



TECHNICAL REPORT

REPUBLIC OF ARMENIA

Report on Government Finance Statistics Mission

SEPTEMBER 27 – OCTOBER 8, 2021

PREPARED BY

Ivana Jablonská & David Bailey



MEMBERS

Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, Uzbekistan

PARTNERS

Asian Development Bank, China, Korea, Poland, Switzerland

DISCLAIMER

The contents of this report constitute technical advice provided by the staff of the International Monetary Fund (IMF) to the authorities of the Republic of Armenia (the “TA recipient”) in response to their request for technical assistance. This report (in whole or in part) or summaries thereof may be disclosed by the IMF to IMF Executive Directors and members of their staff, as well as to other agencies or instrumentalities of the TA recipient, and upon their request, to World Bank staff, and other technical assistance providers and donors with legitimate interest, including members of the Steering Committee of CCAMTAC, unless the TA recipient specifically objects to such disclosure (see [Operational Guidelines for the Dissemination of Technical Assistance Information](#)). Publication or Disclosure of this report (in whole or in part) or summaries thereof to parties outside the IMF other than agencies or instrumentalities of the TA recipient, World Bank staff, other technical assistance providers and donors with legitimate interest, including members of the Steering Committee of CCAMTAC, shall require the explicit consent of the TA recipient and the IMF’s Statistics Department.

MEMBERS



Armenia



Azerbaijan



Georgia



Kazakhstan



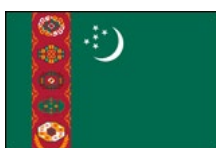
Kyrgyz Republic



Mongolia



Tajikistan



Turkmenistan



Uzbekistan

DEVELOPMENT PARTNERS (DONORS)



Ministry of Economy
and Finance



Ministry
of Foreign Affairs
Republic of Poland



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

CONTENTS

Glossary	4
----------	---

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS	5
---	----------

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS	8
--	----------

A. Sector Classification	10
B. Data Compilation	14
C. Work Plan	19
D. Institutional Arrangements	20
E. Officials Met During the Mission	22

TABLES

1. List of Priority Recommendations	7
2. List of Detailed Recommendations	8
3. Summary of Sector Classifications in Latest PSIT	10
4. Sector Classifications of Financial Organizations	12
5. Sector Classification of Health Bodies (JSCs) by Region	13
6. Examples of Issues Identified in 2020 Budgetary Central Government Expenditure	16
7. Comparison of published GFS and NA data for 2018	21

APPENDICES

I. Template for Sectorized List of Public Sector Units	24
II. Provisional GFS for 2020 – Statement of Operations	25
III. Provisional GFS for 2020 – Expenditure by Functional Categories	26

Glossary

AMD	Armenian Dram
Armstat	Statistical Committee of the Republic of Armenia
CBA	Central Bank of the Republic of Armenia
CCAMTAC	Caucasus, Central Asia and Mongolia Technical Assistance Center
CG	Central Government
COA	Chart of Accounts
DICA	Development and Investments Corporation of Armenia
DGF	Deposit Guarantee Fund
FSRD	Financial Statistics and Risk Department at the MoF
GFS	Government Finance Statistics
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
<i>GFSM 2014</i>	<i>Government Finance Statistics Manual 2014</i>
GG	General Government
JSC	Joint Stock Company
LG	Local Government
LLC	Limited Liability Company
LNCO	Local Non-Commercial Organization
MCD	Middle East and Central Asia Department
MoF	Ministry of Finance
NA	National Accounts
NCO	Non-Commercial Organization
NLB	Net Lending / Net Borrowing
NPI	Non-Profit Institution
PDMD	Public Debt Management Department at the MoF
PFC	Public Financial Corporation
PSDS	Public Sector Debt Statistics
PSIT	Public Sector Institutional Table
QPSD	IMF / World Bank Quarterly Public Sector Debt Database
ROA	Republic of Armenia
SNCO	State Non-Commercial Organization
SOE	State-Owned Enterprise
TA	Technical Assistance
WP	Work Plan

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

1. **The mission to Armenia took place between September 27–October 8, 2021 to assist the authorities to improve their Government Finance Statistics (GFS) compilation practices.** The technical assistance (TA) mission was conducted by Ms. Ivana Jablonská and Mr. David Bailey at the request of the Ministry of Finance (MOF) and with the support of the IMF's Middle East and Central Asia Department (MCD). The main objectives of the mission were to assist the authorities in finalizing a comprehensive sectorized list of all public sector units — known as, the public sector institutional table (PSIT) — and in compiling annual general government GFS data for 2020.
2. **The mission also provided practical and tailored training with the objective of improving the capacity of the authorities to compile and disseminate GFS.** The GFS compilers from the Ministry of Finance (MoF) as well as staff from the Statistical Committee of Armenia (Armstat) and the Central Bank of Armenia (CBA) participated in these sessions. The mission provided training on: (i) sectorization rules and their practical implementation in the sectorization of selected Armenian units; (ii) revenue and expenditure classifications as defined in the *Government Finance Statistics Manual 2014 (GFSM 2014)*, giving particular attention to the items of special interest to the Armenian authorities; and (iii) consolidation, including drafting a short set of guidelines for the Armenian GFS compilers. The mission also delivered information sessions on: (i) overview of the uses and benefits of the GFS framework; (ii) international GFS and Public Sector Debt Statistics (PSDS) data reporting; (iii) consistency of macroeconomic statistics and cooperation among their compilers; and (iv) relationship between the International Public Sector Accounting Standards (IPSAS) and GFS. All training and informational materials were distributed in both English and Armenian.
3. **The mission would like to thank the staff of the national institutions for their courtesy and willingness to share their knowledge with the mission.** It is especially grateful to the staff of the MoF for their assistance in organizing the mission. The mission also thanks Mr. Vahram Janvelyan for his support in arranging meetings and to Ms. Marina Sahakyan and Mr. Arthur Aroustamov for providing interpretation and translation services during the mission.
4. **The mission was part of the work program of the Caucasus, Central Asia, and Mongolia Regional Capacity Development Center (CCAMTAC).** CCAMTAC was launched in February 2021 with a principal role in delivering practical and high-quality advice in areas essential to sound and effective macroeconomic management. CCAMTAC aims to strengthen GFS and PSDS for analyzing, designing, and implementing fiscal policy. It will also aim to improve transparency and data quality.

5. Future GFS and PSDS TA provided to Armenia will be based on the workplan and specific TA needs defined by the authorities. Armenia and eight other countries of the region will benefit from the CD activities in the framework of the five years project assisting the CCAMTAC member countries in their compilation of GFS and PSDS.¹ To this end, the Armenian authorities should establish their medium-term work plan as well as define their high priority TA needs. The recommendations of this TA mission, as well as previous TA missions in January/February 2021 and December 2019, should form the basis of the Armenian medium-term work plan. It is important that the work plan prioritizes those areas which will deliver the greatest user benefits, and considers links and dependencies between milestones. The mission emphasized that the work plan should be realistic and consider both current resource levels and opportunities for efficiency gains.

6. Enhancing cross institutional cooperation would result in improving the quality of GFS and consistency across all domains of macroeconomic statistics. The experience from other countries shows that regular dialogue between the institutions compiling macroeconomic statistics helps improve statistical quality and reduces discrepancies between statistical outputs, the latter thanks to an improved understanding of the source of discrepancies. The mission highlighted existing discrepancies between national accounts (NA) and GFS publications and underlined the importance of the finalized PSIT being used across all macroeconomic statistics. The Armenian authorities acknowledged the improvements needed in institutional cooperation, notably of the necessity to formalize the cooperation between the MoF, Armstat and the CBA.

7. The mission stressed the importance of compiling GFS from detailed source data utilizing charts of accounts (CoA) and bridge tables to automate the compilation process. The mission successfully compiled provisional GFS for 2020, using existing MoF processes, but underlined that the current data sources which are used for the GFS compilation are not sufficiently detailed or disaggregated for the production of high-quality GFS, nor are they well-formatted to facilitate automation of compilation processes. GFS can be significantly improved if compilers are given access to the more detailed data held in the Treasury Single Account (TSA). The TSA database includes both budget codes and classifiers from the Government Finance Statistics Manual 2001 (GFSM 2001), but these codes are not currently being utilized in GFS compilation. In addition, the TSA holds the disaggregated data which is necessary for accurate classification of transactions and for improving consolidation practices. Therefore, the mission strongly encourages the MoF to make the necessary arrangements to provide GFS compilers with access to the detailed TSA data.

8. The Armenian authorities have made progress in developing a comprehensive PSIT, and work should continue to finalize and publish the PSIT as soon as possible. The mission reviewed the latest draft PSIT and assisted the authorities in the sectorization of public foundations (non-commercial organizations established by the government) as well as advising

¹ Other eight CCAMTAC members are: Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan.

on the classification for some public financial corporations. The mission underscored the importance of regularly updating the PSIT once published (either annually or biennially) and maintaining transparent documentation that clearly explains the rationale for each sector classification decision.

9. The mission noted that the current capacity for GFS compilation is limited and an increase of staff resources would be beneficial to advance the medium-term work plan of the authorities. GFS compilation and coordination responsibilities have passed recently to the MoF's Financial Statistics and Risks Department (FSRD). While the mission welcomed the identification of a GFS unit within the MoF, the current staffing level is limited to three persons, all of whom have other responsibilities and tasks beyond GFS compilation and improvements. In the view of the mission, this relatively low level of resource is likely to impact negatively the pace of GFS improvements.

10. To support progress in the above work areas, the mission provided detailed recommendations spanning a two-year period with the following priority recommendations carrying particular weight to make headway in improving GFS quality and completeness.

Table 1. List of Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
December 2021	Finalize and publish the Public Sector Institutional Tables (PSIT), in cooperation with Armstat and the CBA.	MoF
March 2022	Strengthen and formalize the cooperation between statistical compilation institutions.	MoF, Armstat, CBA
June 2022	Secure access to detailed data for budgetary government held in the Treasury Single Account (TSA) and establish processes to use the data in GFS compilation.	MoF

11. Further details on the priority recommendations and the related actions/milestones can be found in the *Detailed Technical Assessment and Recommendations*.

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

Table 2. List of Detailed Recommendations

Target Date	Recommendation	Responsible Institutions
October 2021	Compile and disseminate GFS for 2020 , through the IMF's annual GFS database, using the current data reports and general government delineation. ²	MoF
October 2021	Update and transmit to the IMF the climate change questionnaire with 2020 data on government policy indicators. ³	MoF
December 2021	Finalize the PSIT and share a final version with Armstat, CBA and the IMF, seeking to make the PSIT publicly available by (or as soon as possible after) the target deadline.	MoF
December 2021	Define and formalize the data requirements of the GFS compilation departments within the MoF for access to in-year and historic data in the Treasury Single Account (TSA). The data should be sufficiently detailed for GFS compilation, including consolidation, and should include the GFSM 2001 and budget codes held within the TSA.	MoF
December 2021	Develop a well-structured and realistic work plan for the extension and improvement of GFS and PSDS, building on the 2020 MoF Action Plan and discussions with the mission. The work plan is to be shared with CCAMTAC.	MoF
March 2022	Ensure adequate staff capacity to deliver effectively on the agreed activities and targets in the GFS work plan.	MoF
March 2022	Establish a technical working group to discuss issues related to sector classification as well as GFS data and statistical methodology issues. The working group should meet regularly and be composed of technical level staff involved in the compilation of macroeconomic statistics from the MoF, Armstat and CBA.	MoF, Armstat, CBA
March 2022	Put in place Memoranda of Understanding (MoU) between the MoF, Armstat, and the CBA which ensure that relevant data can be freely shared between the three institutions for the purposes of statistical compilation and sector classification.	MoF, Armstat, CBA

² The GFS data for 2020 were transmitted at the end of October and are published on the IMF's GFS database.

³ The updated climate change questionnaire was transmitted at the end of October.

March 2022	Establish clear and transparent processes and documentation which will allow the PSIT to be updated and maintained following a regular annual or biennial update schedule.	MoF
June 2022	Develop and test new GFS compilation systems/processes for budgetary government using the detailed data sourced from the TSA.	MoF
September 2022	Compile and disseminate GFS for 2021 (and data for at least the previous 5 years) through the IMF's annual GFS database using (i) detailed TSA data for budgetary government; (ii) existing data sources for extrabudgetary government; and (iii) additional data for general government units which are currently missing but will be identified through the PSIT.	MoF
October 2022	Investigate differences between GFS and national accounts data and implement a program to bring the two into alignment where appropriate.	Armstat, MoF
September 2023	Establish efficient data collection arrangements which cover all general government units and use these to compile, and disseminate, GFS. Depending on the materiality of the units, and associated fiscal risks, the data collection arrangements may be either monthly, quarterly or annual.	MoF, Armstat, CBA
Continuous (regular)	Regularly review and update the PSIT in cooperation with Armstat and CBA.	MoF

A. Sector Classification

12. The mission reviewed the latest draft version of the PSIT provided by the authorities, containing 3,456 institutional units. The MoF officials explained that they had continued the work of the previous mission of January-February 2021 in applying the sector classification principles to state and local non-commercial organizations, state-owned enterprises, public sector established foundations, and public financial corporations. It had been possible to source new and/or improved data on certain entities, which had led to some corrections to the previous preliminary sector classifications. This was most evident in the case of Joint Stock Companies (JSCs) and State Non-commercial Organizations (SNCOs) where improved data had led to different outcomes by applying the “market test”.⁴

Table 3. Summary of Sector Classifications in Latest PSIT

	Government Units	Public Corporations	Not yet classified	Total
Joint Stock Companies (JSCs)	151	79	0	230
State Non-Commercial Organizations (SNCOs)	1,829	12	0	1,841
Local Non-Commercial Organizations (LNCOs) ¹	1,180	0	0	1,180
Public Financial Corporations	1	21	0	22
Public Foundations ²	39	17	70	126
Public Entities in process of liquidation ³	14	0	43	57
Total⁴	3,214	129	113	3,456

1 Although the State Registry lists 1,440 LNCOs, to-date only 1,182 have been confirmed.

2 Public Foundations are non-commercial organizations established by the government to pursue social, charitable, cultural, educational, scientific, health, or environmental aims.

3 Includes liquidated entities as well as those in the process of liquidation.

4 Nine privatized public entities were identified by the MoF and have been excluded from this list.

13. The mission noted that budgetary central and local government units were currently missing from the PSIT. A summary of the coverage of the latest version of the PSIT is shown in table 3. The authorities confirmed that they planned to add the central government units which constitute the budgetary central government, as well as the regional (Marzes) and local community government units that constitute the budgetary local government. As the sector

⁴ The “market test” requires that for a nonfinancial public unit to be a public corporation its sales must cover at least half of its production costs. For more detail, please see the GFS TA report from the January/February 2021 mission.

classification of these units is not in question, the process of their inclusion is expected to be straightforward.

Public Foundations

14. The authorities requested assistance with the classification of public foundations, in particular for the 70 entities which remained unclassified. Public foundations are non-commercial organizations which have been created by government in order to pursue social, charitable, cultural, educational, scientific, health, or environmental aims. One of the challenges faced by the MoF compilers was the relative lack of information on public foundations when contrasted with the available information on SNCOs. The mission reviewed the 70 public foundations not yet classified and establish preliminary classifications for 41 of these, with the other 29 requiring further examination.

15. The mission recommended that the default classification for public foundations should be as extrabudgetary government units given their non-commercial nature. However, the mission emphasized that efforts should be made to source the necessary information on individual public foundations in order to apply the sector classification principles, and the default classification as a government unit should only be applied in those cases where the required information was lacking or absent. In many cases examined by the mission, it was possible to source the information required for sector classification through internet searches for the charters, annual reports, and/or accounts of the foundation. It was recommended that this approach be followed for the remaining 29 public foundations, and if unsuccessful, the MoF compilers were encouraged to reach out to the relevant ministry or local community in order to source relevant information regarding the public foundation.

16. While classifying public foundations, the mission identified that Armstat held data on public foundations established with educational/academic aims. The data held by Armstat allowed the sector classification of certain public foundations to be cross-checked for consistency with the separate assessment of Armstat. This was done, but the process was complicated by the severe limitations on data-sharing between Armstat and the MoF. The obstacles to data-sharing, and recommendations on how they might be overcome, while maintaining appropriate data confidentiality, are discussed further in section D on institutional arrangements.

17. The PSIT includes a number of units that either have been liquidated or are in the process of liquidation, and many of these units have not been sectorized. The mission noted that often the process of liquidation can span a number of years, and during this process there can be significant transactions and stock positions that require capturing in GFS. For this reason, the mission recommended that units that are in the process of liquidation remain included in the PSIT under the appropriate sector classification until such time that they are fully liquidated. Additional notes can be included in the PSIT to inform users that a unit has entered a process of liquidation.

Public Financial Organizations

Table 4. Sector Classifications of Financial Organizations

Organization
Extrabudgetary Central Government Units
Deposit Guarantee Fund of Armenia
Pension Guarantee Management Fund
Public Financial Corporations
Central Bank of Armenia
Export Insurance Agency of Armenia CJSC
Development and Investments Corporation of Armenia CJSC
Panarmenian Fund ¹
Armenian Card CJSC
National Mortgage Company CJSC
Homes for Youth CJSC
Small and Medium Business Credit Support CJSC
Vehicle Single Window CJSC
Stak Processing CJSC ²
Stak Money Transfer CJSC ²
Hayincassatsia CJSC ³
Financial System Mediator

1 The Panarmenian Fund was thought not to be an institutional unit in the previous TA mission but new information from the CBA suggests it is an institutional unit.

2 Stak Money Transfer CJSC and Stak Processing CJSC merged in January 2021.

3 Hayincassatsia began a process of liquidation in 2020.

18. With the assistance of the statistical department of the CBA the mission reviewed the current classification of public financial institutions. Although the latest PSIT includes 22 financial organizations, some duplication was identified within these entries as well as some units which did not appear to be financial in nature. Table 4 provides a list of those financial organizations that have been classified. The ACRA Credit Reporting JSC and Armenian Motorinsurers' Bureau may also be public financial corporations, although the mission was unable to establish whether they met the criteria to be considered public sector controlled. According to available information, the German-Armenian Fund appears not to meet the criteria for a separate institutional unit.

Health Units

19. The mission noted that there was considerable heterogeneity in the sector classification of health units that has been established as JSCs. Table 5 summarizes the classification of JSC health bodies by region (based on reporting body). It can be seen that there is considerable regional variation. While this variation does not in itself indicate any errors in the application of the sectorization principles the mission encourages the authorities to consult with relevant officials in the Ministry of Health to check the plausibility of the sector classifications for health bodies constituted as JSCs. In particular, it is recommended that the distinction between local and central government classifications is reviewed.

Table 5. Sector Classification of Health Bodies (JSCs) by Region

Reporting Body	Number of units by sector classification			
	Public Corporation	Central Government	Local Government	Total
Ministry of Health	3	13	0	16
Aragatsotn province	2	2	0	4
Ararat province	3	4	0	7
Armavir province	5	1	0	6
Gegharkunik province	7	1	0	8
Kotayk province	3	5	0	8
Lori province	12	2	0	14
Shirak province	9	11	0	20
Syunik province	2	5	0	7
Tavush province	1	0	3	4
Vayots Dzor province	2	1	0	3
Yerevan municipality	0	0	32	32
Total	49	45	35	129

PSIT Presentation

20. The units which constitute the public sector are continually in flux, with some units being dissolved, some newly constituted, and others being merged or restructured; it is therefore essential that this is reflected in the PSIT in a transparent way. The mission reminded the MoF compilers of the PSIT template that had been suggested during the previous mission of January-February 2021. The template not only records the sector classification of all public sector units at a point in time (e.g., end of 2020) but also includes a section to capture changes in sector classification over a period of time (e.g., during 2021). This template is reproduced in Appendix I. The mission recommended that the MoF adopt a similar template when sharing and publishing the PSIT.

21. The importance of maintaining transparent documentation that clearly explains the rationale for a sector classification decision was underlined. The mission recommended that the documents and data used to arrive at each sector classification decision are electronically

maintained in a way that will facilitate future reference and allow the rationale and evidence for the sector classification decision to be understood. This will allow informed sector classification amendments to be made when either the operating circumstances for the unit changes, or new information comes to light. There would also be some benefit to users in including within the published PSIT a column containing a short explanation of the rationale for the sector classification of each unit (see Appendix I). This inclusion should be in addition to the more detailed documentation maintained by the MoF.

22. Given the importance of sector classification decisions to all compilers of macroeconomic statistics, it is recommended that the MoF work more closely with Armstat and the CBA when finalizing and updating the PSIT. While it is recognized that the MoF has the lead responsibility for defining the extent of the general government sector, and the wider public sector, it would be beneficial for Armstat and the CBA to have a greater role in reviewing and agreeing the PSIT. There are a number of reasons why such involvement would be helpful, but the two main reasons are: (i) both Armstat and the CBA collect and hold data which can be of assistance in making informed sector classification decisions; (ii) it is essential that all Armenian macroeconomic statistics use the same sectoral definitions to ensure consistency across economic metrics (e.g., GDP, external current balance, government net lending/net borrowing), and Armstat and the CBA are the two other major official producers of Armenian macroeconomic statistics. Section D on institutional arrangements discusses further the mission recommendations with respect to inter-agency collaboration and cooperation.

23. The mission welcomed the use of unique tax and entity identifiers within the PSIT but noted some inconsistencies in the format of these identifiers. Unique identifiers are important as they will allow the PSIT to be linked with other datasets, using simple automated lookups. Such linkages are much more reliable and effective when using unique alphanumeric identifiers than when they are based on names of organizations, whose names frequently have multiple versions, spellings and formats. While the latest version of the PSIT includes identifiers, sometimes the identifiers include separators in the form of ".", sometimes they use ",", and sometimes the separators have been removed. It is essential that all identifiers are presented consistently, and in the same format as used in other government datasets. It was also noted that in the PSIT some identifiers included blank spaces immediately preceding the identifier, these should be removed as they can impact data linking.

B. Data Compilation

24. The Financial Statistics and Risks Department (FSRD) at the MoF has taken over responsibility for GFS coordination and compilation, and as part of the transfer in responsibilities the Public Debt Management Department (PDMD) will provide assistance in compiling the GFS for 2020. MoF officials from the PDMD explained that they had already compiled balance sheet data for budgetary general government, covering financial assets and liabilities, for 2020 and would work with officials from the FSRD to integrate the stocks data with the transactional data for 2020. This handover would assist in providing practical compilation

training to the FSRD staff and was expected to result in final GFS for 2020 being transmitted to the IMF's Statistics Department before the end of October 2021.

Provisional GFS for 2020

25. The mission assisted the authorities to compile provisional GFS for 2020 by using the available summary data reports. The GFS compiled was transactional cash data for expense and revenue, as well as transactions in nonfinancial assets, financial assets, and liabilities. The expenditure data included both a breakdown using economic categories and functional categories, the latter using the Classification of the Functions of Government (COFOG). See Appendices II and III for provisional tables.

26. Provisional GFS for 2020 covered budgetary central government, budgetary local government, and SNCOs. The compilation process used ten summary data reports which capture different aspects of the cash transactions. The process was resource intensive, requiring considerable manual intervention, as most of the reports included only Armenian descriptions without any codes (either budget or GFS codes).

27. The mission noted that compiled GFS for 2020 showed good consistency across sectors as well as between the 'above-the-line' and 'below-the-line' transactions.⁵ This internal consistency of the data was observed despite the data being sourced from summary reports. As examples of this consistency, the total functional expenditure exactly matched the expenditure by economic transactions, and the total statistical discrepancy (between 'above-the-line' and 'below-the-line' transactions) was limited to 1.3 percent of total expenditure.

Challenges of Using Summary Data Sources

28. The current use of summary reports to compile GFS means that the classification of individual transactions is inexact and consolidation of transactions between government units is limited. With respect to the classification of transactions, the mission found that there was insufficient disaggregation in the summary data reports to allow data lines to be matched accurately to a specific GFS category. Instead, many items in the summary data reports had to be matched to a single GFS category based on broad assumptions, despite in many cases the existence of more detailed data underlying the summary reports. With respect to consolidation, the summary data reports include very limited information on the counterpart to transactions, and in some cases different government counterparts are conflated in a single category (for example, "current grants to SNCOs and LNCOs"), as a result the extent to which data can be consolidated between general government units is severely limited.

29. In addition, the mission analyzed the expenditure data for budgetary central government and identified some significant weaknesses in the current level of aggregation

⁵ Above-the-line transactions refer to revenue, expense, and transactions in nonfinancial assets, while below-the-line transactions are the transactions in financial assets and liabilities ('financing').

of the source data. Table 6 highlights some examples of the data weaknesses identified when reviewing the expenditure source data. It is believed that many of the issues can be addressed through sourcing more detailed expenditure data from the Treasury Single Account (TSA), although in some cases it may be an issue with original data entered by ministries and other government units. These latter cases can only be identified as a result of GFS compilers being able to analyze the detailed source data by ministry/government unit.

Table 6. Examples of Issues Identified in 2020 Budgetary Central Government Expenditure

Expense category	Percentage of total expenditure	Issue
Acquisition of services and products	9.5%	There is no counterparty information preventing possibility of consolidation; and lack of detail prevents quality assurance that all transactions are required payments for services rendered.
Subsidies and grants	16.1%	There is limited counterparty information which is required for consolidation; and lack of detail prevents quality assurance that transfers meet GFS definitions of subsidies and grants.
Pensions	18.8%	Single line which does not identify separate pension payments, in particular the cash transfers from Armenian residents to private pension funds (which flow through the TSA) are not identifiable.
Other Expenses	14.8%	Single residual item which is likely to cover many different types of expense and which requires disaggregation to the appropriate GFS categories.
Sum across "not elsewhere classified" categories in COFOG breakdown	6.2%	Use of "not elsewhere classified (nec)" line items should be limited with attempts always made to identify the correct functional expenditure line; "nec" expenditure is particularly high for social protection expenditure.

30. The mission also discussed the findings of recent analysis by IMF's Fiscal Affairs Department (FAD) and of the Middle East and Central Asia Department (MCD) on the budget economic classification of expenditure. The authorities explained that they were already looking into the issues raised in the analysis, and further explained that the majority of the expenditure recorded under "other expenses" related to spending by the Ministry of Defense. The mission team recognized the potential sensitivity of military spending but pointed out that GFS presents only high-level aggregates and does not identify spending by individual ministries or government units. The authorities were therefore encouraged to review the current practice of

recording certain military expenditure within “other expenses” and record it in the relevant economic transaction categories. In the opinion of the mission the military spending when recorded in this way in GFS would be less identifiable, and so there should be less sensitivities, than with the current practice of recording all classified military expenditures in a single expense line item. If the sensitivities do not relate to GFS but other data presentations, such as the budget presentation, then the authorities might explore alternative options where at the macro-fiscal level of GFS dissemination all expenses are correctly recorded according to *GFSM 2014*, but for more disaggregated data presentations the classified individual line items are either suppressed or aggregated.

31. The mission supported the MoF compilers by providing bespoke training on the GFS framework, revenue and expense classifications, as well as international data dissemination practices. The training focused on GFS topics of particular relevance to the Armenian context. With respect to revenue and expense, it was emphasized that the *GFSM 2014* did not include residual categories and that care should be taken to appropriately classify all items of revenue and expense. Focus was also given to the distinction between grants, subsidies, and other transfers as well as between taxes and non-taxes. With respect to the GFS framework, particular attention was given to the integrated nature of the framework and the consistency/quality checks that are therefore intrinsic to the framework and included within IMF’s annual GFS reporting templates.

Advantages of Using Detailed Treasury Single Account Data

32. The mission strongly urges the MoF compilers to directly use the more detailed TSA data, which includes both budget codes and *GFSM 2001* codes, when compiling GFS as this should significantly improve GFS data quality and data processing. Many of the current challenges in GFS compilation can be overcome by simply gaining access to the detailed TSA data and using the embedded *GFSM 2001* codes when compiling GFS. It is expected that this step will (i) increase the accuracy of detailed GFS revenue and expenditure categories; (ii) reduce the extent to which residual “other” categories are used; (iii) provide information to allow more detailed and accurate consolidation of general government transactions; (iv) reduce the complexity and risk of manual errors in the current compilation processes; (v) increase the level of automation of GFS compilation; and (vi) provide additional data required by Armstat when compiling statistics on the general government sector for national accounts (NA).

33. A Treasury official confirmed that they did not foresee any obstacles that would prevent MoF GFS compilers from accessing to the detailed data held in the TSA. The mission presented how GFS compilation could be strengthened and improved by using the TSA data directly, including use of the embedded *GFSM 2001* codes. The Head of the Treasury confirmed willingness to work with MoF colleagues to establish the GFS data requirements for TSA data, updating if necessary the relevant Ministerial Order (no. 5) to provide the required

access. It might also be possible for Armstat NA compilers to have access to TSA data but it was indicated that establishing this access would require a separate request process.

34. Although the TSA contains *GFSM 2001* codes rather than *GFSM 2014* codes this should not be an obstacle to using the data for GFS compilation. Both *GFSM 2001* and *GFSM 2014* are based on the same basic compilation framework, and many of the changes introduced in the *GFSM 2014* are further elaborations on the methodological guidance and principles rather than on changes to the underlying classification structures. As a result, there is no immediate difficulty in using the TSA *GFSM 2001* codes. The mission advised that where there are differences between *GFSM 2001* and *GFSM 2014*, these can be addressed within the GFS compilation processes. More urgent priorities should be to (i) ensure that the GFS coding corrections identified in a previous TA mission (December 2019) have been incorporated; (ii) ensure that the data supplied by ministries and other government units are recorded consistently with GFS principles; and (iii) minimize (or stop) the use of residual “other” categories (as discussed in the preceding paragraphs).

Consistent Time Series

35. The TSA database contains budgetary data back to 2006. The long time series of data, combined with a semi-automated GFS compilation process taking advantage of the *GFSM 2001* codes embedded in the TSA (at least for more recent years), should facilitate the production of consistent GFS time series. The mission recommended that, when the GFS compilation processes are transitioned to use the new detailed TSA data the new processes are implemented not only for the latest year, but also for at least the previous 5 years.

36. The authorities explained that they were aware that GFS, as disseminated in the IMF’s annual GFS database, was not fully consistent over the time series as a result of methodological improvements implemented for 2019 data. The authorities further informed the mission that due to the handover of GFS compilation responsibilities, the revision of the historical GFS data (pre-2019) to bring it in line with the latest methods and practices would not be considered a priority and work on this would be deferred until late 2021 or early 2022. The mission took note of this information and suggested that the priority after disseminating the 2020 data should be to advance the use of detailed budgetary data in GFS compilation (see preceding paragraphs) and that the historical data might be revised at the same time as implementing improvements using detailed TSA data source.

Consolidation

37. Current consolidation practices are limited due to lack of detailed data. Of particular note is the difficulty in reconciling grant expense and revenue data in order to consolidate grants within general government. In some instances, the level of detail of the current source data means that consolidation has to be done using the counterpart aggregated data for

communities or extrabudgetary units, rather than the state budget data which would usually be more reliable (given it is a single data source subject to budgetary checks).

38. It is likely that new consolidation challenges will appear when applying the finalized PSIT to the GFS compilation processes. The latest version of the PSIT has identified a number of state-owned enterprises (financial and nonfinancial), as well as foundations, that are currently not included in the GFS compilation processes but which need to be taken into account. Similarly, some SNCOs currently included within GFS will need to be excluded. In order to implement these changes, it will be necessary to have detailed data which allows any transactions and stock positions between these units and other government units to be appropriately consolidated.

39. The mission delivered detailed training on both the theory and practical application of consolidation. The training provided a number of pragmatic “rules of thumb” to use when consolidating data from different data sources and a short guide on consolidation was produced for the GFS compilers. The short guide was tailored for the Armenian context.

C. Work Plan

40. The GFS/PSDS capacity development support to be provided to Armenia by CCAMTAC will be based on the country work plan (WP) and specific TA needs defined by the authorities. The opening regional GFS/PSDS workshop organized by CCAMTAC took place virtually on September 13-17, 2021. The main objective of the workshop was to identify each country’s TA needs and to establish country WP to improve the compilation and dissemination of its fiscal data. Besides providing theoretical background of the key principles and concepts of the compilation of GFS and PSDS, the workshop also offered the opportunity for the countries to exchange their practice in the compilation of these statistics. The Armenian authorities delivered a well-prepared presentation on the current status of GFS compilation.

41. The mission bridged the Armenian GFS action plan, published as a Ministerial Decree in September 2020, into a CCAMTAC country WP template and advised the authorities on how to complete it. The WP template requests setting up objectives in the following areas: (i) Coverage (Units, Stocks, Flows); (ii) Frequency and Timeliness (frequency and timeliness of transmission of annual and high frequency data); and (iii) Quality (internal and intersectoral consistency; classification of specific operations; availability of metadata; and data revisions). Armenia and other CCAMTAC member countries should establish their GFS/PSDS medium term WPs and transmit them to the Resident Advisor before the end of 2021.

42. The Armenian authorities will update the draft work plan as appropriate, taking into account the current situation and compilation practices as well as the outcome of this mission. The mission stressed that the objectives set up in the WP should be realistic, including with respect to the current pandemic situation and virtual way of work. The authorities will

transmit the updated WP to CCAMTAC as requested. In addition, they will highlight those high priority issues which they wish to deal with during the future missions.

D. Institutional Arrangements

43. The mission strongly believes that improving intra- and inter-institutional cooperation will improve the quality and consistency of all domains of macroeconomic statistics. In the context of the discussions on the cooperation, the mission delivered an information session on the consistency of macroeconomic statistics and on the need for close cooperation among their compilers. The mission appreciated the presence of the staff of CBA and Armstat during the sessions, which proved the interest of all compilers to improving and aligning their statistics.

Intra-agency Cooperation

44. The GFS compilation responsibilities have been passed recently from the PDMD to the FSRD in the MoF. The mission noted that the handover, from PDMD (previously responsible for GFS compilation), of theoretical knowledge and experience in compilation of GFS had been ensured. The authorities explained that the staff of the two departments will cooperate in the preparation of the next transmission of the annual GFS questionnaire for 2020 (see Section B "Data compilation").

45. At the same time, the cooperation among various departments of the MoF needs to be enhanced, notably with respect to the data exchange between the Treasury and those involved in GFS compilation. The mission noted that several staff of the MoF had been trained in GFS at various trainings organized by the IMF and that there was good general understanding of the basic GFS principles and of the GFS framework existing within various departments of the MoF. This was welcomed as very positive for establishing a common understanding of the needs of FSRD staff when compiling GFS data and introducing GFS improvements.

Inter-agency Cooperation

46. The mission recommended that the cooperation between MoF, Armstat and CBA should be formalized, ideally by signing a Memorandum of Understanding (MoU) by all the three institutions. The mission's understanding is that the cooperation between the MoF on one side and Armstat and CBA on the other side is not formalized. A MoU seems to exist between Armstat and CBA but not with the MoF. The mission proposed that a MoU should be agreed covering the main three areas of: (i) Exchange of relevant data; (ii) Sectorization of entities; and (iii) Methodological issues. The mission also recommended a creation of a cross institutional technical working group to resolve issues relating to data sources/sharing and statistical methodology.

47. The mission believes that it would be helpful, even before signing an MoU, for the MoF to establish a channel to exchange data between MoF and Armstat. The mission

understood that the preparation and signing a MoU will take some time and suggested that Armstat staff participate in the MoF discussions on sectorization of units on an informal basis. In the context of discussions on data sharing, a Treasury official confirmed that Armstat would in principle be able to access the detailed TSA data which would help Armstat when compiling NA (see section B “Data compilation”). On its end, Armstat holds data which can inform and support the work of the MoF in compiling and maintaining the PSIT, but currently these data are considered “confidential” and are not shared. Armstat should therefore explore ways in which it might share data it has collected with the MoF, perhaps by removing or anonymizing any fields that could be reasonably considered confidential or sensitive.

Consistency Across Macroeconomic Statistics

48. Published NA data for the general government sector is materially different from published GFS data for the Consolidated Budget. The mission compared data from the National Accounts of Armenia 2019 publication with data from the Finance Statistics of Armenia 2019 publication. The comparison highlighted significant differences between the two publications, with general government according to NA showing a surplus in 2018 of 39.6 billion AMD, while the GFS consolidated budget shows a deficit in the same year of 96.2 billion AMD (see Table 7). Although some differences might be expected due to different sectoral boundaries and minor conceptual differences, the magnitude of the difference is much too large to be explained by such factors.

Table 7. Comparison of published GFS and NA data for 2018

	GFS ¹ (billion AMD)	NA ² (billion AMD)	Difference (billion AMD)
Revenue	1,384.5	1,646.6	-262.1
of which: Taxes	1,284.4	1,372.7	-88.3
of which: Non-taxes	100.1	273.9	-173.8
Expense	1,331.4	1,369.4	-38.0
of which: Compensation of employees	175.1	468.7	-293.6
of which: Subsidies	142.6	5.4	137.2
of which: Grants	72.5	57.5	15.0
of which: Others	941.2	837.8	103.4
Transactions in nonfinancial assets	149.3	237.6	-88.3
Surplus (+) / Deficit (-)	-96.2	+39.6	-135.8

1 Consolidated Budget data from Finance Statistics of Armenia, 2019 (published 30 October 2020)

2 General Government data from National Accounts of Armenia, 2019 (published 20 November 2020)

49. Given that consistency between macroeconomic statistics is essential, the mission encouraged the MoF and Armstat statistical compilers to work together to understand the reason for the differences between NA and GFS publications and implement a program of

work to bring them into alignment. This issue of consistency between NA and GFS publications was first highlighted in a previous TA report (December 2019) and has not been resolved yet. Armstat and MoF officials engaged with the mission on examining possible reasons for the differences. The most likely reason that emerged was the use of different data sources for the two publications.

E. Officials Met During the Mission

Name	Department / Role	E-mail Address
Ministry of Finance		
Mr. Loris Muradyan	Financial Statistics and Risks Department	loris.muradyan@minfin.am
Ms. Arusyak Gevorgyan	Financial Statistics and Risks Department	arusyak.gevorgyan@minfin.am
Mr. Poghos Baloyan	Financial Statistics and Risks Department	poghos.baloyan@minfin.am
Mr. Artur Hambardzumyan	Public Debt Management Department	artur.hambardzumyan@minfin.am
Ms. Ruzanna Gabrielyan	Budget Process Organization Department	ruzanna.gabrielyan@minfin.am
Ms. Gayane Zargaryan	Budget Execution Reporting Department	gayane.zargaryan@minfin.am
Ms. Emma Ghaytanjyan	Budget Execution Reporting Department	emma.ghaytanjyan@minfin.am
Mr. Zhirayr Titizyan	Treasury Operations Department	zhirayr.titizyan@minfin.am
Mr. Raffi Aleksanyan	Accountancy, Methodology & Reporting Monitoring Department	raffi.aleksanyan@minfin.am
Ms. Sveta Harosyan	Budget Process Organization Department	sveta.harosyan@minfin.am
Ms. Narine Tolmajyan	Accountancy, Methodology & Reporting Monitoring Department	narine.tolmajyan@minfin.am
Ms. Lilit Sargsyan	Budget Process Organization Department	lilit.sargsyan@minfin.am
Statistics Commission of Armenia		
Ms. Haykush Titizyan	Finance Statistics Division	haykush@armstat.am
Ms. Lusya Khachatryan	Macroeconomic Indicators and National Accounts Division	lusya@armstat.am
Mr. Arsen Ohanjanov	Finance Statistics Division	finance@armstat.am
Ms. Astghik Barutchyan	Finance Statistics Division	finance@armstat.am

Ms. Nadejda Astvatsaturova	Macroeconomic indicators and National accounts division	national_accounts@armstat.am
Ms. Arus Tonapetyan	Macroeconomic indicators and National accounts division	national_accounts@armstat.am
Central Bank of Armenia		
Mr. Gagik Aghajanyan	Statistics Department	Gagik.Aghajanyan@cba.am
Mr. Tigran Baghdasaryan	Statistics Department	Tigran.Baghdasaryan@cba.am
Ms. Arpine Petrosyan	Statistics Department	arpine.petrosyan@cba.am
Ms. Peprone Margaryants	Statistics Department	peprone.margaryants@cba.am
Ms. Shake Titanyan	Statistics Department	shake.titanyan@cba.am

Appendix I. Template for Sectorized List of Public Sector Units

It is proposed that the PSIT is compiled and updated annually (although a biennial update process might alternatively be considered). The proposed presentational format consists of two elements:

I. List of all public sector units as of a point in time (e.g., 31st December)

Legal Entity Code	State Registry Number	Tax Payer Identifier	Armenian name	English name	Legal Form	Sector/Subsector	Basis of sectorization/resectorization
Կազմակերպության նույնականացման ծածկագիր	Պետական ռեգիստրի ծածկագիր	Հարկ վճարողի նույնացուցիչ	Անվանումը հայերեն	Անվանումը անգլերեն	Կազմակերպա- իրավական ձև	Ոլորտ/ ենթաօլորտ	Սեկտորիզացման/սեկտորիզացման վերսկսման հիմքը
			Երևանի Կոմիտասի անվան կոնսերվատորիա «Մշակութային արժեքների փորձագիտ»	"Yerjan Komitas Conservatory" SNCO "Expert Center for Cultural Values" SNCO	SNCO SNCO	Central Government - Extrabudgetary Central Government - Extrabudgetary	SNCO which does not meet criteria to be a market producer SNCO which does not meet criteria to be a market producer

II. List of all changes in classification of public sector units between updates (e.g., 1st January to 31st December)

Legal Entity Code	State Registry Number	Tax Payer Identifier	Armenian name	English name	Sector/Subsector	New unit (in year)	Dissolved unit (in year)	Resectorization (in year)		Additional notes
						Effective date from which sectorization applies	Date of dissolution from which sectorization ends	Effective date of new sectorization	Previous Sector/Subsector	
Կազմակերպության նույնականացման ծածկագիր	Պետական ռեգիստրի ծածկագիր	Հարկ վճարողի նույնացուցիչ	Անվանումը հայերեն	Անվանումը անգլերեն	Ոլորտ/ ենթաօլորտ	Նոր միավոր (տարվա ընթացքում)	Լուծարված միավոր (տարվա ընթացքում)	Սեկտորիզացման վերսկսում (տարվա կտրվածքով)		Լրացուցիչ նշումներ
						Սեկտորիզացման մեկնարկի ամսաթիվը	Լուծարման ամսաթիվը, որից հետո սեկտորիզացումը դադարեցվում է	Նոր սեկտորիզացման մեկնարկի ամսաթիվը	Նախորդ օլորտ/ ենթաօլորտ	

Changes in the sector classification of public sector units may be due to (i) the formation of new units; (ii) dissolution of existing units; or (iii) a change in the sector classification of units, due to either new information or changes in circumstances ("resectorization").

Appendix II. Provisional GFS for 2020 – Statement of Operations

STATEMENT OF OPERATIONS (in billion AMD)		General Government						
		Central Government				Local Governments	Consolidation	General Government
		Budgetary	Extrabudgetary	Consolidation	Central Government			
TRANSACTIONS AFFECTING NET WORTH:								
1	Revenue	1,535.9	191.2	-179.2	1,547.9	156.1	-83.0	1,621.0
11	Taxes	1,360.4	0.0	-9.1	1,351.4	30.8	-1.4	1,380.8
12	Social contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Grants	53.2	155.3	-153.2	55.3	81.6	-81.6	55.3
14	Other revenue	122.2	35.9	-16.9	141.2	43.8	0.0	185.0
2	Expense	1,668.5	178.8	-179.2	1,668.1	121.3	-83.0	1,706.4
21	Compensation of employees	176.1	139.5	0.0	315.6	27.6	0.0	343.2
22	Use of goods and services	179.2	26.9	-16.2	189.9	19.4	0.0	209.3
24	Interest	164.8	0.0	0.0	164.8	0.1	0.0	164.9
25	Subsidies	119.1	0.0	0.0	119.1	0.4	0.0	119.4
26	Grants	186.9	0.0	-153.2	33.6	64.4	-81.6	16.4
27	Social benefits	559.1	1.4	0.0	560.5	2.3	0.0	562.9
28	Other expense	283.4	11.0	-9.8	284.6	7.1	-1.4	290.3
31	Gross investment in nonfinancial assets	226.2	0.0	0.0	226.2	17.1	0.0	243.3
311	Fixed assets	226.2	0.0	0.0	226.2	36.3	0.0	262.5
314	Nonproduced assets	0.0	0.0	0.0	0.0	-19.2	0.0	-19.2
2M	Expenditure (2+31)	1,894.6	178.8	-179.2	1,894.2	138.4	-83.0	1,949.6
NLB	Net lending (+) / Net borrowing (-) (1-2M)	-358.7	12.4	0.0	-346.4	17.8	0.0	-328.7
32	Net acquisition of financial assets	19.7	12.4	0.0	32.1	17.8	0.0	49.9
33	Net incurrence of liabilities	353.7	0.0	0.0	353.7	0.0	0.0	353.7
NLBz	Overall statistical discrepancy: NLB vs Financing (32-33-NLB)	24.8	0.0	0.0	24.8	0.0	0.0	24.8

Appendix III. Provisional GFS for 2020 – Expenditure by Functional Categories

EXPENDITURE BY FUNCTIONS OF GOVERNMENT (COFOG) (in billion AMD)		General Government					
		Central Government				Local Governments	Consolidation
		Budgetary	Extrabudgetary	Consolidation	Central Government		
7	EXPENDITURE [=2M]	1,894.6	178.8	-179.2	1,894.2	138.4	-83.0
701	General public services	344.3	11.8	-11.0	345.2	36.1	-79.2
702	Defense	387.8	0.3	-0.3	387.8	0.1	0.0
703	Public order and safety	151.4	0.7	-0.7	151.5	0.0	0.0
704	Economic affairs	125.6	15.8	-8.9	132.5	10.8	0.0
705	Environmental protection	4.4	3.4	-3.2	4.7	16.5	0.0
706	Housing and community amenities	8.9	0.0	0.0	8.9	13.5	0.0
707	Health	148.2	10.2	-11.6	146.8	0.4	0.0
708	Recreation, culture, and religion	33.6	19.6	-26.0	27.3	9.0	0.0
709	Education	143.8	111.6	-112.2	143.2	48.9	-3.7
710	Social protection	546.6	5.3	-5.4	546.5	3.1	0.0
7z	Statistical discrepancy: 2M vs Sum of COFOG Divisions	0.0	0.0	0.0	0.0	0.0	0.0