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## Public Investment Management in the EU: Key Features & Practices

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#### **European Commission**

Directorate-General for Economic and Financial Affairs

### **Public Investment Management in the EU**

**Key Features and Practices** 

Cristiana Belu Manescu

#### **Abstract**

The paper addresses the fundamental question of what makes public investment management efficient. It defines public investment as tangible and intangible fixed assets plus ordinary maintenance and repairs and distinguishes the following salient phases: strategic planning, project selection, medium-term budgeting, implementation and ex-post reviews. For each of these phases, the paper provides some examples of good practice in the EU, complemented with insights from the implementation of EU cohesion policy. Finally, the paper identifies significant data gaps both within and across EU countries.

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## 1. INTRODUCTION

There is wide consensus about those features that make public investment management systems efficient. Affecting every stage of public investment management, such features have been extensively discussed by the various assessment frameworks of the OECD, the World Bank and the IMF. A financially realistic long-term strategic planning, transparent and consistent project selection, capital budgeting integrated in a medium-term perspective, effective procurement, and implementation and monitoring throughout the lifetime of the asset are known to improve the efficiency of public investment (Kim et al, 2020; IMF, 2020; IMF, 2018; Rajaram et al., 2014).

At the same time, data evidence on public investment management practices concerning EU Member States is scarce. The most comprehensive and comparable source for the EU Member States comes from the 2016 OECD survey (OECD, 2017). Yet, only 16 MS are covered at most, while some relevant dimensions of public investment management, such as the budgeting perspective, are excluded. In addition, Kim et al. (2020) provided a major data source as they discuss in detail a host of good practice examples in the EU and elsewhere. Finally, for those dimensions that are not specific to public investment management, such as how binding medium-term budgetary frameworks are or the level of budgetary transparency, work carried out in a different context is leveraged here (e.g. Sherwood (2015) or the Budgetary Frameworks Directive Suitability Review in Commission (2020)).

This note aims to inspire a debate on the most desirable features of an effective public investment management system on the basis of good experience observed in the EU Member States and elsewhere. Importantly, it does not aim to rank Member States in terms of effectiveness of their public investment management systems. Nor could it give an exhaustive review of all features of all Member States' public investment management systems. The note rather points at various aspects of public investment management in theory and practice in order to prepare the ground for a fruitful discussion and exchange of experience among the Member States. As a rule, where available, all examples of good practices highlighted in the EU Member States by the above-mentioned secondary sources were taken up here. The conclusions from this debate could then be used in the national reflection on improving public investment management and increasing its effectiveness in individual countries.

This note is organised as follows: Section 2 looks into the definition and scope of expenditure that would fall under public investment management, while Section 3 discusses and illustrates with examples from the EU and elsewhere those features that make public investment management efficient. Section 4 analyses the impact of the EU regulation (most notably that related to EU's cohesion policy) on the national public investment management systems and provides a preliminary overview of EU funds functioning and implications for public investment management, while Section 5 concludes.

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<sup>&</sup>lt;sup>1</sup> Data available from <a href="https://qdd.oecd.org/subject.aspx?Subject=GOV">https://qdd.oecd.org/subject.aspx?Subject=GOV</a> INFRG.

## 2. DEFINITION AND SCOPE OF PUBLIC INVESTMENT

#### 2.1. DEFINITION OF PUBLIC INVESTMENT

In the generally accepted view, public investment broadly refers to fixed assets², which can be tangible or intangible. Specifically, in national accounts, public investment is measured as general government gross fixed capital formation and reflects the total value of general government acquisitions, less disposals, of fixed assets (tangible and intangible) during the accounting period, plus additions to the value of non-produced assets (e.g. land improvements). Box 1 presents categories of capital expenditure according to ESA 2010. Intangible fixed assets include results of R&D, computer software, and large databases to be used in production for more than one year. Public R&D (including the production of freely available R&D) include academic fundamental research, applied research and R&D grants and contracts to private sectors.

#### **BOX 1. MAJOR CATEGORIES OF FIXED ASSETS IN ESA 2010**

- Dwellings, other buildings and structures;
- Machinery and equipment (such as ships, cars and computers);
- Intangible fixed assets, including intellectual property products, such as R&D, and computer software and databases.
- Weapons systems.

Source: European Commission (2013).

Some nuances to be aware of regarding the type of expenditure that falls under public investment, especially with a view to designing regulations and guidelines, include:

- Capital investment is not confined to physical fixed assets. The share of intangible fixed assets such as computer software and databases has increased strongly in recent decades. In the euro area, for example, intangible assets (measured as R&D as well as computer software and databases) accounted for about 15% of total investment in 2017 (ECB, 2018). As a result, including intangible fixed assets within the scope of public investment managemet is particularly important.
- While major improvements to an asset are classified under capital expenditure, ordinary maintenance and repairs are not. Maintenance and repairs are recurrent costs (classified as current expenditure) that cannot be avoided, as the expected service life of the asset may be drastically shortened otherwise. An issue may appear in a situation where such maintenance is classified as capital expenditure, in which case it may compete and lose out with new projects. This underscores the importance of producing estimates of recurrent costs (maintenance and repair) associated to a project, alongside the capital costs.
- Public investment management tends to be associated with infrastructure projects, although, generally speaking, infrastructure is taken to be a subset of investment, encompassing the physical (tangible) assets required to deliver the services needed to support economic activity. Key characteristics that distinguish infrastructure projects from other types of capital projects include that they are large capital-intensive projects, with significant up-front costs while

<sup>&</sup>lt;sup>2</sup> According to ESA 2010, fixed assets are produced assets used in production for more than one year.

benefits accrue over a very long time, and with the potential to generate positive externalities (IMF, 2017). The World Bank implicitly uses this definition, which excludes the physical assets required to deliver many public services such as education, health, and justice as well as the assets of the public administration (Kim et al., 2020).

#### 2.2. THE SCOPE OF PUBLIC INVESTMENT MANAGEMENT

All capital expenditure of public funds should be included in the scope of public investment management. This includes expenditure by budgetary authorities at all levels of government, but also state-owned enterprises' investment funded by capital transfers or subject to government guarantees, as well as capital expenditure by extra-budgetary funds. Moreover, public-private partnerships should fall within the scope of public investment management too. The key issue is that independent of how they are spent, either via extra-budgetary bodies or government guarantees, all public funds should undergo the same level of scrutiny as that of the central budget.

In the EU, the Budgetary Frameworks Directive (Directive 2011/85) has played an instrumental role in improving budgetary transparency with respect to government guarantees and capital expenditure by extra-budgetary bodies. Directive 2011/85 requires the publication of information on extra-budgetary units and funds and introduces an obligation to present their combined impact on general government balances and debt in the framework of the annual and multi-annual budgetary processes. It also lays down specific requirements regarding contingent liabilities, which led to harmonisation in definitions in terms of national accounts and an agreement that such information should be annually submitted to Eurostat. While not targeting or attempting to define the concept of total public investment explicitly, such general requirements on budget transparency are a first step towards improving the transparency of public investment data. Section 3.3 provides more details regarding the degree of implementation of these provisions in the EU. From a public investment management point of view, what matters is that such information is reflected in the budgetary documentation.

# 3. STAGES OF PUBLIC INVESTMENT MANAGEMENT AND EXPERIENCES IN THE FU

#### 3.1. STRATEGIC LONG-TERM PLANNING

Broad strategic guidance for public investment is an important way to anchor government decisions and to guide sector-level decision makers toward national priorities. Such guidance may be derived from a national plan or other medium to long-term strategic documents that establish development priorities at the highest decision-making levels (OECD, 2017; IMF, 2018).<sup>3</sup>

Many EU countries have in place a long-term strategic infrastructure plan at either the national or sectoral level. According to the 2016 OECD survey on infrastructure, when national strategic plans are in place, they cover either the central government (e.g. Austria, Hungary, Spain) or include also sub-national government projects above a relevant size (Ireland, Italy, the Netherlands). In the absence of comprehensive national plans, transport (Belgium, Czechia, Germany) or multi-sectoral plans are in

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<sup>&</sup>lt;sup>3</sup> The OECD defines a long-term strategic vision as a politically sanctioned document that demands concrete action in terms of infrastructure services to society over the long term. This might go beyond a normal political mandate period. The design of the vision requires a process that distils complex and multifaceted infrastructure issues, cutting across a multiplicity of actors, sectors, and interests, into a coherent set of decisions with long-term impact, including projects and processes. Such a process should be anchored in central agencies and have substantial input from policy departments, sub-national governments, civil society, and business stake (OECD, 2017).

place (e.g. Estonia and France). Public consultation is usually embedded within the long-term strategic plan. Of the six countries with long-term strategies in place, four report some form of consultation processes, usually in the form of a hearing among stakeholders such as user groups, the civil society or lower levels of government (see Table 1 and OECD (2017)).

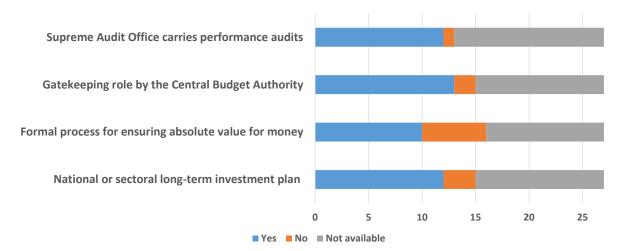


Table 1. Overview of selected public investment management practices in the EU

Source: Own calculations based on OECD (2017) data for 16 Member States (Austria, Belgium, Czechia, Denmark, Estonia, Spain, Finland, France, Germany, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Slovenia, Sweden). Note: Other key dimensions discussed here were not part of the OECD survey, such as (a) the extent to which strategic plans include costings, (b) link between plans and annual budget decisions, (c) existence of inter alia medium-term capital ceilings to protect capital over the life of a project, (d) rules on project adjustment and ex-post reviews..

Coordination mechanisms for integrated planning or exchange of information are reported to exist in many EU countries. Ireland, Poland, the Netherlands, Austria, Sweden, Portugal, Luxembourg, for example, have some form of intergovernmental cooperation aimed at promoting exchanges of information at the regional level, which offers a basis for policy coordination at the regional level (OECD, 2019).

However, the various plans are fiscally realistic to a quite different degree with only few plans containing all essential elements. To be effective, investment plans should identify essential investment components, needs and trade-offs and how they should be prioritised across sectors, projects and regions. The absence of costings and weak links to the fiscal framework are among the most important shortcomings of national development plans, turning them into political "wish-lists" rather than strategic guidance. To be realistic, investment plans would need to include costings of major investment projects or, at least, ensure that the Ministry of Finance is involved at the strategic planning phase of infrastructure.

Ireland offers a good example of a successful national planning process to guide the identification and prioritisation of projects. One of its most distinctive features is an integrated approach to planning, where the national development plans include more detailed investment strategies at the sectoral level, framed within an indicative capital spending envelope agreed with the Department of Finance. Sector strategies are fully costed and are closely integrated and consistent with medium-term budgets (Rajaram et al., 2014).

More recently, Czechia has created a National Investment Plan that came into effect in 2019. A distinctive feature of the plan is that it combines a bottom-up approach of collecting projects at the sub-national level, which are then prioritised by the government within a fiscal constraint. The

National Investment Plan will be further developed and consultation will take place between local and regional authorities and stakeholders (OECD, 2019).

Some countries with advanced systems have been using long-term infrastructure plans instead of national development plans. Such an example is the Swedish "National Transport Plan", first introduced for the period 2010-2021 (Kim et al., 2020). The ten-year plan targets the road and rail network and includes a preliminary screening of projects based on cost-benefit analyses. The Swedish long-term transport infrastructure planning covers multiple transport modes and its twelve year plan includes projects based on cost benefit analyses. For this type of long-term planning, cross-party consensus building and stakeholder consultations are an important component ensuring durability of planning, while the rolling nature of these plans also allows for priorities to be adjusted over time.

These plans are even more effective when they are closely linked to the budgeting decision, i.e. to the annual budget. This closes the loop in that it ensures that projects that eventually receive funding at the annual budget phase are derived from the strategic documents. Such an example is the Multi-Year Plan for Infrastructure, Spatial Planning, and Transport (MIRT) in the Netherlands, an integrated program for the preparation and decision-making process of infrastructure projects. The MIRT contains both investment plans that are designed for up to 14 years ahead, as well as a common set of rules and procedures for project development and implementation. It underpins two of the budgetary funds used to maintain and facilitate long-term investments in infrastructure.

#### 3.2. PROJECT APPRAISAL AND PROJECT SELECTION: A CONTINUOUS PROCESS

Several stages of filtering/selection on a project's journey from idea to eligibility for funding are usually identified. The OECD framework emphasises the "value for money" and prioritisation of projects stages, while the IMF (2018) also emphasises the independent review of project appraisals. In addition, Kim et al (2020) discuss the merits of pre-appraisal as a key stage, as these four processes (also known as quality-at-entry processes) would ensure that projects proceeding to an implementation decision have been properly vetted as a socially profitable use of public financial resources and that there is no better way to use the financial resources involved. Quality-at-entry processes combine rigorous analysis with sequenced, disciplined review and decision-making.

- 1. Pre-appraisal provides an opportunity to address weak concepts before they advance too far in the planning process or before they have gained too much political commitment. A comprehensive pre-appraisal process (such as that of the UK) may involve the following steps: checking the project rationale, verifying strategic relevance, costs and benefits assessments, ensuring that a full range of alternatives is considered, managing the project pipeline, checking sustainability, potential risks and constraints, flagging potential for adopting public-private-partnerships, and planning for appraisal.
- 2. An appraisal involves preparing a feasibility study or the equivalent (e.g. "value for money" assessment in OECD terminology). A feasibility study should have both technical and economic dimensions and be supported by a preliminary technical or engineering design for the project, including cost estimates and detailed forecasts of demand for the services provided by the asset to be created or improved. Not all EU countries have a legal requirement for project appraisal, while some only have it for selected types of projects (Table 1). In France, Germany, Italy and the Netherlands, appraisals are required for all projects, while in Hungary and Ireland this is required only for projects above a certain threshold (OECD, 2017). Cost-benefit analysis appears to be the most popular method used to assess value-for-money (OECD, 2017).
- 3. Independent reviews are increasingly recognised as effectively addressing the problem of systematic "optimism bias" shown to beset all major projects, across time, countries, and sectors. Optimism bias consists of the statistically demonstrated tendency of project

planners to underestimate costs and to overestimate benefits (Flyvbjerg, 2005). Independence does not mean external to the government. The independent reviewer function should be performed by an objective body with nothing to gain from the project going ahead. It should be difficult for a project to proceed with a negative independent review. Completing an independent review is not necessarily a decision point, as the independent reviewer may often only advise the final decision maker. Different types of independent reviews and with different binding force are found in the UK, France, Korea, Chile, Ireland and the Netherlands (see Annex 1).

4. Project selection is the culmination of the quality-at-entry processes and, perhaps surprisingly, it may involve more than one decision point. Selection is a decision in principle to proceed with a project based on appraisal findings and recommendations, which are usually presented to decision makers in a summary appraisal report. Selection ends with a formal decision on a project's social viability and sustainability and confirmation of its eligibility to be proposed for budget funding. Selection does not mean that funding is guaranteed as this can only happen through the budgetary process, when a project's merits are considered alongside competing claims on budget allocations (Kim et al 2020).

To be effective, project appraisal and selection need to be fully integrated with both the capital budgeting as well as the strategic planning cycles. First, effective "gatekeeping" could ensure that projects entering the capital budgeting process have been positively appraised and selected. Second, a medium-term budgetary framework, possibly supplemented by a longer-term strategic expenditure framework for infrastructure sectors, could anchor budgetary decisions into the longer-term strategic investment plans (Taliercio and Estrada, 2020; Allen et al., 2020; Kim et al. 2020)

Gatekeeping is an administrative check on projects presented in budget requests to ensure they have undergone proper appraisal. It is seen as an essential tool to prevent "unappraised" projects from receiving budgetary funding (Taliercio and Estrada, 2020; Kim et al., 2020). In practice, there are different ways to implementing this function (Kim et al., 2020). Most often, a unit within the Ministry of Finance plays this role.<sup>4</sup> When such an arrangement is politically unfeasible, a broadly representative political body or an interministerial committee of senior officials may sometimes fullfill this role. The danger with such arrangements is that selection can often become part of a political bargaining process rather than a decision on the quality of individual projects. One option in such circumstances is to give the finance or planning ministries veto power on a broader decision-making body or to have them chair the body (and thus set the agenda).

Although selection should be largely a technical decision, achieving the right balance between technical and political inputs to decision making is nevertheless important. Almost all EU Member States participating in the OECD 2016 survey reported that the Central Budgetary Authority has a formal gate-keeping role in approving infrastructure projects (see Table 1). In most of these cases, if a project does not meet the affordability or the value for money criterion it cannot proceed. At the same time, strong political backing, more often than the cost-benefit analysis, is reported to determine which projects are approved for funding.

<sup>&</sup>lt;sup>4</sup> Kim et al. (2020) explain that in some systems, a minister is "sovereign" in his or her ministry, and the final selection decision remains with the minister who has ultimate responsibility for the project. Ireland uses this approach, where the emphasis is on developing and promoting good practices so that ministers and their officials have the tools to make sound decisions.

#### 3.3. BUDGETING FOR INVESTMENT

Good practice in advanced economies indicates that linking strategic planning and capital budgeting can be achieved through a medium-term budgetary framework. A medium-term budgetary framework helps ensure continuity of funding for the implementation of ongoing projects by providing expenditure ceilings, allowing for carry-over between budget years, introducing multi-annual commitment appropriations and integrating capital and recurrent budgeting (Kim et al., 2020, Allen et al., 2020).

Expenditure ceilings or targets as part of a medium-term budgetary framework exist in a majority of Member States, although disaggregation between current and capital expenditure is less common. Disaggregated ceilings are the preferred approach where a government wishes to ensure minimum expenditures on capital investment (perhaps where such spending has been neglected in the past) and is in line with a commitment to a robust public investment management system (Kim et al., 2020). According to Sherwood (2015), Sweden, Finland, the Netherlands and Denmark put emphasis on aggregate ceilings at the central level and possibly other levels of government. By contrast, in Cyprus, Greece, France and Ireland medium-term expenditure ceilings are set also at ministerial level. In some Member States, more detailed ceilings are set for the first years of the framework and less detailed ones are decided on for the outer years (e.g. Austria and France).

Still, to be effective, the medium-term budgetary frameworks need to be firmly linked to the annual budget process beyond the next budget year, as well as to the strategic investment plan, where it exists. With a few exceptions (e.g. Sweden, Finland, Denmark, the Netherlands), the medium-term budgetary framework tends to be indicative with respect to the annual budgetary process in most Member States, in the sense that a new trajectory for the main fiscal variables is generated every year with little or no constraint (Sherwood, 2015). Moreover, even in advanced economies with relatively strong public financial management practices, there are frequent challenges in linking the medium-term budget framework to a country's medium- and long-term strategic development objectives and its national infrastructure plan (if one exists), for example because these documents may be prepared on different assumptions and classifications. Other tools used in advanced economies include performance-based management systems or spending reviews (Allen et al., 2020).

The carry-over of unused expenditure appropriations from one year to the next may prevent discontinuity in project funding between years in case of slower-than-planned implementation. Kim et al. (2020) argue that this practice can help to prevent inefficient bunching of expenditures at year-end. Slower-moving projects will also not have to compete for funding against new priorities in the new budget year. Where this practice is allowed for multiyear projects, a limit is usually placed on the extent of carryover, typically up to 5 percent of annual appropriations (Lienert and Ljungman, 2009).

Some Member States allow for carry-over arrangements for capital spending. Ireland allows carryover of up to 10 percent of the allocated capital (Kim et al., 2020). Simiarly, Estonia sets a limit of 3% of the total expenditure with the exception of investment projects (and co-financing of projects) partly funded by the EU, for which all unused amounts can be transferred to the following year (Sherwood, 2015). By contrast, Austria applies no limit to the amount of unspent appropriations (Sherwood, 2015). According to the Austrian MTBF, the ceilings set for the chapters of the central government expenditure are then notionally increased by the size of the reserves accumulated previously under the respective chapter. A too flexible policy can lead to problems, however, as the United Kingdom found when the extent of carryover that had built up over time threatened to jeopardise fiscal sustainability rules (Kim et al., 2020). Similar to Austria, in the UK no limits were placed on the amount of carryover for capital projects, and carryover could be accumulated over several years. In response, the United Kingdom tightened up its rules and reactivated an annual control on carryover (Lienert and Ljungman, 2009).

Good integration of capital and recurrent expenditure planning and budgeting can protect the asset's planned operating life. In Spain, the annual budget documentation includes some information about recurrent costs called "investment for rail and road" and "public service obligations for RENFE" (the Operating company), but this information is limited to the next budget year. Beyond the budget year, the annual budget includes an annex with indicative projections of costs for all investment projects.

Budget transparency with regard to government guarantees and spending by extra-budgetary items is generally high in Europe. The suitability review of the Budgetary Frameworks Directive found that a very large majority of EU Member States make information about general government bodies that are not covered by the budgets available to the public (European Commission, 2020). However, less than half of them explicitly present the combined impact on general government balances in their annual budgets and medium-term fiscal planning documents, and even fewer do so for impacts on debt. As regards publication of contingent liabilities data, including liabilities related to PPPs recorded off-balance sheet of government, data for all Member States are available from Eurostat and most Member States publish this information at national level (European Commission, 2020).<sup>5</sup>

#### 3.4. PROJECT IMPLEMENTATION AND ADJUSTMENT

Several elements known to be important at the project implementation phase require regulation or guidance to be in place (Kim et al., 2020; IMF, 2018):

- Assignation of accountabilities and responsibilities to specific senior officers and project managers;
- Preparation of implementation plans, prior to budget approval;
- Monitoring of implementation plans at the level of line ministries but also centrally;
- Standardised rules and procedures for project adjustment, to reflect changes in cost, scheduling, or demand conditions, including termination if that is the most economically viable solution; and
- Designing and implementing efficient procurement systems.

In terms of good practice, Rajaram et al. (2014) refer to Ireland, the UK, Korea and Chile. Regarding implementation, they found that in these countries there is a strong focus on managing the total project costs over the lifetime of each project. Clear roles and responsibilities are in place for project implementation. Accounting systems record total and annual project costs. Moreover, there are regular reports on financial and non-financial progress and close monitoring by (a) a line ministry responsible for subordinate implementing agencies and/or (b) the central fiscal authority. Sound procurement systems are consistently implemented using advanced techniques for allocating risks between government and contractors (although problems still arise). Regarding project adjustment, a distinctive feature in these countries is that specific mechanisms are in place to trigger a review of a project's continued justification if there are material changes to project costs, schedule, or expected benefits. For example, in Korea, projects are automatically subject to reappraisal if real costs rise by more than 20 percent. In Chile, when the lowest tender is 10 percent or more above the estimated price, the project is subjected to a reappraisal.

<sup>&</sup>lt;sup>5</sup> See <a href="https://ec.europa.eu/eurostat/web/government-finance-statistics/contingent-liabilities">https://ec.europa.eu/eurostat/web/government-finance-statistics/contingent-liabilities</a>

#### 3.5. EX-POST REVIEWS AND DATA REGISTERS

Ex-post reviews of major investment projects can provide critical input to future policy design. IMF (2018) argue that ex post reviews of major projects focusing on project costs, deliverables and outputs need to be conducted regularly by an independent entity or experts and to be used to adjust project implementation policies and procedures. For example, Ireland has such a system in place, whereby all large capital projects (above EUR 20 million) and at least 5% of other capital projects have to be subjected to a post-project review to see if the predicted benefits of the project were realised (Kim et al., 2020). The review would focus on both project outturn and appraisal and management procedures and would take place at pre-determined intervals. As with all parts of the Public Spending Code, any significant lessons would lead to changes in the Sponsoring Agency practices and even of the Code itself.

Finally, it is generally agreed that asset registers are a useful way to monitor that assets deliver throughout their lifetime. Asset registers are official records of the property owned by the state and its institutions. These should be comprehensive and updated regularly at reasonable intervals. According to the OECD 2016 survey, Finland and Spain have in place a central, systematic and formal collection of information on financial and non-financial performance of the infrastructure projects, which allows the use of evidence-based tools for regulatory decisions (e.g. as for example the decision on the modality of infrastructure delivery). More generally, however, asset registers of non-financial assets remain still very limited throughout the EU (European Commission, 2018). Furthermore, performance audits of infrastructure assets are generally conducted by the Supreme Audit Institution, mostly on a case-by-case basis (see Table 1).

# 4. EU IMPACT ON THE NATIONAL PUBLIC INVESTMENT MANAGEMENT

For the EU's cohesion policy funds and the Recovery and Resilience Facility, the concept of investment is broader than fixed assets. In addition to capital formation in fixed assets (i.e. the equivalent of "gross fixed capital formation" used in national accounts), it also includes capital formation in human capital (e.g. spending on health, social protection, education and training) and natural capital (e.g. waste and water management, reforestation). As a rule, recurrent costs (including staff costs or operating costs) are not to be covered. However, in very specific cases, certain recurrent costs may be supported on a case-by-case basis (for example investments in upgrades, including very heavy or overdue maintenance).

The EU legal framework contains very limited requirements specifically targeting public investment management in the Member States. Most notably there are a set of directives setting requirements for public procurement (e.g. Directive 2014/24/EU, as amended by three Commission Delegated Regulations 2015/2170, 2017/2365, 2019/1828). The EU Budgetary Frameworks Directive gave a strong impetus to the development of medium-term budgetary frameworks in the EU, although the provisions on the medium-term budgetary framework do not reach the level of detail and specificity that would be relevant for public investment management. In particular, the suitability review of the EU Budgetary Frameworks Directive finds that the medium-term budgetary frameworks are still to an overly large extent subordinate to the annual budget processes and do not create a sufficiently stable and credible medium-term perspective for fiscal policy (European Commission, 2020).

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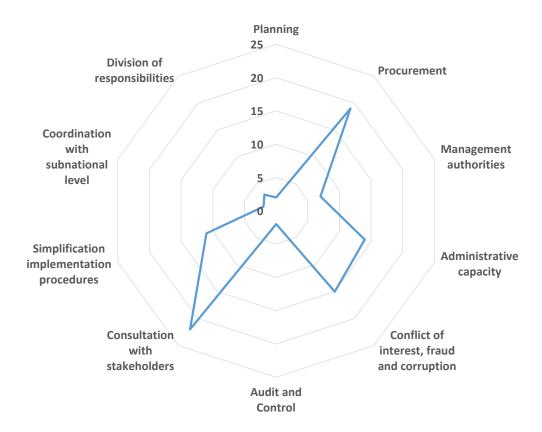
<sup>&</sup>lt;sup>6</sup> Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States.

At the same time, EU requirements governing EU's cohesion policy funds can have a significant impact on the public investment management system in the Member States. The regulations governing the implementation of EU's cohesion policy funds are jointly decided by the Council of the European Union and the European Parliament on the basis of a proposal from the Commission (also known as the ordinary legislative proposal). At the same time, there are a number of implementing rules set out in delegated and implementing regulations.

In some Member States, this led to a dual public investment management system, one for the national and one for EU's cohesion policy funds. Quite naturally, in some Member States, especially where the share of EU funded investment in total investment is high, we observe a dedicated track for EU funds management (with specific rules, procedures and in many cases also specific institutions) in addition to a dedicated one for domestic investment. Nevertheless, in many such cases, national rules for public investment tend to converge to the implementation rules applied to EU funding, in terms of budget planning, monitoring, execution, control and audit, etc. Some Member States are taking more coordinated steps to try harmonising their systems. For example, Greece initiated a project to consolidate, simplify and review the procedures of their Public Investment Programme for which technical assistance from DG REFORM had been requested. Similarly, Bulgaria also initiated a project aimed at increasing the efficiency and effectiveness of public investment expenditures.

Improved procurement performance, more administrative capacity, better measures to prevent and avoid conflict of interest, corruption and fraud as well as more inclusion of stakeholders' views would significantly strengthen the effectiveness of EU's cohesion policy (Figure 1). Building on the Commission proposal for the next Multi-Annual Financial Framework for the period 2021-2027 of 2 May 2018 (COM(2018)321), Annex D of the 2019 Country Reports presents the preliminary Commission services views on, inter alia, factors for effective delivery for the 2021-2027 cohesion policy. By screening across all countries, Figure 1 highlights the frequency at which the different factors are mentioned in the Annex D of the 2019 Country Reports as framework conditions for effective delivery for the 2021-2027 Cohesion Policy. While identified in this context, these factors are not specific to the EU's cohesion policy funds and are likely to be symptomatic of the broader national public investment environment.

Figure 1. Factors for effective delivery of cohesion policy



Note: The axis shows the number of countries where the respective factor is present. Only factors identified in at least two countries are shown.

Source: Annex D to the 2019 Country Reports, own calculations.

Regulation (EU) 2021/241 regarding the Recovery and Resilience Facility sets out criteria for the management of funds that are compatible with efficient public investment management. The Recovery and Resilience Plans are required to include effective planning and project selection with detailed costings and milestones and targets; moreover, the plans are required to provide detailed information on implementation and monitoring, audit and control mechanisms, protection against a number of serious irregularities including conflict of interest, corruption and fraud as well as avoidance of double funding.

Most countries are using the opportunity presented by the Recovery and Resilience Facility to reform their public investment management systems to varying degrees. A few countries take a more comprehensive approach to reform. For example, Spain has committed to implement a new Sustainable Mobility and Transport Financing Act by end 2023, which aims to align almost every aspect of public investment management with good practices. In particular, it sets requirements for a genuine integrated and strategic planning that is coordinated across government layers and evaluated by the independent fiscal authority, an intermodal approach to project appraisal, new procedures for prioritisation of projects, and improved budgetary planning in the short to medium term<sup>7</sup>. Similarly, reforms to improve planning of public investment are envisaged also in Croatia (Component C2.1),

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<sup>&</sup>lt;sup>7</sup> Many of the new features of the new law address AIReF's recommendations in the context of their Spending Review of Transport Infrastructure of 2019/2020. In other Member States, National Productivity Boards may occasionally provide assessments or recommendations on certain aspects of public investment management. For example, the Netherlands Bureau for Economic Policy Analysis (CPB) carried out a study on how biodiversity is incorporated into the practice of cost-benefit analysis (Bos and Ruijs, 2019).

through amendments to the Act on the Strategic Planning and Development Management System (by end 2022) and a new Act on the Institutional Framework for EU Funds (by end 2021). Czechia would create a Coordination Unit within the Ministry of Regional Development tasked to develop and promote a consistent appraisal methodology across different project financing modalities. Also Slovakia committed to publish the methodology for the procedures for project appraisal and prioritisation by 2021Q4. Finally, Greece committed to improving a number of elements, including policy planning and coordination, public procurement, fighting corruption as well as more general public financial management reform, while Germany is committed to removing implementation bottlenecks to investment (Component 6.2) through a more stakeholder-oriented administration and simplified implementation procedures. In addition, a vast majority of Member States have committed to reform specific elements of public investment management, such as improving the efficiency of public procurement and/or administrative capacity.

## 5. CONCLUSIONS

This note discusses a number of key features of efficient public investment management. Some of the key elements identified in the "upstream" investment cycle include: strategic planning that is both fiscally realistic and effectively integrated into the annual budget process, effective medium-term budgetary frameworks and independent reviews of project appraisals. Regarding the "downstream" investment cycle, the note emphasises, inter alia, a clear designation of roles and responsibilities for project implementation as well as legal clarity with respect to standardised rules for project adjustment and procurement. The note also outlines the implications of the EU cohesion policy for public investment management. By relying on secondary sources, such features are illustrated with experience from selected Member States.

The analysis emphasises significant data gaps. Existing sources do only cover selected EU Member States and dimensions of public investment management. Thus,key information is currently unavailable for most EU Member States, in particular on (a) the link between strategic investment guidance and the annual budget, (b) the medium-term budgetary framework features (such as capital ceilings) that would protect capital over the entire investment project lifetime or (c) the extent to which legal provisions for project adjustment rules or ex-post reviews are in place. Moreover, where available, the information is sometimes incomplete or insufficient at the level required for genuine change or reform. For the required level of detail and horizontal consistency, a survey on key identified issues would therefore be warranted.

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#### ANNEX 1. FXAMPLES OF INDEPENDENT REVIEWS OF PROJECT APPRAISALS

Kim et al. (2020) discusses the following country examples:

In **the United Kingdom**, the Treasury only reviews major projects. A checklist approach is used to ensure that the fundamentals of the appraisal methodology have been followed and to question critically the appraisal findings and underlying assumptions. For all projects, the gateway review system, internal to the agency sponsoring the project, must be reviewed by external peer reviewers elsewhere in the public sector. The independent review is closely tied to a decision point (known as the Treasury approval point); projects will not proceed if they receive a negative review.

In **France**, the General Commission for Investment organises a second opinion on appraisals of major projects (above EUR 20 million) that critically examines the methodological approach, the calculation of parameters used in the appraisal, and appraisal findings. It then prepares an opinion for the prime minister, which also goes to the minister proposing the project and to parliament.

In **Korea**, an independent review precedes appraisal and draws up a preliminary feasibility study for major projects (above USD 50 million) as a basis for deciding whether to proceed to appraisal. This unusual, but highly effective, approach involves much deeper analysis by the independent reviewer, the Public and Private Infrastructure Investment Management Center (PIMAC), than in other countries; combined with a system for controlling cost escalation, it has proved remarkably effective. In Korea, the National Finance Law requires PIMAC to conduct an independent review of major projects for the Ministry of Economy and Finance; in practice, the ministry's decision is closely tied to the result of the independent review.

In **Chile**, all projects are subject to review. All interested institutions do the appraisal, but the review is carried out by the Ministry of Social Development, which rejects projects that do not conform to methodological guidance. The ministry requests corrections until the appraisal is satisfactory. The review is less a "second opinion" and more quality control to ensure that the detailed methodologies have been applied properly. Chile's system is recognised as being rather strict, but even here some projects proceed without positive reviews from the planning ministry.

In **Ireland**, the review by the Central Expenditure Evaluation Unit is purely advisory for the minister proposing the project.

In **the Netherlands**, independent review findings need to be taken into account in making the final decision, but there is no requirement for these findings to determine the final decision.

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