Document of

The World Bank FOR OFFICIAL USE ONLY

Report No: ICR00004399

IMPLEMENTATION COMPLETION AND RESULTS REPORT

(IDA-51140)

ON A

CREDIT

IN THE AMOUNT OF SDR 7.8 MILLION

(US\$12.0 MILLION EQUIVALENT)

TO THE

GOVERNMENT OF ARMENIA

FOR A

TAX ADMINISTRATION MODERNIZATION PROJECT (P111942)

July 19, 2019

Governance Global Practice Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2019)

Currency Unit = Armenia Dram (AMD)

US\$ 1 = AMD 487.60

SDR 1 = US\$ 1.40

FISCAL YEAR July 1 - June 30

Regional Vice President: Cyril E. Muller

Country Director: Sebastian-A Molineus

Global Practice Director: Edward Olowo-Okere

Regional Director: Lalita M. Moorty

Practice Manager: Daniel J. Boyce

Task Team Leaders: K. Migara O. De Silva, Davit Melikyan

ICR Main Contributors: Pierre Messali, Alma Nurshaikhova, Gokuldas Pai, Sidet

ABBREVIATIONS AND ACRONYMS

AMD Armenia Dram

CIT Corporate Income Tax

CPF Country Partnership Framework
CPS Country Partnership Strategy
DCG Donor Consultative Group
DPO Development Policy Operation

FA Financing Agreement

FFPMC Foreign Financing Project Management Center

FY Fiscal Year

GDP Gross Domestic Product
GoA Government of Armenia

HRMIS Human Resources Management Information System
ICR Implementation Completion and Results Report
ICT Information and Communication Technology
IDA International Development Association
IFC International Financial Corporation
IMF International Monetary Fund

IT Information Technology
MoF Ministry of Finance

MOU Memorandum of Understanding

NPV Net Present Value

PAD Project Appraisal Document
PDO Project Development Objective

PIT Personal Income Tax

PIU Project Implementation Unit PMB Project Management Board

SC Steering Committee

SDR Special Drawing Rights

SRC State Revenue Committee

TA Technical Assistance

TACMS Tax Audit Case Management System

TADAT Tax Administration Diagnostics Assessment Tool **TAMP** Tax Administration Modernization Project

TTL Task Team Leader

USAID United States Agency for International Development

VAT Value Added Tax
WB World Bank

TABLE OF CONTENTS

DA	TA SHEET	1
I.	PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES	5
	A. CONTEXT AT APPRAISAL	5
	B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)	9
II.	OUTCOME	. 11
	A. RELEVANCE OF PDOs	11
	B. ACHIEVEMENT OF PDOs (EFFICACY)	11
	C. EFFICIENCY	17
	D. JUSTIFICATION OF OVERALL OUTCOME RATING	_
	E. OTHER OUTCOMES AND IMPACTS (IF ANY)	19
III.	KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME	. 20
	A. KEY FACTORS DURING PREPARATION	20
	B. KEY FACTORS DURING IMPLEMENTATION	
IV.	BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME	
	A. QUALITY OF MONITORING AND EVALUATION (M&E)	
	B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE	23
	C. BANK PERFORMANCE	
	D. RISK TO DEVELOPMENT OUTCOME	25
V.	LESSONS AND RECOMMENDATIONS	. 25
ANI	NEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS	. 28
ANI	NEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION	. 40
ANI	NEX 3. PROJECT COST BY COMPONENT	. 42
ANI	NEX 4. EFFICIENCY ANALYSIS	. 43
ANI	NEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS	. 46
ANI	NEX 6. TAXPAYERS SURVEY RESULTS	. 47

DATA SHEET

BASIC INFORMATION	
Product Information	
Project ID	Project Name
P111942	Armenia Tax Administration Modernization Project
Country	Financing Instrument
Armenia	Investment Project Financing
Original EA Category	Revised EA Category
Not Required (C)	Not Required (C)
Organizations	
Borrower	Implementing Agency
Government of Armenia	State Revenue Commitee

Project Development Objective (PDO)

Original PDO

The Project development objective (PDO) is to modernize Armenia's tax administration to (i) increase voluntary tax compliance, (ii) reduce tax evasion, (iii) reduce compliance costs; and (iv) increase administrative efficiency. This objective will be achieved by:

- introducing modern, integrated information technology to support SRC operations;
- improving data exchange between the SRC and other agencies to enhance better risk management and targeting of compliance activities ("third party information");
- reengineeringand automation of business processes to improve efficiency and effectiveness; and
- expanding eGovernment, including e-filing and e-payments to lower the compliance burden for the private sector.

_				
ы	IN	ΑN	LI	NG

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
World Bank Financing			
IDA-51140	12,000,000	12,000,000	10,966,928
Total	12,000,000	12,000,000	10,966,928
Non-World Bank Financing			
Borrower/Recipient	3,100,000	3,100,000	2,300,000
Total	3,100,000	3,100,000	2,300,000
Total Project Cost	15,100,000	15,100,000	13,266,928

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
03-Jul-2012	28-Dec-2012	18-Feb-2015	30-Apr-2016	31-Jan-2019

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US\$M)	Key Revisions
10-Mar-2014	.50	Change in Legal Covenants
		Change in Institutional Arrangements
04-Nov-2015	5.72	Change in Loan Closing Date(s)
23-Mar-2018	9.02	Change in Loan Closing Date(s)
17-Sep-2018	10.47	Change in Loan Closing Date(s)

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Satisfactory	Satisfactory	Substantial

RATINGS OF PROJECT PERFORMANCE IN ISRS Actual No. **Date ISR Archived DO Rating IP Rating** Disbursements (US\$M) 01 31-Mar-2013 0 Satisfactory Satisfactory 02 .20 15-Dec-2013 Satisfactory Satisfactory 03 09-Jul-2014 Satisfactory **Moderately Satisfactory** .50 03-Dec-2014 1.15 04 Satisfactory **Moderately Satisfactory** 05 24-Jun-2015 Satisfactory **Moderately Satisfactory** 4.86 16-Nov-2015 06 Satisfactory **Moderately Satisfactory** 5.72 07 23-May-2016 Satisfactory **Moderately Satisfactory** 6.43 08 22-Dec-2016 Satisfactory **Moderately Satisfactory** 6.67 09 **Moderately Satisfactory** 6.74 04-May-2017 Satisfactory 8.39 10 15-Dec-2017 Satisfactory Satisfactory 11 20-Apr-2018 Satisfactory **Moderately Satisfactory** 9.02 12 17-Oct-2018 Satisfactory Satisfactory 10.47 **SECTORS AND THEMES Sectors** Major Sector/Sector (%) **Public Administration** 100 Central Government (Central Agencies) 100 **Themes** Major Theme/ Theme (Level 2)/ Theme (Level 3) (%) **Economic Policy** 35 **Fiscal Policy** 35 35 Tax policy

Private Sector Development		100
Jobs		100
Public Sector Management		66
Public Finance Manageme	nt	35
Domestic Reven	ue Administration	35
Public Administration		31
E-Government, i	ncl. e-services	31
ADM STAFF		
Role	At Approval	At ICR
Regional Vice President:	Philippe H. Le Houerou	Cyril E Muller
Country Director:	Asad Alam	Sebastian-A Molineus
Director:		Lalita M. Moorty
Practice Manager:	William Leslie Dorotinsky	Daniel J. Boyce
Task Team Leader(s):	Sebastian Eckardt	K. Migara O. De Silva, Davit Melikyan
ICR Contributing Author:		Pierre Prosper Messali

I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Context

- 1. The Tax Administration Modernization Project (TAMP, the Project) was initiated at a time when Armenia was recovering from the global financial crisis which began in 2008. Armenia's strong growth record in the 2000s was followed by a severe downturn during the crisis and a slow recovery in 2010-11. After pursuing a significant fiscal expansion during the crisis, the Government focused on consolidating its fiscal accounts. The government's crisis response policies led to a substantial expansion of the fiscal deficit from 0.4 percent of GDP in 2008 to 7.6 percent of GDP in 2009. As a result, the public debt to GDP ratio more than tripled in just two years and peaked at about 42 percent in 2011. To restore a sustainable fiscal path, the Government embarked on a significant consolidation effort which helped reduce the overall fiscal deficit to 2.9 percent of GDP in 2011. The authorities planned to further reduce this ratio below two percent in subsequent years.
- 2. Increases in revenue collection were an important component of a sustainable deficit reduction. Although the State Revenue Committee (SRC) successfully maintained the level of revenue collection through the economic downturn, Armenia's tax (excluding social security contributions) to GDP ratio at about 16.3 percent remained low for its level of income. Further gains in revenue collection were required to create fiscal space for investments in key public services and infrastructure needed to deliver on the Government's poverty reduction and economic growth objectives.
- 3. The Government had already taken steps to improve its revenue administration. With the support of development partners, the International Monetary Fund (IMF), International Financial Corporation (IFC), United States Agency for International Development (USAID) and the World Bank, the SRC was reorganized along functional lines with segmented operations focusing on large taxpayers and seven service centers that provided services to taxpayers. The administration of the Value Added Tax (VAT) was strengthened to ease the payment of taxes and eliminate several reporting requirements for taxpayers. The Appeals Committee for reviewing disputes between the taxpayers and the SRC was transferred from the SRC to the Ministry of Finance (MoF) in June 2010, providing for greater independence in the resolution of taxpayer disputes. Electronic filing was introduced in August 2010 and became mandatory for large taxpayers. The SRC with technical assistance (TA) provided by USAID also began to establish risk-based audit selections. With the support provided under the World Bank's Development Policy Operation (P116451), the SRC conducted a comprehensive review of its business processes, which provided detailed blueprints for the simplification and automation of business processes.
- 4. **Despite past efforts, Armenia continued to face significant challenges in terms of raising its revenue performance.** While its tax rates for most major taxes, including the Corporate Income Tax (CIT), the Personal Income Tax (PIT) and the VAT were at similar levels to other countries in the region, tax productivity¹remained persistently below regional averages with CIT productivity standing at 0.12 and VAT productivity at 0.38 in 2009-2010. This was the result of narrow tax bases with numerous tax exemptions and weak capacity to detect and penalize tax fraud, undermining compliance and contributing to widespread tax evasion and informal sector activities. At the same time, high compliance costs for taxpayers undercut the business climate and private sector development in the formal sector. The World Bank's 2011 Doing Business Report ranked Armenia only 159th out of 183 countries regarding the ease of paying taxes. Business

¹ Tax productivity is defined as the ratio of tax collected to GDP divided by the statutory rates.

surveys had regularly identified weaknesses in tax administration, plus arbitrary and corrupt behavior by tax officials, as major impediments to the formation and success of small and medium enterprises.

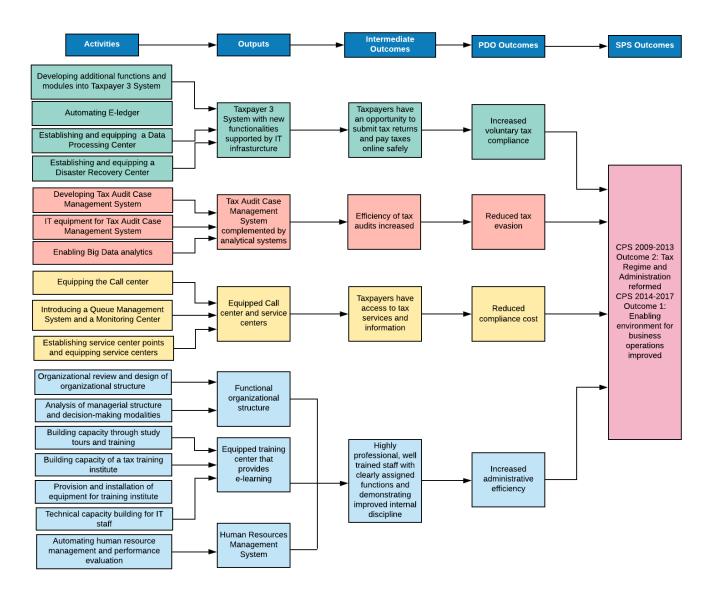
5. Acknowledging these challenges, the Government adopted a strategic document to guide tax administration reforms for 2011-14. The key interrelated elements of this strategy included: (i) Removing barriers for taxpayers to fulfill their obligations through simplified procedures, including e-filing, and enhanced taxpayer services; (ii) Business process re-engineering and modernization of core information technology (IT) systems, including integration of data bases, centralized data processing, back-up and business continuity capabilities; (iii) Improved compliance management through modern risk based and (computerized) audit selection and targeted enforcement activities based on amount of revenue at stake and risk incurred; and (iv) Performance oriented management of human resources to improve efficiency and effectiveness of the SRC, including skills development and introduction of internal control mechanisms. Improved IT support was seen as a critical enabler for the implementation of the envisaged tax administration reforms and for the enhanced performance of the SRC.

Theory of Change (Results Chain)

- 6. The project financed critical investments included in tax administration reform strategy for 2011-2014. These were focused on the first three interrelated elements of the strategy: expanding the use of e-governance (see i above); information and communication technology (ICT) infrastructure to enable business process improvements (see ii above); and introducing a more targeted, risk-based compliance strategy based on voluntary compliance (see iii above). Specifically, the project was to finance software development to complement SRC's efforts in developing a new revenue management system called the "Taxpayer 3" system. Six out of 15 "Taxpayer 3" modules were to be supported by the project²: Personal E-ledger, Treasury Data Registration, Third Party Data Registration, Cameral Investigations, Legal Proceedings, and National e-Payment Portal. The project was also to supply and install modern IT equipment and infrastructure to support the expansion of electronic service delivery and other modern business processes. Finally, the project was to enable the SRC to carry out big data analysis by financing a centralized and integrated database with improved business intelligence capability.
- 7. These investments were to help strengthen competitiveness and enhance economic growth, thereby contributing to the achievement of core Country Partnership Strategy (CPS) targets. Ultimately, the project targeted reducing the cost of taxpayer compliance and increasing revenue collection, which were expected to enable the Government to invest in public services and infrastructure. All these were expected to contribute to future growth and competitiveness of the domestic economy. Figure 1 depicts the theory of change in detail.
- 8. While the TAMP largely focused on ICT investments, other development partners provided technical assistance. USAID was the key partner in the TAMP which supported some of the required institutional, process and human resource changes to enhance the modernization of the SRC and to ensure the sustained improvement of SRC performance. The current ICR does not assess this part of the program led by the USAID, though it assesses the quality of the partnership with this donor.

² The rest of the nine modules are: (1) Registration of taxpayers; (2) VAT refund for legal entities and foreign citizens (Tax Free); (3) Collection of information presented by third parties; (4) Mobile terminals (New Generation Multifunctional Cash Register Machines); (5) Registration of acts of audit; (6) Registration of budget entries; (7) Issuing, electronic invoices; (8) Generating electronic tax declarations; and (9) Generating standard and non-standard reports.

Figure 1. Theory of Change



9. The Project was implemented in parallel with other interventions in governance, including the second and the third Public Sector Modernization Projects, as well as larger DPOs. As a prior action for the DPO-2, the Law on VAT was amended, and the VAT exemption for financial brokerage services was discontinued. The DPO-2 also supported the preparation of a report on tax expenditures designed to raise awareness of the magnitude of foregone fiscal revenues. Adoption of the draft Unified Tax Code was included as a prior action for the DPO-3.

Project Development Objectives (PDOs)

10. The objective of the Project was to reform and modernize the tax administration to: (a) increase voluntary tax compliance; (b) reduce tax evasion; (c) reduce compliance costs; and (d) increase administrative efficiency.

Key Expected Outcomes and Outcome Indicators

11. The following key PDO indicators were selected to track progress against expected outcomes:

Increased Voluntary Tax Compliance:

- (i) Increase in number of active VAT taxpayers by 1% every year (from a base of about 12,000 in 2011);
- (ii) Increase in number of active CIT taxpayers by 1% every year (from a base of about 29,000 in 2011);

Reduced Tax Evasion:

- (iii) Enhanced audit performance, as measured by a 20% increase in the adjustment resulting from audits (from AMD 10.1 million to AMD 12.1 million, real terms);
- (iv) Reduction in the tax gaps as measured by a 40% increase in CIT productivity (from 0.1-0.14) by the end of the project;

Reduced Compliance Costs:

(v) Improvement in perception of taxpayers regarding level of professionalism and honesty in tax administration as measured by biannual surveys;

Increased Administrative Efficiency:

(vi) Increase in the ratio of revenue collected to SRC operating costs by 10% by the end of the project.

Components

12. The Project consisted of four components, as defined in the Financing Agreement (FA):

Component A: Institutional Development and Change Management - Provision of consultant's services to SRC for a tax workflow analysis and developing organizational restructuring plan, and purchase of equipment for the tax administration centers.

Component B: Strengthened Operations - Provision of consultant's services to SRC, and goods and information technology (IT) systems and software to tax service centers providing a range of services to taxpayers.

Component C: IT Infrastructure and Systems Modernization - Provision of goods to SRC to upgrade its Information and Communication Technology to develop a comprehensive and integrated tax management system.

Component D: Project Management - Provision of Operating Costs and consultants' services to the Foreign Financing

Project Management Center (FFPMC) and SRC to assist in Project implementation and management, and provision of technical assistance, including Training.

13. A difference in project cost by components is noted at the project closing. The total difference of about US\$1.1 million between IDA financing at approval and completion is largely due to SDR/US\$ exchange rate movements (see Table 1). The currency of credit commitment was SDR and project functional currency was the United States Dollar (US\$). The project designated account was also in US\$, thus, disbursements and subsequent reporting have been done in US\$, where the SDR/US\$ exchange rate of the transaction date has been applied. There was also a residual amount of US\$140,000 unspent at the closure of the project. As all key activities of the project were completed as planned the residual amount had no impact on the achievement of PDOs.

Table 1. Project costs by component

Component	Α	mount at approv	/al	Actual at closing			
	Project cost IDA Financi		% Financing	Project cost	IDA Financing	% Financing	
Α	2.2	1.7	80%	1.0	0.8	80%	
В	1.0	0.8	80%	1.3	1.1	85%	
С	11.0	8.8	80%	10.0	8.3	83%	
D	0.9 0.7		80%	0.9	0.7	78%	
Total	15.1 12.0		80%	13.2	10.9	83%	

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

Revised PDOs and Outcome Targets

14. There was no change in PDO or outcome targets.

Revised PDO Indicators

15. There was no change in PDO indicators.

Revised Components

16. There were no changes in the components. It is worth noting though that the Project Appraisal Document (PAD) provides for a more detailed description of the components. As can be seen from the comparative table below, the component description in the PAD clarifies expected outputs and narrows down the broad description included in the Financing Agreement (FA). Project implementation followed this detailed description included in the PAD, while the ICR team assessed the project implementation using the legally binding description provided in the FA.

Table 2. Comparison of the description of project components

Financing Agreement	Project Appraisal Document		
Component A: Institutional Development and Change	Component 1 is aimed at improving the organizational		
Management - Provision of consultant's services to SRC for a tax	structure, strengthening strategic planning and human		
workflow analysis and developing organizational restructuring	resource management, including technical and managerial		
plan, and purchase equipment for the tax administration	training for SRC staff as well as enhancing SRC's internal control		
centers.	environment.		
Component B: Strengthened Operations - Provision of	Component 2 will strengthen compliance management by		
consultant's services to SRC, and goods and information	supporting introduction of risk-based audit methodologies and		

technology systems and software to tax service centers providing range of services to taxpayers.	improved taxpayer services, including of a modern, centralized call center which will allow for cost -efficient service delivery and more effective quality assurance in the responses provided to tax payers.
Component C: IT Infrastructure and Systems Modernization - Provision of goods to SRC to upgrade its Information and Communication Technology to develop a comprehensive and integrated tax management system.	Component 3 will enhance SRC's IT environment to support modernized business processes, automation and business intelligence, including establishment of a centralized data processing center, data warehouse, disaster recovery facilities and improved networking capacities.
Component D: Project Management - Provision of Operating Costs and consultants' services to FFPMC and SRC to assist in the Project implementation and management, and provision of technical assistance, including Training.	Component 4 will support the client in implementing the project in compliance with Bank procedures and address change management challenges.

Other Changes

- 17. The project was restructured five times. The first restructuring was approved in March 2014 and involved changes to the FA. The requirement of setting up a Steering Committee stipulated in the FA was deleted since a well-functioning Project Management Board had already been established on January 23, 2013 pursuant to the Prime Minister's Decree #51A. Non-consulting Services and Incremental Operating Costs were included as an eligible expenditure category to enable relevant payments retroactively starting from the date of signing the FA under this category. Part D of Schedule 1 on Project Management of the FA was amended to include "goods" to enable FFPMC (Project Implementation Unit, PIU) to procure minor equipment. Lastly, the covenants on maintaining a Donor Consultative Group (DCG) and Thematic Groups for each project component were added to be consistent with the PAD.
- 18. Subsequent project restructurings (November 2015, July 2017, March 2018, September 2018) were aimed at extending the project closing date for a cumulative period of 33 months. The TAMP became effective within six months after the Board approval on December 28, 2012 after parliamentary ratification of the FA. The original closing date was set as April 30, 2016, which was relatively short and an ambitious calendar for such a complex and innovative project. Similar Bank projects supporting tax administration reform are designed for at least five years and implemented over a period of seven to ten years. The first request for an extension of the project closing date was made in October 2015 and approved on November 4, 2015 by the Bank Management that provided a new closing date of December 31, 2017. Since then, the project closing date was extended three more times till April 15, 2018, September 30, 2018 and finally till January 31, 2019 to enable the successful completion of critical project activities. The overall duration of the project was six years, which was realistic in terms of the IT procurement and installation processes funded by the project.

Rationale for Changes and Their Implication on the Original Theory of Change

19. Changes related to the legal covenants and institutional arrangements were mostly added to make the FA consistent with the PAD. The requirement to establish a Steering Committee as originally proposed in the PAD and the FA was deleted at the Recipient's request. Both the Project Management Board and the Donor Consultative Group had been already established at the time of the restructuring and fulfilled the internal and external coordination needed for the implementation of project activities. Two legal covenants on the Donor Consultative Group and Thematic Groups were added to the FA to be consistent with the PAD. At the time of the restructuring, the Recipient had already "complied with" these two covenants. Changes in withdrawal of the proceeds of funding were introduced to bring the FA in line with the Minutes of Negotiations and the different sections of the FA. The changes in institutional arrangements, legal covenants, and financing did not have any implications on the original theory of change.

II. OUTCOME

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

Rating: High

- 20. Project objectives throughout its implementation period were consistent with the Bank's 2009-2013 and 2014-2017 Country Partnership Strategies (CPS). Specifically, the TAMP contributed to the achievement of Outcome 2 "Tax regime and administration reformed" of the CPS 2009-13 and Objective 1 "Enabling environment for business operations improved" and Outcome Indicator 1 "Lower Tax Compliance Cost" of the 2014-17 CPS. The new Country Partnership Framework (CPF) approved on March 28, 2019, after the Project closure, does not include an outcome specifically on tax administration. This can imply that for the new CPF period, the tax administration is no longer a key binding constraint for development. Moreover, it suggests that tax administration is on a good track after the project completion and that the authorities could further capitalize on the impact of the IT infrastructures and capacity building provided by the project.
- 21. The Project was also fully aligned with the Government's medium-term policy objectives. Key development objectives stipulated in the 2011-2013 Medium-Term Expenditure Framework (MTEF) and approved in August 2010 included the continued reduction of poverty, enhancement of human development, modernization of the public administration and judiciary, fight against corruption, and economic growth through a friendlier business environment and improved infrastructure. The Government strategy set explicit targets for increasing its revenue effort till 2013. Addressing tax administration challenges was important to improve the business environment. At the closing of TAMP, its PDOs remained in line with national priorities as stated in the 2014-2025 Strategic Program of Prospective Development, and specifically its public revenue policy aimed at the implementation of a horizontal and vertical equity principle of taxation, increases in tax administration efficiency to promote the business environment and application of economically justified tax rates.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

22. The PDO is composed of four outcomes measured by six PDO level indicators (see paragraph 11). The ICR team assessed the progress on PDO level indicators during the project implementation period and especially starting from the implementation of new ICT tools that contributed to the PDO achievement. This is particularly valid for the outcomes of reduced tax evasion and increased administrative efficiency. The team focused its analysis only on activities financed by the IDA credit of US\$12 million and borrower contribution of US\$3.1 million at approval, and not on activities financed by other donor contributions, specifically USAID.

Outcome 1. Increased voluntary tax compliance - High

- 23. The outcome of increased voluntary tax compliance was achieved:
 - The number of active VAT payers increased by 32 percent from 11,800 in 2012 to 15,590 VAT payers in 2018, which is 27 percentage points above the original target established at project approval (12,300).
 - The number of active CIT payers increased by 21.9 percent from 13,118 in 2014 to 15,991 in 2018. This is above the original target of a four percent increase.

24. **Despite several legislative changes that affected the calculation of the "Active CIT Payers" indicator during the project implementation period, the target was reached.** Due to enactment of the Turnover Tax Law on January 1, 2013, a statistical bias was introduced so that the baseline of 2014 has to be used instead of the 2011 one. In practice, in 2013 a number of simplified CIT payers became automatically Turnover Tax payers (see Table 3) and 3,358 CIT payers changed voluntarily their taxation regime and became Turnover Tax payers and Patent Fee payers starting from 2014. Further changes to CIT payers' methodology were also introduced on January 1, 2018 such as obliging private entrepreneurs and state non-commercial organizations to pay CIT. All in all, the number of active CIT payers increased from 14,444 December 2017 to 75,738 in 2018, of which 59,747 were non-voluntary private entrepreneurs and state non-commercial organizations. The ICR team did not consider these additional 59,747 CIT payers, so that the number of voluntary CIT taxpayers (15,991) remained comparable with the baseline (13,118). Based on these trends, the target was reached.

Table 3. CIT and Turnover taxpayers

	Baseline (2011)	2012	2013	2014 (new baseline)	2015	2016	2017	2018	2018/2014 %
Number of active CIT payers	29,231	28,791 ³	15,547	13,118 ⁴	13,648	15,877	14,444	15,991	21.9
Turnover Tax payers			58,475	58,916	51,092	50,491	51,258	66,690	

- 25. The Project contributed to the increased voluntary compliance through the supply and installation of modern IT equipment, which enabled the expansion of the Taxpayer 3 System. Equipping the SRC with a modern IT infrastructure was instrumental for the undisrupted functioning of the Taxpayer 3 system, including its four modules essential for electronic service delivery: registration of taxpayers; VAT refund for legal entities and foreign citizens; e-invoicing; and generating electronic tax declarations. Full implementation of the Taxpayer 3 system reduced compliance costs, contributing to increased taxpayer registration and filing.
- 26. The TAMP provided a much-needed ICT infrastructure, enabling information storage capacity and security, without which the electronic filing would not have been possible. The IT infrastructure included the establishment of and support to Data Processing and Disaster Recovery Centers in July 2015. TAMP provided the required servers to create the Virtual Environment for SRC infrastructure, for organizing the data warehouse, upgrading the SRC's "3 par" storages in 2017 and establishing the Distributed Network Infrastructure and Security System. The total cost of the investments comprised 40 percent of total project disbursements. The project also financed the upgrading of the cabling and local area network operation. This significantly enhanced security of data exchange and better management of data flow by defining priorities of data flow in the network to make sure that important data pass

³ For 2012, from 28,791 active CIT taxpayers, 18,427 taxpayers were simplified CIT report filers. Since the Law of the Republic of Armenia on Turnover Tax came into effect from 1 January 2013, the majority of simplified CIT payers became Turnover Tax payers, which leads to the decrease of the figure from year 2013 onwards.

⁴ The number of active CIT payers decreased, as further 3,358 CIT payers (from 15,547) have changed their taxation regime and have become Turnover Tax payers and Patent Fee payers starting from 2014.

⁵ Changes to the Tax Code that came into effect on January 1, 2018 obliged private entrepreneurs and state non-commercial organizations to file CIT form. As the result the number of active CIT payers rocketed to 75,738 in 2018, of which 59,747 were private entrepreneurs and state non-commercial organizations. For ICR purposes and consistency with the previous years, the SRC suggested to distract the number of private entrepreneurs and state non-commercial organizations from the total number of CIT payers, which gives the figure of 15,991 of active CIT payers in 2018.

faster than those which are identified as less important.

27. **E-ledger Automation, Treasury Data Registration, and National E-Payment Portal financed by the TAMP have considerably simplified tax payments and facilitated exchange of information on tax liabilities.** The E-ledger module allowed the creation of a single Treasury account for paying tax liabilities instead of numerous Treasury accounts. The implementation of the module allowed taxpayers to be informed of their tax liabilities online; to exclude overpayments; to change the entire logic of recording liabilities (the liabilities were no longer to be recorded within the deadlines for payment but as of the actual day of calculation); to reflect the difference between new and prior calculations in the ledgers in case of filing the adjusted returns; to simplify the mechanisms of calculating fines and penalties against recalculations and overdue liabilities as a result of filing adjusted returns; and to clarify the terms of advance payments calculation and payments. The e-payment process was significantly strengthened by establishing web services between the SRC and the Central Bank for data sharing. Similarly, data sharing with other key government agencies – such as the Cadaster and the Police – has been established under the TAMP. It is expected that web services between the Central Bank and the commercial banks will be established, which was beyond the scope of the project, and that it will further enhance the e-payment process.

Outcome 2. Reduced tax evasion - Substantial

- 28. **The PDO indicators for reduced tax evasion have been achieved.** CIT productivity increased from 0.10 in 2011 to 0.14 in 2018 meeting the target of 0.14 established for 2015. The average adjustments following audit results more than doubled from the baseline of AMD10.1 million in 2011 to AMD22.1 million in 2018. This is well above the target of 13 percent increase to AMD12.1 million in 2015.
- 29. The project financed new systems that contributed to increasing CIT productivity: The Tax Audit Case Management system (TACMS), the Analytical Tools System, and new subsystems in the Taxpayer 3 System:
 - The TACMS automated audit organization and risk management processes at the SRC. It helped to raise audit efficiency and transparency by improving audit planning, introduce control over audit functions specified in the regulation for each audit, record audit results, identify inefficient risk criteria selection and/or inefficiently performed audits through monitoring of audit results. At the time of project closure, the TACMS was operating in a pilot mode, bringing initial efficiency results. The TACMS became fully operational in spring 2019 and is running simultaneously with the old system for several months to cover any possible risk.
 - The specialized Analytical Tools' System financed by the project allows for Big data analysis of structured transaction data and other forms of data that are often left untapped by conventional business intelligence and analytical programs. Thanks to the Analytical System in business intelligence, queries can now answer basic questions about business operations, performance, and risks.
 - The new subsystems developed under the TAMP (three out of six) are about automation of: (a) third-party data; (b) desk (cameral) investigations and electronic subsystem of legal proceedings; and (c) manual work performed by tax inspectors. These subsystems allowed the SRC to exclude arithmetical errors and gaps and introduce a wide application of data cross-checking and the use of third-party information. The third-party data module became operational in February 2019. The SRC reported significant reductions of time spent by tax inspectors in filling reports, as well as potential benefits for simplified filling of e-declarations using a pre-filling tool. At the time of this ICR, the desk (cameral) investigations module was partially operational, being updated due to new tax report forms and legislative changes. The SRC reported that the module will be in full capacity by August 2019. The electronic subsystem of legal proceedings, which was fully functional at project closing, minimizes subjective factors related to collections of liabilities, and the application of injunction and mandatory collection. It increased the efficiency of the collection process by sending electronic notifications to taxpayers and by providing a complete and systemized information on collection of taxpayer liabilities and

injunction proceedings.

- 30. An assessment of this outcome indicator is difficult. Globally, the arithmetic results stemming from the figures on adjustment following tax audit are way above the targets (see data and percentage above). However, since most of the new ICT tools financed by the project were not fully operational at the closure of the project, some being implemented on a pilot basis, it would be incorrect to link all the good results of tax audit to these new tools. The only one that was fully operational during the implementation period of the project was the electronic subsystem of legal proceedings. The latter certainly had a positive impact on the indicator.
- 31. For the reasons discussed above, the proposed rating for this indicator is substantial. Substantial rating should be considered as a minimum since the results of the pilots that were conducted during the implementation period were all positive and are to produce their full positive impact after project exit.

Outcome 3. Reduced compliance costs - High

- 32. **The outcome of reduced compliance cost was achieved.** Perception of taxpayers regarding the level of professionalism and honesty in tax administration has increased from 23.7 percent in 2013 (at the time of the first survey) to 62.5 percent in 2018⁶. On average 83 percent of respondents stated that calculation of taxes, payment procedures, and report submission were simpler and easier compared to three years before. According to 63 percent of respondents from the corporate sector and 45.7 percent of respondents representing individual entrepreneurs, automatization of tax administration resulted in a reduction of administrative costs for taxpayers.
- 33. Improvements in Armenia's Doing Business rank can be referenced as additional evidence for the reduced compliance costs. Armenia's Doing Business rank on Paying Taxes increased from 159th out of 183 countries in 2011 to 82nd in 2018. The time required to pay taxes dropped from 500 hours in 2011 to 262 hours in 2018⁷.
- 34. **Electronic filing, e-invoicing system and electronic payments are key reasons for reduced compliance costs, as evidenced by the 2018 Taxpayer Perception Survey.** The percentage of tax returns filed electronically has increased dramatically since 2011 from 20 percent to 97.5 percent in 2018, which is well above the target rate of 55 percent in 2015. The dramatic rise in electronic filing was mainly due to the legislative changes in 2013, which required all taxpayers to file a final income tax return electronically. However, electronic filing would not have been possible without investments in ICT infrastructure, as mentioned above. The E-payment portal has also been instrumental in reducing compliance costs by enabling online payments and cross-checking of data by different government agencies, bringing the need to go the SRC offices in person to zero. The latter is confirmed by the Armenia tax administration assessment undertaken under the auspices of the USAID during November 7-22, 2016 using the Tax Administration Diagnostic Assessment Tool (TADAT). Armenia SRC scored A on the "Use of electronic payment methods".
- 35. Improvements in taxpayer services supported by the TAMP have also contributed to reduced compliance costs. The Project supported the establishment of a Call Center, which contributed to facilitating a better understanding by taxpayers of their tax liabilities, and registration and reporting requirements. A Queue Management System has been implemented at different taxpayer service centers throughout Yerevan and the regions, and a Monitoring Center was equipped and tasked with quality control functions. As the result, the usefulness of services provided by the tax administration was rated higher in all nine areas in 2018 compared to 2013 (see Annex 6 for Survey

⁶ The survey was conducted by USAID in 2013 and the indicator chosen in 2013, "The Level of Trust towards the Tax Service", was inaccurate as the results were obtained exclusively from the household survey and therefore do not accurately reflect the perception of taxpayers on performance of tax administration. The same company conducted a follow-up survey in October 2018, just before the close of the project, identifying a more representative sample (of taxpayers and not just households) which shows a significant improvement compared to the survey of 2013 with a similar representative sample. Survey results are presented in Annex 6.

⁷ WB – Doing Business Report 2011 to 2018

results).

36. **Reducing compliance costs has a direct impact on increased voluntary compliance.** Similarly, activities that supported voluntary compliance have also greatly contributed to the reduction of compliance costs. Thus, these two outcomes should be considered in close interrelation, and are both rated as high.

Outcome 4. Increased administrative efficiency - Substantial

- 37. **Globally, the PDO level indicator on increased administrative efficiency was achieved.** The ratio of revenue collected to the SRC's operating costs increased from 74 in 2011 to 107 in 2018.
- 38. The increased ratio stemmed from the higher revenue growth rate (175 percent) versus a lower growth rate of operating costs (138 percent) during 2011-2018 (see Table 4). Higher rate of revenue growth (on average 110 percent per year) can be partially attributed to increased voluntary compliance and reduced tax evasion encouraged by the IT investments as discussed above. Lower growth rate of operating costs, which on average was 105.6 percent a year, is explained by the efficiency gains resulting from the restructuring of the SRC and IT investments. Starting March 2016, there are only two centralized tax inspectorates (compared to 39 in 2012) one for large and medium taxpayers and the other one for small taxpayers. The inspectorate for small taxpayers also has offices in the regions (marzes). This organizational improvement was the result of technical assistance provided by USAID and supported through IT infrastructure financed by the TAMP. Automation of tax administration processes supported by the TAMP also paved the way for the workforce reduction of 1.5 percent in 2017.

Table 4. Ratio of Revenue collected to the SRC operating costs

	2011 (baseline)	2012	2013	2014	2015	2016	2017	2018
Ratio of Revenue collected to the SRC operating costs	74	85	95	102.6	104.5	106.6	101.8	107
Collected revenue. mln.AMD		559,232	654,412.3	696,134.9	776,065.7	820,654.3	838,625.0 ⁸	975,978
SRC's operating costs, mln.AMD		6,581.8	6,854.5	6,785.4	7,424.2	7,696.6	8,238	9,123

- 39. The TAMP also contributed to increased administrative efficiency through change management and capacity building initiatives. Modern computer/video conferencing equipment and licenses were installed in a newly established Training Center and in taxpayer service centers located across Armenia, which facilitated the training and distance learning processes. The distance learning courses were piloted in the SRC and are planned to be rolled out in Summer 2019. The training center provides annual three-day mandatory training for all SRC staff, conducts short-term programs on specific tax policy and tax administration issues for SRC staff, and taxpayers and accounting associations, with the annual capacity of 3000 trainees. The Training Center's Printing House was equipped with modern printing equipment, thus enabling the SRC to print tax legislation, changes to tax legislation, informational brochures for taxpayers, and other key learning materials. The project supported several study visits on tax audit (Germany), strategic planning, implementation and reporting processes (Bulgaria), tax payment methods and registration of tax liabilities (Sweden), Human Resources Management Issues and Training Center Best Practices (the Netherlands). These study tours were instrumental in conceptualizing the SRC's development strategy.
- 40. Two activities expected to increase SRC productivity were cancelled following changes in the Government's structures. The first one, the most important in terms of productivity, was the organizational review and workload

⁸ The reason for a one time increase in operating costs in 2017 is caused by severance pay of AMD 323 million to 500 laid-off employees.

analysis of the SRC: it was cancelled by the Prime Minister's office following the SRC's merger with the MoF in 2014. The second one, less important for SRC productivity, was also dropped following a November 2017 Government decision (Presidential Order NK263A) to launch a government-wide comprehensive Human Resources Management Information System (HRMIS) platform that was duplicating the HRMIS modules that were initially planned to be installed at the SRC by the project. The funds related to both activities were reallocated to activities which were aimed at further strengthening the SRC's administrative capacities. Due to the HRMIS cancellation, the intermediate results indicator of "Modern Core IT System Established and Operational"- monitored by sub-indicators which include (a) Data Processing Center Operational; (b) Data Warehouse Operational; (c) HRMIS Operational; (d) IT Security and Access Management for Audit Trail and Tracking of Usage of SRC ICT Systems - is partially achieved with three out of four core IT systems already established and operational by the closing of the project.

41. The activities of the Bank project contributed to improvements in administrative efficiency of the SRC, but quantifying it is difficult. A main challenge is to apportion these good results to the activity of the SRC financed by the Bank project and TA by USAID. The increase in revenue growth is likely linked to these project's activities. However, the link with the reduced growth of operating costs is more indirect and stems from both the USAID activity on SRC restructuring and the deployment of new IT investments by the Bank project. It is nevertheless arguable that the downsizing of SRC would not have been made possible without the huge pathway that the TAMP IT investment opened for further productivity. This is a strong rationale for rating the outcome indicator as substantial.

Justification of Overall Efficacy Rating - Substantial

42. Overall efficacy rating is substantial, as the project achieved all PDO level indicators and nine out of ten intermediate indicators were fully achieved. There is a clear link between the progress on indicators and project funded activities in most cases, especially for outcomes 1 and 3.

Table 5. Summary of PDO level indicators

Indicators	Baseline (2011)	Target (2015)	Actual (2018)	Status					
Outcome 1. Increased voluntary tax compliance									
Number of active VAT taxpayers	11,800	12,300	15,590	Achieved					
Number of active CIT taxpayers (as per PAD)	29,231	30,400	Not comparable						
Number of active CIT taxpayers (new baseline) ⁹	13,118	13,643	15,991	Achieved					
Outcome 2. Reduced Tax Evasion									
Average Adjustment result from audits (mln. AMD)	10.10	12.1	22.1	Achieved					
CIT productivity (CIT/GDP/CIT rate)	0.10	0.14	0.14	Achieved					
Outcome 3. Reduc	ed complian	ce costs							
Perception of taxpayers regarding the level of professionalism and honesty in tax administration as measured by biannual surveys	23.7% (2013)	N/a	62.5%	Achieved					
Outcome 4. Increased Administrative Efficiency									
Ratio of Revenue collected to the SRC operating costs (Collected revenue divided by SRC's operating costs)	74	82	107	Achieved					

⁹ As discussed above, due to changes in CIT regulations, the data for 2014 is used as the baseline, and 4% increase as the target. The 4% increase is based on the original estimated target in the PAD, which sets the baseline of 29,231 in 2011 and the target of 30,400 in 2015.

C. EFFICIENCY

Assessment of Efficiency and Rating - Substantial

- 43. **The Project's efficiency is rated as substantial.** The project contributed to a significant increase in the number of taxpayers and reduction in compliance and administrative costs. The growth in the number of VAT and CIT payers was 35% and 30% respectively between 2014 to 2018. The tax to GDP ratio which was 17.5% in 2012 was 20.8% in 2017. There was also a substantial increase in the ratio of revenue collected to the SRC operating costs from 74 in 2011 to 107 in 2018. The compliance cost also fell due to the decrease in time required to pay taxes from 500 hours in 2011 to 262 hours in 2018. The financial and economic analysis of the project was repeated using the same methodology as employed during the appraisal. However, at appraisal no specific attribution was done, and the entire increase in tax revenues were considered for computing Net Present Value (NPV). In this ICR, only the increase in revenue over and above the trend rate has been attributed to the project. Also, the Economic Analysis is done based on actual savings in operating and compliance costs as against the percentage of GDP assumptions in the PAD. Due to the above reasons and to changes in exchange rates the two numbers are not comparable.
- 44. Based on several assumptions¹², the project's financial internal rate of return is 219 percent and the Net Present Value is US\$275 million. The calculations considered the increase in number of taxpayers in 2016 2018, so that only the increase in revenues attributable to tax administration and not due to higher tax rates is considered for this computation. A sensitivity analysis has been carried out for the several key assumptions, including: growth, exchange rate, and the underlying assumptions on the financial impact of the Project. The financial benefits are robust across these specifications.

Table 6. Base Case Results for Economic and Financial Analysis

	Financial Analysis	Economic Analysis
Real Net Present Value (NPV), US\$ million	275	14.2
Real Internal Rate of Return (IRR), %	219	31

- 45. The economic analysis indicates that the Project has generated economic benefits, both in terms of reduced administrative costs for government and reduced compliance costs for taxpayers. These economic benefits are directly welfare enhancing benefits in the sense that by reducing compliance and administrative costs related to tax collections, the overall transaction costs related to the generation of state revenue for both government and citizens were lowered. With IDA financing the net economic benefits of the project have a net present value of US\$14.2 million and an internal rate of return of 31 percent.
- 46. **In addition to financial and economic benefits, the implementation of the project was efficient.** All the planned activities were completed without any cost overrun and at 98.7% of the approved IDA funding¹³ level. The two-year and nine months total closing date extension was mainly due to a very short implementation period of 3.5 years established at the project design and approval stage which in hindsight was overly ambitious. Despite delays, TAMP was able to fully

¹⁰ WB – World Development Indicators

¹¹ WB – Doing Business Report 2011 to 2018

¹² The following assumptions are made: increase in elasticity of non-oil and gas tax revenue to GDP over the trend rate of 1.19 attributable to the project, discount rate of five percent, GDP growth of 4.5 percent from 2019-22, inflation of four percent, AMD/US\$US\$ exchange rate of 0.002073 in 2018, and one percent devaluation in 2019 and 2020.

¹³ As indicated above, the due to SDR/US\$US\$ exchange rate differences, the IDA funding at approval was US\$12 million and US\$10.8 million at closing. The difference is caused by SDR/US\$US\$ exchange rate differences. Disbursed amount is equal to US\$10.6 million and undisbursed amount is equal to US\$0.14 million.

complete its activities in six years which should rank the project among the shortest implementation periods of Bank funded tax administration projects in all regions.



Figure 2. Armenia Tax Revenues with and without IDA funding

47. The detailed efficiency analysis is presented in Annex 4. As discussed in the Annex, this approach provides an indicative analysis only - as the outcomes supported in this project cannot be solely attributed to project activities. Also, the analysis could not be compared with the PAD due to changes in the assumptions and the inability to verify the detailed data used in the PAD. In addition, the project's closing date was extended four times for a cumulative period of 33 months, during which the results targets could have been made more ambitious, and the cost benefit and economic analysis could have been revised. The project nonetheless contributed to major financial and economic benefits, in addition to cost-efficient implementation. The efficiency is therefore rated as Substantial.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

- 48. **The overall outcome rating is satisfactory.** Despite a challenging political economy context (see Key Factors During Implementation below), the project achieved all its stated objectives: i) increased voluntary compliance, ii) reduced tax evasion, iii) decreased tax compliance costs and, iv) increased administrative efficiency. Securing the IT infrastructure, upgrade of ICT and developing six out of fifteen modules of the integrated tax management system brought about gains in terms of increased revenues and reduction of tax evasion. This also ensured that SRC's IT infrastructure and systems can support modernized business processes, automation and business intelligence (including establishment of a centralized data processing center, data warehouse, disaster recovery facilities and improved networking capacities), which in its turn resulted in gains in terms of efficiency of tax administration. The results of the project will become even more tangible in a year's time, after all the IT systems launched in 2019 have been in full operation for at least twelve months.
- 49. The achievement of the project outcomes is largely attributable to the activities supported by the TAMP, especially as regards to increased voluntary compliance and reduced tax compliance costs. The PDO remained relevant throughout the project implementation as evidenced by the priorities set in governmental strategic documents. Financial and economic benefits outweigh the costs.

Table 7. Summary of Outcome rating

Criteria	Rating
Relevance of PDOs	High
Achievement of PDO (Efficacy)	Substantial
Outcome 1	High
Outcome 2	Substantial
Outcome 3	High
Outcome 4	Substantial
Efficiency	Substantial
Overall Outcome Rating	Satisfactory

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

50. **The TAMP mostly financed gender-neutral IT software and hardware.** At the same time, TAMP ensured that women receive equal access to training opportunities financed by the project. Of the 34,132 tax inspectors trained over the course of the project, 32% were women, providing them with better opportunities and enhanced skills. Since the overall share of women in the SRC is 32.6%, it can be concluded that the participation of women in learning opportunities was proportional.

Institutional Strengthening

51. **TAMP** implementation had a direct impact on the SRC's institutional strengthening. A Change Management and Impact Assessment Unit, as well as a special Project's Office, was created at the SRC's IT division. It received extensive capacity building on change management, human resources management, business continuity, data center infrastructure, and general tax administration issues. The SRC's functional departments also benefited from trainings and exposure to good international practices in areas such as tax audits, electronic tax systems, single tax account, internal financial control, and audit.

Mobilizing Private Sector Financing

52. **The Project has indirectly contributed to mobilizing private sector financing.** Following the establishment of data sharing web services between the Central Bank of Armenia and the SRC, commercial banks will integrate their web services with the Central Bank by using their own resources, which will further enhance the e-payment process. Documents describing the technical and software solutions required for the integration were provided under the TAMP to commercial banks.

Poverty Reduction and Shared Prosperity

53. By raising additional revenues, the project had an indirect impact on poverty reduction and shared prosperity as it provided much-needed resources to the Government of Armenia's (GoA) budget. Enhanced integrity of SRC staff, as measured by the surveys carried out under TAMP, suggest that there was an indirect impact on shared prosperity.

Other Unintended Outcomes and Impacts

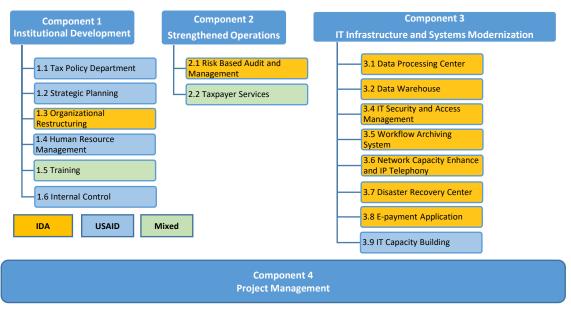
54. The Project additionally contributed to fiscal sustainability of the SRC Training Center and strengthened the competitiveness of local IT market. The Training Center and the Printing House deliver some specialized training courses and learning materials for taxpayers, generating additional income to finance its administrative costs and internal capacity building activities. The firm that developed several modules of the Taxpayer 3 system for this project leveraged its experience in Armenia to provide assistance in a similar project in Tajikistan (Tajikistan TARP - P127807 with an ISR rating of the IT component as satisfactory in 2019). This suggests that the Armenian TAMP contributed to building local IT capacities and competitiveness.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

- 55. **Focus on ICT investments.** At the project design stage, the Government explicitly requested the Bank to focus the use of the IDA credit on investments in ICT upgrades and complementary support provided to the SRC by other donors. As a general principle, the GoA has expressed a preference to use IDA funding for investments in tangible assets and predominantly utilize grant financing and own revenues to fund technical assistance and consulting services. IDA funds therefore focused on financing investment in ICT infrastructure and system upgrades, while TA components were minimized. The limited funds that were to be allocated to technical assistance focused on supporting the organizational restructuring, which is a key area in the GoA's overall reform initiative.
- 56. **Collaboration with USAID.** To ensure a comprehensive reform approach, the project was implemented in close collaboration with the USAID Tax Reform Project which included an approximately US\$6 million grant to finance a four years long TA program to the SRC and the MoF. USAID was closely consulted in the design of this operation; and in turn coordinated closely with the Bank on the design of its own TA program. While the financing arrangements for the two projects were separate, the collaboration resulted in highly complementary project designs.

Figure 3. Project Components and Financing



- 57. **Risks identified in the PAD** The main risks identified in the PAD for the technical design and institutional capacity for implementation were rated as moderate, while procurement risk was rated substantial. It appears that the first two risks were correctly rated despite the implementation delays at the early stage due. A substantial procurement risk rating was kept throughout project implementation given the prevailing procurement environment in the country especially for complex IT packages.
- 58. **Business-processes reengineering study** As a prior action for the DPO-1, the government adopted "Guidelines on Strategic Principles for Review of Tax and Customs Legislation" and approved a medium-term strategy for amending the tax and customs legislation. The DPO-1 also financed a study on business processes reengineering in tax administration, which laid a solid basis for the project preparation.

B. KEY FACTORS DURING IMPLEMENTATION

- 59. Institutional and political changes affected project implementation timeline and key decisions At project launch in December 2012, the State Revenue Committee was responsible for tax administration and was assigned as an implementing agency. Mr. Vakhtang Mirumyan, the then Deputy Chairman, was appointed as the Project Director. In less than one and a half years the SRC was reorganized and became part of the Finance Ministry. A positive factor was that even though Mr. Mirumyan was appointed as Deputy Minister of Finance, he continued his role as the Project Director and reconfirmed overall tax administration modernization plans. In March 2016, less than two years after the merger with the MoF, the tax administration function was reorganized again through the recreation of the SRC. This structural change affected the implementation of the Component 1 on Institutional Development, which was to finance the review of organizational structure and workload analysis of the SRC and optimization of the managerial structure and decision making at the MoF.
- 60. **Delays in Project implementation caused by political turbulence (see Box 1)** Following the so called "Velvet Revolution" in spring 2018, a new government was formed. Mr. Davit Ananyan, a newly appointed SRC Chairman, quickly renewed the commitment to tax administration reforms. However, there was a delay in establishing the Project Board under the new administration, which delayed the signing of the Tax Audit Case Management System.
- 61. **Strong IT leadership and team at the SRC** A highly efficient Project Manager and a strong ICT team, supported by the head of the IT Department, with project management and change management skills contributed to the project's success. The project saw four SRC chairmen, but the continuous presence of the Head of IT Department who later became the Deputy SRC Chairman ensured the continuity of the project vision and implementation.
- 62. **Changes in tax legislation and the new Tax Code 2018** several changes in tax legislation and the adoption of the new Tax Code, which came into effect on January 1, 2018, slightly delayed the preparation of technical specifications for the IT systems. Changes to the turnover taxpayers' threshold resulted in inconsistencies in calculation of the indicator on active CIT payers.
- 63. **Membership to the Eurasian Economic Union (EEU)** Armenia joined the EEU in January of 2015. Following requirements of the EEU, a new activity on a labelling system to track specific goods from import to sale was added to the project's Procurement Plan and successfully implemented.
- 64. **Governmental decisions outside of the Project's control** government-wide decisions by the Prime Minister related to the number of inspectorates, composition of the training center, and cancellation of the HRMIS also affected the project implementation timeline and final deliverables, as discussed above. However, if the cancellation of the HRMIS had an impact on an intermediate result indicator "Modern Core IT System Established and Operational", it did not have impact at the level of the Outcome 4.

Box 1. Political Context

In the spring of 2018, large nationwide and peaceful street protests—referred to as the Velvet Revolution—forced Armenia's long-standing leader from power. The country had just completed its move from a semi-presidential system to a parliamentary republic as per constitutional amendments passed in 2015. Under the new political system, the prime minister's office became the center of power while the president was elected through the parliament. The outgoing president's subsequent appointment as prime minister, despite public statements that he would not seek the post, sparked vibrant street protests that led to his resignation.

Nikol Pashinyan, a member of the parliamentary opposition who had led the protest movement, was appointed prime minister. In June 2018, the parliament passed a Government Program that committed to new and fair parliamentary elections within a year and prioritized better governance and rule of law, including the fight against corruption, open market competition, human capital development, and better links to the Armenian diaspora to spur economic growth, job creation, and poverty reduction. Parliamentary elections in December 2018 yielded a solid majority for Prime Minister Pashinyan's centrist My Step alliance. The two-party alliance received 70.4 percent of the vote and now holds 88 of 132 seats in parliament. A new government was formed and put forward a new five-year Government Program, which was endorsed by parliament in February 2019 and is broadly in line with the vision laid out in the immediate aftermath of the Velvet Revolution.

While the scale of street protests and rapid toppling of the government took everyone by surprise, Armenians' discontent with their government had been building for several years. Although the country has undertaken some reforms in recent years, Armenia performs poorly with respect to regional comparators on corruption-specific indicators. The country ranked 105th of 180 countries in Transparency International's Corruption Perceptions Index 2018, and in the bottom third of countries in the 2017 Worldwide Governance Indicators on control of corruption, voice and accountability, and political stability. The World Economic Forum's 2018 Global Competitiveness Index highlighted issues in Armenia related to ineffective government internal control frameworks, a lack of judicial independence, and the absence of merit considerations in promoting civil servants.

The new government has brought a new commitment to anticorruption efforts, good governance, transparency, and accountability in Armenia. These efforts have so far resulted in measures to reclaim unpaid taxes among politically linked businesses and a call for businesses to operate transparently.

Source: World Bank Group. Country Partnership Framework for the Republic of Armenia for the period of FY2019-2023

65. **Cooperation with USAID** - A strong collaboration with USAID was continued during the implementation phase. USAID provided a US\$6 million grant for training and capacity building to SRC and the Ministry of Finance. There were shared responsibilities between the Bank and USAID through MoU signed at the start of the project in support of the implementation of the main project components. The partnership was crucial for the implementation of the TAMP components 1, 2 and 3 and their proper sequencing between the two institutions. The USAID project was implemented in 2012-2016 and was fully alligned with the TAMP implementation schedule. The extension of the TAMP did not affect the quality of collaboration, as the extension was needed to complete IT related procurements that did not require additional technical assistance.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

66. **M&E** design was adequately structured. The operation's results chain was clear, and adequate indicators were identified to monitor the progress toward achieving the PDOs. The use of survey and gender disaggregated indicators contributed to the Bank's overall strategy on citizen engagement and gender. However, following the extension of the

project closing date, it would have been logical to revise targets based on the current progress and set more ambitious targets. An indicator on the number of active CIT payers could have also been revised to reflect the changes in the legislation as well as the transition of simplified CIT payers into turnover tax and patent fee payers.

M&E Implementation

67. **M&E** data were collected and analyzed in a methodologically sound manner. The Implementing Agency submitted timely progress reports to the Bank with detailed information on the progress of results indicators. The data on results indicators was consistent and in accordance with the approved methodology in the PAD. In case of any discrepancies, justified explanations were provided. The Bank team filed Aide Memoires and Implementation Status and Results (ISR) reports on time.

M&E Utilization

68. **M&E** data was well utilized. The Project Management Board¹⁴ met quarterly to review project progress, discuss issues and agree on an action plan to speed up implementation. Coordinators of all SRC internal units met on a regular basis. Donor Coordination Meetings were organized bi-annually, as required by project covenants, to discuss the project progress and results indicators.

Justification of Overall Rating of Quality of M&E

69. The overall rating of quality of M&E is rated substantial. Despite minor design shortcomings indicated above, the M&E system as designed, implemented and utilized was sufficient to assess the achievement of the objectives and test the links in the results chain.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

- 70. TAMP was assessed as a category C project and therefore no environmental assessment was required.
- 71. **Fiduciary function was carried out by the Foreign Financing Project Management Center (FFPMC)**. FFPMC had significant experience and capacity to implement projects in accordance with the World Bank's fiduciary policies and procedures. Financial management (FM) arrangements were adequate and satisfactory to the Bank throughout the Project implementation period. These included planning and budgeting, accounting, financial reporting, external audit, funds flow, internal controls, organization and staffing arrangements. The Project's financial management risk was rated as Low throughout the Project implementation period. The Project's ISR FM rating was Highly Satisfactory or Satisfactory during the Project duration. All disbursement procedures were in compliance with the Bank's disbursement guidelines. Project funds were almost fully disbursed by the Project closing date, with a small undisbursed balance of US\$140,000. The Project semi-annual interim un-audited financial reports (IFR) prepared by FFPMC were always received on time and found to be acceptable to the Bank. The auditors issued unmodified (clean) opinions on the Project's annual financial statements, which were received by the due dates. No issues were raised by the auditors in the management letters.
- 72. **Procurement packages were in accordance with the Bank's Procurement and Consultant Guidelines.** However, some packages had to be cancelled and re-bid primarily due to lack of competition resulting in "no bids submitted," "non-responsive bids," or "bids exceed the cost estimate." Ultimately, these cancellations of bidding process and re-bid

¹⁴ Established on January 23, 2014 pursuant to the Prime Minister's Decree # 51A and comprised of the Head of SRC, MoF, Ministry of Economy, Deputy Chairmen of SRC.

required more time to complete key project activities specified in the procurement plan. This was also the main reason for the last two extensions of the project closing date. Procurement risk rating was rated as substantial throughout project implementation.

C. BANK PERFORMANCE

Quality at Entry

- 73. **Quality at entry is rated moderately satisfactory.** The project was well designed, and largely benefited from the review of business-process reengineering financed by the Second Development Policy Operation (P116451). It was specifically designed to provide needed IT infrastructure to the SRC, while USAID financed TA provided required consultancy services. The PDO, however, addresses expected changes from both the Bank financed project and the USAID financed TA. The PDO could have been formulated more narrowly to address specific outcomes expected from what was financed under IDA, which was primarily the IT investments.
- 74. Unrealistic period of implementation at the conceptual stage resulted in several project extensions. The initial implementation period of 3.5 years was highly unrealistic for a project involving IT systems development and implementation. Similar tax projects are usually designed for at least five years and implemented over at least seven years.
- 75. **Inconsistencies in FA and PAD required restructuring.** Several key aspects (legal covenants and institutional arrangements as discussed in paragraph 19) that were included in the PAD were missing in the FA, and the project had to be restructured fifteen months after the effectiveness to address those gaps. A slight discrepancy in FA and PAD components descriptions should have also been addressed at the preparation stage.
- 76. A high-quality of collaboration between the Bank and the Borrower and development partners at the preparation stage is noted. The Bank had a close working relationship with the Borrower during preparation and appraisal. The Bank had a leading role in the project preparation and was instrumental in bringing in other donors. During project preparation, donors held joint missions and agreed on clear divisions of labor.

Quality of Supervision

- 77. **Quality of supervision is rated satisfactory.** The SRC management, project team, FFPMC and the CMU all stressed the high quality of supervision from the Bank's team. Continuous technical support, efficiency and flexibility in responses and constant follow-up from the headquarter based and locally based Task Team Leaders (TTLs) are especially noted. The Bank's team, staffed with a highly qualified IT expert, another WB staff with extensive experience in tax administration issues (who provided cross support), and an IT procurement specialist, also played a significant role in ensuring the adequacy of technical specifications for IT software and hardware in bidding documents. A co-TTL based in Yerevan, Armenia, was instrumental in early-warning, prevention and solution of implementation issues and ensured undisrupted Bank support to the SRC.
- 78. Quality of supervision could have been rated highly satisfactory, if it were not for the initial nine months of delay in project kick-off due to the rotation of the TTLs. The first mission of the second TTL took place in September 2013, nine months after the date of project effectiveness of December 28, 2012 and with no supervision mission till then. The new TTL noticed discrepancies between the FA and PAD that hampered the project implementation and initiated the first project restructuring, approved on March 14, 2014, to adjust the Financial Agreement (the details of the adjustments are discussed above).
- 79. Once the Bank team was fully staffed, it demonstrated proactivity in identifying and resolving project

implementation issues. The supervision of the project stressed since then the need to extend the project completion date to accommodate a challenging implementation schedule of some of the complex IT packages included in the project. The first request for the extension was made with in October 2015, which was immediately approved on November 4, 2015 by the Bank Management with an extended closing date of December 31, 2017. The fast reaction of the Bank management is a good indicator of the quality of supervision.

80. Despite operating in a complex environment, the team responded rapidly to changed circumstances and took timely actions to mitigate risks and ensure smooth project implementation.

Justification of Overall Rating of Bank Performance

81. **Overall rating of Bank performance is rated satisfactory.** Despite several shortcomings in quality at entry, the task team managed to quickly overcome them and provided exemplary implementation support and supervision of the project. Quality of performance reporting was high and supervision inputs and processes were adequate.

D. RISK TO DEVELOPMENT OUTCOME

- 82. **Risk to Development Outcome is negligible.** The risk is considered negligible, given the high institutional support, including the SRC's ownership of the IT systems and their source codes. All of the IT systems, except the HRMIS, were piloted and there is no doubt that they will all become fully functional in the next few months. The effect of the HRMIS on PDO is negligible, and thus its cancellation does not pose any risk to development outcome. There is some risk related to the maintenance and amortization of the IT equipment, which will require upgrading in the next three to five years. The SRC Strategic Plan includes activities on continuous strengthening of analytical skills and Electronic Management System skills of tax officials, which is an important sustainability factor.
- 83. The Bank has taken important actions to mitigate potential risks. Donor funding was secured to finance technical assistance on further improvements in tax administration, based on the weaknesses identified by the 2017 TADAT assessment. Furthermore, the fourth Armenia DPO (P169624), which was under preparation at the time of ICR, includes a prior action on rolling out the Tax Audit Case Management System with full functionality for digitalized audit planning and random inspector assignment.

V. LESSONS AND RECOMMENDATIONS

Preparation

- 84. Three factors at the project design stage were key for the project success. First, the project design was informed by several pieces of analytical work, carried out by the GoA, the Bank, and other development partners, as well as the recommendations of the business-processes reengineering report financed by the 2011 DPO. Second, the project was designed to build on the existing SRC operations and facilities, which ensured that the changes were incremental and therefore manageable. Finally, the project design reflected an integrated approach, encompassing different elements of reform, including the TA on institutional changes and process re-engineering provided by USAID and IT investments financed by the Bank.
- 85. The Project implementation timeline should have been more carefully vetted at the preparation stage. The Project had many complex IT packages central to SRC modernization and hence required proper sequencing in preparing and implementing them. Similar tax projects financed by the Bank usually have the implementation timeline of seven to ten years. The overoptimistic schedule of TAMP implementation (3.5 years) was adopted to align with the period of the Strategic Document to Guide Tax Administration Reforms (2011-14). The ICR team was not able to find out whether the

Bank management was given a comprehensive justification before agreeing to such a short timeline, with terms of references and technical specifications necessary for implementing in time this complex project, in particular from a procurement perspective.

86. At the approval stage, the Bank team should have exercised greater diligence in ensuring that the project timeline was realistic, and that FA was consistent with the PAD. As discussed above, inconsistencies between the PAD and the FA led to delays and the first restructuring, only 15 months after the effectiveness date. These involved simple and concrete issues that should not have happened under the internal control framework of the Bank. Similarly, the inclusion of a steering committee in the project management organization that apparently duplicated the role of the Project Management Board and was not agreed by the SRC since the inception, was also a mistake that required fixing in the first restructuring paper and that caused useless and annoying problems of governance in the management of the project at its early stage.

Implementation

- 87. **Visionary leadership and ownership of reforms was a decisive success factor.** The SRC has exercised visionary leadership during the course of the Project implementation with only short periods of delays in decision-making. Despite changes in the Government and SRC management, the project has been driven by a stability of the IT vision and priorities. The IT team remained the same and demonstrated consistency in IT strategy and priorities, with a strong vision, a business-oriented approach, advanced project management skills, and a deep understanding of tax administration challenges in Armenia benchmarked against best international practices. The IT team has selected a step-by-step approach and focused its modernization efforts on a defined list of priorities with only slight changes in the implementation plan. That was a noticeable factor of successful implementation.
- 88. **Right sequencing of TA and IT investments** is critical for tax administration reform projects. A sequenced IT investment implementation plan was developed to ensure that the SRC directed its focus on the development of bidding documents for priority procurement packages. This was important given the complexity of the procurement procedure for such investments. As said above, the first Restructuring Paper (March 2014) indicated satisfactory implementation progress toward achieving the PDO with disbursements of large IT packages on track for 40% of the total to be completed in FY 14 and an amount of another US\$4 million package under preparation.
- 89. The choice of a customized system (the approach adopted for the Project) over a Commercial-off-the-shelf (COTS) solution usually poses implementation challenges. Some challenges that the project faced during the implementation such as the overrun of the implementation timeline should have been anticipated in the design phase, as they are typical characteristics of the customized approach. Other challenges such as difficulties in the selection of the vendor to build the Tax Audit Case Management System or the addition of the single taxpayer account could have been avoided as most COTS solutions could handle them with ease.
- 90. **Local IT market capacities were taken into account when opting for a customized system.** Armenia's IT market is quite advanced. A large number of simple IT procurement packages were sourced from the local IT market, which helped to reduce procurement time, cost, as well as to overcome language and culture barriers. This played an important role in speeding up the project implementation and contributed to greater efficiencies of procurement processes.
- 91. Projects that involve the development of complex ICT systems should be accompanied by the technical assistance to support business processes reengineering and change management. The TAMP design and scope responded to the explicit request from GoA to focus the use of WB IDA credit on investments in ICT upgrades, and technical assistance was provided by other donors, mostly by USAID. Arrangements were made to ensure the USAID funded project would complement the IDA funded project. However, the absence of the TA component is a big risk to project implementation, which should be avoided in future design and implementation of similar Bank operations. One

possible solution is to explore opportunities for establishing a small Bank-executed Trust Fund or Grant to support some technical assistance and independently identifying solutions on some sensitive issues that the PIU would not be comfortable to address.

92. A strong success factor was an effective collaboration between the Bank, the USAID project team and the SRC at all stages of implementation. Strong collaboration and day-to-day communications with the USAID's project team ensured complementarity of activities. It is unlikely that the project could have produced good results without the support of the whole training and capacity building activity led by USAID.

Supervision

93. Energetic management coupled with an efficient local management of the project was a decisive element in the successful implementation of a project. All key stakeholders at the SRC have pointed out the highly professional Bank supervision provided by the Task Team Leader based in headquarters and the local staff as co-TTL during the implementation of the project. The stability of this team across the whole period of the project was a decisive factor in the success of the project. The responsiveness, support, and guidance of this team led to resolving complex issues as well as addressing day-to-day management issues.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: Outcome 1. Increased tax voluntary compliance

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of active VAT taxpayers	Number	11800.00	12400.00	12400.00	15590.00
		01-Jan-2011	30-Apr-2016	31-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of active CIT taxpayers	Number	28939.00	30400.00	30400.00	15991.00
		01-Jan-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved. The number of active CIT payers increased by 21.9 percent from 13,118 in 2014 to 15,991 in 2018. This is above the original target of a four percent increase. It is important to point out that the baseline of 2014 is used instead of 2011 due to legislative changes that do not allow comparison between the 2011 and 2018 CIT payers' numbers.

Objective/Outcome: Outcome 2. Reduced Tax Evasion

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Average Adjustment result from audits	Amount(USD)	10.10	12.10	12.10	22.10
		26-Apr-2016	30-Apr-2016	31-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
CIT productivity	Percentage	0.10	0.14	0.14	0.14
		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Data for 2018 will be available in 2019

Objective/Outcome: Outcome 3. Reduced Compliance Costs

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Perception of taxpayers regarding level of professionalism and honesty in tax administration as measured by biannualsurveys (differentiated by gender)	Percentage	23.70 31-Dec-2013	0.00 30-Apr-2016	0.00 29-Dec-2017	62.50 31-Jan-2019

Comments (achievements against targets):

The first taxpayer satisfaction survey was conducted in 2013, which is used as the baseline. The target is achieved

Objective/Outcome: Outcome 4. Increased Administrative Efficiency

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Ratio of Revenue collected to SRC operating costs	Number	74.00 13-Feb-2012	83.00 30-Apr-2016	83.00 29-Dec-2017	107.00 31-Jan-2019

Comments (achievements against targets):

Target achieved

A.2 Intermediate Results Indicators

Component: Component A: Institutional Development and Change Management

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of tax inspectors trained (differentiated by gender).	Days	0.00 13-Feb-2012	13800.00 30-Apr-2016	13800.00 29-Dec-2017	32443.00 31-Jan-2019

Comments (achievements against targets):

Target achieved. 11133 - women; 21310 - men

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of tax inspectorates	Number	39.00	29.00	29.00	2.00
		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
SRC adopted modernized organizational structure, based on workflow analysis	Text	Current SRC structure is based territorial structure, based on face-face interactions with clients	Segmented, functional organization adopted	Segmented, functional organization adopted.	Following SRC restructuring in 2017 there are 2 tax inspectorates now (centralized) - one is for large and medium taxpayers and the other one is for small taxpayers with its regional offices in the RoA Marzes (regions) Currently besides Business to Government (B2G) and G2B, SRC is providing B2B and B2 (customers) services electronically. Most of the services are provided electronically (97.5%
		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Provision and Installation of Equipment and Furniture for Training Institute	Text	Outdated equipment and furniture deployed in training institute	New equipment and furniture deployed	New equipment and furniture deployed	Training Center in Yerevan is equipped with distance-learning software, IT equipment and Video Conferencing System.
		13-Feb-2012	30-Apr-2016	30-Apr-2016	31-Jan-2019

Target achieved

Component: Component B: Strengthened Operations

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Service centers established	Yes/No	N	Υ	Υ	Υ
		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of total tax Percenta returns filed electronically	Percentage	20.00	60.00	60.00	97.58
		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Time to prepare and pay	Hours	500.00	400.00	400.00	262.00
taxes		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Comments (achievements against targets):

Target achieved

Component: Component C: IT Infrastructure and Systems Modernization

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised	Actual Achieved at Completion
				Target	Compiction

Disaster Recovery Center	Yes/No	N	Υ	Υ	Υ
Operational		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Target achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Modern Core IT System Established and Operational (monitored by sub- indicators:(a):Data Processing Center Operational(b):Data Warehouse Operational(c): IRMIS Operational(d): IT Security and Access Man	Number	0.00 13-Feb-2012	4.00 30-Apr-2016	4.00 29-Dec-2017	3.00 31-Jan-2019

Comments (achievements against targets):

Target mostly achieved

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised	Actual Achieved at Completion
				Target	Completion

Network Capacity and IP	Yes/No	N	Υ	Υ	Υ
Telephony operational		13-Feb-2012	30-Apr-2016	29-Dec-2017	31-Jan-2019

Target achieved

B. KEY OUTPUTS BY COMPONENT

Objective 1: To increase voluntary tax compliance				
Outcome Indicators	 Increase in number of active VAT taxpayers Increase in number of active CIT taxpayers 			
Intermediate Results Indicators	1. Percentage of total tax returns filed electronically 2. Modern Core IT System Established and Operational (monitored by sub-indicators: (a) Data Processing Center Operational; (b) Data Warehouse Operational; (d) IT Security and Access Man			
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	 Taxpayer 3 System: E-ledger automation; Treasury Data Registration Module; Treasury Data Registration, and E-Payment Portal Monitoring of Taxpayer 3 Applications for Monitoring Center IT Equipment for Data Processing Center and Business Continuity Disaster Recovery Additional Chillers for the Data Centers Microsoft Data Centers Software Software for National E-Payment Portal 			
Objective 2: To reduce tax evasion				
Outcome Indicators	 Increase in the adjustment resulting from audits Increase in CIT productivity 			
Intermediate Results Indicators	1. N/A			
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	 Tax Audit Case Management System (TACM) Software and IT Equipment for Tax Audit Case Management and Analytical Tools' Systems Legal Proceedings Management software 			

	4. Cameral Investigation Module5. Third Party Information Module6. Labeling System (hardware and software)
Objective 3: To reduce compliance cost	
Outcome Indicators:	1. Improvement in perception of taxpayers regarding level of professionalism and honesty in tax administration as measured by biannual surveys
Intermediate Results Indicators	 Service centers established Time to prepare and pay taxes
Key Outputs by Component (linked to the achievement of the Objective/Outcome 3)	 Equipment and Software for Queue Management System and for Monitoring Center Call Center Management and Reporting Software for Monitoring Center IT Equipment taxpayer service centers located in the Post Offices of Armenia Tax Perception Survey
Objective 4: To increase administrative efficiency	
Outcome Indicators	1. Ratio of revenue collected to SRC operating costs
Intermediate Results Indicators	 Number of tax inspectors trained (differentiated by gender) Number of tax inspectorates SRC adopted modernized organizational structure, based on workflow analysis Provision and Installation of Equipment and Furniture for Training Institute Network Capacity and IP Telephony operational

	6. Modern Core IT System Established and Operational (monitored by sub-indicators: (c) HRMIS Operational
Key Outputs by Component (linked to the achievement of the Objective/Outcome 4)	 Corporate Mail Solution Office furniture for tax inspectorates Equipment for Printing house IT Equipment for Training centers Distributed Network Infrastructure of the SRC and Security System Training for IT staff and tax officials

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS	
Name	Role
Preparation	
Supervision/ICR	
K. Migara O. De Silva, Davit Melikyan	Task Team Leader(s)
Benedicta T. Oliveros	Procurement Specialist(s)
Lusine Grigoryan	Financial Management Specialist
Agnes I. Kiss	Social Safeguards Specialist
Dolly Elizabeth Teju	Team Member
Rajul Awasthi	Team Member
Darejan Kapanadze	Environmental Safeguards Specialist
Luz Meza-Bartrina	Counsel
Gayane Davtyan	Team Member
Joseph Huntington La Cascia	Team Member
Pierre Messali	ICR author
Alma Nurshaikhova	ICR author
Sidet Kim	ICR Team Member

B. STAFF TIME AND COST					
Stage of Project Cycle		Staff Time and Cost			
Stage of Project Cycle	No. of staff weeks	US\$ (including travel and consultant costs)			
Preparation					
FY10	11.225	89,557.56			
FY11	29.059	457,277.90			
FY12	26.864	133,886.88			
FY13	0	3,383.50			

Total	67.15	684,105.84
Supervision/ICR		
FY13	12.550	120,549.52
FY14	18.936	84,384.84
FY15	23.337	151,037.31
FY16	11.226	82,597.90
FY17	19.775	82,087.44
FY18	16.555	95,147.26
FY19	16.191	117,453.84
Total	118.57	733,258.11

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval (US\$M)
Institutional Development	2.20	1.0	0.45
Process Modernization and Compliance Management	1.00	1.3	1.3
Infrastructure and System Modernization	11.00	10.0	0.9
Project Management	0.90	0.9	1.00
Total	15.10	13.20	0.88

ANNEX 4. EFFICIENCY ANALYSIS

- 1. The efficiency is rated as substantial. The project contributed to a significant increase in the number of taxpayers and reduction in compliance and administrative costs. The growth in the number of VAT and CIT payers was 35% and 30% respectively between 2014 to 2018. The tax to GDP ratio which was 17.5% in 2012 was 20.8% in 2017. There was also a substantial increase in ratio of revenue collected to the SRC operating costs from 74 in 2011 to 107 in 2018. The compliance cost also reduced due to the decrease in time required to pay taxes from 500 hours in 2011 to 262 hours in 2018. The
- 2. The financial and economic analysis of the project was repeated using the same methodology as employed during the appraisal. However, at appraisal even though it was assumed that the project would raise elasticity of non-oil and gas tax revenue to GDP from the trend rate of 1.19 to 1.5, no specific attribution was done and the entire increase in tax revenue was considered for computing NPV. In the ICR, only the increase in revenue over and above the trend rate has been attributable to the project. Also, the Economic Analysis is done based on actual savings in operating and compliance costs as against percentage of GDP assumptions in the PAD. Due to the above reason, and due to changes in exchange rates the two numbers are not comparable.
- 3. The assumption at appraisal was that the project would raise elasticity of non-oil and gas tax revenue to GDP from the trend rate of 1.19 to 1.5 over a period of four years (y5 to y8 of the project life i.e. from 2016 to 2019). The elasticity was expected to return to the trend rate after these four years. The actual data for 2016-18 has substantially exceeded this estimate. In 2016, tax revenues increased by 2.13% when GDP growth rate declined to only 0.2 percent, similarly the increase in tax revenues kept pace with GDP growth rate which rebounded to 7.5 percent in 2017. In 2018, tax revenues increased by 14 percent over the previous year, without tweaking the tax rates¹⁷ which is mainly due to the efficiency in tax administration. The number of active VAT and turnover taxpayers increased by 17 percent (15,590) and 30 percent (66,690) respectively in 2018 compared to 2017.
- 4. Assuming the increase in elasticity of non-oil and gas tax revenue to GDP over the trend rate of 1.19 attributable to the project, a discount rate of 5 percent, a GDP growth of 4.5 percent from 2019-22¹⁸, inflation of 4 percent, an AMD/US\$US\$ exchange rate of 0.002073 in 2018, and 1 percent devaluation in 2019 and 2020, the project's internal rate of return is 219 percent and the Net Present Value is US\$275 million. The calculations considered the increase in number of taxpayers in 2016 2018, so that only the increase in revenues attributable to tax administration and not due to tax rates is considered for this computation. Sensitivity analysis has been carried out for several key assumptions, including growth, exchange rate, and the underlying assumptions on the financial impact of the Project. Financial benefits are robust across these specifications.
- 5. The economic analysis indicates that the Project has generated economic benefits, both in terms of reduced administrative costs for government and reduced compliance costs for taxpayers. These

¹⁶ WB – Doing Business Report 2011 to 2018

¹⁵ WB – World Development Indicators

¹⁷ https://armenianweekly.com/2019/01/31/in-defense-of-armenias-flat-tax-proposal/

¹⁸ From IMF World Economic Outlook (WEO)

economic benefits are directly welfare enhancing benefits in the sense that by reducing compliance and administrative costs related to tax collections, they lower overall transaction costs related to the generation of state revenue for both government and citizens. With IDA financing the net economic benefits of the project have a net present value of US\$ 14.2 million and an internal rate of return of 31 percent.

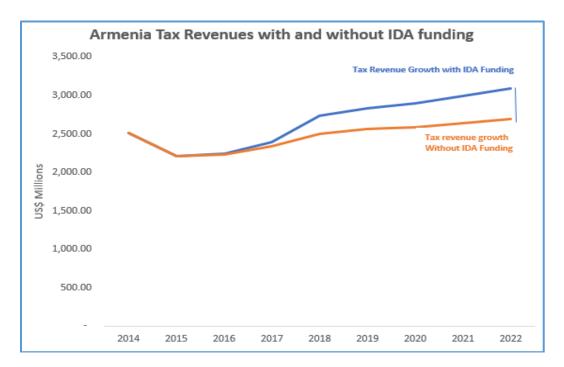


Table 1. Base Case Results for Economic and Financial Analysis

	Financial Analysis	Economic Analysis
Real Net Present Value (NPV)	275	14.2
Real Internal Rate of Return (IRR)	219%	31%

Sensitivity of Results

6. To address sensitivity of financial analysis from 2019 - 2022, four low case scenarios are considered: (1) revenue elasticity of 1.0 from 2019 - 2022; (2) 2% GDP growth rate from 2019 - 2022; (3) a currency depreciation of 10 percent in 2020; and (4) a combination of all above assumptions. The financial benefits are robust for all these assumptions. The summary of results is given in Table 2 below.

Table 2. Sensitivity of Financial Analysis

	Base case	Elasticity @1.0	Growth @ 2%	Depreciation @10%	Combined
Financial NPV	275	206	202	255	178
Financial IRR	219%	216%	216%	217%	215%

7. For economic analysis, the sensitivity of results is carried out for three scenarios: (1) assumption that reduction in compliance and administrative costs to be 50% of the Base case estimates, reflecting uncertainty in attribution; (2) GDP growth of 2% from 2019-2022; and (3) a currency depreciation of 10 percent in 2020. A summary of results of these scenarios are presented in Table 3 below.

Table 3. Sensitivity of Economic Analysis

	Base case	Lower Bound Estimate at 50% of Base case estimate	Growth @ 2%	Depreciation @10%
Financial NPV	14.2	2.6	11.6	12.8
Financial IRR	31%	11%	28%	29%

- 8. In addition to financial and economic benefits, the implementation of the project was efficient. All the planned activities were completed without any overrun at 98% of the IDA funding of US\$10.8 million at closing. The two-year and nine months no cost extension was mainly due to a very short implementation period of 3.5 years, established at the project design and approval stage which in hindsight seem to be overly ambitious. Structural and management changes at the MoF and the SRC also delayed implementation of the project's critical elements. Despite these delays, TAMP was able to fully complete its activities in little over 5 years which should rank among the shortest implementation periods of WB funded tax administration projects in all regions.
- 9. This approach provides an indicative analysis only, as the outcomes supported in this project cannot be solely attributed to project activities. Also, the analysis could not be compared with PAD as the detailed data used when preparing the PAD could not be verified. There were also changes in assumptions. In addition, the projects closing date was extended four times for a cumulative period of 33 months, during which the results targets could have been made more ambitious, and the cost benefit and economic analysis could have been reset. The project nonetheless contributed to major financial and economic benefits, in addition to cost-efficient implementation. The efficiency is therefore rated as Substantial.

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

The ICR was shared with the Borrower on June 24, 2019 and USAID on July 10, 2019. No comments have been received so far.

ANNEX 6. TAXPAYERS SURVEY RESULTS









CONTENT

- 1. Main goal and characteristics of the survey
- Survey methodology and sampling procedure
- Main results and comparison with previous surveys
- Development prospects of tax administration
- Future steps of tax administration modernization. taxpayer expectations

TAX ADMINISTRATION AND TAX PERCEPTIONS

SURVEY OF TAXPAYING ORGANIZATIONS AND INDIVIDUAL ENTREPRENEURS

main results and comparison with the surveys conducted in 2013 and 2016

Heghine Manasyan, heghine@crrccenters.org Aharon Chilingaryan, a.chilingaryan@bdo.am

> January 18, 2019 Yerevan

A LOOK BACK. CHANGES WITHIN THE PAST YEARS

- > Tax administration legislation reforms in the framework of Doing Business project
- Adoption of the Tax Code in 2016
- ➤ Implementation of the Treaty on EAEU in 2015
- Signing international agreements, including in the framework of OECD, relating to the automatic exchange of data and other tax administration issues
- Support to the RA tax authority through tax administration projects by USAID and WB

The WB, through the Tax Administration Modernization Project implemented with the Government of the Republic of Armenia, supports the capacity strengthening of the tax authority in Armenia and improvement of the services provided to taxpayers.

THE GOAL OF THE SURVEY

The survey aim is to gauge the effect of the Tax Administration Modernization Project on the perceptions and attitudes of businesses and individual entrepreneurs toward the composition, structure, and quality of tax administration services in Armenia.

SURVEY METHODOLOGY

Sample

- <u>Sample size</u>. 400 commercial taxpayer organizations and individual entrepreneurs
- <u>Sampling method.</u> non-proportionate quota sampling by:
 - type of organization (organizations and individual entrepreneurs),
 - annual turnover (up to 58.35 mln AMD, 58.36-115 mln AMD, above 115 mln AMD)
- Sampling framework. the complete list of taxpaying organizations and individual entrepreneurs

Method of data collection

 Face-to-face interviews using a tablet based CAPI system (15 interviewers conducted the survey)

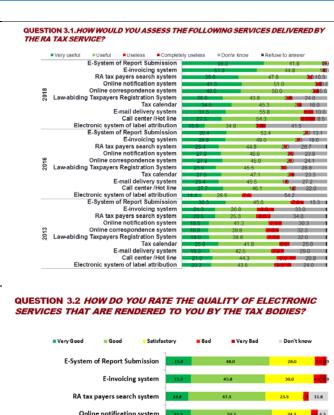
Data collection tools

· Standardized questionnaire and show cards

Դաշտային աշխատանքների ժամանակահատվածը

October 6-29, 2018

MAIN RESULTS AND COMPARISON
WITH PREVIOUS SURVEYS



USEFULNESS OF TAX SERVICE

Particularly useful are considered.

> E-system of Report Submission

2018 - 98,1 percent of respondents,

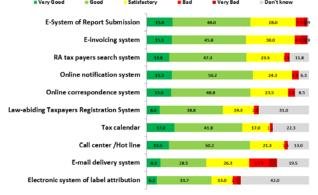
2013 - 75,3 percent of respondents.

and

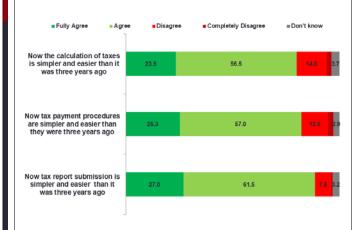
➤ E-invoicing system

2018 - 96 percent of respondents,

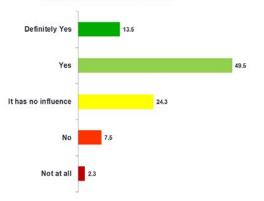
2013 - 58 percent of respondents.



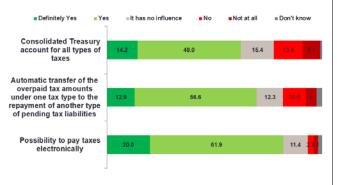
QUESTION 3.4 TO WHAT EXTENT DO YOU AGREE WITH THE FOLLOWING STATEMENTS?



QUESTION 3.6 AUTOMATION OF TAX ADMINISTRATION FUNCTIONS THAT HAVE TAKEN PLACE IN THE COURSE OF THE RECENT THREE YEARS HAS RESULTED IN A REDUCTION OF COSTS (ADMINISTRATIVE COSTS) FOR TAXPAYERS TO RUN A BUSINESS



QUESTION 3.8 DO THE NEW TYPE OF SERVICES BEING RENDERED BY TAX AUTHORITY DIRECTLY PROMOTE OR AT LEAST SIMPLIFY YOUR BUSINESS OPERATIONS?



*Note. Majority of entrepreneurs (85-90%) are aware of new online services provided by the RA tax authority

AUTOMATIZATION - DECREASE OF BUSINESS EXPENCES

Automatization of the tax administration functions in the last three years:

- according to 63 percent of the respondents, has resulted in a decrease of business expenses,
- > only 45.7 percent of the IEs agreed with this opinion.

QUESTION 3.1. ASSESSMENT OF SERVICES THAT ARE RENDERED TO YOU BY THE TAX BODIES IN 2013, 2016 AND 2018 (SUM OF VERY USEFUL AND USEFUL ANSWERS, PERCENT IN TOTAL)

Type of services		2016	2018	2013-18 percentage point
Online notification system	48.8	73.6	92.3	+43.5
E-invoicing system	58.0	78.8	96.0	+38.0
Online correspondence system	57.8	72.5	90.5	+32.8
RA tax payers search system	55.8	70.2	86.8	+31.0
E-mail delivery system	61.8	70.9	87.3	+25.5
E-System of Report Submission	75.3	83.8	98.0	+22.8
Call center /Hot line	65.25	73.8	81.8	+16.5
Tax calendar	66.8	74.6	79.8	+13.0
Law-abiding Taxpayers Registration				
System	58.8	69.1	71.8	+13.0
All above mentioned	60.9	74.1	87.1	26.2

USEFULNESS OF ELECTRONIC SERVICES

- an increase in usefulness rating of the services based on modern digital technologies, especially the online systems of notification and invoicing
- the average usefulness rating of the services has increased by 26 percentage points between 2013 and 2018, almost evenly for the given timeframe.

QUESTION 3.9 HOW DO YOU RATE, IN GENERAL, THE INITIATIVES UNDERTAKEN BY TAX AUTHORITIES OVER THE LAST THREE YEARS FOR THE IMPROVEMENT OF TAX ADMINISTRATION (INTRODUCTION OF VARIOUS E-SERVICES, SIMPLIFICATIONS IN TAX CALCULATION, ETC.)?

	2013	2016	2018
Very positive	0.5	1.3	7.0
Positive	20.5	22.5	55.5
Positive Total	21.0	23.8	62.5
Satisfactory	34.0	33.5	32.0
Negative	23.3	20.7	3.0
Very negative	14.5	6.0	0.5
Negative Total	37.8	26.7	3.5
DA/RA	7.3	16.0	2.0
Total	100.0	100.0	100.0

*Note: In 2013 and 2016 the question was phrased 'How do you assess the impact of measures taken by the Government of the Republic of Armenia over the recent years towards improvement of the tax legislation and administration on business activity and business environment?'

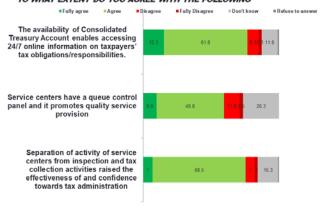
THE EFFECT OF TAX ADMINISTRATION MODERNIZATION ON BUSINESS ENVIRONMENT

"How do you rate, in general, the initiatives undertaken by tax authorities over the last three years for the improvement of tax administration?"

The comparison of 2018 survey findings with the 2016 and 2013 surveys shows that:

- the share of positive ratings of the tax administration improvement measures has significantly increased from 21 percent to 62.5 percent,
- one third of the respondents in the past years had rated them as satisfactory.

QUESTION 3.14/1,3 ABOUT SERVICE CENTERS QUALITY 3.15/1. ABOUT CONSOLIDATED TREASURY ACCOUNT TO WHAT EXTENT DO YOU AGREE WITH THE FOLLOWING



OTHER SERVICES TAX INSPECTIONS, INTERNAL STUDIES AND TAX COLLECTION

- Twenty-three point five percent of the BTPs disagreed during the inspections (another 23,5 percent of the total did not undergo any), out of which:
- > 18.1 percent of the businesses had gone to the court
- only 21,3 percent were satisfied with the results in the process of appealing the inspection act.

Monitoring Center.

- the function of the Monitoring Center to identify and notify businesses about risks is still in the making
- in some cases the real sector risks are "overestimated"

Internal studies. the analyses in the tax internal study protocols have already gained a steady and valued role among the tax administrators and business taxpayers

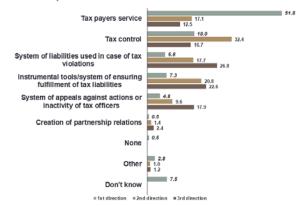
<u>Tax collection</u>, the taxpayers are partially confident that the tax authorities show fair and equal attitude toward everyone

MAIN CONCLUSION

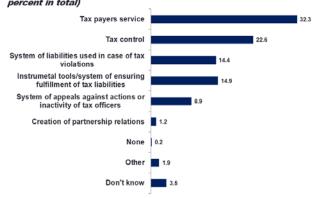
The survey shows significant progress in the customer ratings of the state authorities related to tax administration, both from the perspective of customer service, as well as from the electronic services and tax internal studies. This suggests that the Training Center of the SRC is developing.

FUTURE STEPS OF TAX ADMINISTRATION MODERNIZATION. TAXPAYER EXPECTATIONS

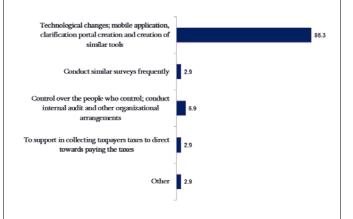




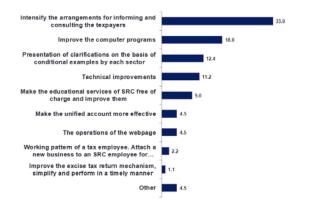
QUESTION 2.4 WHICH DIRECTION OF THE REFORMS OF TAX ADMINISTRATION DO YOU CONSIDER TO BE ESSENTIAL FOR THE IMPROVEMENT OF BUSINESS ENVIRONMENT? (all answers, percent in total)



QUESTION 3.20.1 WHAT NEW SERVICES DO YOU THINK SHOULD BE DELIVERED BY THE SRC?



QUESTION 3.20.2 IN YOUR OPINION, WHAT NEW WAY OR METHOD SHOULD SRC APPLY IN THE EXISTING SERVICES THEY DELIVER?



FUTURE STEPS OF TAX ADMINISTRATION MODERNIZATION. TAXPAYER EXPECTATIONS (1)

- in relation to the tax administration functions, the highest expectations among taxpayers are from the services rendered to the taxpayers
- enhance taxpayers' awareness of services, particular attention should be paid to prompt notification on legislative changes
- taking into consideration the insufficient allocation of funds for consulting services by taxpayers, it is advisable to group the answers to taxpayers' questions and run a special portal
- conduct a one-time survey among taxpayers on technical issues of electronic services. Subsequently, it is also possible to develop a tax mobile application.

FUTURE STEPS OF TAX ADMINISTRATION MODERNIZATION. TAXPAYER EXPECTATIONS (2)

- undertake preparatory activities prior to the introduction of the Horizontal Monitoring System,
- fine-tune the operations of the highly-requested Call Center by setting performance improvement indicators,
- introduce tax service processes evaluation and efficiency enhancement planning,
- create a feedback mechanisms with the taxpayers by conducting annual surveys among taxpayers to assess the services rendered and tax-abidance for revaluation of the key indicators.









THANK YOU

Heghine Manasyan, heghine@crrccenters.org Aharon Chilingaryan a.chilingaryan@bdo.am

> January 18, 2019 Yerevan