OPEN GOVERNMENT CASE STUDY:

Costing the ProZorro e-Procurement Program

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Executive Summary

This case study presents the total costing of the ProZorro e-procurement program in Ukraine. The purpose of this case study is two-fold: (1) to provide validation of the Open Government Costing Framework and Methods developed by Results for Development as part of the Open Governement Costing Initiative to be used for costing of open government programs and (2) to provide an estimate for costs of the ProZorro program to be used when advocating for adoption of e-procurement programs. In addition, this costing can be used to provide the costing estimates for a cost-benefit analysis of e-procurement and more specifically ProZorro.

In conducting this costing, we followed a six-step process and methodology to estimate the economic costs of the program, including: (1) defining the scope of the program, (2) identifying which costs to assess, (3) developing a framework for costing, (4) identifying cost categories, (5) conducting data collection, and (6) conducting data analysis. The completion of each of these steps was augmented by interviews with key stakeholders of the ProZorro system including government officials involved in setting up and operating the ProZorro system, stakeholders within the non-profit sector, and volunteers within the ProZorro system.

The final cost estimate for ProZorro was calculated to be approximately 4.69 million Euros, which includes costs from the inception of the program in 2014 through its implementation in 2017. The breakdown of this cost by phase is approximately 1.23 million Euros for setup, 0.56 million Euros for implementation, and 2.90 million Euros for operation. The cost estimate presented here is an underestimate of the ProZorro system as only budget costs that could be tied directly to ProZorro were included.

Rationale for Open Government Costing

"Open government" is built on the idea that citizens have the right to access government information, to actively participate in government decisions that affect their livelihoods, and to hold government officials and/or service providers to account when they fail to govern properly (Heller, 2012; McGee and Edwards, 2016). Open government reforms aim to make government more transparent, more accountable, and more responsive to their own citizens, with the ultimate goal of improving the quality of governance, as well as the quality of services that citizens receive (OGP, 2015). The umbrella of open government programs and reforms includes initiatives such as open data systems, 311 systems for reporting service delivery complaints, e-procurement, participatory budgeting, citizen scorecards and citizen audits, as well as many other adjacent reform efforts.

According to the World Bank Group, when embraced, open government reforms can contribute to the twin goals of ending extreme poverty and promoting shared prosperity in low- and middle-income countries (GGP, 2016) in several ways. First, open government reforms can help increase the effectiveness of both domestic and donor-funded development spending, thereby improving the allocation and use of public resources (UN, 2008). Second, open government reforms can facilitate more inclusive decision-making processes and more effective management of public resources, and in so doing improve the delivery of government services, which are disproportionately used by the poor (Grandvoinnet, Aslam, and Raha, 2015; Rocha, Menocal and Sharma, 2008). Finally, open government reforms can increase trust between government and citizens; such social capital is crucial for the success of a wide range of public policies (Brixi, Lust, and Woolcock, 2015).

A review of the extant literature, however, raises more questions than answers as to whether these three statements hold in practice and the extent to which the potential gains associated with open government reforms are greater than the costs of implementing them. In particular, there exists a large

gap in understanding *the value for money* of specific subtypes of open government reforms. Low- and middle-income governments are now expected to use the "billions" in official development assistance and development resources to attract, leverage, and mobilize "trillions" in investments of all kinds (Badré, 2015). However, analysis on the specific costs needed for implementation of specific government reforms, as well as the return on investment of these reforms, has yet to be conducted.

Given the reality of increasingly limited development resources from external funders, being able to weigh the full costs of open government initiatives is critical to ensuring that governments are allocating and using resources in the most efficient and effective manner possible. A better understanding of which open government reforms can be achieved for what price can be used to tailor and sequence open government components to the specific needs of low- and middle-income countries, particularly within the context of striving towards fulfillment of the Sustainable Development Goals.

Analysis of the total costs of implementing open government reforms also provides a first step towards conducting a cost-benefit analysis of open government reforms. Thus far, the growing global political momentum behind open government reform programs has often relied on rights-based arguments (Heller, 2016). Understanding the costs and potential returns on investment associated with open government reforms is an important next step towards making the case for why opening up government matters for instrumental gains as well.

This report presents one of two open government costing case studies conducted by Results for Development; the purpose of these case studies is to both validate and present concrete examples of how to use the Open Government Costing Framework and Methods.

The Open Government Costing Framework and Methods developed by Results for Development presents a general methodology for costing open

government programs and is summarized in the section below.[1] However, one of the biggest challenges is adapting this framework to account for different contexts and types of reforms across geographies. Given the diverse range of open government initiatives, each type of open government program may have different structures, key components and players, as well as different economic and financial requirements and costs. Furthermore, even within the same type of reform (e.g. two similarly-structured open contracting reform programs in two adjacent countries), the implementation and structure of the reform may vary significantly. This framework is meant to present modifiable, adaptable scaffolding for open government cost analysis, but by no means is it all-inclusive. For certain programs, specific activities or components may take precedent and contribute far more significantly to total costs while others may be less relevant.

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[1] A detailed description of the costing methodology as well as adaptable costing tool are available as part of a consolidated report produced on the costing of open governance programs.

Overview of the Open Government Costing Framework and Methods

The Open Government Costing Framework and Methods outlines the major components needed to conduct a cost analysis of an open government program, with the ultimate objective of putting a price tag or a cost range on key open government reforms in various countries. As the methodology takes a high-level, conceptual approach to costing, we believe it can be adapted to cost open government programs of many types and potentially other governance programs.

The Open Government Costing Process includes six essential steps for conducting a cost study: (1) defining the scope of the program, (2) identifying which costs to assess, (3) developing a framework for costing, (4) identifying cost categories, (5) Conducting data collection, and (6) conducting data analysis (see Figure 1 below).

Using the Open Government Costing Framework, we identify the activities, inputs and costs for three distinct implementation phases: setup, implementation and operation. (Fixsen et al., 2005).

1. **Setup:** includes all exploration and adoption/adaption activities prior to implementation of the program. Key activities in this phase include planning, advocacy and any development of systems (hardware, software) or infrastructure investments needed for program implementation.

2. **Installation and Initial Implementation:** includes all activities involved in putting the program in place. This is typically related to changes needed to support implementation of a new program, including staffing and skill levels and organizational mandate and capacity. Key activities would include any one-off requisite legislation, training, and/or promotion required for success of the program.

3. **Operation:** includes all activities associated with the running of the program once in place. Key activities include program management, maintenance of equipment, monitoring and evaluation, utilization and refresher trainings

Figure 1: Step-wise Breakdown of Costing Process

1. Defining the scope of open government program
2. Identifying types of costs for open government costing
3. Developing a framework for open government costing
4. Indentifying cost categories involved in open government program
5. Conducting data collection of open government program costs
6. Conducting data analysis of open government program costs
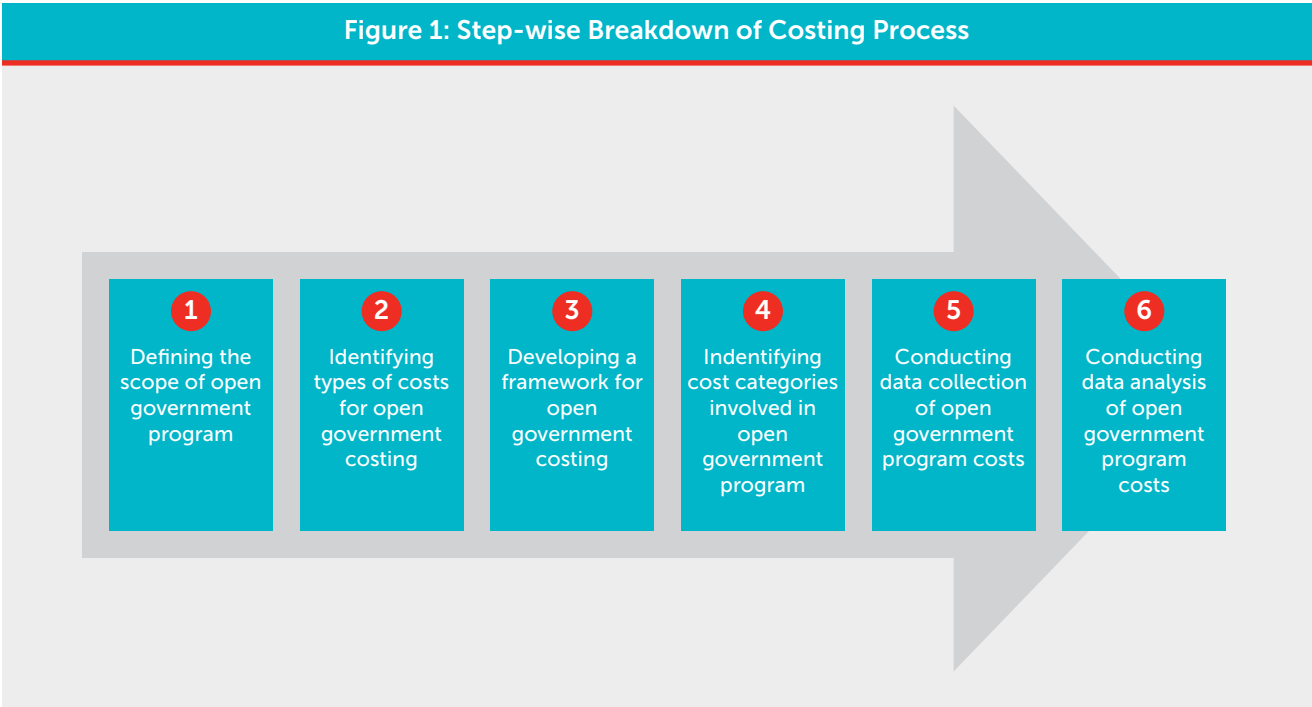
Figure 2: Framework of Open Government Costing

Setup		Installation and Initial Implementation		Operation	
Planning		Legislation		Program Management	
Development of Systems		Promotion		Equipment Depreciation and Maintenance	
Advocacy		Initial Training		Monitoring and Evaluation	
				Utilization	
				Recurrent Training	
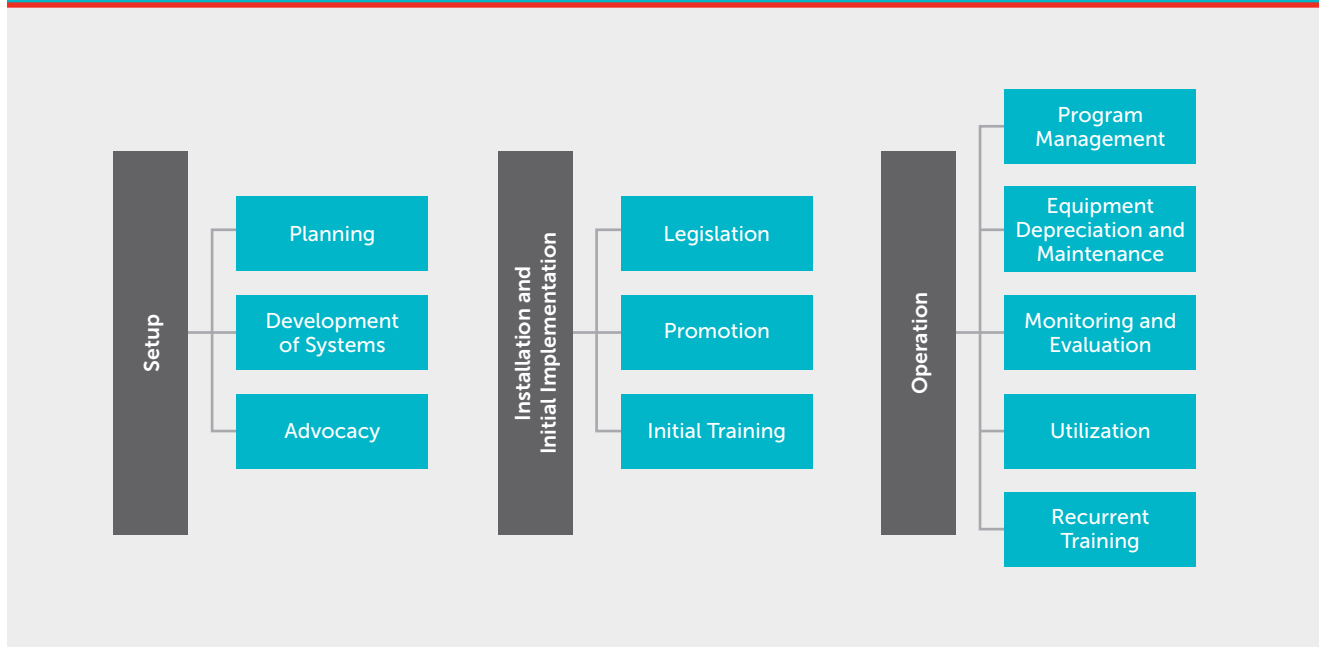
The subsequent sections of this case study provide details of how this methodology and framework was applied to one open government program – the ProZorro e-procurement platform in Ukraine. The case study begins with an introduction to the ProZorro platform to provide context for this initiative, followed by a description of how each step of the costing process was implemented for this open government reform as well as the results of each step. Finally, we provide some conclusions from the case study including lessons for the ProZorro platform itself and lessons for those seeking to implement the costing methodology on different open government reforms.

Costing the ProZorro Platform

Introduction

ProZorro is an e-procurement program that stemmed from renewed nationalism after the revolution in Ukraine. Built on a rights-based approach to governance, this e-procurement platform was developed as a collaborative effort by key actors in the government and in the private sector who donated their time and skills to plan, advocate for, and implement this program in a push for increased government transparency and accountability. In May 2014, the concept was developed by Ukrainian volunteers with assistance from Transparency International, the Open Contracting Partnership (OCP), and government officials who had previous experience with the Georgian e-procurement system.

In January 2015, a team of key volunteers piloted the ProZorro platform. In this stage, Transparency International managed the platform with key support from volunteers from the private sector. Only five volunteer government departments were using the ProZorro system for procurement, which at that stage was comprised of the minimum viable product (MVP), or product with minimal sufficient components to be used by early adopters.

The MVP for the ProZorro platform includes the central database, the application programing interface (API), and seven privately-run marketplaces as depicted in Figure 3. The central database, which hosts key procurement data, is the centerpiece of the platform. The API is the online website and platform through which the users interface with the procurement data. Both the central database and the API are centrally run by the ProZorro governing body. The marketplaces, on the other hand, are privately-run web portals through which users place bids for products. During the development phase of the portal, private companies paid a single payment of $7,000 each to participate in the portal and operate these seven marketplaces. The development of the MVP at the pilot stage was led by volunteers in the IT sector and costs associated with software for platform building were subsidized and donated by key actors in the non-profit sector. It is important to note that these costs, while not incurred by the ProZorro platform, are critical to include in the costing to provide an estimate of the true cost of this type of program.

Concurrent with the development of the e-procurement system, there were parallel changes within the government, made through extensive advocacy efforts, that facilitated ProZorro's

Figure 3: Outline of ProZorro Minimal Viable Product
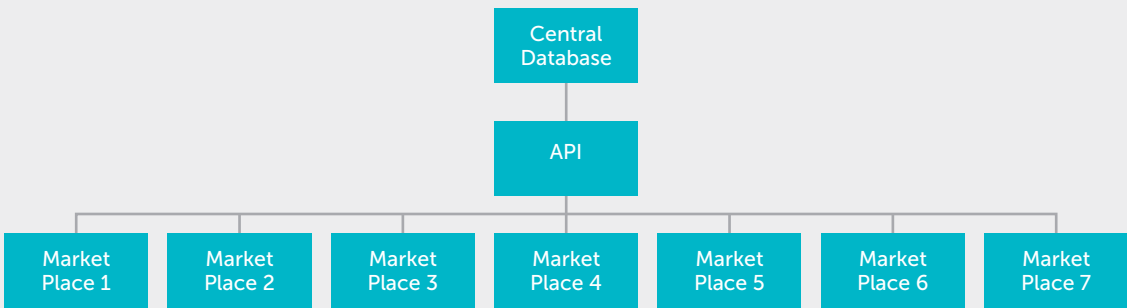
implementation. The department of procurement went through a reformation, and monitoring systems for procurement were updated and put in place. The key policy factor that catalyzed the implementation of ProZorro was legislation passed in December 2015. The legislation stated that, beginning on April 1, 2016, all central executive bodies and state-owned natural monopolies must conduct procurements exclusively through ProZorro. In August 2016, this requirement was expanded to include all public procurement. It was at this time that the government took full ownership of the ProZorro system, and those ProZorro staff who were previously volunteers were recruited as government staff to work in the newly created state enterprise. The platform was also further developed in this phase to include the business intelligence (BI) tool to be used for monitoring and evaluation.

In its current stage, users of the platform pay to use ProZorro for procurement. The amount of payment for the service is based on value of products procured. This revenue from users fees is shared between the government department of ProZorro and the private companies running the ProZorro market places.

In the following sections, we describe the six-step process undertaken to estimate the total economic cost of the Prozorro system, including both direct and indirect costs incurred by all stakeholders. The methodology is outlined more specifically within each of these steps, but in general, data were gathered through interviews with key players, budget documents and information on the structure of ProZorro from reports and data found on the ProZorro platform itself.

1. Defining the Scope of the Program

Defining the components and boundaries of the open government program is a critical first step in conducting a costing analysis. This is key to identifying which components of the program should be included in the costs.

The first step is to identify the **purpose** and the **perspective** in costing the program. In this case, costing the ProZorro system was done with a dual purpose: (1) to validate the open government costing framework and, (2) to develop estimates for advocacy purposes when pushing for the adoption of an open e-procurement platform in a country where it has previously not existed. For this reason, the total economic cost of ProZorro was calculated with an additional goal of pairing this total cost with further data on return on investment stemming from the elimination of corruption in procurement and additional economic efficiency.

As a second step, we sought to understand why the program was developed and what it needed to accomplish to be successful. This step is key in understanding the core elements that must be in place for a successful e-procurement program and thus to inform the program elements to include when costing the system. To answer these questions, we used the definitions of e-procurement developed by the Organization for Economic Cooperation and Development (OECD) (2006) and the Sunlight Foundation (2017) which describe e-procurement as:

- The use of electronic methods, typically over the Internet to conduct **transactions between the public sector and private suppliers;**

- **covering every stage of purchasing,** from the initial identification of a requirement, through the tendering process, payment and potentially contract management;

- ultimately making elements of the procurement process **open to the public**.

Using these definitions as guidance in the costing of an e-procurement program, all elements of the ProZorro system involved in transaction between the public and private sectors were included in the costing analysis. This included all stages of this process, from announcement of procurement to monitoring of bids occurring on the platform.

Key Implementing Agents and Stakeholders

The first stage of scoping also required the identification of key players and program components, the results of which are described below and highlighted in Figure 4.

Public Sector

The main implementing agent for ProZorro is the Department of Public Procurement Regulation within the Ministry of Economic Development and Trade, which was responsible for changes to the Public Procurement Law and the development of secondary legislation acts required for implementing changes to the law. In turn, all the changes proposed by the Department need to be adopted by the Parliament.

The second implementing agent in the institutional environment is the state enterprise ProZorro (formerly Zovnishtorgvydav), which is responsible for administrating the ProZorro platform and operating the official website of the procurement system.

A critical stakeholder is the State Anti-Monopoly Committee, a government body that aims to provide state protection to competition in the field of entrepreneurial activity. Bidders can submit complaints to the State Anti-Monopoly Committee and receive a verdict within 15 days[2].

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[2] Bidders are businesses that participate in tenders and eventually may supply goods to state procuring entities.

Figure 4: Key Implementing Agents and Players

Public Sector		Private Sector	Civil Society
Dept of Public Procurement Regulation — Legislation and implementation	**State Enterprise ProZorro** — ProZorro Administration	**Marketplaces** — Platforms for procurement	**Donors** — Donors for funds in setup and implementation phases as well as monitoring
Anti-Monopoly Committee — Complaints	**Procuring Entities** — Users of ProZorro System	**Bidders** — Users of ProZorro System	**Advisors** — Legislation and implementation

Lastly, state institutions and enterprises participate in the system as buyers (procuring entities). According to the law, from August 1, 2016 on, all public procurements must be conducted through ProZorro platform.

Private Sector

The private sector participates in the ProZorro platform in two important ways. First, each of the seven commercial marketplaces is run by actors in the private sector. Second, private sector actors also operate as bidders in the e-procurement platform for the procurement opportunities announced and released by the public sector.

Civil Society

Civil society organizations were key in the setup and implementation phases of ProZorro. In its early stages, most funding for ProZorro came from civil society donors, such as EBRD and GIZ (see Annex).

This funding helped pay for activities including the setup of the platform and trainings. These funds were organized and managed by a steering committee headed by Transparency International (TI) Ukraine. TI Ukraine was also the initial host and manager of the ProZorro system before the system was integrated into the state enterprise. In addition to providing direct funds for ProZorro development, civil society organizations helped advise and support the creation of the platform. For example, the Open Contracting Partnership (OCP) provided free support and advice to the ProZorro team on compliance with the Open Contracting Data Standard and provided access to free tools and help desk support.
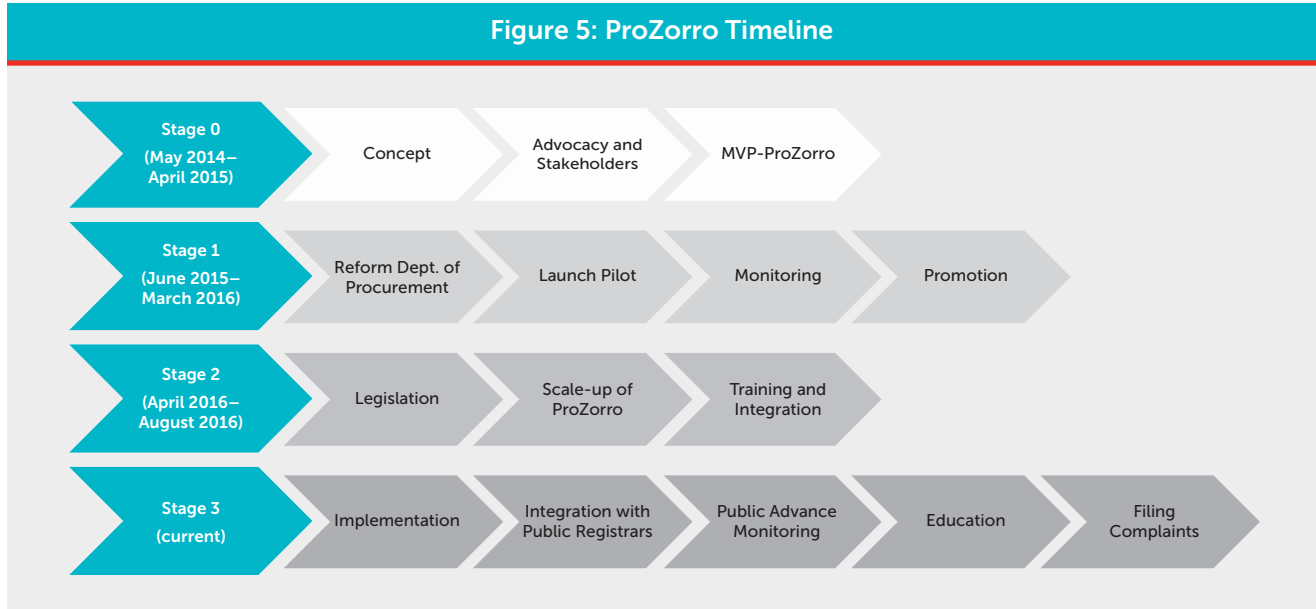
Timeline

Figure 5 briefly outlines the timeline and key steps that led to the development and institutionalization of the ProZorro system. Briefly, Stage 0 included the conception phase of ProZorro, followed by advocacy efforts by key stakeholders and the development

of the MVP. Stage 1 included the reform of the Department of Procurement, development of monitoring system and ProZorro promotion. Stage 2 was the scale up phase for ProZorro and included legislation efforts and training. Stage 3 (the current

stage of the platform) includes the operation and maintenance of the ProZorro system.

For each stage, key activities, players and costs were identified through interviews and budget documents.

Figure 5: ProZorro Timeline

Stage	Activities				
Stage 0 (May 2014– April 2015)	Concept	Advocacy and Stakeholders	MVP-ProZorro		
Stage 1 (June 2015– March 2016)	Reform Dept. of Procurement	Launch Pilot	Monitoring	Promotion	
Stage 2 (April 2016– August 2016)	Legislation	Scale-up of ProZorro	Training and Integration		
Stage 3 (current)	Implementation	Integration with Public Registrars	Public Advance Monitoring	Education	Filing Complaints

2. Identifying Types of Costs for ProZorro

As part of the costing process, researchers have to identify whether to use economic, financial, or fiscal costing for the analysis. The advantages and disadvantages, as well as cost category definitions, of each costing type is described in more detail in the Open Government Costing Framework and Methods report.

For this case study, an economic costing of the ProZorro program was conducted. Economic costs are a combination of financial costs and opportunity costs that reflect the full value of all resources utilized to produce a good or service. Opportunity costs represent full cost of resources actually consumed, thus preventing the opportunity

to devote those resources to another purpose. In terms of personnel time, economic costs include the total value of all staff time spent on the program, as well as the opportunity cost of any volunteers and unpaid staff members involved in the program. Economic costs are generally the most useful for economic evaluations, such as cost-benefit analysis or cost effectiveness analysis. As the purpose of this costing study is to provide data to feed into a larger body of work on investment and efficiency gains through the advocacy for a public e-procurement platform, conducting an economic costing was most applicable. Therefore, each of the line items included in the costing of ProZorro were defined in the broadest terms to capture total economic costs as summarized in Figure 6 below.

Figure 6: Definition by Cost Category	
Cost Category	**Economic Costs**
Salaried Labor	Included to represent opportunity cost of time of government staff involved in program (full time and percentage of time)
Volunteer Labor	Opportunity cost of volunteers
Consultants	Labor costs of consultants hired for program
Contracts	Cost of contracted services for program
Rent	Included additional cost of venue rental needed for program
Transport	Cost related to travel for meetings, to promote program or to conduct trainings
Per Diem	Cost related to extra compensation for staff for program related travel
Materials	Cost of all materials needed for program implementation and advocacy
Overhead	Cost of additional overhead for program
Equipment	Economic cost of technology including depreciation

3. Adapting the Open Government Costing Framework for ProZorro

According to the Open Government Costing Framework, the activities, inputs and costs should be identified and segregated into discrete pieces when conducting a cost analysis of a program. This framework divides key activities of the program into three discrete phases: setup, implementation and operation as shown in Figure 7 below.
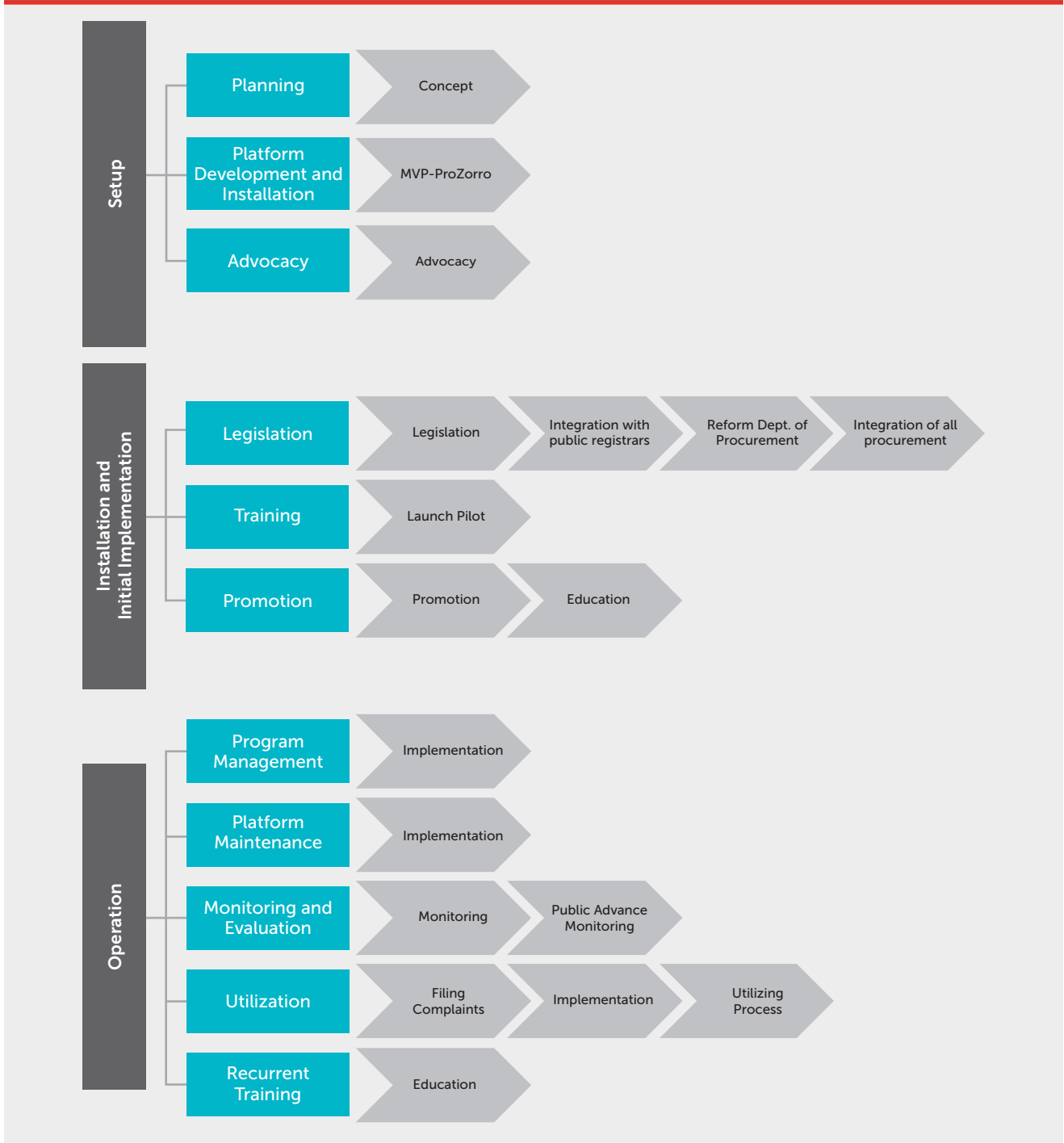
- **Setup** includes all exploration and adoption/adaption activities prior to implementation of the program. Key activities in this phase include planning, advocacy and any development of systems (hardware, software) or infrastructure investments needed for program implementation.

- **Installation and Initial Implementation** includes all activities involved in putting the program in place. This is typically related to changes needed to support implementation of a new program with respect to skill levels, organizational mandate and capacity, etc. Key activities would include any one-off requisite legislation, training and/or promotion required for success of the program.

- **Operation** includes all activities associated with the running of the program once it is in place. Key activities include program management, maintenance of equipment, monitoring and evaluation, utilization and refresher trainings.

For this study, each of the key steps in the ProZorro timeline identified in Figure 5 was mapped to this open government costing framework. The purpose of this exercise was to identify where costs for each program activity would be placed within the costing framework

Figure 7: ProZorro Timeline Integrated into Open Government Costing Framework

Setup

Planning	Concept
Platform Development and Installation	MVP-ProZorro
Advocacy	Advocacy

Installation and Initial Implementation

Legislation	Legislation	Integration with public registrars	Reform Dept. of Procurement	Integration of all procurement
Training	Launch Pilot
Promotion	Promotion	Education

Operation

Program Management	Implementation
Platform Maintenance	Implementation
Monitoring and Evaluation	Monitoring	Public Advance Monitoring
Utilization	Filing Complaints	Implementation	Utilizing Process
Recurrent Training	Education

4. Identifying Cost Categories of ProZorro

Once key activities and resources are identified, costs can be categorized by activities and inputs such as salaried labor, transport and rent. Using interviews with key players and review of ProZorro budgets as a guide, relevant line items for activities across the ProZorro timeline were identified. In Figure 8, a green box indicates that a line item was relevant for a given activity. As this is an economic costing, each of the line items included in this costing are defined in Figure 6.

Figure 8: Relevant Cost Category by ProZorro Program Component											
	Setup			Installation and Inital Implementation			Operation				
	Planning	Advocacy	Platform Development	Training	Legislation	Promotion	Program Management	Platform Maintenance	Monitoring and Evaluation	Utilization	Recurrent Training
Salaried Labor		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Volunteer Labor	✓	✓	✓		✓	✓			✓		
Consultants			✓		✓				✓		
Rent				✓							
Transport		✓				✓					
Per Diem	✓	✓		✓					✓		
Materials				✓	✓	✓		✓	✓	✓	✓
Overhead						✓	✓	✓	✓	✓	✓
Equipment								✓	✓		

5. Conducting Data Collection of ProZorro Program Costs

Data for this case was gathered using a variety of top-down data collection methods, which capture program expenditures through reviewing expense reports and interviews with program managers (rather than direct observation of program activities). Data sources for ProZorro costs included budget documents from both donors and government as well as an extensive set of interviews used to capture labor and historic costs. This combined approach helps to identify costs that cannot be directly obtained through review of documents alone, such as the allocation of indirect costs or opportunity costs associated with already-completed program phases.

As this was a mixed methods approach to data collection, we used different approaches to estimate total and unit costs and to ultimately arrive at our final metric the total cost per activity. For several activities, unit costs were derived by collecting total expenditure and dividing by the number of project outputs or outcomes. For other costs, total costs per activity were estimated using an ingredients-based approach, where the number of units was multiplied by cost per unit. This combination of methods allowed for the estimation of all identified costs associated with the ProZorro platform.

In Figure 9 below, briefly outlines the line items included in each cost bucket as well as the methodology followed to collect data for these line items.

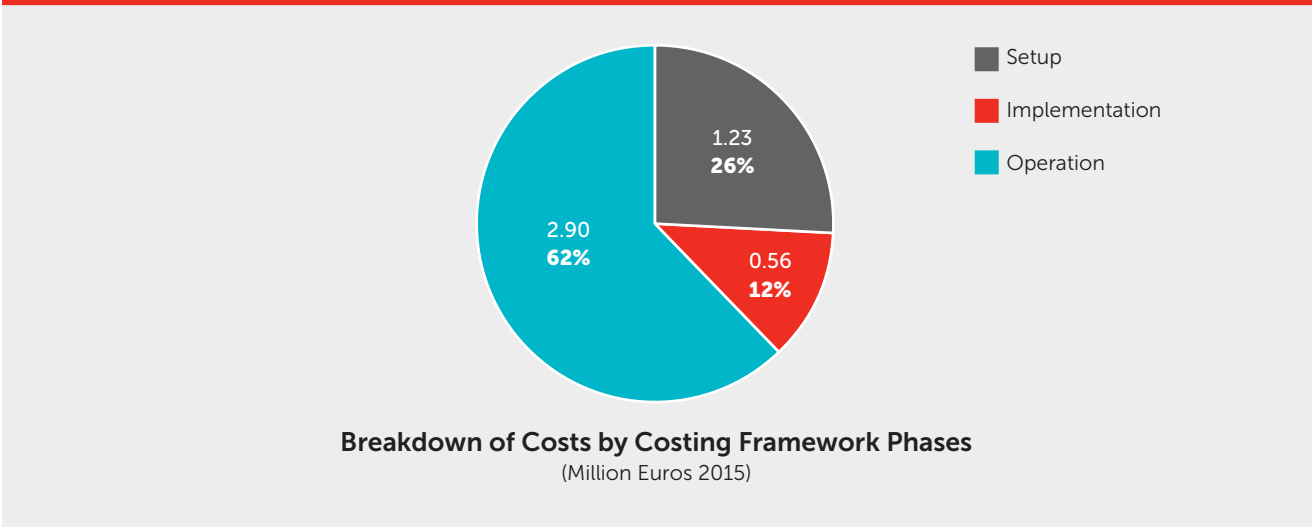| Figure 9: ProZorro Costs and Calculation Methodology by Cost Category		
Cost Category	**Costs Included**	**Calculation Methodology**
Salaried Labor	Salaries of manager and platform designers paid for by GIZ in setup phase, Marketing director costs for promotion, Training labor costs, ProZorro platform manager, ProZorro platform maintenance labor cost, Monitoring specialists, BI tool developers	Data collected through donor budgets and interviews with donors and program staff
Volunteer Labor	Volunteers in setup phase	We estimated the cost of this labor by estimating time spent free of change on this program by number volunteers by wages the volunteers would have made had they been working in another sector or minimum wage when that could not be established; data was collected through interviews with volunteers
Consultants	Consultants hired for development of ProZorro platform in setup phase	Data collected through donor budgets
Contract	Contracted services for ProZorro	Data collected through donor budgets
Rent	Rent during development of systems	Data collected through donor budgets
Transport	Training transport costs	Data collected through donor budgets
Per Diem	No costs included	Unable to disaggregate data for this line item
Materials	Materials needed for setup for platform (i.e. software, iCloud storage, supporting webpages etc.)	Data collected through donor budgets
Overhead	No costs included	Unable to disaggregate data for this line item
Equipment	Supporting external platforms	Data collected through donor budgets

6. Conducting Data Analysis of ProZorro

This analysis examines the total economic cost per activity for the ProZorro program. The cost measure incorporates all costs collected from key implementing agents and funders from the public, private and NGO sectors, described in further detail in the previous sections of the case study. We find that the total cost of the ProZorro program is €4.69 million Euros or between $4.98 - $5.98 million USD[3], of which approximately 1.23 (26%) million Euros was spent in set up phase, 0.56 million Euros (12%) in implementation phase, and 2.90 million Euros (62%) in the operation phase. We provide the completed tables for our calculations in the Annex of this report. Below, we highlight some of the key results in Figures 10, 11, 12, and 13.

Discussion

The biggest cost driver for ProZorro is labor costs. In every stage of the program, paid staff time was a necessary component in program operation. In installation of similar interventions in other places, this will likely be the key cost driver as well. Interestingly in the ProZorro case, roughly 35% of the total labor costs were incurred by volunteers. This brings down significantly the paid labor costs in the ProZorro life cycle; however, it is critical to consider the opportunity cost of volunteer time in the costing because this is skilled time that would likely need to be included as a salaried labor cost if setting up a similar e-procurement program elsewhere. Figure 13 highlights the importance of volunteer time in the costing of the ProZorro intervention. When split into phases, the critical role of volunteers is even more clear – in the setup phase, volunteers made up 29% of total labor costs (not including the cost of consultants) while in the implementation

Figure 10: Breakdown of ProZorro Program Costs by Phase

- Setup
- Implementation
- Operation

1.23
26%

0.56
12%

2.90
62%

Breakdown of Costs by Costing Framework Phases
(Million Euros 2015)

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[3] Estimated using average yearly exchange rates based on data from the United Stated Department of Internal Revenue Services. Result for Development presents a range of cost for is USD as the analysis was conducted in 2015 euros and time restrictions prevent the analysis to translate cost of each line item to USD at the time of procurement.

Figure 11: Breakdown of ProZorro Program Costs by Activity
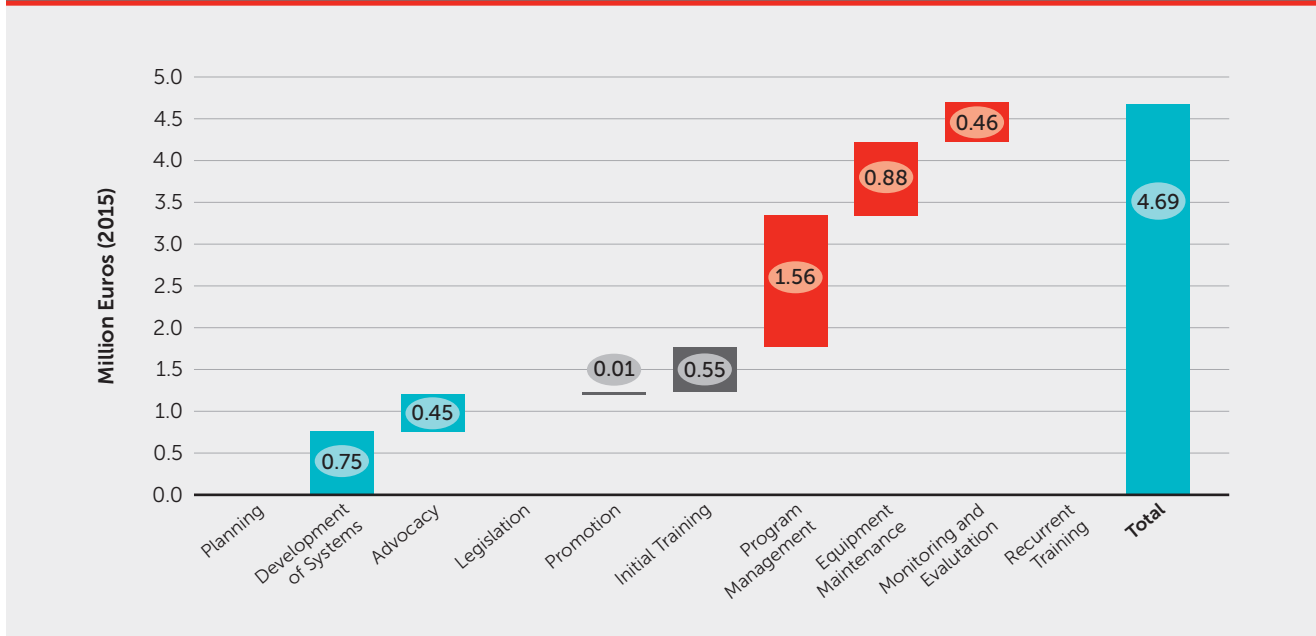
and installation phase, volunteer labor was 91% of labor costs. As mentioned earlier, we observe high volunteer costs in the ProZorro program as many ProZorro volunteers were highly skilled and therefore had high opportunity costs.
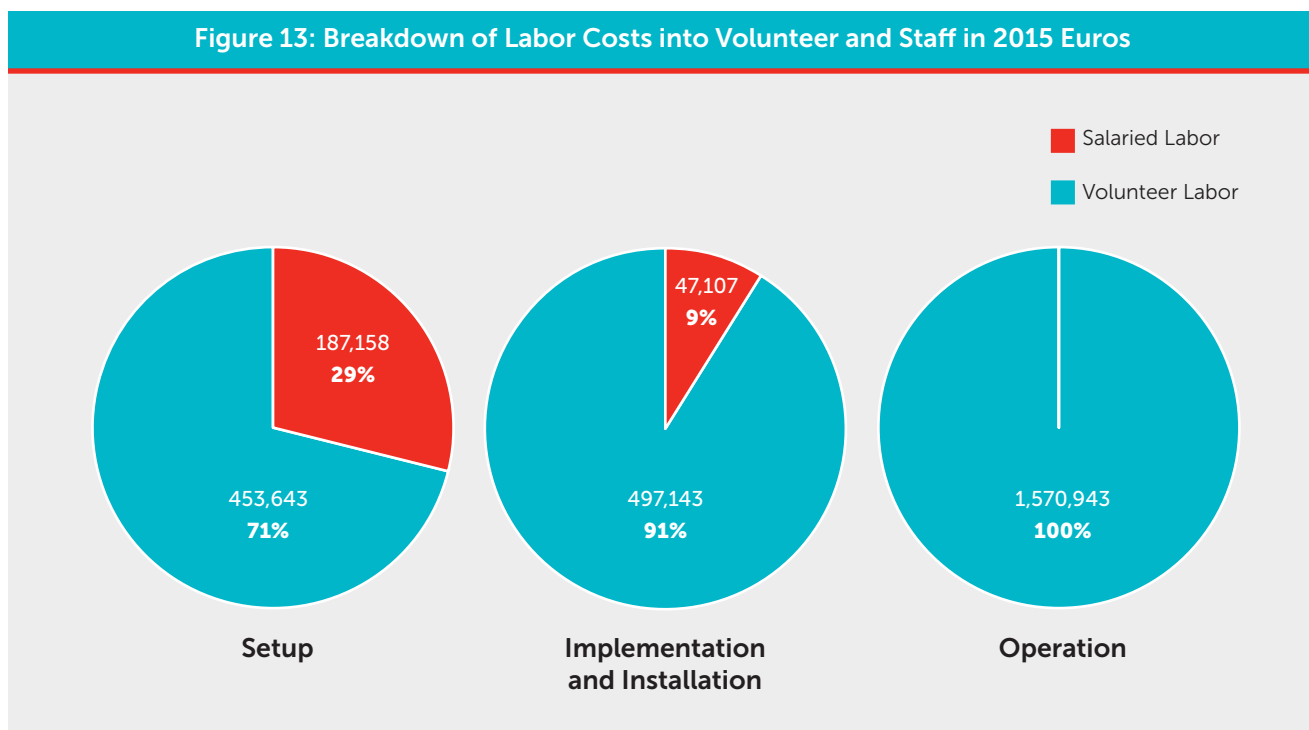
The second biggest cost driver for ProZorro is materials. This primarily includes the cost of setting

up and maintaining the ProZorro platform. It is important to note here that the cost of setting up this platform is lower than expected as many of the services and materials to set up the platform were offered at a lower cost than in the private market by organizations in conjunction by civil society donors. Although this is an economic costing of ProZorro, for the purpose of this cost study costs incurred directly

Figure 12: Breakdown of ProZorro Program Costs by Cost Input Category

Figure 13: Breakdown of Labor Costs into Volunteer and Staff in 2015 Euros

Setup

Implementation and Installation

Operation

Salaried Labor
Volunteer Labor

187,158 29%
453,643 71%

47,107 9%
497,143 91%

1,570,943 100%

by ProZorro were included, not costs of the materials in the private sector. This decision was made primarily because the cost of these materials privately was hard to collect as we were unable to conduct interviews with the platform development company. When recreating this reform in other countries, the cost of materials will likely be a key cost driver of the program.

Cost offsets

Utilization, or access fees to organizations and individuals submitting their bids to the government using the ProZorro platform, are an important cost recovery component of the ProZorro system. The costs to users are not included as these were seen as out of scope. Utilization fees are an important source of revenue both to the government and to the private sector actors managing the platform. The utilization fees serve to offset some of the operational costs of ProZorro. These costs provide some revenue per transaction on the platform, but they are not enough to negate all costs associated with program operations. Expenditures or budget projections from the government state enterprise ProZorro would be helpful in quantifying the actual revenue gain from users; however, these data were unavailable for this case study.

As discussed previously in the scoping section of this report, the role of civil society actors was a key contributor to cost offsets. Non-profit organizations within the governance community donated standards, tools, and technical expertise in procurement. While volunteer time donated specifically and only to ProZorro was included in the economic costing of this program, the cost of free resources, tools and standards in procurement that helped guide this program were not included. The existence of these resources within this sector led to many cost savings in the planning and setup phases of ProZorro. Due to these subsidized and donated resources, it is important to note that the overall cost estimate for the program presented in this report is likely to be an underestimate of the true cost of ProZorro.

Limitations

While we were provided with expansive access to people and reports that could provide information on costs, there remain some limitations to this costing exercise. First, we were unable to estimate costs by each line item because there was a lack of disaggregated data in project expense reports. For example, overhead costs were tied into total costs included for operation of the ProZorro system.

Therefore, the overhead cost was not available as a separate line item, and thus the full cost of program management was only disaggregated into the highest proportion categories based on interview data.

Second, we were unable to collect information on costs for legislation, utilization and recurrent training activities. For legislation, there were labor costs associated with efforts by volunteers in the government and legislators spending time to pass bills on ProZorro and the e-procurement system. These costs have not been included as data on the legislation process was unavailable and interviews of legislators involved in this process could not be conducted. In future studies, we will recommend following the methodology described by Wilson et al. (2012) to better understand the legislation costs associated with implementing governance programs like ProZorro. Such a cost estimation would be conducted using a bottom-up approach that utilizes direct observation of various cost inputs, such as the cost of the staff and resources required to implement a new program at a national or local level.

Finally, a key gap in the costing is that we were unable to estimate costs borne by the private sector. These costs include recurrent training costs, development of system costs by the private sector, and program management and maintenance of the ProZorro marketplaces. We were unable to collect this data as we did not have access to private sector representatives for interviews. It is important to note that the contribution of the private sector in terms of cost is only included in the development of systems activity. Private sector costs are also involved but not included in the costs for operation in activities such as program management and maintenance.

Due to the combination of these data gaps, the costs for ProZorro presented in this study is an underestimate of program costs.

Conclusion

The main objectives of this analysis were to (1) justify and build evidence for the costing framework and (2) estimate the economic cost of the ProZorro platform.

We approximated the economic cost of ProZorro at €4.69 million Euros from inception of the program in 2014 through June 2017. This is an underestimate of the total costs of ProZorro program, but sets a rough context for similar e-procurement program, though this cost should not be attributed to other cases without first undergoing a similar costing analysis.

One of the key takeaways of this case study for future programs is the critical role of skilled volunteer labor from civil society and other organizations. While the economic costing of this program captured the rough costs of this labor, it is likely that this cost is higher than presented due to the data gaps presented in the limitations section. There were also quite a few cost savings due to pre-existing literature and materials shared with the ProZorro program from civil society organizations and materials donated at lower costs from the private sector. When designing similar platforms in other contexts, it is useful to keep in mind the availability of resources from civil society.

When paired with data on cost savings of the program, this economic costing study provides a first step towards conducting a cost-benefit analysis of ProZorro. At this stage, there have been some preliminary studies by OCP and KMBS that have suggested a cost savings of 14.1% in mid-2016 and 9.6% in March 2017 (Frauscher, Granickas, and Manasco, 2017). As data on the cost savings of ProZorro increases, there is a significant opportunity to create a return on investment case for ProZorro. This would be the first such case for e-procurement programs and open government programs in general. Therefore, continued study of ProZorro can provide the first step in building evidence for a cost-benefit based argument for creating open government programs.
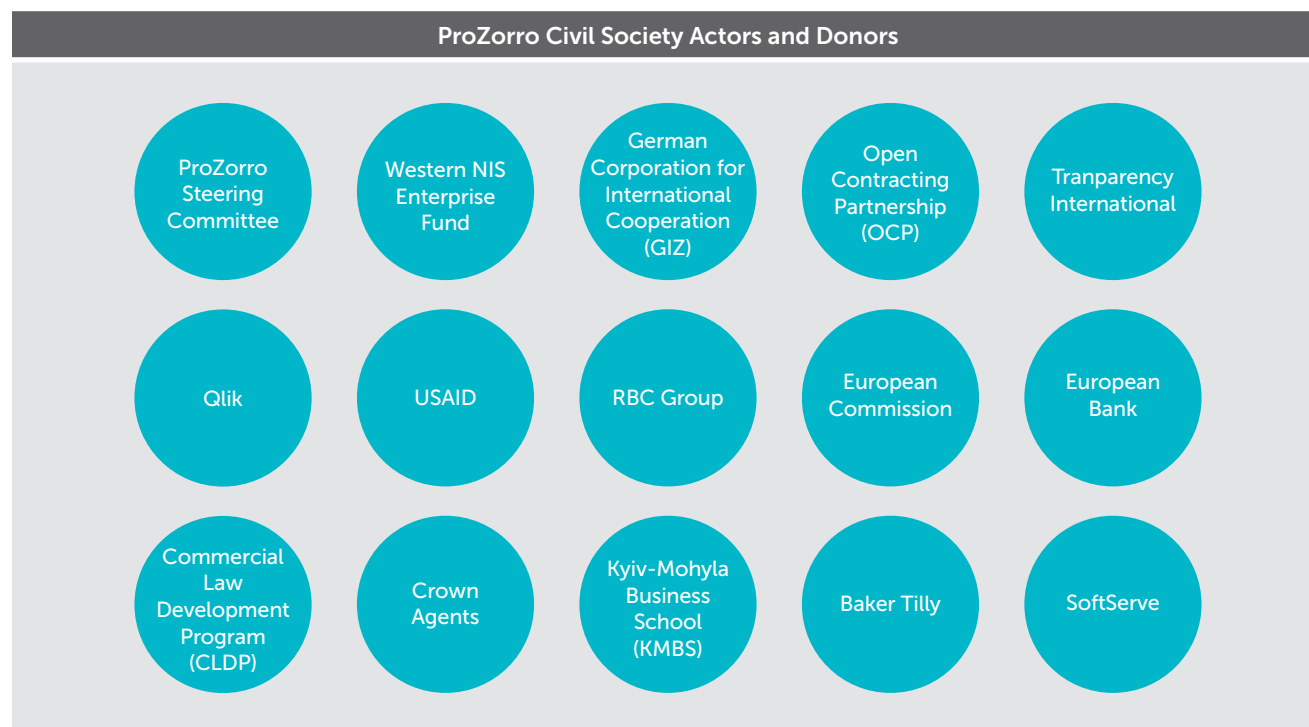
References

Badré, Bertrand. "Achieving Trillions out of Billions." Public-Private Partnerships Blog. World Bank Group, 17 July 2015. Web. 23 Dec. 2016.

Brenzel, Logan. Common approach for costing and financing of routine immunization and new vaccines (EPIC) Working Paper. Bill and Melinda Gates Foundation. 2016.

Brixi, Hana; Lust, Ellen; Woolcock, Michael." Trust, Voice, and Incentives: Learning from Local Success Stories in Service Delivery in the Middle East and North Africa". Washington, DC: World Bank. © World Bank. 2015. https://openknowledge.worldbank.org/handle/10986/21607 License: CC BY 3.0 IGO

Fixsen, D. L.; Naoom, S. F.; Blase, K. A.; Friedman, R. M.; Wallace, F. (2005). Implementation Research: A Synthesis of the Literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Frauscher, Kathrin; Granickas, Karolis; Manasco, Leigh. "Learning Insights: Measuring Results from Open Contracting in Ukraine." Open Contracting Partnership. N.p., 19 Apr. 2017. Web. 29 June 2017.

"Governance Overview." Global Governance Practice. World Bank Group, 30 Sept. 2016. Web. 23 Dec. 2016

Grandvoinnet, Helene; Aslam, Ghazia; Raha, Shomikho. "Opening the Black Box : The Contextual Drivers of Social Accountability". New Frontiers of Social Policy;. Washington, DC: World Bank. World Bank. 2015. https://openknowledge.worldbank.org/handle/10986/21686 License: CC BY 3.0 IGO."

Guinnuess, Lorna and Wiseman, Virgina (eds). Introduction to health economics, second edition. Open University Press. 2011.

Heller, Nathaniel. "A Working Definition of Open Government." www.globalintegrity.org. N.p., 23 May 2012. Web. 23 Dec. 2016.

Heller, Nathaniel. "Open Government: Moving beyond Arguments on the 'Right Thing to Do.'" Results for Development, 7 Nov. 2016. Web. 23 Dec. 2016.

McGee, Rosie, and Edwards, Duncan. "Introduction: Opening Governance – Change, Continuity and Conceptual Ambiguity." IDS Bulletin. Institute of Development Studies, 24 Jan. 2016. Web. 23 Dec. 2016.

Marcella, Corsi. "E-Procuremenr Overview." (n.d.): 76-79. OECD. Jan. 2006. Web.

"Learning Insights: Measuring Results from Open Contracting in Ukraine." Open Contracting Partnership. N.p., 19 Apr. 2017. Web. 26 June 2017.

"Open Government Partnership." Open Government Partnership. N.p., n.d. Web. 23 Dec. 2016.

Reference Case for Global Health Costing Draft. Global Health Costing Consortium Costing Team. GHCC. 2016.

Rocha Menocal, A. and Sharma, B. "Joint Evaluation of Citizens' Voice and Accountability: Synthesis Report". London: DFID. 2008.

"Policy Guidelines for Municipal Open Contracting." Sunlight Foundation. N.p., Jan. 2017. Web. 05 May 2017.

"United Nations E-Government Survey 2008 From E-Government to Connected Governance." United Nations (n.d.): n. pag. 2008. Web.

Wilson, Nick; Nghiem, Nhung; Foster, Rachel; Cobiac, Linda; Blakely, Tony. "Estimating the Cost of New Public Health Legislation." WHO. World Health Organization, 8 May 2012. Web. 05 May 2017.

Annex — List of Interviews and Validators in Data Collection on ProZorro

List of Interviews and Validators in Data Collection on ProZorro

Stakeholder	Organization
Viktor Nestulia	Transparency International Ukraine, ProZorro Steering Commitee
Lindsey Marchessault	Open Contracting Partnership
Kathrin Frauscher	Open Contracting Partnership
Karolis Granickas	Open Contracting Partnership
Olexandr Starodubtsev	State-Enterprise ProZorro Lead
Kristina Goutsalova	Council of Reforms Manager, ProZorro Volunteer - Training
Andriy Kucherenko	ProZorro Staff and Volunteer - Platform Development

ProZorro Civil Society Actors and Donors

- ProZorro Steering Committee
- Western NIS Enterprise Fund
- German Corporation for International Cooperation (GIZ)
- Open Contracting Partnership (OCP)
- Tranparency International
- Qlik
- USAID
- RBC Group
- European Commission
- European Bank
- Commercial Law Development Program (CLDP)
- Crown Agents
- Kyiv-Mohyla Business School (KMBS)
- Baker Tilly
- SoftServe

ProZorro Costing Data

Planning			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor			25,204

Development of Systems			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor			161,954
Consultants			61,041
Contract		13,871	13,872
Rent		3,635	3,635
Materials		314,008	507,195

Initial Training			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor		36,607	36,607
Volunteer Labor			497,143
Equipment			11,307

Promotion			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor		10,500	10,500
Rent		1,586	1,586
Materials		1,658	1,658

Program Management			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor	2	780,000	1,560,000

Equipment Maintenance			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor	8	311	2,486
Materials			880,000

Monitoring and Evaluation			
	Units	**Unit Cost**	**Total (2015 Euros)**
Salaried Labor		8457	8,457
Equipment		448,000	448,000