

F I S C A L A F F A I R S D E P A R T M E N T



I N T E R N A T I O N A L M O N E T A R Y F U N D

Slovak Republic

Spending Reviews of Health, Transport, and Information Technology

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Technical Assistance Report

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GLOSSARY

CAPEX	Capital Expenditures
CBA	Cost-Benefit Analysis
CIO	Chief Information Officer
EC	European Commission
GP	General Practitioner
IT	Information Technology
LM	Line Ministry
MoF	Ministry of Finance
MoH	Ministry of Health
MoT	Ministry of Transport
NHS	National Health Service
OECD	Organization for Economic Cooperation and Development
OPEX	Operational Expenditures
PPP	Public Private Partnership
TA	Technical Assistance

PREFACE

In response to a request from the Ministry of Finance (MoF) of the Slovak Republic, a joint International Monetary Fund, European Commission (EC), Organization for Economic Cooperation and Development (OECD) technical assistance (TA) mission visited Bratislava during May 30 to June 6, 2016 to review progress in the establishment of an expenditure review process and advise on the first round of spending reviews in the areas of health, transport, and information technology. The mission comprised:

- From the IMF: Richard Hughes (head), David Coady (both IMF staff), Catherine Adams, Peter Brandon, and Tony Hockley (all IMF experts);
- From the EC: Claude Wendling, Sebastian Renaud, Francisco Garcia-Moran (all EC staff), and Patrick Broudic (EC expert); and
- From the OECD: Jens Wilkins and Dejan Makovsek (both OECD staff).

The mission met with the Minister and Deputy Minister of Finance and Minister of Health; staff of the Institute of Financial Policy and Ministries of Health, Transport, and the Government Office who make up the Health, Transport, and Information Technology (IT) Spending Review Teams; staff of the Institute of Financial Policy and Ministries of Education and Labor who make up the Schools and Public Employment Service Pilot Spending Review Teams; the President and staff of the Supreme Audit Office; and Ludovit Odor of the Council for Budget Responsibility.

The mission would like to express its appreciation to all its Slovak counterparts for their excellent collaboration and to Stefan Kiss, Peter Harvan, and Matej Kurian in particular for all of their support to the work of the mission prior to and during its visit to Bratislava.

I. SPENDING REVIEW PROCESS

A. Background

1. The Slovak government spending review is off to a strong start and its design reflects the lessons from successful exercises in other countries. First, the review has a *strong political mandate* having been included in the Government Manifesto, National Reform Program, and Stability Program for 2016. Second, the review makes *effective use of scarce analytical capacity* in government, which are heavily concentrated in the MoF's Institute for Financial Policy by focusing these on three areas (health, transport, and IT) in the first round of reviews. Third, the terms of reference for each review appended to 2016 Stability Program include *clear financial objectives* expressed either in terms of cost containment (holding health spending to zero percent real growth), economy (20 percent savings on operating and maintenance cost in transport), or efficiency (30 percent savings on IT expenditure) over the four years to 2020. Finally, the MoF has completed several *successful pilot reviews* of the public employment service, schools, and revenue administration which can serve as proof of concept for the reviews and demonstrated to the rest of government and the public that spending reviews can generate credible reform proposals, substantial savings and wider economic benefits, and significant service improvements for citizens.

B. Current Issues

2. Issue 1: Engagement of line ministries (LMs) in the spending review process has been mixed. Strongest engagement has been from the staff of the Ministry of Transport (MoT), where the analysis is being conducted by a joint MoF-MoT technical team but a stronger engagement at the political level is still needed. However, there has been little engagement from Ministry of Health (MoH) officials in the health review to date and collaboration on the IT review has been complicated by the replacement of the government's IT "Tsar" and the ongoing relocation of responsibility of government IT strategy from the MoF to the Government Office (the Prime Minister's Office). In all three reviews, interaction has been largely between analytical units in the MoF (the Institute for Financial Policy) on the one hand and in LMs on the other hand with limited engagement of ministers and senior officials responsible for policy domains in LMs

3. Issue 2: The timetable for the first full round of reviews is tight and greater urgency in data gathering and analysis is required. The first full reviews of health, transport, and IT were officially launched in late April following the legislative elections (March 5, 2016) and need to deliver agreed and costed reform proposals in time to be included in the draft 2017 Budget which is presented to Parliament in October. This gives just over five months for the formation of review teams, gathering and analysis of data, evaluation of reform options, discussion and agreement of reform proposals, and budgeting of reform implementation. While timetable is deliverable, it will require disciplined project management and there is no room for slippage at any stage. The mission helped technical teams identify key data requirements to benchmark performance and evaluate the potential savings from improved performance, with reference to both international cross-country benchmarking and within-country benchmarking (e.g., across health insurers and health providers). However, this activity will need to be accelerated, in particular in relation to within-country benchmarking, if deadlines are to be met.

4. Issue 3: Reviews need to deliver both financial savings for the budget and service improvements for citizens. The credibility of the spending review process will depend on the pilots and first full reviews delivering credible reforms proposals which yield substantial financial savings in the near-term as well as improvements in public service outcomes in the long-term. The mission worked bilaterally with spending review technical teams to identify data resources and reports from other countries' spending reviews that can guide teams in this respect.

5. Issue 4: A strong medium-term budget framework is required to ensure spending targets are binding and consistent with measures identified by the spending reviews. Many of the savings identified as a result of the review will take a number of years to be realized, and some will require upfront investment (e.g., in IT) or other costs (e.g., redundancy payments) to release them. If formal budget decision-making and management remains on a purely annual basis, then there is no guarantee that money given to ministries to "grease the wheels" of reform in the first year will yield reductions in expending in the second and third year. Moreover, rather than planning ahead and making the tough decisions now to improve services and save resources in future, line ministries are liable to wait and hope that next year's annual budget might rescue them from difficult choices.

6. Issue 5: Reform implementation, value for money gains, and service improvements need to be monitored and reported on over time. The flip side of the high level of political commitment and public profile given to the launch of Slovakia's spending review are high public expectations about the improvements it will deliver in the lives of citizens. These improvements need to be demonstrated not only in the kind of operational metrics that appeal to economists and administrators (e.g., the reduction in the average cost of pharmaceuticals or savings per km of road constructed) but also in indicators that offer a close proxy for the citizen's experience of the public service (e.g., waiting times for and survival rates from healthcare interventions or travels times and congestion levels on the road, bus, and rail network). This requires that data be collected on a real-time basis and that the analysis of data trends are presented in an accessible manner to citizens. Since these performance gains may take time to be realized, it is also useful to set and publicize performance targets and to identify specific reform measures that are intended to achieve these targets to help retain public support. Where possible, it is also useful to benchmark and report performance across different actors in the system against targets (e.g., across public and private health insurers or across health care providers).

C. Recommendations

7. Recommendation 1.1: Spending review analysis, conclusions, and recommendations should be jointly owned by the MoF and line ministries at both ministerial and official levels. The government should avoid the spending review and other ministerial "strategic planning" processes being conducted in parallel with the former not taking account of the resource implications of the latter. Joint commitment at the technical level should be reinforced through collocation of review team staff, full sharing of data, and joint advice to ministers on review findings and conclusions. Joint commitment at the political level should be reinforced through: (i) joint seminars chaired by the Minister of Finance and line ministers to discuss the findings of the reviews internally and with key external stakeholders; (ii) joint presentations by

both ministers of the spending review conclusions to Cabinet; and (iii) joint press conferences by both ministers to announce the reforms agreed as a result of the reviews.

8. Recommendation 1.2: Spending review teams need to move quickly from data gathering and analysis to reform option generation. Given the timeframe for the review, there is no time to gather data from primary sources, so teams need to make due with whatever administrative and cross-country data is readily available. Moreover, teams need to be comfortable with the idea that they will never know everything and that the aim of the analysis is to highlight opportunities for value for money improvements. The aim of the interim report should be to share with the public what the data shows about where these opportunities lie and prepare the public for the specific reform proposals to come in October. This can be reinforced by analysis and experiences from other countries that have undertaken expenditure reviews. In the meantime, teams need to move quickly onto discussion of legal, administrative, and institutional reforms needed to realize those improvements. Teams should not underestimate the time needed to cost, discuss, and “socialize” the reform proposals coming out of the reviews.

9. Recommendation 1.3: Spending review teams need to generate both “quick wins” and long-term efficiency improvements. Immediate cashable savings from reductions in input costs (e.g., prices of prescription drugs) or activities (e.g., redundant diagnostic tests) are needed to make the budgetary arithmetic of the spending review work (e.g., 0 percent real growth in health expenditure). But the reviews should also not miss the opportunity to deliver more fundamental transformations in the efficiency and impact of services that are provided (e.g., reorientation of the public employment service interventions toward the long-term unemployed). The interim report should be used to highlight specific reform measures from the health, transport, IT and pilot reviews that have both the potential for financial savings, but also the potential to deliver service transformations (e.g., measures coming out of the public employment service and school reviews which may initially take the form of pilot initiatives to demonstrate their potential to improve outcomes in their sectors).

10. Recommendation 1.4: Spending review savings need to be locked into fixed multi-year budgets for the ministries concerned. The only effective means of ensuring those savings are realized over the coming years is to reflect them in a binding multi-year budget limit for the ministry concerned which factors in those savings (and any initial spending necessary to realize them). The multi-year financial certainty given to the LM will also help them to plan ahead and take the difficult decisions needed to deliver the savings rather than waiting and hoping that next year’s annual budget will rescue them from difficult choices. Integrating savings into budget plans will also require the Budget Department of the MoF to engage in the spending review process and gain an early understanding of the budgetary implications of different reform options.

11. Recommendation 1.5: The MoF and Government Office need to establish joint arrangements for monitoring the implementation of spending review recommendations. This idea is already present in the SK National Reform Program for 2016, which refers to a joint role of the spending review unit of MoF and of the implementation unit of the Government Office, but it has not been elaborated upon at this stage. These arrangements need to track and report publicly on: (i) ministries adherence to their multi-year budget limits; (ii) the realization of

“cashable” financial savings from things like workforce reductions, lower input costs, and reductions in overheads; and (iii) the improvements in public service outcomes for citizens. This requires the spending review to provide clear and manageable number of objectives for each, i.e., (i) multi-year budget limits; (ii) targets for cashable savings; and (iii) objectives for service improvements. The MoF would typically take the lead in monitoring (i) and (ii) while the Prime Minister’s Office would take the lead in monitoring (iii) as part of ensuring the implementation of the government program. Regular, joint MoF-Prime Minister stocktake meetings should be conducted with the ministers concerned to ensure the implementation of all three are on track. Ministries should report on their achievement in their annual reports to Parliament and the MoF should provide a summary of progress alongside the Budget and/or the Stability Programme.

II. HEALTH SPENDING REVIEW

A. Background

12. While total (public plus private) health spending in Slovakia is high compared with comparator countries, health outcomes are substantially inferior. The high level of spending reflects very large increases in both public and private spending over the last decade. Out-of-pocket payments are a significant feature of the system. At the same time, health outcomes as measured by amenable mortality rates and health adjusted life expectancy are significantly inferior to those in other EU countries. The discrepancy between spending and outcomes is, in turn, reflected in high levels of measured spending inefficiencies.

13. Real public health spending is to be kept fixed over the next three years. However, given the level of inefficiency in the system, it should be possible to identify reforms that help to improve health outcomes (e.g., achieving the target of reducing amenable mortality to levels in neighboring countries by 2020) while respecting this budget constraint. Fortunately, the most effective health care practices can also be less costly. The spending review is currently focusing on refining benchmarking analyses with the aim of identifying areas of inefficiency in the health system, which should then also help to inform specific reforms that can be implemented over the short and medium terms. Reflecting capacity constraints at the MoH, to date virtually all of the analytical work has been undertaken by staff at the MoF. Refining the analytical work and translating these into specific health system reforms will require a scaling up of engagement by the MoH to ensure consistency with their own plans for reforming health care programs, said to be organized around more than twenty specific projects, four of which are mentioned in the Slovak National Reform Program for 2016 (introduction by January 1, 2017 of a diagnosis related groups payment system, implementation of e-health by January 1, 2017, construction of a new hospital in Bratislava, and integration of healthcare provision by December 31, 2016).

B. Current Issues

14. Issue 1: High spending is pervasive throughout the health care system and is reinforced by soft budget constraints and lack of competition. Expenditures on pharmaceuticals, diagnostic imaging, laboratories, and transportation and medical rescue services are all high compared to comparator countries. This high spending reflects both high prices, high consumption of health inputs, and high levels of (sometimes redundant) activity. The state and health insurers are required to purchase from local hospitals to maintain the regional spread of providers, and restriction of user choice is enforced through a ban on marketing by private insurers and the absence of a system to measure and rank provider quality. Hospital managers have no significant incentives to make efficiency savings or to improve patient care. Although financial constraints are significant (attested by arrears in the health sector estimated at 550 million euros at the end of 2015, of which 442 million euros concern the 13 teaching and university hospitals), this has yet to translate into meaningful hospital restructuring. Poorly-performing state providers expect to be provided with additional financing to cover any losses, and their managers enjoy strong job security. Addressing these challenges will also require an improvement in the governance and accountability throughout the health care system, especially in hospitals.

15. Issue 2: While hospitals have excess capacity, the capacity of the primary health care system is strained. Although the number of hospital beds per capita has been decreasing, it is still significantly above levels in EU15 countries, and bed occupancy rates are very low. Although the number of doctors per capita is similar to the EU average, they are skewed towards specialists with too few general practitioners (GPs). The number of nurses is also low (and declining) reflecting low pay and strong demand elsewhere in the EU.

16. Issue 3: Stress on the primary health care system results in insufficient gatekeeping and an excessive number of hospital consultations. GPs have little incentive or authority to treat patients and instead pass them onto expensive consultants even for relatively simple procedures. The lack of active patient management or cost control means patients are sometimes sent for repeated diagnostic tests or are prescribed multiple drugs for the same or related conditions. The average age of GPs also appears high raising concerns about their skill level and capacity to provide quality primary health care.

C. Recommendations

17. Recommendation 2.1: Use existing administrative data to help benchmark operational costs across hospitals. This would facilitate the identification of savings through increasing operational efficiency, including selling off any unnecessary assets (buildings and land) to finance upgrading of the hospital system. Simple benchmarking analysis is sufficient, with little to be gained from undertaking more sophisticated Data Envelopment Analysis. Comparisons of the costs of diagnostic tests, drugs, and procedures, as well as average number of nights in hospital for different kinds of patients, occupation of beds, number of nursing hours per patient, cost of emergency care, number of consultations, use of medicines and intensity of use of operating rooms can help identify potential cost savings from more efficient and standardized practices across hospitals. Some of the basic measures produced in the recent UK Carter Report, covering the facility management costs per square meter, and the ratio of clinical to non-clinical floor-space may also be useful. An audit of non-clinical (and unused clinical space) might lead to discussions around the disposal of redundant land and buildings, which in turn may provide hospitals with capital for investment in the repair or replacement of their facilities. However, the overall potential for savings from building is limited since typically around 70 percent of expenditure in hospitals is linked to payroll while direct cost of buildings is around 10 percent of the total cost base.

18. Recommendation 2.2: Develop a plan to downsize and modernize the hospital system. The current plan is to increase capital spending on hospitals by 633 million euros over four years to finance the construction of three new hospitals and renovate five large hospitals. However, there seems to be insufficient emphasis on closing and consolidating hospitals to address overcapacity. The trend in other advanced economies is to move routine treatments out of hospitals and into freestanding outpatient clinics which tend to have lower costs, better outcomes, and lower risks of contracting a hospital-borne infection.

19. Recommendation 2.3: Put greater focus on ways of incentivizing good practice as benchmarking alone is unlikely to have a significant effect on provider behavior and the degree of unnecessary hospital care. The regulatory change which enabled the recent shift of diabetes care from hospitals to GPs deserves further investigation, both because it suggests a

political capability to enact change and because it may represent an initial step towards more accessible and lower cost care for an important source of amenable mortality. In addition:

- a. Consider piloting improved incentive systems in private insurers.** There seems to be some innovation in terms of vertically integrated managed care by the two private insurers left in the market, which may enable the development of systems of managed care across the spectrum from self-care to specialist inpatient services. A few pilots of integrated care for chronic conditions may be worthy of consideration, particularly as reviewing these may produce a better understanding of apparent operational inefficiencies in diagnostics, prescribing, and patient transport. The health experts have also shared useful data on how one-day surgery has been encouraged within the French health system, through a mix of targets, certification procedures, and contractual processes.
- b. More broadly, improving efficiency in the short term will likely need to rely mostly upon using reputational effects rather than financial incentives.** By using simple but robust benchmarking measures it may be possible to introduce a degree of peer pressure and patient “voice” to motivate reform. Public rankings and possibly targets for clinicians based on waiting times, prescribing costs, antibiotic and generic prescribing rates, secondary referral rates, user feedback, and so on may be possible, with a degree of confidence in the data given the limited scope for manipulation.
- c. There may be some strategic potential in creating a system that imposes generic prescribing,** by the International Non-Proprietary Name, for patent-protected medicines that go through the Reference Pricing system. Over time this could lead to much wider acceptance of generic prescribing, bringing significant cost savings without the need for more controversial measures to extend generic substitution. Allied to this, it could be useful to benchmark the availability of non-prescription medicines within Slovakia against other EU Member States, with a view to reducing the burden on GPs, promoting citizen engagement in health, and building an improved community-based system to manage ambulatory care sensitive conditions, as these play a significant part in amenable mortality and avoidable system costs.
- d. A review of the supply chain may enable a better understanding of system costs.** Wholesalers play a significant part in the supply chain, whether for pharmaceuticals or other widely used items. The National Health Service (NHS) in England has long been pro-active in the wholesale market for clinical and facility supplies in order to obtain volume efficiencies. In order to enable local innovation and cost-reduction, NHS providers have remained free to purchase directly from suppliers or other wholesalers. The NHS Supply Chain is now operated by DHL.
- e. More efficient use of existing health staff can improve health care in the context of tight budget constraints.** The health system in Slovakia is top-heavy, with strongly demarcated roles. If an increase in nursing salaries is not possible, despite low pay resulting in recruitment and retention problem, an alternative (but weaker) incentive may be to raise the status of the nursing profession, with “housekeeping” tasks undertaken by some form of nursing auxiliary or health care assistant, increasing the scope for nurses to focus on clinical, patient-focused tasks. Similarly, exploring ways that nurses, pharmacists and others (physiotherapists, social workers) might ease the burden on GPs within the primary care

system may prove valuable. The spending review should draw on the considerable international experience in all of these areas. The World Health Organization European Observatory on Health Systems and Policies has a range of publications summarizing progress, and analysis is available from research within individual countries. Detailed data on pharmaceutical markets, including individual products, is available commercially from IMS Health.

III. TRANSPORT SPENDING REVIEW

A. Background

20. The Transport Spending Review has made a strong start and early progress to provide valuable foundations for identifying improvements in the transport sector. The team has initiated a broad review of the sector and increased its understanding of the opportunities for efficiency and spending pressures within the sector. These areas include improving the clarity of strategy and robustness of investment analysis to improve efficiency of new capital spending, especially on highways, addressing the high unit costs of investment; improving the efficiency of the rail company operations, improving the coordination of public transport services, and tackling the significant backlog of maintenance on roads.

21. The Transport Spending Review team recognizes the need to prioritize its analytical efforts on areas with the greatest potential for savings and rate of return of investments.

The evidence base is strengthening, with an understanding of how to work within the limits of international benchmarking and how to use these most effectively to identify areas where Slovakia is an outlier from international comparisons, such as railway employment. The team also recognizes that in many areas it must try instead to develop internal benchmarks. It is positive to see constructive working relationships with the MoT at a working level and the keen interest on both parts to look for the highest value for money in their sector.

B. Current Issues

22. Issue 1: Building consensus on the size and scope of opportunities within the transport sector. There is a need for cross-agency agreement (MoF, agencies) and wider public buy-in to the overall strategy and objectives for the transport sector, including broad consensus around the costs of inaction; the scale of benefits if change can be successfully delivered and the scale of the reform challenge. This will help drive priorities for reform and savings.

23. Issue 2: Focusing on specific areas within the budgets of the MoT and agencies to deliver savings. The team has done a good job of identifying areas where improved efficiencies can be delivered to improve transport outcomes, such as greater consistency and robustness of processes for investment decision-making and reducing capital costs of delivery. The next stage of analysis needs to move towards scrutinizing the budget lines of the MoT and key agencies (such as the Railways Companies) to define the potential big saving areas that can be reprioritized and areas of potential that will take longer to release (e.g., head-count savings that may require attrition to realize). This issue of prioritization is very acute given the short time constraint and the high political profile of the spending review effort.

24. Issue 3: Identifying how to deliver the improvements in efficiencies and the potential savings for reprioritization. Having identified potential areas to improve outcomes and opportunities to deliver budgetary savings, the team needs to set out an implementation plan to release these savings; with a high-level, indicative costing of any investment required and likely timeframes. This will provide greater credibility to the review's recommendations and will provide the decision makers with all necessary elements to make an informed decision as to which projects should be pursued. The review will need to be realistic about the ability to extract

savings in a timely way (e.g., from the railways sector), and the likely medium to long-term time periods required to effect real change (e.g., on the state of roads maintenance). This is particularly true of savings on wages that usually do not amount to the full estimated savings.

25. Issue 4: The maintenance backlog creates very high spending pressures which will only worsen with lack of action. The scale of this problem, on both national and regional roads, needs to be clearly set out in the review, including the costs and other consequences of inaction. The Transport Spending Review team clearly identified the risks linked to a low level of road maintenance. This will necessitate additional investment costs from the complete rebuilding of the infrastructure whenever the level of degradation reaches a threshold. We understand that given the timeframes, the review is not intending to examine municipal funding in detail, given the scale of challenge in roads maintenance. However, given the scale of the maintenance challenge and municipalities' key role in both procurement and delivery of maintenance, regional funding may need to be the subject of later rounds of the spending review.

C. Recommendations

26. Recommendation 3.1: Build on the current level of engagement with the MoT and agencies, especially at ministerial and senior officials level to ensure they accept the analysis of the spending review by:

- a. The definition of a transportation blueprint for Slovakia as a central element of a good selection of projects.** The selection of the most relevant project must be based on sound governance that must be activated every couple of years to lead a revision of the blueprint. The MoF needs to be engaged early in the development of the Transport Master Plan before its finalization to ensure its consistency with the emerging findings of the review, to understand the spending implications, and to identify and resolve any areas of difference; and
- b. Presenting the issues identified in the spending review in the context of estimated savings that they will generate.** This means that rough figures are required to provide an order of magnitude of the reforms and their monetary implications.

27. Recommendation 3.2: Focus scrutiny on the different categories of transport expenditure rather than on the full range of transport projects, by:

- a. Analyzing current investments by comparing a selection of indicative projects in each major category of expenditure,** the variance in their approach to cost benefit analysis, unit prices and potential additional costs incurred from assessment through to construction. This analysis will help identify the potential benefits from developing a consistent Cost Benefit Analysis policy and help monetize structural reforms in the selection, procurement, and management of construction projects; and
- b. Conducting an in-depth analysis of departmental and agency budgets (such as the railway company).** These structures handle public transport which is an important cost center. The comparison of various structures should enable the identification and justification of savings.

28. Recommendation 3.3: Focus investment in infrastructure projects better by making a move to a centrally agreed and shared cost-benefit analysis methodology. Such a scheme would help avoid the selection of low performing projects. The methodology should define a clear shared standard about what methodology should be followed nationally and define the key indicators and variables that are to be used for the whole country. The initial focus should be on clarifying issues such as the value of time to be ascribed to different users and vehicle types, the economic discount rate to be used, and what factors should be monetized within the analysis and the monetary values to be used (e.g., environmental factors such as carbon emissions and air quality). Such indicators can be refined occasionally. The strategy must be explicit about the importance of sensitivity analysis that can provide the range of benefit expected from each project.

29. Recommendation 3.4: Consider a full range of options for realizing savings, not simply assuming institutional reform by:

- a. Optimizing public transport subsidies (bus and rail)** by considering incentives created by subsidy structure, mode pricing, efficiencies of timetabling changes, etc.;
- b. Investigating infrastructure planning and procurement processes** for investment and maintenance and improving the information base about capex expenditures;
- c. Considering different models of reform for the railway company** to address excess headcount;
- d. Identifying opportunities to improve efficiency by introducing increased competition** into transport markets, e.g., bus contracts, maintenance procurement; and
- e. Better governance, accountability, and scrutiny of decisions** on investment prioritization.

30. Recommendation 3.5: Be explicit about the scale of the roads maintenance problems, the costs of leaving these unresolved, and the strategy for tackling this:

- a. Develop a maintenance strategy with targets around condition of roads** and annual maintenance timetables to contrast with the current situation and an implementation timetable for moving towards this;
- b. Develop a high-level benefit-cost ratio assessment of the maintenance strategy of national and local roads** compared to the costs of business-as-usual (i.e., the eventual need to rebuild the road network and the capital cost of doing so); and
- c. Identify explicit savings elsewhere in the transport budget to address the funding shortfall** and identify any remaining funding pressure.

31. Recommendation 3.6: Slovakia should develop a government-wide Public Private Partnership (PPP) policy if it means to make greater use of the private sector in infrastructure provision. As was pointed out by the OECD during the mission, the involvement of the private sector to ensure the provision of services normally delivered by the state can be beneficial in some cases. However, such benefits are not guaranteed. The decision to pursue and procure infrastructure investments or services via PPPs can also entail significant fiscal risks for government if such arrangements require guarantees, underwriting, or other commitments of resources from the state. They can also fail to deliver the envisaged benefits if contracts are

poorly specified or private partners lack the financial, human, or technical resources to fulfill the contract. Finally, PPP contracts often involve opportunity costs (in the form of foregone revenues, transfer of assets, and loss of discretion over the configuration of services) which need to be taken into account when weighing their benefits and costs. Should the Slovak government decide to pursue such a reform, a nationally defined framework and decision-tree for the state, regions, and municipalities to use in comparing the benefits, costs, and risks of PPPs compared to conventional procurement should be developed.

IV. IT SPENDING REVIEW

A. Background

32. The Government of the Slovak Republic has committed to conducting an assessment of public spending effectiveness (spending review) in the area of information technology (IT) to ensure that IT investments and operations in the Slovak public sector provide higher value for money. At the present time, Slovak public sector IT spending exceeds €500 million a year (which represents some 15 percent of Slovak GDP from services), with EU structural funds contributing some 40 percent of the total input costs (the share for capital spending is higher, at some 54 percent). The results, however, have been limited and fragmented, and the Slovak government lags in the use of IT in public administration (according to the Digital Economy and Society Index and e-Government benchmarks). As well, IT systems do not seem to consistently meet their objectives and provide the expected value.

33. In that context, our TA mission was told at the outset that one of the essential reasons for launching this review was a widespread recognition that IT spending had failed to deliver all the hoped-for results, most notably in terms of availability of e-government services to the wider population. This acknowledgement has already led—following the recent elections—to a government decision to overhaul responsibilities in the field of IT. This has not yet been fully put into practice at the time of the mission. The IT spending review expects to deliver better value-for-money in the use of IT resources in the form of progressive savings of 10 percent, 20 percent, and 30 percent over the next three years, to be reinvested in strengthening the ability of government IT to deliver better results and improved value-for-money performance.

B. Current Issues

34. Issue 1: Based on the evidence available to us, it appears that the Slovak public administration cannot—and is not structured, organized and equipped to—effectively and economically leverage its IT resources to capitalize on the full potential “enabling effect” of IT on society and public administration. Countries that have achieved success in leveraging IT spending have structured their IT stewardship and expenditure management regimes (i.e., how IT spending is targeted, governed and managed) to condition a concerted “whole-of-government” or “enterprise” drive to maximize three categories of potential impacts of IT-enabled initiatives and their inter-relationships:

- a. Societal impacts:** the potential to lower transaction costs and administrative burden in society and the economy, to improve the day-to-day life and experiences of citizens, businesses and other sectors in society, and to enhance the quality of societal decision-making through the use of information emanating from the public administration;
- b. Administrative impacts:** the ability to enhance the effectiveness and efficiency of public administration and the public transparency and accountability in government operations; and
- c. Cost-value impacts:** the potential to optimize the cost economies of delivering value through IT.

35. Issue 2: There is an absence of mechanisms and practices to ensure consistent and coordinated alignment between IT spending and the government's overall policy directions, objectives, and priorities. Experience in successful public administrations points to the need for a core set of effective mechanisms designed to ensure that IT and IT-enabled initiatives remain firmly aligned with the government's overall policy and priorities. These mechanisms include:

- a. Leadership focus with strong political support;
- b. Government-wide (or enterprise) governance and oversight structures;
- c. An IT policy framework that affirms that all IT investments and operations are government policy levers designed to advance the government's overall policy objectives and priorities first, while also advancing the objectives of individual ministries and programs; and
- d. Enterprise coordination mechanisms that cut across ministries, programs and operating "silos" and help achieve horizontal coherence and cohesiveness in support of advancing the government's overall policy objectives and priorities.

36. Issue 3: There is an absence of policies, rigorous practices, guidelines, and an established discipline in respect of value-for-money management of IT capital expenditures (CAPEX). IT investments in successful public administrations are "regulated" through a number of instruments, approaches and practices designed to ensure that investments consistently target the right outcomes and deliver value for the money spent. These typically include:

- a. IT and Information Management policy suites;
- b. Cost-Benefit Analysis (CBA) frameworks, standards, guidelines, and practices;
- c. Governance structures providing direction and oversight for these investments;
- d. Project management and delivery instruments and practices to ensure rigorous, competent, disciplined, effective, and efficient delivery and implementation;
- e. Benefit realization and "harvesting" mechanisms; and
- f. Sharing of best approaches and practices.

37. Issue 4: There is no consistent focus on ensuring that IT operational expenditures (OPEX) do not fund duplicate efforts and inefficient operating practices. Countries which have achieved good results in improving the cost-effectiveness of their IT operations show a consistent and sustained focus on a set of continuous government-wide OPEX optimization practices. Such practices include (but are not limited to):

- a. Shared services arrangements in respect of IT infrastructure services (e.g., computing centers, application hosting, web services, communications networks—voice, data and video, e-mail, etc.);
- b. Reductions in duplication and in the number and diversity of applications and platforms used (e.g., through designated common application platforms for HR, financial management, pay-and-benefits, payment processing, document management, security, and authentication services, etc.);

- c. Shared or clustered arrangements for common applications development, maintenance, and support;
- d. Centralized procurement of standard-configuration end-user devices (PCs, tablets, etc.) and software; and
- e. Centralized use-based management and administration of all software licenses.

38. *Issue 5: No mechanisms or consistent focus appear to exist in the Slovak government to ensure that IT resources can be systematically allocated or re-allocated from lower to higher value and impact targets.* Organizations that have achieved good cost economies in the use of IT are consistent users of a number of practices designed to ensure that the “IT spend” is reviewed periodically for best value delivery, and re-allocated accordingly. Such practices include:

- a. Systematic “culling” exercises to re-target or terminate unproductive IT investments and ineffective operational arrangements;
- b. Project reviews and program evaluations;
- c. Administrative and operating reviews; and
- d. Systematic search for “commoditization” opportunities in respect of certain transactional services (e.g., through cloud computing, outsourcing, off-shoring, etc.) to take advantage of the cost economies available through new or innovative service arrangements.

39. *Issue 6: It does not appear that IT spending in the Slovak government is supported by clear roles, responsibilities, and accountabilities for IT outcomes and the efficient use of IT resources.* Reviews of international IT practices consistently emphasize that clarity and completeness in respect of roles and responsibilities of principals and stakeholders in the “stewardship” of IT investments and operations is a key success factor in delivering value-for-money IT. Furthermore, establishing and enforcing clear accountabilities for those responsible for delivering the outcomes and the benefits targeted by IT spending is a strong requirement in most IT policy frameworks in EU and North American governments.

40. *Issue 7: There are significant gaps in the data available—particularly data related to the numbers and costs associated with IT human resources (HR)—to support effective analysis, performance assessments and benchmarking in respect of government IT OPEX and CAPEX.* Answering the question: “what is the current performance in respect of value-for-money IT in the Slovak government,” is not currently possible with the data available to the MoF. As such, initiating further analysis or benchmarking exercises to compare this performance with that of other governments or the commercial sector is not likely to lead to useful conclusions until a more complete data set is collected, verified, “scrubbed,” and made available in structures and formats suitable for analysis and comparisons.

41. *Issue 8: There is lack of capacity available in critical areas of IT management.* Of particular concern are capacity gaps in policy development, project management, technology architecture development, development of key project documentation (e.g., Project Charters), and the conduct of credible CBAs on CAPEX initiatives.

C. Recommendations

42. Recommendation 4.1: The Slovak government should ensure that the stewardship of IT and its IT spending practices are structured, organized, and equipped to best advance the potential enabling effects of its IT spending on society and public administration.

In particular, the government should:

- a. Set the requirement for a whole-of-government or enterprise approach to IT as government policy, with specific directives on the operating culture, approaches and practices, horizontal coordination, cooperation, and collaboration outcomes expected;
- b. Establish stewardship and oversight structures and mechanisms suitable for a coherent and cohesive enterprise approach to IT;
- c. Develop a policy framework for IT that sets the common “rules of the road” for the “IT enterprise” in the Slovak public administration; and
- d. Set up a performance management framework for the government IT enterprise that ensures that the performance of government IT spending is overseen and reviewed periodically for best value-for-money delivery in respect of its enabling societal, administrative, and cost-effectiveness impacts.

43. Recommendation 4.2: The government should establish a core set of enterprise mechanisms and practices to ensure consistent and coordinated alignment between IT spending and the government’s overall policy directions, objectives, and priorities. As a minimum, the government should set in motion a process for the development and “implantation” of at least four such mechanisms and supporting practices:

- a. A leadership “locus” that blends strong political support (e.g., a political champion) and strong delivery (e.g., a government Chief Information Officer (CIO), supported by a Chief Technology Officer and a Chief Information Management Officer);
- b. An enterprise-wide governance structure—possibly chaired by the political champion—to provide strategic direction, high-level review and oversight, horizontal consensus building, and dispute resolution. This enterprise governance structure should have counterparts in every ministry where significant IT spending occurs;
- c. Appropriate provisions in the IT policy framework that set out specific requirements to ensure that all IT investments and operations, wherever they may occur (i.e., individual ministries or programs) and however they may be funded (EU or budget funds), are to be managed in a way that advances:
 - i. The government’s overall policy objectives and priorities (enterprise perspective);
 - ii. The objectives and priorities of individual ministries and programs (ministry/program perspective); and
 - iii. The public interest and the need to act with probity and integrity and demonstrate value-for-money (public interest perspective).
- d. A well-defined role for the Slovak government CIO and those supporting him/her in respect of enterprise leadership and coordination for horizontal initiatives and related actions designed to:

- i. Advance the government's overall objectives and priorities; and
- ii. Strengthen the integrity, maturity, and efficacy (effectiveness, efficiency, and cost-economy) of the IT function in the public administration.

44. Recommendation 4.3: The government should ensure that its policy framework for IT includes directives, practices, guidelines and "templates" that promote rigor and discipline in respect of value-for-money life-cycle management of IT capital expenditures (CAPEX). Together, these provide a consistent and enforceable "regulatory framework" for IT investments to ensure that they target the right outcomes and deliver value-for-money. As a minimum, these should include:

- a. Specific and enforceable provisions in the IT policy suite and related guidelines and templates that set out a rigorous life-cycle management regime for IT CAPEX, including the establishment and maintenance of complete, accurate, and current IT asset inventories;
- b. CBA frameworks, standards, guidelines, and practices that apply with equal force and in the same manner to all investments, regardless of the source of funds (i.e., EU or government budget funds);
- c. A requirement that significant IT CAPEX (risk, materiality and impact-based threshold criteria to be established) include dedicated governance structures that reflect the stakeholder architectures involved (with emphasis on key targeted users, beneficiaries and "facilitators") and are mandated to approve and provide ongoing direction, guidance, and oversight for these investments;
- d. A requirement that significant IT CAPEX be managed through appropriate project management and delivery practices (e.g., project "gating," Project Management Office (PMO), a proven project management methodology, use of project managers with a proven required set of skills, competencies, certifications, and experience, etc.);
- e. Where business cases (CBAs) indicate that significant benefits are expected from IT CAPEX, a requirement that these benefits be tracked, reported, and harvested appropriately, and that the accountability for their realization be shared between business (programs) and IT (PMO), and overseen by the dedicated governance structures; and
- f. A capability, likely resident in the government CIO's office, charged with the sharing and supporting proven approaches and practices in IT outcomes targeting and value-for-money investment management, management of IT operations, and IT-enabled benefits realization.

45. Recommendation 4.4: The government should set in motion a process aiming to achieve an operating culture, discipline, and concrete results that ensure that IT operational expenditures (OPEX) do not fund duplicate efforts and inefficient operating practices and arrangements. The process should develop directions, guidance, action lines, and the identification of specific opportunities to achieve cost economies in IT operations, which may include:

- a. Shared services arrangements involving all ministries (or clusters of ministries) for computing centers, cloud services, application hosting, web services, communications networks (Wide-Area Networks, Local Area Networks, Voice, and Video), e-mail, secure electronic document

management, and exchange, secure electronic data staging and exchange, and other IT infrastructure services;

- b. Designated (and compulsory) common enterprise solution platforms for HR management, financial management, pay-and-benefits, payment processing, security and authentication services, document management, web portals, etc.;
- c. Where appropriate, identification and implementation of shared or clustered arrangements for maintenance and support for common applications;
- d. Standardized configurations for all end-user devices and software across the government (IT “commodity” items);
- e. Centralized procurement of commodity items; and
- f. Centralized negotiation, management and payment for all software licenses and other user services to maximize the aggregate buying leverage of the government and reduce duplication of administrative effort.

46. Recommendation 4.5: The government should establish provisions, guidelines, and practices that ensure that IT resources can systematically be allocated or re-allocated from lower to higher value and impact targets. These recognize that project targets and operating circumstances—as well as government objectives and priorities—can change over time, and need to be reviewed periodically to ensure that they continue to deliver the right outcomes and optimal value. As such, ministries and programs should be directed to undertake, periodically, with the support of the appropriate governance structures:

- a. Reviews of ongoing IT investments and operating practices and arrangements to identify opportunities to re-target or terminate unproductive IT investments and ineffective operational practices and arrangements;
- b. Reviews of projects at critical stages, particularly at stages that precede large spending tranches, to prevent unnecessary or wasteful outlays of moneys that could more productively be used elsewhere;
- c. The use of program/project evaluations and audits to identify areas where opportunities exist for more cost-effective approaches and solutions;
- d. Administrative and operating reviews targeting specific IT and IT-enabled program spending areas; and
- e. The use of tangible incentives (e.g., ability for programs to retain a share of the savings, individual prizes for good ideas and suggestions, etc.) for identifying savings opportunities, such as “commoditization” in respect of certain transactional services and establishment of shared services and common applications or platforms.

47. Recommendation 4.6: The government should ensure that its future framework for the stewardship of IT leads to the establishment and enforcement of clear roles, responsibilities and accountabilities for IT-enabled outcomes and for the value-for-money use of IT resources. In particular, the policy framework for IT, the related compliance activities and mechanisms, the mandates for IT governance structures, and the job responsibilities of those with significant roles in the targeting, management, and delivery of IT and IT-enabled business

initiatives, should include—and lead to effective enforcement of—responsibilities and accountabilities for delivering the outcomes and benefits targeted by IT spending. Where appropriate, these should include both joint and individual business and IT responsibilities and accountabilities.

48. Recommendation 4.7: The government should set in motion a program designed to assure the provision of sufficient data—starting with IT HR data—to support effective enterprise performance management in respect of IT OPEX and CAPEX. It is recommended that this program be designed specifically to establish, compare, communicate, and make decisions in respect of the value-for-money performance of IT spending in the Slovak government's "IT enterprise." At a minimum, this program should aim to provision adequate and sufficient decision-grade information to aid in:

- a. Establishing the government's current IT performance baseline;
- b. Conducting internal benchmarking exercises across ministries, programs and IT spending areas;
- c. Conducting external benchmarking exercises with reference to other governments and, where appropriate, to commercial IT enterprises;
- d. Establishing realistic performance targets;
- e. Tracking and reporting on progress in improving the value-for-money performance of the government's IT enterprise; and
- f. Increasing public transparency and accountability in respect of IT spending and delivery of IT value-for-money to the public, businesses, other sectors of Slovak society, and the EU.

49. Recommendation 4.8: The government should initiate efforts to fill capacity gaps in critical areas of IT management. Priority consideration should be given to hiring or developing internal capacity to carry out critical tasks that cannot—and should not—be outsourced, including:

- a. Policy development;
- b. Project management;
- c. Technology architecture development;
- d. Development of key project documentation (e.g., Project Charters, Project Management Plans, Functional Specifications, etc.); and
- e. Conduct of credible CBAs on CAPEX initiatives.

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