# Improving the Efficiency of Public Investment in Infrastructure in Belgium

Ed Hearne

SIP/2025/020

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on March 3, 2025. This paper is also published separately as IMF Country Report No 25/70.

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#### **IMF Selected Issues Paper**

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#### Improving the Efficiency of Public Investment in Infrastructure in Belgium

#### Prepared by Ed Hearne

Authorized for distribution by Jean-François Dauphin

March 2025

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ABSTRACT: Against a backdrop of constrained fiscal space, Belgium faces considerable investment needs. Improving infrastructure governance processes can enhance investment efficiency, achieving more "bang" for each investment "buck". This paper analyzes public investment management practices in Belgium, highlighting several areas for improvement by the federal and regional governments. The findings indicate an absence of clear infrastructure strategies, weak practices for project preparation (including project appraisal, selection and approval processes), fragmented governance, and an absence of coordination within and between entities. The "gatekeeping" role of the Ministry of Finance, common in most advanced economies, is largely absent in each of the entities in Belgium's federal state. Notwithstanding these areas for improvement, there are examples of good practices in individual agencies, and a number of promising reform initiatives are underway. The paper recommends taking a strategic and coordinated approach to investment planning, establishing standardized project preparation practices, enhancing coordination between federated entities and with the federal entity, and strengthening the role of departments of finance/budget in the public investment process. Together, these steps can improve infrastructure governance and support enhanced investment efficiency.

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#### **SELECTED ISSUES PAPERS**

## Improving the Efficiency of Public Investment in Infrastructure in Belgium

Belgium

Prepared by Ed Hearne



## INTERNATIONAL MONETARY FUND

## **BELGIUM**

#### **SELECTED ISSUES**

March 3, 2025

Approved By

**European Department** 

Prepared By Ed Hearne (FAD)

### **CONTENTS**

IMPROVING THE EFFICIENCY OF PUBLIC INVESTMENT IN INFRASTRUCTURE IN	
BELGIUM	2
A. Introduction and Overview	
B. Strategic Planning of Public Investment	4
C. Project Preparation and Governance	6
D. Project Selection and Governance	9
E. Coordination and Institutional Arrangements for Public Investment	
F. Recommendations	
BOXES	
1. Cost Overrun in Public Projects	8
2. Major Project Governance Processes—Selected European Examples	10
3. Infrabel's Regional Investment Key	14
4. Gatekeeping Functions of Finance Ministries in Public Investment in Advanced	
Economies	
FIGURES	
1. Comparative Infrastructure Efficiency and Competitiveness	3
2. Flanders Complex Project Process	
3. Aquafin's Project Governance Process	
References	18

## IMPROVING THE EFFICIENCY OF PUBLIC INVESTMENT IN INFRASTRUCTURE IN BELGIUM<sup>1</sup>

Against a backdrop of constrained fiscal space, Belgium faces considerable investment needs. Improving infrastructure governance processes can enhance investment efficiency, achieving more "bang" for each investment "buck". This paper analyzes public investment management practices in Belgium, highlighting several areas for improvement by the federal and regional governments. The findings indicate an absence of clear infrastructure strategies, weak practices for project preparation (including project appraisal, selection and approval processes), fragmented governance, and an absence of coordination within and between entities. The "gatekeeping" role of the Ministry of Finance, common in most advanced economies, is largely absent in each of the entities in Belgium's federal state. Notwithstanding these areas for improvement, there are examples of good practices in individual agencies, and a number of promising reform initiatives are underway. The paper recommends taking a strategic and coordinated approach to investment planning, establishing standardized project preparation practices, enhancing coordination between federated entities and with the federal entity, and strengthening the role of departments of finance/budget in the public investment process. Together, these steps can improve infrastructure governance and support enhanced investment efficiency.

#### A. Introduction and Overview

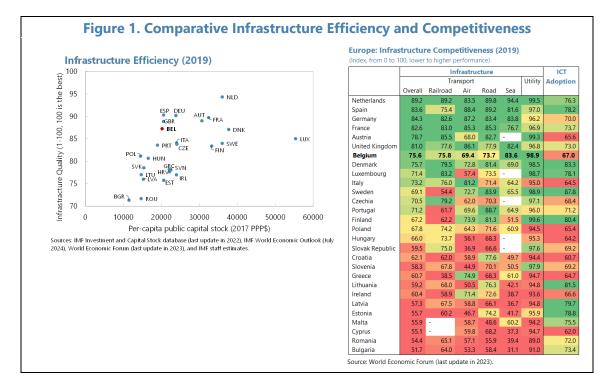
- 1. Against a backdrop of constrained fiscal space, Belgium faces considerable investment needs. Public investment is required to improve the quality and coverage of physical infrastructure, to foster digitalization and spur productivity growth, to enable the decarbonization transition, and to ensure climate resilience and adequate maintenance of the existing asset base. These needs must be accommodated within a decreasing overall spending envelope.<sup>2</sup>
- 2. Belgium's capital stock is comparatively low relative to neighboring countries and peers, and investment efficiency lags leading performers. The public component of the capital stock has been below three percent of GDP since the 1990s. From an efficiency perspective, comparators such as the UK and Spain achieve a higher level of infrastructure quality for a comparable level of capital stock, and components of transport infrastructure competitiveness fall behind neighboring countries in the road, railroad, and air transport sectors and in ICT adaptation (Figure 1). This may understate the relative efficiency gap for Belgium given its high population density. For a densely populated country, a given level of capital stock in value terms should be expected to deliver a higher level of access to quality infrastructure compared to a more sparsely

2

<sup>&</sup>lt;sup>1</sup> Prepared by Ed Hearne (FAD). The chapter benefited from valuable comments by Jean-Francois Dauphin and Mark Horton and Victoria Timonova provided excellent support.

<sup>&</sup>lt;sup>2</sup> For a fuller discussion of this theme, see the accompanying selected issue paper by Wong and Li (2025), "Increasing Public Investment, Fostering Digitalization and Supporting the Green Transition: A Difficult Challenge Under Fiscal Consolidation.

populated country. Higher density can bring an efficiency in infrastructure provision compared to less densely populated countries where more distributed and less concentrated networks are required to bring services to remote locations, serving fewer inhabitants.



- **3. Belgium has an opportunity to narrow the efficiency gap by improving infrastructure governance practices.** IMF research has shown that, on average, countries could close two thirds of the efficiency gap by improving public investment management (PIM) practices to the level of the most efficient comparator. Further, strong infrastructure governance practices are also associated with improved economic productivity of public investment: countries with better PIM systems get more growth "bang" for their investment "buck". Accordingly, improving institutions for public investment can improve the quality and coverage of infrastructure delivered and improve the chances of that infrastructure enhancing growth prospects.
- 4. This paper assesses public investment management practices in Belgium, focusing on the planning phase of the infrastructure lifecycle. The approach draws on aspects of the IMF's Public Investment Management Assessment (PIMA) framework the leading diagnostic to assess countries' infrastructure governance practices. Belgium is a highly decentralized state and subnational governments have significant autonomy over fiscal policy. While responsibility for the rail network, public buildings and prisons rests with the federal government, most other sectors of

<sup>&</sup>lt;sup>3</sup> IMF (2015) Making Public Investment More Efficient.

<sup>&</sup>lt;sup>4</sup> For more information see IMF (2022) <u>Public Investment Management Handbook</u> and the IMF's Infrastructure Governance Portal at https://infrastructuregovern.imf.org/.

<sup>&</sup>lt;sup>5</sup> For a fuller discussion see Wong, Yu Ching (2023) <u>Fiscal Federalism in Belgium: Challenges in Restoring Fiscal Sustainability</u>. IMF Selected Issues Paper (SIP/2023/016). Washington, D.C.: International Monetary Fund.

public investment including roads, waterways, public transport, flood defense, water supply and wastewater treatment are the competence of the regions: Flanders, Wallonia and Brussels-Capital Region. Given the distribution of responsibilities for public investment across Belgium, this paper assesses each aspect of infrastructure government as they apply in the federal and each regional federated entity.

**5. The remainer of this paper is structured as follows:** Section B assesses the extent to which public investment is planned, budgeted and implemented within an overarching national, regional or sectoral strategy; Section C assesses the project preparation phase, including use of standard techniques like project appraisal, governance and decision-making protocols for public investment and practices for project selection; Section D reviews institutional arrangements and coordination structures for public investment management; Section E presents recommendations to address the issues identified.

#### **B.** Strategic Planning of Public Investment

- **6. To be effective and efficient, public investment should be guided by an overarching strategic plan.** Investment strategies, or "National Development Plans" establish how public investment goals and objectives will be achieved through a broad portfolio of projects and programs that complement each other. A strategic approach can maximize the impact of individual investments and ensure alignment of infrastructure spending with other cross-cutting policy priorities including addressing climate change or promoting economic growth or sustainable regional development. Investment plans should be linked to available resources and must be feasible in the context of the medium-term macroeconomic context. In the absence of a national or regional investment plan, there is a risk that spending will be haphazard, opportunities for synergies and network benefits will be forgone, and investment efficiency will be eroded.
- 7. While there are reforms underway, there are significant weaknesses in strategic planning of public investment in Belgium at present. Integrated investment plans are not in place. While there are a number of published investment programs at the regional level, these are generally confined to sectors (such as mobility) or sub-sectors (such as roads). Where plans do exist, they are generally not in the context of a realistic assessment of available resources and hence aspirational. Frameworks for territorial development and spatial planning are generally well developed but these are undermined by absence of supporting infrastructure plans. Given the fundamental spatial nature of infrastructure, this is a significant weakness.

#### Federal Government

8. Belgium does not have a national investment strategy nor an integrated plan for the sectors within the competence of the federal government. The Federal Department of Budget does not oversee investment strategy. While the Study Group on Public Investment, supported by the Federal Planning Bureau, has undertaken valuable research and analysis on infrastructure issues, its role has not extended to policy development. In addition, there is no central assessment of investment needs and priorities in Belgium, whereas the highest performing countries undertake

such assessments. Nor does Belgium have sectoral strategies at the national level as standard.<sup>6</sup> Regional sectoral strategies, where they exist, are not integrated at the national level. Belgium is an outlier in this regard – as of 2022, nine EU member states had integrated national investment plans and a further 13 used national sectoral strategies.<sup>7</sup>

#### **Flanders**

9. Flanders does not currently have an integrated public investment strategy, but work is underway to develop a medium-term plan. Historically, investment programs were set out annually by each of seven entities within the mobility and public works policy area. A consolidated plan is in development, incorporating all transport modes and flood defense investment. Project proposals will be reviewed by an Investment Cell in the Department of Mobility and Public Works. Structures have been established to improve coordination, but this is limited to the policy areas under the remit of the Department. The plan will be more constrained by available resources than previous plans and is likely to result in many proposals not proceeding. The development of a consolidated plan is a positive step and can be built upon. Future iterations should broaden the coverage to other investment sectors and ensure a close alignment with policy objectives such as climate change and territorial development.

#### Wallonia

- **10.** The Government of Wallonia has developed a number of public investment strategies, focusing on the transport sector. *Mobility and Infrastructure for All* set out a range of investment projects and programs designed to maintain existing networks, engender a modal shift to sustainable mobility and encourage active transport. The plan included funding for all modes public transport, roads, waterways and cycling. However, the plan did not incorporate complementary investment in other sectors. In addition, the plan was not sufficiently linked to available resources with the consequence that many projects were unaffordable and aspirational.
- 11. The Wallonia government is evaluating the domestically-funded component of the region's Recovery and Resilience Plan, and this will form the basis of a new medium-term investment plan. This iteration, planned for 2025, should be explicitly linked to a realistic assessment of available resources. Future iterations of the plan should aim to broaden the coverage to other sectors of public investment. This should include economic infrastructure such as water and sanitation, energy and communications, and social investment such as education, healthcare and public housing. To support maximum impact, the plan should be consistent with spatial policy in the region. At present, there is no explicit link between territorial/land-use planning and public investment, impeding effectiveness in both policy areas.

<sup>&</sup>lt;sup>6</sup> An exception is investment planning in the rail network.

<sup>&</sup>lt;sup>7</sup> Belu Manescu, C. (2022). <u>New Evidence on the Quality of Public Investment Management in the EU</u>. DG ECFIN Discussion Paper nr. 177.

<sup>&</sup>lt;sup>8</sup> Government of Walloon (2020) Mobility and Infrastructure for All.

#### **Brussels Capital Region**

- **12. BCR does not have an integrated public investment plan or strategy.** While certain sectors have established multi-annual investment plans, these are not consistently developed or presented. Plans are fragmented. For example, the BCR Ministry of Mobility has three: bridges and viaducts, public transport, and tunnels. These amount to investment plans for individual asset classes rather than an integrated plan for mobility. Moreover, transport planning is a key enabler of other public investment sectors and there is no mechanism for strategic alignment across policy spheres.
- **13. BCR** has a well-developed spatial planning framework, but this is not explicitly aligned to public investment policy. A Regional Designated Land Use Plan was adopted by the Brussels Government in 2001. The plan governs the general use of the various zones of the Brussels-Capital Region and has primacy within the spatial planning hierarchy. Special Use Plans give effect to the regional plan at the municipal level. BCR has also adopted a Regional Plan for Sustainable Development that sets out the sectoral and territorial development objectives in the years to 2040. The Plan articulates objectives around four main themes:
- Developing new neighborhoods;
- Improving the living environment;
- Developing the urban economy; and,
- Promoting multi-modal travel.
- **14.** Complementary public infrastructure is critical to achieving the objectives of regional and urban planning. Likewise, achieving wider objectives of urban planning such as densification is fundamental to maximizing the efficiency of investment projects. The absence of a strategic investment plan and the lack of alignment between public investment and territorial development therefore undermines effectiveness of policy in both spheres.

#### C. Project Preparation and Governance

#### **Project Appraisal**

**15. Rigorous and objective project appraisals are fundamental to sound public investment management.** To support the identification and selection of the highest impact projects, all investment proposals should be subject to consistent economic, financial and technical appraisal.

<sup>&</sup>lt;sup>9</sup> EU Commission (2023). D6. Gap analysis for the Brussels - *Capital Region Enhancing public investment management at federal and regional (Brussels) level*. Report prepared by AARC, Amsterdam SEO and Aebel. REFORM/SC2022/049.

<sup>&</sup>lt;sup>10</sup> Government of Brussels (2001) Regional Land Use Plan.

<sup>&</sup>lt;sup>11</sup> Government of Brussels (2024) <u>Spatial Planning Code.</u>

<sup>&</sup>lt;sup>12</sup> Government of Brussels (2018) Regional Spatial Development Plan.

Good project appraisal involves comparing all available options to achieve a policy outcome. To facilitate comparison of competing demands for scarce resources, appraisals should be completed in line with standard methodologies across ministries.

**16.** Belgium has significant weaknesses in project appraisal across each entity of government, contributing to cost overrun on major projects. Project appraisals should make adequate provision for the impact of risk and uncertainty on the case for a public investment project, and shortcomings in this regard can contribute to cost overrun, schedule delay and underachievement of planned benefits. There are numerous examples of cost overrun in Belgium (Box 1), and weak arrangements for project appraisal exacerbate the challenges of delivering complex infrastructure.

#### Federal Government

17. There are no standard arrangements for project appraisal at the federal government level. The infrastructure sectors within the remit of federal government are energy, public buildings, rail, and prisons. In the case of energy, investment is by the private sector or within a regulated asset-base regime. There are no requirements for economic appraisal in public buildings. In the rail sector, Infrabel undertakes economic and financial appraisal on large network investment projects. These are not published, nor independently scrutinized prior to investment decisions. In the past, PPP contracts have been entered into without appraisal, for example the DBFM prison investment program.

#### **Flanders**

**18. Public investment projects in Flanders do not require appraisal prior to approval.** A number of previous studies have pointed to the absence of arrangements for ex-ante project assessment, though there is little evidence of progress as a result.<sup>13</sup> Feasibility studies have been undertaken on some projects, but these are not completed to a common standard and are not routinely published. The absence of cost-benefit analysis (CBA) on road projects has been found to have contributed to problems with cost overrun, schedule delay and budgetary pressures, as too many projects were commenced without a clear indication of the relative socio-economic priority of each.<sup>14</sup> The current government agreement mentions the role of CBA as a guideline for political consideration of investment.<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> Studies include Dorren, L., Verhoest, K., van Dooren, W. and Wolf, E.E.A., (2018) Planning Beyond Borders – The Selection and Prioritization of Infrastructure Projects; and Tripple Bridge (2015) Towards a well-considered sustainable investment policy.

<sup>&</sup>lt;sup>14</sup> Court of Audit (2020) Realization of Missing Links in Flemish Road Infrastructure.

<sup>&</sup>lt;sup>15</sup> Government of Flanders (2024) Flemish Government Agreement 2024–2029.

#### **Box 1. Cost Overrun in Public Projects**

Belgium has experienced a number of challenges with public investment projects including cost overrun and schedule delay. Causes include optimism in early cost and schedule estimates, commitment to projects prior to conclusion of design, failures in front-end planning, inadequate risk assessment and mitigation plans, and weaknesses in the contracting process. High profile examples can be found in each federated entity:

- The Oosterweel ring road in Antwerp has experienced substantial cost escalation in excess of the
  originally-planned scheme. The initial tunnel concept was replaced by a design featuring two ring roads,
  public parks and other elements. From a 2010 estimate of €3 billion, the projected total scheme cost
  now stands at over €10 billion.
- The estimated cost of the Brussels Metro 3 line, connecting the north and south of the city, has
  increased from an initial estimate of €950 million in 2009 to €4.7 billion by 2024. Following the
  breakdown of the procurement process in 2024, project sponsors plan to retender the scheme after a
  cooling-off period.
- Modernization of the Mons Railway Station was completed in December 2024, nine years later than the
  original schedule. From an initial cost estimate of €60 million, the final outturn cost was €480 million.
   Contributory factors included persistent scope and design changes and weak forecasting practices. The
  Liege Tram has also experienced challenges and plans for the second phase have been canceled.
- A range of challenges and scope and design changes increased the cost the Regional Express Network rail project. By 2016, the estimated cost had increased from €1.5 billion to over €3 billion.

Among the most significant investment portfolios in Belgium over the last two decades was investment to address missing links in the Flemish road network. The portfolio has experienced major cost escalation: in 2001, 24 of 27 projects were estimated to cost €1.4 billion; by 2019, just nine projects were completed and the estimated cost to completion of the full 27 stood at €11 billion. This is all the more striking given international evidence that major road projects tend to experience lower cost overrun than other infrastructure classes. Causes of the overruns in the Flemish roads include inadequate appraisal, lack of prioritization, and disconnection of portfolio management from the budget.

Cost increases on smaller projects have been more modest, but there is some evidence that project performance has worsened in Belgium in recent years. A study of a set of rail, road and inland transport projects showed that investments undertaken since 2008 have a higher average cost overrun than those undertaken in the preceding decade. Factors including failures of coordination and weak stakeholder management are more pronounced as causes of cost overrun in Belgium than other jurisdictions.

Source: Staff analysis of Molinari, L., Haezendonck, E. and Mabillard, V., 2023. <u>Cost overruns of Belgian transport infrastructure projects: Analyzing variations over three land transport modes and two project phases.</u> Transport Policy, 134, pp. 167–179. Molinari, L., Haezendonck, E., Van Rompay, K., Mabillard, V. and Dooms, M., 2025. <u>Persisting cost overruns in public infrastructure projects: Lessons from the Belgian case.</u> Public Works Management & Policy, 30(1), pp. 36–57. Court of Audit (2017) <u>Regional Express Network implementation and Financing.</u> Court of Audit (2020) <u>Realization of Missing Links in Flemish Road Infrastructure.</u> Court of Audit (2022) <u>Modernization and Development of the Site and Buildings of Mons Station.</u> Court of Audit (2024) <u>Alliance for the Future – Audit Report on the Fourth Financial Progress Report.</u> Parliament of Belgium (2024) <u>The Overrun of Deadlines for the Works at Mons Station – Hearing</u> Sessional Paper, 22 November. Flyvbjerg, B. and Bester, D.W., 2021. <u>The cost-benefit fallacy: Why cost-benefit analysis is broken and how to fix it.</u> Journal of Benefit-Cost Analysis, 12(3), pp. 395–419.

#### Wallonia

19. There are no standard arrangements for project appraisal of public investment projects in Wallonia. Sectors have autonomy to prioritize projects without the need for financial, technical or economic analysis of the proposal. Absence of requirements for appraisal and quality assurance of the case for investment exacerbates the risk of cost overrun and schedule delay such as those experienced in the Liege Tram and the Mons Railway Station.

#### **Brussels Capital Region**

**20. Public investment projects in BCR are not subject to standard economic and financial appraisal.** While previous diagnostics have acknowledged the practice of environmental impact assessment, this is an EU-mandated process and does not constitute project appraisal. <sup>16</sup> Some individual major projects have been appraised, for instance in the mobility sector. Large public housing developments are subject to technical and financial appraisal but not economic analysis. Appraisals are not published or independently assured as standard. Investment decisions are generally taken at ministerial or governmental discretion, with no standard requirements for project-level analysis. Absence of a strong framework for assessing proposals prior to the decision to proceed undermines the quality of project proposals.

#### D. Project Selection and Governance

- 21. Strong arrangements for project preparation and governance can improve public investment efficiency. Frameworks that govern project preparation, decision-making and funding approval can help prioritize the highest impact projects, identify, mitigate and manage risks, and support the delivery of infrastructure on budget, on time and to required benefits. Many European countries now use some form of decision-gate structure to govern public investment decision-making (Box 2).
- **22. Belgium does not use standard processes for selection and governance of new investment project proposals, but there are some pockets of good practice.** Neither the federal government nor any of the regions have instituted standard procedures to oversee investment project preparation and scoping, risk management, and approvals at each point in the project lifecycle. However, there are some examples of good practice in individual sectors as noted below.

9

<sup>&</sup>lt;sup>16</sup> Specially the 2021 PEFA and 2023 Gap Analysis.

#### **Box 2. Major Project Governance Processes—Selected European Examples**

Norway. All investment proposals with an estimated cost of NOK750m or above are subject to the State Projects Model. Proposals are required to undergo a quality assurance process at two stages of the project lifecycle – QA1 which examines the conceptual solution prior to submission to government and then QA2 which provides an external scrutiny of cost estimation prior to submission to parliament for decision to proceed.

**Denmark.** Road and rail projects with a value over DKK250m are subject to external assurance at two stages of the project lifecycle, known as Decision Levels 1 and 2. At Decision Level 1, it is decided which concepts will be taken forward, while Decision Level 2 considers whether the project should be implemented. The implementing agency undertakes a project appraisal, which is then subject to quality assurance by an external consultancy firm appointed by the Ministry of Transport. The implementing agency makes a recommendation to the Ministry of Transport, which is ultimately considered by Government prior to consideration by Parliament.

United Kingdom. The Treasury Department has developed detailed guidance and processes in relation to project governance and risk management, with the Government Major Project Portfolio comprising the largest, most novel and highest risk projects and programs. All projects with an estimated cost greater than £1billion, as well as other projects considered particularly novel or contentious, are subject to enhanced levels of scrutiny with assurance reviews by the Infrastructure & Projects Authority and review by the Major Projects Review Group. The Group's membership includes two independent members drawn from a pool of senior public and private sector experts. The Group challenges projects on deliverability, affordability and value for money at key points throughout the project life cycle.

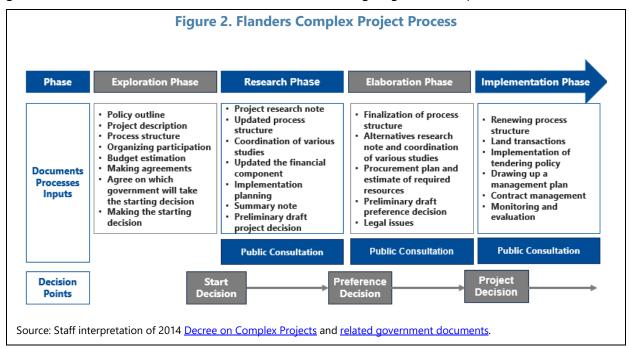
Ireland. The Infrastructure Guidelines embed a project lifecycle with three discrete Approval Gates for all investment projects. Major projects (with an estimated cost over €200m) are subject to an external assurance process and then a review by the Department of Public Expenditure, NDP Delivery and Reform's Major Projects Advisory Group at Approval Gate 1 – Preliminary Business Case. The project's Strategic Assessment and Preliminary Business Case (which includes CBA for most sectors), external assurance review and the report of the Major Projects Review Group are submitted to Government at Approval Gate 1. The Group is comprised of independent experts and its reports are published. Government approval is also required at Approval Gate 3 Final Business Case prior to contract award.

Sweden. A governance process for major transport projects was introduced in 2013. Project ideas are initially subject to a Choice of Concept Study. CBA is undertaken on all proposals. Projects that receive approval are required to be reviewed again prior to formal approval to proceed. The Building Start Document is prepared and reviewed by and independent agency prior to final endorsement.

Sources: Samset, K.F., Volden, G.H., Olsson, N. and Kvalheim, E.V., 2016. Governance schemes for major public investment projects: A comparative study of principles and practices in six countries.; Parliamentary Budget Office, Ireland (2024) Capital Spending - An Overview of Ireland's Infrastructure Guidelines; IMF (2022) United Kingdom - Technical Assistance Report - Public Investment Management Assessment; Olsson, N.O., Nyström, J. and Pyddoke, R., 2019. Governance regimes for large transport infrastructure investment projects: Comparative analysis of Norway and Sweden. Case Studies on Transport Policy, 7(4), pp. 837-848.

#### **Flanders**

23. Flanders does not have standard procedures for project selection and governance but has established an optional process designed to expedite the delivery of complex projects. In 2014, the Flemish government instituted a process for complex projects (Figure 2), but this is optional for project sponsors. 17 Decisions on major investments are usually made by the government and do not follow a standard decision-making or governance process.

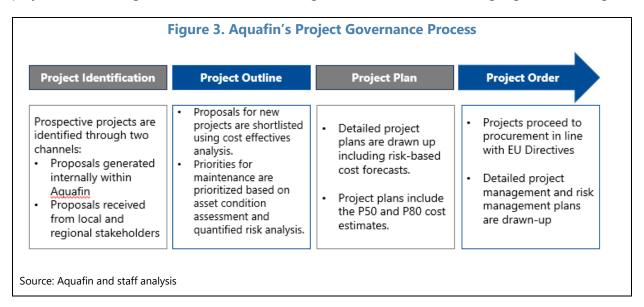


- 24. The optional process is underpinned by a range of supporting documents but has not been widely applied in practice, and there is limited evidence of its effectiveness to date. A number of high-profile megaprojects, including the Oosterweel in Antwerp, did not follow the process. Research on a sample of port projects that did use the model found that sponsors deemed that the process made project preparation more transparent and solution-driven, although there was mixed evidence as to whether the process expedited project delivery. 18 Nonetheless, key principles of the model such as standard project phases and document requirements, standard supporting guidance and formal decision points represent good practice and could form the basis of an improved – and mandatory - approach in the future.
- 25. Notwithstanding the absence of mandatory processes, there are some examples of good practice in project preparation and governance. In wastewater infrastructure, Aquafin uses a structured approach to identifying project priorities and selecting investments for inclusion in a multi-annual investment plan that is updated annually (Figure 3). Project proposals are ranked based on environmental criteria derived from the EU Water Framework Directive, a measure of time

<sup>&</sup>lt;sup>17</sup> Government of Flanders (2014) Decree on Complex Projects.

<sup>&</sup>lt;sup>18</sup> Gosseries, M. (2020) Evaluation of the Complex Projects Decree. Master's Dissertation.

criticality reflecting regional policy priorities, and a measure of wider opportunities and risks. 19 Candidate projects' performance against these criteria are then assessed through a costeffectiveness framework. Priority projects are prepared and developed using a new project management process with formal decision gates. Risks are identified as part of the project costing process, and the P50 and P80 project costs are estimated. Risk contingencies up to the P80 estimate are available to project sponsors, but can only be released where specified risks materialize. Aguafin reports that in the two years since the new governance process was introduced, about 80 percent of projects are on budget at the P80 level, indicating an accurate cost-forecasting regime on average.



#### Wallonia

#### 26. Wallonia does not have a standard approach to project governance and selection.

Project selection is largely a political process. There are no regulations on project preparation, approval or risk management. There is a requirement for reporting project progress through a dedicated software system, but this is a reporting rather than a governance or oversight function.

#### **Brussels Capital Region**

#### 27. BCR does not have standard processes for project selection or investment governance.

In practice, selection of new investment projects is political. <sup>20</sup> There are no common steps for development and approval of projects across different sectors. Even within individual sectors, procedures for new project selection are weak: neither the Department of Housing or Mobility (the ministries with the largest public investment portfolios) have standard criteria to prioritize competing investments. Project costs are not explicitly set out as part of the Region's budget.

<sup>&</sup>lt;sup>19</sup> For example, the potential benefits of flood risk amelioration that may arise from a proposed project.

<sup>&</sup>lt;sup>20</sup> AARC Consultants (2021) Public Expenditure and Financial Accountability Performance Assessment Report.

- 28. There is some evidence of better approaches to prioritizing maintenance spending. For example, Vivagua, which manages the 500km sewer network in BCR, uses a sophisticated risk-based approach to prioritize capital and operational maintenance interventions. The age of the network, coupled with the fact that 99 percent of the population is already served by the sewer system, means that maintenance and renewal is typically a higher priority than new infrastructure. The approach deployed by Vivagua uses evidence on asset condition, assessment of consequences of infrastructure failure and financial information to prioritize a rolling 15-year investment program.
- 29. As the Brussels government aims to address these shortcomings, planned reforms should focus on high-impact early wins. Work has been ongoing in recent years to strengthen the approach to public investment in BCR. A gap analysis was undertaken<sup>21</sup> and a set of recommendations developed.<sup>22</sup> These are positive steps. On the point of project selection and governance, the region plans to develop a "Helper Tool" to assist in project selection.<sup>23</sup> While supporting IT systems can aid good public investment management, the focus in the near term should be on establishing a clear and transparent framework for project governance; establishing the minimum level of information required for approval decisions at each point in the process (particularly relating to project costs and risks) and setting out clear criteria to shape investment prioritization within a realistic and binding fiscal constraint.

#### E. Coordination and Institutional Arrangements for Public Investment

#### **Coordinating Public Investment**

- 30. Effective coordination is crucial when various layers of the public sector are involved in planning, funding and delivering public infrastructure. In this context, coordination means that the priorities of the different parts of government are made consistent with each other; budget funding, particularly to entities like local governments, is transparent and predictable; and risks arising from major investment projects, regardless of the implementing body, are well understood and managed appropriately and consistently.
- 31. There is fragmentation in public investment management and weak coordination among entities. Infrastructure is spatial in nature and discrete public investment projects form networks that work together to provide services to users. These network effects are particularly pronounced in geographically smaller and more densely populated contexts. At present Belgium does not have administrative structures to align infrastructure planning and development among sectors and across regions. There is no process to coordinate investments that are within the

<sup>&</sup>lt;sup>21</sup> EU Commission (2023). D6. Gap analysis for the Brussels - Capital Region Enhancing public investment management at federal and regional (Brussels) level. Report prepared by AARC, Amsterdam SEO and Aebel. REFORM/SC2022/049.

<sup>&</sup>lt;sup>22</sup> EU Commission (2024). D10. Enhancing public investment management at federal and regional (Brussels) level. Report prepared by AARC, Amsterdam SEO and Aebel. REFORM/SC2022/049.

<sup>&</sup>lt;sup>23</sup> The "Helper Tool" is designed to systematize the project selection process, informed by harmonized selection criteria and linked to budgetary resources.

competence of the federal government and within the competence of the regions. For example, rail investment is planned and managed nationally, but road investment is planned and managed by the regions. The two modes interact as complements and substitutes in different circumstances, and, absent a coordinating mechanism, there is a significant risk of loss of efficiency. Even where public investment is managed nationally, there are cases where regional issues risk undermining efficiency, for example Infrabel's Regional Key (Box 3).

#### **Box 3. Infrabel's Regional Investment Key**

Infrabel has the mandate to design, construct, renew, maintain and manage railway infrastructure on a national basis. The company maintains a dense network of over 6,500km of track, 11,600 bridges and tunnels on which 4,400 trains run daily. Investment is undertaken through the Multiannual Investment Plan, 2023–32 (MIP), and the Strategic Multiannual Investment Plan, 2018–31 (SMIP). The MIP is part of Infrabel's performance contract and sets out investments across five pillars: safety, punctuality, digitalization and production, capacity, and accessibility to railway services. The SMIP is a cooperation agreement between the Federal State and the three regions designed to fund strategic projects in addition to the investments provided for under the MIP.

Despite its national mandate, arrangements with the regions introduce rigidity into Infrabel's infrastructure planning and risk undermining investment efficiency. Dating from a cooperation agreement between the Federal State and the regions struck in 2001 and enshrined in law in 2002, the volume of railway investment must be split in a ratio of 60 percent for the Flemish Region and 40 percent for the Wallonia Region. The ratio or "key" is applied to available resources for investment with the exception of funding for railway infrastructure in BCR and expenditure on rolling stock. Articles 132 and 133 of Infrabel's performance contract enshrine the key in formulation of the MIP and SMIP, respectively. The key applies to both new projects and maintenance of existing assets. The shares of spending must be achieved annually in the case of the MIP and on a cumulative basis over the duration of the plan in the case of the SMIP.

The regional investment key introduces risk of inefficiency in capital spending in a number of ways. First, the key could act as an artificial ceiling on investment in one or other region, leading to missed opportunities for projects with robust financial cases or above average socio-economic returns. Second, the key could act as a floor on investment in one or other region, leading to too high a level of spending on low value projects. Third, the extent of the rail network is approximately equally distributed between Flanders and Wallonia. Because the key applies to maintenance spending, it could lead to a lower level of maintenance in Wallonia, risking degradation of network assets over time.

Source: Staff analysis of Infrabel (2024) <u>Facts and Figures</u>; Ministry of Transport and Infrastructure (2002) <u>Law approving</u> <u>the cooperation agreement of 11 October 2001</u>; Ministry of Mobility (2023) <u>Infrabel Performance Contract.</u>

**32.** A federated government system should not preclude coordinated public investment management, and there is a case for structures to allow coordination among different competent bodies. Infrastructure has spillover effects from one region to another and many countries with decentralized autonomy for investment recognize the interconnected nature of infrastructure systems and plan investment accordingly. For example, in Germany, the Federal Government prepares 10–15 year strategies for transport spending. Germany's current plan, the 2030 Federal Transport Infrastructure Plan is the primary transport infrastructure planning tool and addresses both maintenance needs and new investments in road, rail and waterways. The plan was

<sup>1/</sup> The relative shares of Belgium's population between the regions (Flanders accounts for 58 percent, while Wallonia accounts for approximately 31 percent) illustrates the potential mismatch.

developed with input from the federal states, members of parliament, the Federal Government, railway infrastructure companies, members of the public, trade associations and other stakeholders. 24

33. Even within the federated entities, there is a risk of fragmentation given the proliferation of agencies and absence of coordination structures or unifying policy vision. Each entity has numerous bodies tasked with investment delivery in sub-sectors. In addition, the use of special purpose structures for project or program delivery is widespread. On major investment projects, this practice risks diluting accountability and scrutiny of projects by government departments.

#### **Institutional Arrangements for Public Investment**

- 34. Appropriate structures and institutional arrangements are an important component of strong PIM systems. In addition to the technical role of delivery agencies in implementing investment projects, there are key functions for central government departments to align public investment with wider national and regional policy objectives and to ensure fiscal sustainability of infrastructure spending.
- 35. Within each federated entity, the budget/finance functions have a limited role in oversight of public investment. The Budget Ministry does not have an active gatekeeper role in public investment management in any of Belgium's entities. Belgium is an outlier in this regard – in most advanced economies, the Ministry of Finance plays a significant role in oversight of capital spending (Box 4). Strengthening the role of the budget/finance function would support improved coordination of public investment, support enhanced fiscal sustainability, and bring closer scrutiny of risks at the project and portfolio levels.
- 36. There are reform initiatives underway which are a positive starting point. Flanders has established a new public investment cell within the Department of Mobility and Public Works that will oversee public investment planning and the project selection process within the sectors under its remit. The Brussels-Capital Region has enacted legislation to establish a new PIM unit. 25 The unit will oversee project appraisal, selection and budgeting. These units should be adequately empowered to drive improved investment governance.

<sup>&</sup>lt;sup>24</sup> OECD (2019) Infrastructure Toolkit

<sup>&</sup>lt;sup>25</sup> Government of Brussels-Capital Region (2024) <u>Decree of the Government of the Brussels-Capital Region on</u> budgetary funds, the budgetary framework, the revenue and expenditure budget and budgetary amendments.

#### Box 4. Gatekeeping Functions of Finance Ministries in Public Investment in Advanced **Economies**

In most advanced economies, the Ministry of Finance plays an important role in public investment management processes and has clear "gatekeeping" functions. Responsibilities can span across the investment lifecycle and may include some or all of the following tasks:

- Setting overall national investment policy.
- Determining a binding medium-term expenditure framework for public investment, consistent with a sustainable and realistic fiscal position.
- Providing ministries with annual and multi-annual capital spending ceilings.
- Establishing rules for project appraisal and providing guidance and training.
- Quality assurance of project appraisals, establishing processes for project governance, and approval and approving or rejecting proposals at various points in the lifecycle.
- Monitoring and managing fiscal risks from infrastructure, including through PPPs.
- Oversight of the aggregate portfolio of public investment projects.
- Monitoring during execution including approval of substantial change in budget.

#### F. Recommendations

#### **Investment Planning**

- **37**. To address weakness in strategic planning and increase public investment efficiency:
- Mandate and resource the Federal Planning Bureau or a similarly competent body to undertake periodic assessments of the existing capacity and condition of public infrastructure in Belgium and make recommendations on the optimum focus of public investment on a national basis.
- Introduce requirements in each entity to publish periodic public investment strategies, constrained by a realistic assessment of available resources, linked to spatial policy objectives and incorporating all budget-funded investment sectors.

#### **Project Preparation and Governance**

- 38. To improve investment efficiency and mitigate against the risk of major cost overrun:
- Introduce a requirement for economic and financial appraisal for all public investment projects, with larger and more complex investments requiring more detailed analysis:
  - Develop a common standard and accompanying guidelines for project appraisal.
  - Determine thresholds that set the required form of appraisal for projects of different sizes.
- Establish a standard governance process for public investment projects and programs, incorporating explicit decision gates and approval processes.

- For megaprojects, clearly set out the required level of project maturity and supporting information required at each point in the process including:
  - Economic and financial appraisal;
  - Project governance and organization structure;
  - Design and technical brief;
  - Risk assessment, mitigations and management plan;
  - Commercial and procurement plan;
  - Cost management plan; and,
  - Benefits realization plan.
- For megaprojects, introduce a requirement for expert assurance of project documentation prior to progression at each decision gate.

#### Coordination and Institutions for Public Investment

- 39. To tackle inefficiencies through weak coordination and fragmentation:
- Establish a structure to bring together federal and regional policy makers in public investment to enhance coordination, examine common challenges, and identify opportunities for efficiency improvements.
- To foster construction industry confidence and prepare the supply side of the market, publish a rolling combined national pipeline of construction tenders, updated every six months.
- Introduce new regulations to empower the finance and budget functions in each entity to play a defined gatekeeper role in project appraisal, selection budgeting, and implementation (drawing on the potential functions set out in Box 4).
- Build on the nascent public investment units in each region to drive to a step-change in the quality of public investment policy, project appraisal and governance, risk management, portfolio monitoring and ex-post review.
- Resource and mandate the Study Committee on Public Investment to develop new research and analytical tools for better public investment management.

Taken together these steps can improve infrastructure governance and support enhanced investment efficiency, supporting Belgium in meeting its investment needs in the context of a constrained fiscal position.

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