue a full or partial equalisation goal. However, many combine multiple features and some issues are relevant to all systems (Dougherty et al., 2022_[69]) (OECD, 2023_[18]).

Adopt innovative financing instruments to boost subnational infrastructure investment

Mobilising finance is essential to help subnational governments meet the high up-front costs of infrastructure investment and to spread those costs across the future beneficiaries of an investment (OECD, 2022_[38]). Subnational governments mainly finance infrastructure investment through debt in the form of loans and bonds. While regions and municipalities access loans to finance infrastructure, their level of indebtedness is very low. Czech regions and municipalities can borrow from different sources, including commercial banks, the State Environment Fund or international donors such as the European Investment Bank. Subnational governments may also issue bonds with the approval of the Ministry of Finance (around 9% of municipalities issue bonds).

National governments can regulate subnational borrowing by introducing effective borrowing controls in the form of administrative or regulatory rules to preserve fiscal discipline. Since 2017, regional and municipal gross debt must remain below 60% of a four-year average of revenue (Act No. 23/2017). If the debt target is not respected, central authorities may cut revenue to a municipality or region by 5% of the difference between its amount of debt and the 60% target. This suspended revenue can only be released to gradually repay subnational government debt obligations made before the year in which the suspension occurred. As a result, subnational government debt in Czechia is well below the OECD average (3.5% of GDP and 7.5% of public debt vs. 27.9% and 20.2% respectively). Financial debt, which accounts for 43.7% of subnational government outstanding debt, is primarily made up of loans (85.6% of financial debt in 2020)

while bonds account for only 14.4% of subnational government financial debt. In 2019 approximately 550 municipalities (9% of the total number) had a debt higher than 60% of their revenue and the regions had no debt exceeding this threshold.⁴

Subnational governments can also mobilise equity or guarantees provided by upper-level governments or multilateral development banks. While the use of guarantees needs to be carefully considered, this instrument can be an effective tool to improve access to finance for quality infrastructure investment by subnational governments, particularly where a project is economically and financially viable but includes risks that financiers would have little control over or may not be willing to bear (OECD, 2022_[38]).

OECD countries are increasingly using more innovative financing instruments, including green, social, climate and sustainability bonds or loans (Box 3.18). Green bonds, for example, are gaining traction for financing green projects that deliver environmental benefits. Green bonds share the same financial characteristics as conventional bonds, with the exception of the ring-fencing or earmarking of proceeds required by the green label. They are usually issued by large cities or groups of cities that pool together their financing and human capacities. For green bonds to be successful, governments need to develop a pipeline of quality, bankable projects (OECD, 2020_[31]). The use of innovative financing instruments in Czechia is very limited. No green bond has been issued at the subnational level and there is still low use of private capital to finance public investment. Following the example of France's Île-de-France region (Box 3.18), regions or big cities in Czechia could explore resorting to innovative financing instruments to make better use of existing opportunities to finance their infrastructure needs, especially for social housing and complementary infrastructure.

Box 3.18. Innovative financial instruments used by subnational governments in OECD countries

France's **Île-de-France** region has made climate finance a trademark for its investors. It has been a frequent and regular issuer in the green and sustainable bond market since 2012, with eight transactions. Its 6th Green and Sustainable Bond Issuance, launched in June 2018, amounted to EUR 500 million. As part of the process and under the supervision of the region's finance directorate, each sectoral department in the region is asked to identify priority projects with a high environmental and social impact and within a certain budget. The finance directorate then consolidates the information across departments and finalises the budget allocation by sector. Nine eligibility criteria have been established to guide the purpose and management of the projects (e.g. environmental responsibility, social and societal responsibility, economic responsibility and governance). Looking at the funds received from the green bond during the 2014-18 period, half went to public transport and sustainable transport projects. Social housing and facilities for education and leisure accounted for 16% and 15% respectively. Minor shares of funding were also allocated to projects related to biodiversity (5%), economic and socially inclusive development (7%), support to vulnerable groups (5%) and energy efficiency (2%).

The first municipal green bond in the **Nordic countries** was issued in 2013 by the City of Gothenburg, Sweden, to fund energy, transport, water management and waste management projects. It has renewed the experience almost annually since then. To support its green bond strategy, the city has developed its own Green Bond Framework, which specifies terms and conditions for the selection of eligible projects, follow-up and transparency requirements. Nordic local government funding agencies, such as *Kommuninvest* (Sweden) and Municipality Finance (Finland), are also regular issuers of green bonds. In general, Nordic green bond issuers rely extensively on the use of external reviews and second party opinions to support their green bond issuances, which confirms compliance with the Green Bond Principles and the climate components of the proposed investments. In 2014, eight local municipal water utilities in the **Veneto region in Italy** joined together to raise finance through a 'hydrobond'. To achieve this, the municipal companies pooled mini bonds into a Special Purpose Vehicle (SPV) and jointly issued a EUR 150 million bond on the capital market. This has financed 728 individual infrastructure investments in the region's integrated water system from 2014 to 2017 (with an estimated value of EUR 300 million). These investments included new water mains and sewer pipes, upgrading facilities and network maintenance.

Source: (OECD, 2020[31])

Subnational governments in OECD countries are also increasingly innovating in the type of investment approach that they use. When delivering an investment, a subnational government might evaluate different options, including traditional and more innovative public procurement of infrastructure, the use of a publicprivate partnership or harnessing a state-owned enterprise (e.g., a municipal company). Various models exist to build public-private co-operation and leverage private investment, and new forms of collaboration are emerging. While the PPP market has seen some decline in recent years, there are other innovative partnership models involving national and local authorities in which there is a long-term vision and risks and rewards are shared over time. One form of emerging model of public-private collaboration is the regulatory asset-based model, which already exists for supporting private investment in some industries (energy, water, etc.), but is increasingly being explored for use in new sectors (OECD, 2022[36]). To support more inclusive investment, they may also explore the use of different procurement innovations such as green or social procurement. Green public procurement supports environment-friendly policies and investment strategies by integrating environmental and social considerations into the procurement process. In Europe, they have taken the form of Green Deals - generally, voluntary agreements between private partners, civil society and the national and/or regional government to establish a joint green project (OECD, 2020[31]).

PPPs can be attractive for a number of reasons (see Chapter 2), especially because they can be an efficient way of accelerating infrastructure investments at the regional and local levels. Taking advantage of the renewed momentum for PPPs, Czechia could envisage large municipalities engaging in PPPs. However, it is extremely important to closely assess financial commitments to ensure that the sequence of subsequent payments is compatible with the financial situation of subnational governments. This requires highly skilled, competent, and experienced teams, given the complexity of the financial, technical and legal frameworks of PPP projects. Such expertise is generally not available outside the bigger cities. Czechia could thus envisage appointing a special team within a National PPP Unit that is responsible for developing and reinforcing regional and municipal capacity to effectively engage with the private sector through PPPs. The UK model of the Private Finance Initiative (PFI) programme or the French "public-private partnership contracts" could be followed.

Summary of key recommendations

Given the challenges of implementing a full suite of reforms, Czech authorities could consider sequencing the recommendations made above. By grouping recommendations according to the time horizon needed to implement them effectively (short term, and medium to long term), Czech authorities could allocate resources to reforms in a way which would provide incremental benefits. A potential sequencing is included below.

Short-term reforms

1. **Increase subnational governments' funding capacities.** This can be implemented through several complementary avenues:

- Revise the tax-sharing formula to avoid encouraging municipal fragmentation. The formula could be better structured to acknowledge the differences in revenue-raising capacity among municipalities in order to enhance horizontal equity. For this it would be important to raise the weight of factors linked to economic activity (number of employees) and income.
- Consider designating the municipal income tax as own-source only for certain types of municipalities or large cities, as small municipalities do not necessarily reach an optimum size to collect taxes efficiently.
- Make better use of the property tax. Property tax evaluation should be based on regularly updated estimates of property value rather than the size of the property, as it is today. This has been the path adopted by several countries that calculate the value of the property based on the rental value or the market value.

Medium to long-term reforms

- Adopt innovative financing instruments to boost subnational infrastructure investment. Mobilising finance is essential to help subnational governments meet the high up-front costs of infrastructure investment and to spread those costs across the future beneficiaries of an investment. They can be either an alternative or a complement to subsidies, depending on their conditions and investments needs:
 - Encourage the use of innovative financing instruments, including green, social, climate and sustainability bonds or loans. In the first instance they could be targeted especially at social housing and complementary infrastructure.
 - Provide expert support for subnational governments to guide them in the use of innovative instruments. The Union of Towns and Municipalities could provide expert support, especially for medium or small municipalities. Bigger cities could aim at integrating this expertise directly in their administration. This could also take the form of a special task force bringing together stakeholders from all government levels, as well as from the financial sector, to develop a methodology, pilot and implement it to make innovative instruments accessible and attractive for subnational governments.
- 2. **Explore wider engagement in public-private partnerships by regions and cities as an option to accelerate infrastructure investments**. PPPs can be a tool for reforming public procurement and public service delivery, and not just a means of leveraging private sector resources. For this it would be of utmost importance to have a special team within a national PPP unit responsible for developing and reinforcing regional and municipal capacity to effectively engage with the private sector in PPPs

Notes

1 The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system developed by the European Union for dividing up the economic territory of the EU and the UK. NUTS 1: major socioeconomic regions; NUTS 2: basic regions for the application of regional policies; NUTS 3: small regions for specific diagnoses.

2 https://www.risy.cz/cs/

3 With the establishment of regions in 2000 and the subsequent transfer to their purview of Class II and III roads, the fund's tax revenues were reduced as funds for lower class roads were transferred to local governments in the form of tax budgeting.

4 The structural fiscal balance rule was amended in 2020 to allow the central government to deal with the COVID-19 crisis and to implement fiscal support.

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146 |

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156 |

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