



# **INTEGRATION OF THE BUDGET CLASSIFICATION AND CHART OF ACCOUNTS**

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*Good Practice among Treasury Community of Practice  
Member Countries*

**PEMPAL**

**2014**

# Introduction and Background

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## PEMPAL, TCOP and the Working Group

**Public Expenditure Management Peer Assisted Learning (PEMPAL)** is a network of public expenditure management professionals in various governments in Europe and the Central Asia (ECA) region. These professionals benchmark their PEM systems against each other and pursue opportunities for peer learning, which is increasingly understood to enhance knowledge transfer. PEMPAL comprises three communities of practice, among which is the Treasury Community of Practice (TCOP), which focuses its activities on challenges in implementing reform initiatives in treasury and on issues that are of professional interest to its members.

Recently, the TCOP has encouraged members to form smaller working groups to share experiences and work on common agendas. Following a Plenary workshop in Azerbaijan in November 2012, three countries, Georgia, Azerbaijan and Ukraine, formed a Chart of Accounts/Budget Classification working group. Moldova and Russia were subsequently invited to join the group to share their experiences. The group was supported by the World Bank resource team that works with TCOP, including Mark Silins (lead thematic expert), Elena Nikulina (TCOP resource team leader) and Ion Chicu (TCOP operations advisor).

In late April 2013, this working group met in Kiev to largely focus on presenting country experiences in reforming chart of accounts (CoA) and budget classifications (BC). Each country has embarked on significant reforms driven by the need to improve financial management and accountability through improved reporting. The reforms have been a component of a larger program of general reform. Each country has undertaken the reforms in a different way and at a different pace; however, each country shares some common features:

- As each is a transition economy, they share the same challenges in moving from a central planning approach to governance, to one which places an increased focus on devolution to Ministries, Departments and Agencies (MDAs) while seeking to retain strong central fiscal management;
- Government CoAs existed for some time, however, these did not support effective fiscal management, rather the focus was on reporting the entity balance or result<sup>1</sup>. This result has some relationship to IPSAS-based reporting but falls well short of meeting these standards<sup>2</sup>. In some cases, a number of CoAs exist in general government. For example,

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<sup>1</sup> This balance was intended for a single audience, the government, and was designed to meet the reporting and accountability needs of a centrally planned economy. There is not a strong relationship between this approach and what is required under IPSAS, however, the component transactions are very similar. For more on this refer to <https://jyx.jyu.fi/dspace/bitstream/handle/123456789/9135/thassine.pdf?sequence=1>

<sup>2</sup> International public sector accounting standards - for more information on these standards refer to [www.ifac.org](http://www.ifac.org)

a separate CoA for the state and local government and other structures for specific extra budgetary funds;

- Each country created a separate BC for appropriation control and cash management centrally. Unfortunately the BC was not integrated with the CoA – the structures were seen as separate and serving different purposes; and
- Automation was a core component of the reform agenda.

Given this history, the group is well placed to be used as the basis for a “study” on how and why to integrate the BC and CoA. The TCOP believes that this experience is also relevant and applicable for other developing economies. This paper presents TCOP knowledge product documenting the results of the working group operation.<sup>3</sup>

## Defining a CoA and why separate BC and CoA evolved

One of the key reasons as to why a separate BC and CoA were developed can be understood through discussion on the local definition and scope of a CoA. For many countries, the CoA was frequently described as the structure of the accounts to fulfil the requirement to prepare formal financial statements. As a result, the concept of a CoA was viewed quite narrowly. In fact, as mentioned previously, in some countries, each major reporting entity (e.g. the state versus local government), or specific extra-budgetary funds, may have developed its own separate CoA. This is currently the situation in both Moldova<sup>4</sup> and Ukraine, although both countries have developed structures that seek to integrate all the CoAs and the BC. Importantly, among the different CoAs the areas of commonality are quite significant, with the general structure of each CoA very much aligned.

In addition, in many countries, the requirement to manage cash against the budget (budget execution control), is also seen as separate and different to financial reporting. While budget execution control is a very different management issue from formal financial reporting, what was absent was an understanding of how these two reporting and control requirements were linked. Thus in developing the BC and CoA, the structures focussed on the differences rather than the areas of convergence. Other issues which probably contributed to the separation of these structures included:

- There was a strong historical institutional commitment to continue with the CoA operating in governments, making it difficult for it to be upgraded or amended to accommodate budget execution control;
- The CoA was a modified accrual structure while the BC was generally cash based;

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<sup>3</sup> The paper was produced under the supervision of Elena Nikulina, World Bank PEMPAL team leader and leader of the TCOP resource team. The main author of the paper is Mark Silins, PEMPAL thematic advisor, World Bank. Country examples were provided by the members of the working group representing respective countries.

<sup>4</sup> In 2008 Moldova designed a new CoA to integrate six existing CoAs and the BC.

- The CoA was more narrowly focussed on financial reporting – a more traditional accountants view of reporting – while the BC sought to include additional aspects for consolidated management, such as the sources of financing (where the receipts came from) because of the important relationship to the financing of the budget;
- In most cases, there was an urgent need to manage cash, both in terms of appropriation control by limiting unapproved spending, and also from a consolidated perspective, to improve cash management and also fiscal discipline. Thus the BC (initially anyway), was more operationally focussed – in some cases this urgent requirement meant the institutional commitment to the original CoA was an impediment to reform; and
- There was a lack of automation in relation to accounting in general, making it difficult for implementers to integrate the two structures effectively.

Thus as a result of the different structures, MDAs also managed the two processes separately, creating challenges in relation to reconciliation and management.

## What is different today?

A number of the circumstances that prevailed at the time separate BC and CoA were implemented have changed including:

- Countries have been redeveloping their approaches to accounting, focussing on compliance with IPSAS and also reporting according to GFSM<sup>5</sup> or ESA<sup>6</sup> frameworks – the traditional approach to accounting was recognised as having a limited application;
- There is a much stronger convergence between IPSAS, that is financial reporting, and budget control and reporting since 2008. Until 2008, IPSAS required a very traditional accountant’s view of government reporting. However, this was amended to also require accounting entities to report against the appropriated budget. This has created a stronger convergence and understanding in government reporting that the budget is a primary control and accounting device;
- The advent of automation in each country has highlighted the issues in relation to the separation of the BC and CoA and most countries now recognise the possibility of better integration of these different structures. With automation, data and financial transactions can be captured just once, with the CoA able to provide the different reporting requirements for different users.

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<sup>5</sup> The IMF’s Government Financial Statistics Manual (GFSM). There are three: GFSM 86 which is cash based, and GFSM2001 which is accrual based, and (draft) GFSM 2014. The 2001 framework is currently being updated and a draft GFSM2014 manual is now available. GFSM is consistent with the UN System of National Accounts (SNA). For more information on GFSM refer to. [www.IMF.org](http://www.IMF.org)

<sup>6</sup> European System of National and Regional Accounts (ESA). This is referred to as ESA 95 although it is subject regular updating. ESA 95 is consistent with the UN System of National Accounts. It is the required financial reporting system for all EU member and accession countries.

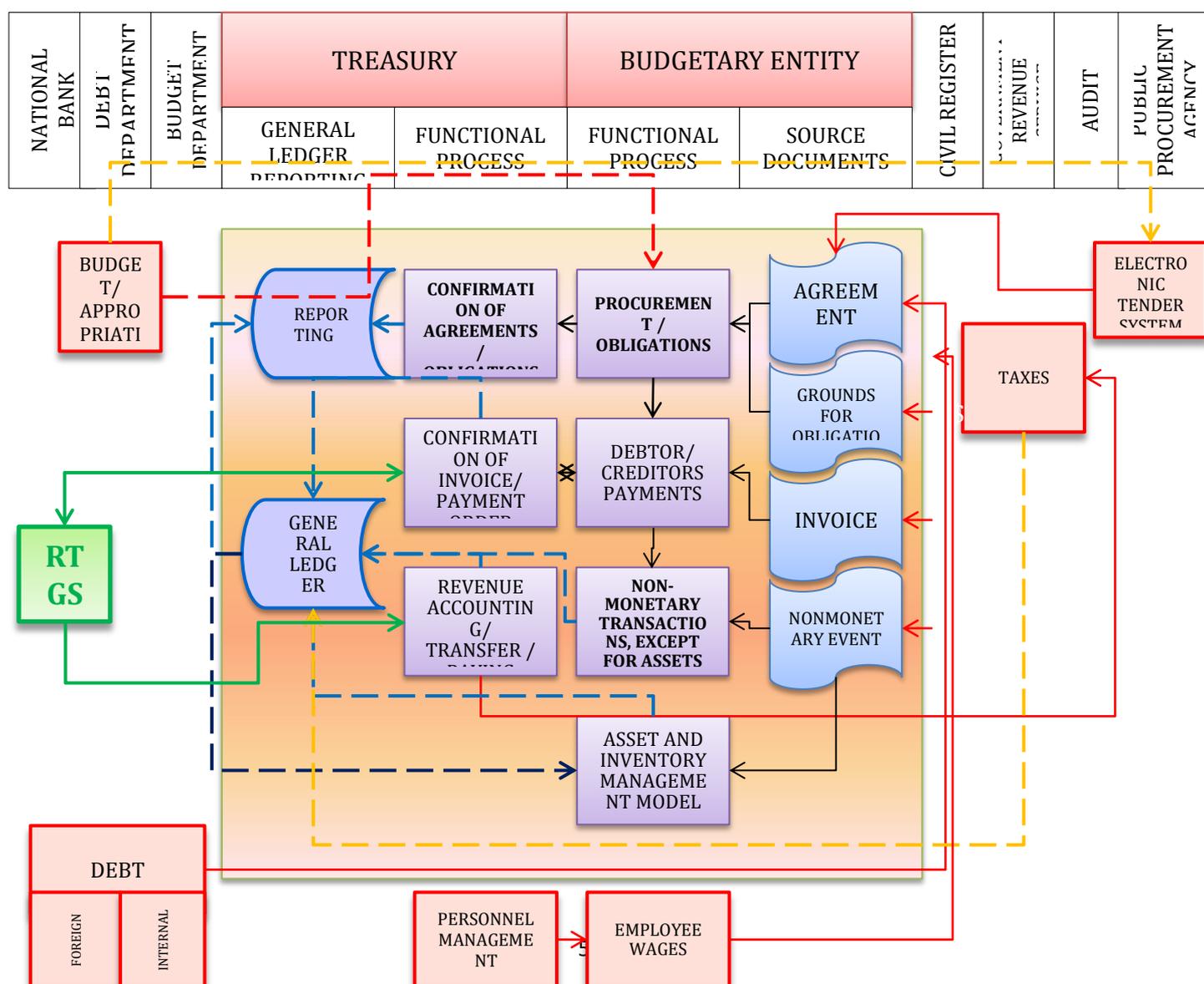
This paper will first examine good practice elements of CoA design, including the importance of comprehensiveness in the design if major reports for all key stakeholders are to be derived from the CoA. The paper then moves to focus exclusively on the economic segment, identifying specific examples of good practice design evident in PEMPAL countries, and ways to integrate cash based budget reporting with accrual based financial reporting.

## Designing a CoA

### Defining the scope of the reporting and accounting framework

Georgia, which is currently in the process of redeveloping its accounting and reporting framework to ensure consistency with international requirements (IPSAS and GFSM) has first designed a concept of its overall Public Financial Management Framework that can be seen in Figure 1.

Figure 1 - Georgian PFM Framework



At this stage, Georgia has developed its accounting processes in relation to its automated salary and pension payment processes, which support both cash control and accrual reporting requirements. Georgia plans to gradually extend this system to encompass all government operations, but by ensuring the overall concept is planned at the front end, it will ensure that it takes a comprehensive and inclusive approach to the design. Thus even though a country may take many years to implement its (accrual) accounting framework, by ensuring it first defines the scope of the framework it is more likely to include all of its accounting, control and reporting requirements in the design. As Figure 1 indicates, Georgia is seeking a fully integrated approach to PFM, and, as a result, the CoA design is also being developed in an integrated and comprehensive manner.

Countries need not develop such a framework from scratch. The Treasury Reference Model<sup>7</sup> is an excellent resource in this regard as it provides a useful template for how each functional element of the PFM framework integrates with other processes and the accounting system. Appendix 1 includes a flowchart from the Treasury Reference Model that has a strong relationship to the Georgian PFM framework.

**To summarise, in designing its CoA a country needs to ensure it meets all of its major reporting requirements.** Too often a CoA is designed too narrowly, failing to fulfil the reporting requirements of all major stakeholders. This was certainly the issue in relation to the majority of CoA originally designed and operating in TCOP countries, with few upgraded to integrate new budget control requirements. Developing a cash-based BC separately from the modified accrual CoA has made reconciliation between the two structures and the related reporting requirements at least more difficult. As countries move to adopt integrated financial management information systems, each has an opportunity to review how the general ledger and accounting will support better integration of the overall accounting and reporting framework. There are at least seven principles required for effective design of a government CoA detailed below in Box 1.

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<sup>7</sup> Hashim, A and Allan B, <http://www1.worldbank.org/publicsector/pe/trm.pdf>

## **Box 1**

### **Principles for the effective development, implementation and maintenance of a CoA**

**Comprehensiveness.** The CoA should be comprehensive enough to capture all the required/relevant information. The budget classification should be a core component of the CoA. This is because the accounting and reporting system should be the primary source of financial information for reporting on budget execution and, since 2009, reporting against the budget has become a core element in relation to compliance with international public sector accounting standards. The accounting and reporting system may, however, require additional classifications or accounts to meet the financial management needs of the government.

**Granularity.** The segments and sub-segments of the CoA should be designed to facilitate many possible different combinations of data elements necessary for control and reporting purposes. Each segment should have sufficient detail to meet all control, accountability, management, and reporting needs for all stakeholders.<sup>8</sup>

**Mutual exclusiveness.** The attributes of CoA segments should be defined in a way to make them mutually exclusive and avoid confusion in transaction posting and reporting. This is a particular issue with many of the economic segments in CoA, where the inclusion of non-economic descriptors and posting accounts has undermined fiscal data integrity.

**Non-redundancy.** There is no need for an independent segment in the CoA if the related information can be derived from another segment. Where there are multiple classifications, it can be useful to explore the relationships between those classifications. For example, the requirements of COFOG<sup>9</sup> can often be derived from either the organizational segment or a program segment, should such structures exist.

**Internal consistency.** The logic applied in designing the hierarchical structure of CoA segments should be internally consistent. Using a consistent coding system and structure helps make the CoA user-friendly and will reduce the chance of coding errors. Hierarchies in segment design allow codes to be grouped logically, making it easier for users of the CoA to understand the structure and navigate it for use.

**Scalability.** The CoA should allow flexibility for future additions and changes as far as possible. It should provide for capturing additional information in the future, particularly when such additional information has been anticipated/identified as part of an on-going PFM reform program. Providing room for growth, change and future reporting requirements can help ensure that a CoA will be relevant for a long period of time and is able to cope with the changing needs of the business environment, regulatory requirements and reporting needs. A CoA with a well-designed structure and open account range can accommodate future legal and business requirements.

**A unified framework.** Individual accounting units can be allowed certain flexibility in developing their own specific account codes at a more detailed level. However, the CoA should be unified to ensure that at least the information at the aggregate level uses the same accounting classification.

*Source: IMF Technical Notes and Manuals – Chart of Accounts: A critical element of the Public Financial Management Framework –Cooper and Pattanayak - [http://blog-pfm.imf.org/files/tnm\\_2011-03\\_web-1.pdf](http://blog-pfm.imf.org/files/tnm_2011-03_web-1.pdf)*

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<sup>8</sup> Along with this principle, CoA data is captured at the most detailed level of the accounts, at one time, allowing all reports and stakeholders to be certain about the reliability of the financial information in the General Ledger.

<sup>9</sup> Classifications of the Functions of Government (COFOG). The current COFOG structure is used consistently in the UN SNA, GFSM and ESA 95

Typically, a government CoA includes seven major components as per Figure 2.

**Figure 2 - Segment Structure of a Good Practice CoA**

Source of Funds	Organisation	Function	Project	Location	Economic	Program
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**Source of funds segment.** This segment is used to separate different sources of receipts to allow these to be matched to specific payments. In many countries certain funds are required to be managed separately from the general fund. A common example of this is a separate development fund for recording development partner financing. However, many countries use this to separate other financing requirements, such as where money is held in trust for other parties.

**Organizational segment.** This segment captures organisational structures in government. Typically, this would include at least ministries, but can include multiple layers for sub-allocation and expenditure tracking, including down to spending units/cost centres such as a primary school or health clinic.

**Functional segment.** This utilizes the COFOG standard for reporting expenditures and is similar to a sector and subsector approach to reporting. In many countries, it is derived via a mapping table from the organizational segment (sometimes in combination with other segments such as programs)<sup>10</sup>.

**Project segment.** This is required to record government activities which have a finite life and is particularly important to create separate budget control for development partner financing. In general it also has a strong relationship to a countries investment/capital budget component.

**Location segment.** This allows both revenues and expenditures to be reported by state and subnational government as required. It can also assist in tracking grant financing;

**Economic segment.** This is the most important element of the CoA as it is the segment that links budgeting, accounting, fiscal analysis and statistical reporting. It is often recommended that GFSM2001 be utilised when developing this segment as the general approach in GFSM supports good economic reporting.

**Program - Results Based Management Segment.** There is a range of different terms used international to describe this segment including programs, outputs, and outcomes. In fact there are also combinations of these terms in use in different countries. Results based budgeting is recognised as a medium to long-term reform priority, which should normally be implemented once a number of more fundamental reforms are in place. Precursors to implementation of results based management are an integrated financial management framework and system and effective control over spending on inputs<sup>11</sup>.

<sup>10</sup> Some countries may also choose to develop their own variation of COFOG. A common example is to have a separate high level function for Agriculture, which in CoFoG is a sub-component of the Economic Function.

<sup>11</sup> For more on sequencing budget reforms please refer to Good Practice Note on Sequencing Public Financial Management (PFM) Reforms (Jack Diamond - January, 2013), [www.PEFA.org](http://www.PEFA.org)

**The above seven-segment structure can contribute to the achievement of a number of major reporting, accounting and management objectives:**

- Consolidated classification and reporting for all government finance, including integration of development partner resources into the general structure;
- Detailed reporting to support analysis and internal control within ministries, departments and agencies and accounting units;
- Fiscal reporting, including the key report of government, the fiscal balance report, and for macro fiscal analysis;
- Reporting against the budget, and the ability to ensure cash control in an IFMIS against appropriations, allotments or warrants, and of commitments;
- Statistical reporting by ensuring the economic segment is aligned with GFSM2001 which in turn is part of the national statistical accounts reporting requirements;
- More timely provision of financial information as a well-designed CoA supports the capture of consolidated information, eliminating the time consuming collation of information;
- The capability to capture transactions just once, improving accuracy and timeliness, with the ability to provide information for a multitude of users and purposes based on the structure of the CoA; and
- Performance-based reporting to allow an improved understanding of the costs and benefits of government activities and programs. Performance reporting involves the matching of related expenditures and outcomes.

**To maximise integration and capacity, each of these components should comprise part of the structure of the accounting system's general ledger.** This ensures that the system can be used as the main "tool" for all accounting and reporting requirements. On many occasions, countries do not integrate one or more of these elements into the CoA. Thus when stakeholders come to use the system for reporting based on the dimension which is not included in the general ledger, the system is unable to produce the required reports without modification, or the collation of the required information has to occur in third party systems. In some countries this use of the "tool" can be enhanced further by defining the system as the "statutory" or legal reporting system. Thus any external accounting or reporting would need to first be reconciled with the statutory system for it to be viewed as reliable.

**This is why it is so important for countries to follow Moldova's example, and create a CoA Schematic or concept to ensure all reporting and accounting requirements are accommodated in the design phase of the CoA and IFMIS.** The schematic for the Moldovan CoA, which took eighteen months to develop and complete, is shown in Figure 3. This schematic went through a number of iterations as the authorities became more aware of the opportunities that a new CoA and IFMIS would create, the need to consider reporting requirements beyond the narrow requirements of the Treasury and the MoF, and the benefits of full integration of all accounting and reporting requirements.

**Figure 3 - Moldovan Schematic for the CoA**

Segment	Current	Length	New	Length
Organizational	Main spending unit	3	Main spending unit	4
	Agency	4	Agency	5
	Type of agency	3	Type of agency	3
Functional	Main group	2	Main group	2
	Group	2	Group	1
			Subgroup	1
Programs	Program	3	Program	2
	Subprogram	1	Subprogram	2
			Activity	3
Economic	Paragraph/ subparagraph	3	Type	1
			Category	1
	Item/ subitem	2	Section	1
			Item	1
			Subitem	1
			Element	1
Sources	Type of fund	1	Budget level	1
	Funds register	3	Budget sublevel	1
			Component	1
			Subcomponent	2
			Origin of the source	1
			Category of special funds	1
<b>Total</b>		<b>28</b>		<b>38</b>

**Even this well designed schematic does not include one important element – location/ geographic descriptors.** Moldova does in fact have this segment designed, with State

(national), Rayons (regional), and Primeria (local) governments along with autonomous regional reporting requirements. In fact this is to be part of the Moldovan IFMIS general ledger specifications, but has been omitted as a formal part of the CoA at this juncture.

**The primary reporting requirements should be a core consideration when designing any CoA. At least six major aspects of reporting should be considered in Government CoA design:**

- **Budget** – The CoA must support the budget formulation and execution process. Given the importance of the government budget to any country, arguably the single most important accountability process for any country, the budget structure should directly influence the overall design of the CoA. Thus any unique requirements a country may have should also be reflected in the CoA design. Given this, and given the fact that in most countries budget structure can change each year (although typically this is a shifting of resources from one budget entity to another), a good CoA must also be able to change to meet the new requirements. This may also include program based performance reporting;
- **Financial Reporting** – Today for many countries this means compliance with IPSAS, either cash or accrual (most countries are in reality managing on a modified accrual basis which represents either partial adoption of the accrual standards on the pathway towards full adoption, or adoption of the cash basis standard with supplementary disclosures in the notes to the accounts). Importantly, in 2008 IPSAS were updated to also require budget reporting as a core element of financial reporting;
- **Macro-fiscal** – the ability to track the budget deficit (or surplus) ideally each day, should be a core design element of the economic segment of the CoA. This can be readily achieved by using GFSM 2001 as the template for the economic segment;
- **Statistical Reporting** – Ensuring the manner in which government stocks and flows are classified is consistent with the national accounts, will ensure the information captured in the IFMIS can be used for statistical analysis. Once again ensuring consistency with GFSM2001 largely ensures that statistical reporting is supported<sup>12</sup>;
- **Management and Control** – managing against the budget is a core element here. However, management control of MDAs often goes beyond budget reporting, to ensure information is available where controls have been devolved below the MDA level to sub-units, and to be able to track and analysis spending by inputs (even when the budget does not control appropriations by inputs). The usefulness of an IFMIS to MDAs is often determined by how well the CoA and IFMIS can support these elements. If it cannot, then MDAs generally invest in their own accounting systems<sup>13</sup>; and
- **Transparency and accountability** - the CoA provides information for transparency and accountability through financial reporting and also through expenditure tracking.

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<sup>12</sup> This is because GFSM2001 has been designed as a sub-component of the National Accounts.

<sup>13</sup> In fact, in many OECD countries, MDAs do have their own IFMIS. Examples include Holland, UK and Australia. However, for most TCOP countries this is not the case, partly due to the stage at which development of IFMIS is in those countries and also due to cost implications.

**Thus a well-designed CoA should include at least the above six elements if it is to be effective for integrated management and reporting.** One way to consider these requirements is to ensure that the CoA is comprehensive and inclusive for all elements of government. An example of this can be seen in the design of the source of financing or funds code. In Table 1 below we can see that the source of funds code includes both the general fund and three other funds of government. It also includes components to allow integration of development partner resources. This is particularly important for countries that have a significant dependence on external financing from development partners. If development partner resources are not included, then the IFMIS will be unable to report: all government revenues and financing used for the budget; a proper fiscal balance report; and will not meet its reporting obligations for IPSAS or for statistical reporting. In addition, development partners will continue to insist on separate systems and units (often called project implementation units) in MDAs to manage their resources, creating duplicate processes and failing to properly utilise country systems<sup>14</sup>. Thus the lack of integration in the CoA, and a countries IFMIS and general ledger, are a major reason for poor integration and reporting of external financing.

**Table1 – Indicative Structure of a Source of Funds Code**

Source of Funds Code	Description
1	General Fund
2	Development Fund
21	Grants
2111	Multilateral Partner 1
2112	Multilateral Partner 2
2121	Bilateral Partner 1
2122	Bilateral Partner 2
22	Loans
2211	Multilateral Partner 1
2212	Multilateral Partner 2
2221	Bilateral Partner 1
2222	Bilateral Partner 2
3	Wealth Fund
4	Trust Fund

**The CoA cannot, however, be everything to every possible stakeholder.** Trying to over-engineer the CoA can be as big an issue as not designing it comprehensively enough. This will be particularly true in relation to very detailed requirements for each reporting entity or development partner. Thus in designing the CoA, a country must determine the level at which the CoA will be *universal* and centrally controlled. These are the core structures of the CoA which must not be changed within an MDA or accounting unit and which are used as the basis for producing the primary reports for government. Below the *Universal CoA*, entities

<sup>14</sup> Using country systems such as the budget and the IFMIS are major objectives defined by all development partners and recipient countries under the Paris Treaty and more recently at Accra.

should be free to add further detail as required, and this should not be impeded centrally. In some cases this will even involve additional levels being available in the CoA and IFMIS where an accounting entity can define its own structures. These levels must always be subordinate to, and consistent with, the *Universal CoA*.

**The Georgian and Moldovan examples show how important and challenging the design of a CoA can be for a country.** It is of major importance to ensure all parties have a common understanding of the scope and role of the CoA in a government PFM system. This will be particularly important as countries transition through major changes, such as implementing an IFMIS, moving from cash to modified accrual or accrual accounting, or de-concentrating accounting functions and roles in government. To ensure all parties understand how these elements will be aligned, a country should develop a concept paper for broad consultation and discussion that addresses the major issues. This would include both the scoping element of the Georgian framework and the components detailed in the Moldovan schematic. Box 2 suggests some of the components of the discussion paper which should be included.

## **Box 2**

### **Possible Components of a CoA Concept Paper**

- Background to CoA reform in the country defining the objectives of CoA reform and the relationship to general PFM Reform. It would indicate that the CoA is primarily being designed to support the country manage and report in accordance with specific accounting requirements (e.g. cash, modified accrual or full accrual), and also focus on the importance of consolidation of all government activities for proper management and reporting.
- Coverage of the CoA – which entities are included within the framework and which are excluded (e.g. state-owned enterprises).
- Definition of the CoA structure. This would include each CoA segment, and an indicative hierarchical structure for each segment. The principles of good CoA design would be included here.
- The importance of the CoA for different reporting and control purposes including budget, financial, macro-fiscal and statistical reporting.
- The relationship of the CoA to the IFMIS and sequencing of reforms to ensure they are institutionalized.
- Establishment of a working group and consultative process for the redesign of the CoA.

*The paper should be widely circulated and discussed*

**The economic segment is the most important of all the segments in the CoA<sup>15</sup>.** It is the segment where all of the different reporting elements converge. Without a properly structured and designed economic segment, supported by good quality accounting policies and instructions, most countries will not meet the reporting requirements for good governance. The economic segment provides the basis for financial reporting and the production of either cash or accrual financial statements. It provides a classification for recording cash transactions and other flows and also for reporting stocks, that is, assets, liabilities and net assets or equity. It is also used by many countries for appropriation control and budget execution management<sup>16</sup>. It also provides the structure for economic and statistical reporting.

**Ensuring accounting descriptions and structures in the economic segment are primarily limited to generally accepted accounting concepts can be key to good design of this segment.** Thus if an account cannot be readily defined as an expense, revenue, asset, liability or equity<sup>17</sup>, it probably should not be included in the economic segment. Thus the economic nature of the accounts is largely synonymous with accounting itself. Further to this point, poor design of the economic segment generally breaches one or more of the seven principles of effective CoA construction (Box 1) as demonstrated by the following real examples.

**Table 2 - Fund Concepts in the Economic Segment**

Code	Description
1411	Capital investments in non-commissioned fixed assets (general fund)
1412	Capital investments in non-commissioned fixed assets (special fund)
1413	Capital investments in non-commissioned fixed assets (state earmarked funds)
1414	Capital investments in improvements of financial lease units (general fund)
1415	Capital investments in improvements of financial lease units (special fund)
1416	Capital investments in improvements of financial lease units (state earmarked funds)
1417	Capital investments in investment properties (general fund)
1418	Capital investments in investment properties (special fund)
1419	Capital investments in investment properties (state earmarked funds)

<sup>15</sup> This paper will now focus exclusively on the economic segment given its importance. A subsequent TCOP study may be developed in relation to designing other elements of the CoA.

<sup>16</sup> Even countries that have implemented full results based budgeting and do not control appropriations economically, still distinguish between capital and recurrent spending in a budget. This is a high level economic concept.

<sup>17</sup> While these are accrual concepts, the principles apply equally to cash accounting

**Table 3 – Non-Economic Concepts in the Economic Segment**

Code	Description
0523310	Maternal & Child Health Programme
0523311	National Weight Reduction
0523312	National Mental Health Program
0523313	Laboratory Strengthening Project
0523314	National Blood Programme Project
0523315	Health Systems Strengthening
0523316	Public Health Strengthening

**One common feature for improving the economic segment is to shift non-economic reporting requirements into other segments of the CoA.** This is one reason why an IFMIS and automation is key – creating two or more segments in the CoA presupposes a level of automation. If for example, the economic segment of the CoA currently includes fund descriptions, these could be removed and the separate fund reporting created through the use of the source of funds code. Taking the examples in Table 2 above the new structure could be something similar to the proposed codes in Table 4.

**Table 4 – Table 2 Revised**

Source Of funds Account	Source of Fund Description	Economic Account	Economic Description
01	General Fund	1411	Capital investments in non-commissioned fixed assets
02	Special Fund	1412	Capital investments in improvements of financial lease units
03	State Earmarked Funds	1413	Capital investments in investment properties

In the above case, each source of funds code can be used with each economic account. As can be seen this simplifies the detail included in the economic segment, removes the non-economic descriptions, and improves the usability of the CoA for reporting. Now if we require a report for the general fund, there is no need to map each economic account relating to the general fund - the report can be produced using the single code in the source of funds segment. Similarly, if we need to know the amount by fund or for all funds for economic code 1411 we either request a report for the specific fund code or just for the code 1411, which would include all funds. A similar approach could be taken with Table 3, by utilising the program and project segments.

A number of TCOP countries, including Azerbaijan, Russia, Tajikistan and Moldova, have developed their economic segment consistently with generally accepted accounting concepts by using GFSM 2001<sup>18</sup> as a template. Figure 4 replicates the general structure of GFSM 2001.

**Figure 4 – General Structure of GFSM2001**

<b>Class</b>	<b>Description</b>
1	Revenues
2	Expenses
31	Non-Financial Assets
32	Financial Assets
33	Liabilities

GFSM 2001 does not include a class for equity as this represents a balancing item derived from the other classes. As can be seen by the above classes, there is a strong correlation between GFSM 2001 and generally accepted accounting concepts. The major difference is that assets are divided into non-financial and financial, rather than current and non-current, recognizing the importance of separately reporting recurrent and capital spending for government.

*For many countries this structure (non-financial and financial in lieu of current and non-current)<sup>19</sup> is preferred because it aligns better with the structure of a government budget (the budget classification must be an important structural consideration for a properly integrated CoA); provides a fiscal balance report – the critical analytical report for macrofiscal analysis and budget management and control; generally accords with the structure of an IPSAS cashflow statement<sup>20</sup>, while still supporting modified accrual and accrual reporting as the structure also supports reports on the operating result and balance sheet.*

Following is a discussion of how the general GFSM 2001 structure is able to support each of these reports and outputs.

<sup>18</sup> Some argue that countries that are primarily reporting on a cash basis should use the cash based GFSM86 structure in lieu of the accrual structure from GFSM2001. Unfortunately the problem with GFSM86 is that it focuses on inflows and outflows, which can hide the proper economic nature of some transactions, making it difficult to produce properly classified reports for other requirements, such as fiscal reporting. Given that all countries report at least some accruals (as an example debt) and all are interested in tracking the fiscal balance, GFSM2001 is a more effective design tool. In addition just because GFSM2001 is utilised, it does not mean a country has to adopt full accrual. GFSM2001 also supports proper cashflow reporting.

<sup>19</sup> The CoA must at the same time, continue to support reporting in accordance with IPSAS or the equivalent standards in a country. Even under IPSAS countries have a choice as to whether to report based on a current/non-current approach for assets and liabilities in the balance sheet, or to report from the most liquid to least liquid assets and liabilities.

<sup>20</sup> There are some differences in classification between GFSM2001 and IPSAS 2, cashflow reporting, particularly in relation to the classification of some investing and financing transactions. However, these can be readily addressed when formulating the relevant reports and statements.

**Budgeting**<sup>21</sup> – A government budget is developed, firstly, by estimating the revenues that will be collected, and, secondly, by estimating spending in two key areas – operational expenditures and capital (primarily non-financial assets). The coverage of revenues over expenditures represents the operating result. Typically, countries try to ensure a surplus operating result (not borrowing for operational spending)<sup>22</sup>. The coverage of the revenues over operating and capital expenditures is usually defined as the fiscal balance<sup>23</sup>. If a country has a surplus fiscal balance, it decides what it does with the surplus. It can increase its financial assets or reduce its liabilities, or a combination of both. If a deficit exists – revenues are smaller than the combined estimate of recurrent and capital expenditures – the budget should show how the deficit will be financed. The financing of the deficit will show how the gap in cash from government revenues will be sourced, either by reducing financial assets (e.g. spending cash surpluses from former years or through privatisation receipts) or through borrowing (e.g. new borrowing).

**Figure 5 - General Structure of a Good Practice Budget**

<b>Revenues</b>
<b>Operational Expenditures</b>
<b>Net Capital Expenditures</b> <sup>24</sup>
<i>Financing the Deficit</i>
<b>Reduction in Financial Assets</b>
<b>New Borrowing</b>

**Fiscal Management** – A fiscal balance, with the budget reflected above the line and the sources of financing below the line, is a universal structure which a good government CoA should support. Representing this explicitly in the overall structure at a high level of the CoA ensures that all decision-makers have a stronger sense of the impact of new spending decisions on the fiscal position of government. The fiscal balance report is also the primary structure for medium-term fiscal frameworks, and can be used each day to assist in monitoring performance against the fiscal targets in the budget. Finally, the same format can be used in reports, such as a budget scorecard, to show decision-makers the impact on the fiscal position of any new policy, either within the annual budget process, or even during the year.

<sup>21</sup> The assumption here is that the budget and fiscal balance are calculated based on cashflows

<sup>22</sup> Often referred to as the Golden Rule – governments should only borrow to invest

<sup>23</sup> Technical this is the net borrowing/lending balance, with the fiscal balance derived through the reclassification of certain transactions. Further details on the differences is provided in GFSM2001

<sup>24</sup> For the purposes of a simplified presentation, spending on non-financial assets is presented net of any sales of non-financial assets

**Figure 6 - General Structure of a Fiscal Balance Report**

<b>Revenues</b>	<b>The explicit policy decisions of government- referred to as Above the Line in GFSM 86</b>
<b>Operational Expenditures</b>	
<i>Operating Balance</i>	
<b>Net Capital Expenditures</b>	
<i>Fiscal balance</i>	
<b>Change in Financial Assets</b>	<b>Financing decisions for the budget- referred to as Below the Line in GFSM 86–</b>
<b>Change in Liabilities</b>	

**Figure 7 - General Structure of a Budget Scorecard**

<b>Current Budget Balance</b>	<b>New Budget Balance</b>
<b>Revenues</b>	<b>Revenues</b>
	<i>New Revenue options</i>
<b>Operational Expenditures</b>	<b>Recurrent Expenditures</b>
	<i>New recurrent expenditure policy proposal</i>
<b>Capital Expenditures</b>	<b>Capital Expenditures</b>
	<i>New capital expenditure policy proposal</i>
<i>Fiscal Deficit/Target</i>	<i>Adjusted Fiscal Deficit/Target</i>
<b>Source of Financing of Deficit</b>	<b>Source of Financing of Deficit</b>
	<i>Proposed new sources of financing</i>

**Cashflow Statement** – a cashflow statement under the cash based IPSAS, accrual IPSAS (IPSAS Standard 2) or IFRS can be primarily the same<sup>25</sup>: operating cashflows, investing cashflows and financing cashflows<sup>26</sup>.

<sup>25</sup> The IPSAS cash basis, is not prescriptive in relation to the structure of the cashflow statement, however, the benefits in governments adopting the IPSAS 2 and IFRS format are significant

<sup>26</sup> There are differences in classification of cashflows, particularly for investing and financing cashflows, between GFSM and IPSAS. However, these can be readily addressed when formulating the relevant reports and statements.

**Figure 8 - General Structure of a Cashflow Statement**

<b>Opening Cash Balance</b>
<b>Revenues</b>
Less: <b>Operational Expenditures</b>
<i>Operating Cashflows</i>
<b>Capital Expenditures</b>
Less: <b>Cash Sales of Non-financial Assets</b>
<i>Investing Cashflows</i>
<b>Net Cashflows from Financial Assets</b>
<b>Net Cashflows from Liabilities</b>
<i>Financing Cashflows</i>
<b>Closing Balance</b>

**Accrual reporting** – the structure of GFSM2001 also supports modified accrual or full accrual reporting, with the economic classes clearly related to the primary financial reports, the Statement of Financial Performance, and the Statement of Financial Result<sup>27</sup>.

**Figure 9 - Statement of Financial Performance (Operating Statement)**

<b>Revenues</b>
Less: <b>Expenses</b>
<i>Operating Balance</i>

**Figure 10 - Statement of Financial Result (Balance Sheet)**

<b>Assets</b>
<b>Less Liabilities</b>
<b>Equity</b>

While the above analysis represents a simplified approach to the structures of all reports, hopefully, it is clear that the proposed GFSM2001 based economic structure is aligned with all the key reports in government, including the budget, macro fiscal requirements and traditional reports under both cash and accrual accounting.

<sup>27</sup> As countries move towards full accrual, disclosures in the balance sheet become more comprehensive

In addition, given the strong relationship between accounting and budgeting structures, for most countries this does not represent a radical change in structures. As an example Table 5 represents the existing and planned structures for the Ukraine as at 2013 for its CoA.

**Table 5 – Ukrainian old and new accounting structures**

CoA Class	GFSM 2001	Budget Spending Institutions – Account Class	Economic Classification- Classes	Unified CoA- Account Classes
Revenues	1	7		7
Expenses	2	8	2	8
Non-Financial Assets	31	1,2	31	1
Financial Assets	32	3		2,3,4
Liabilities	33	5,6		6
Equity		4		5
Off Balance				9

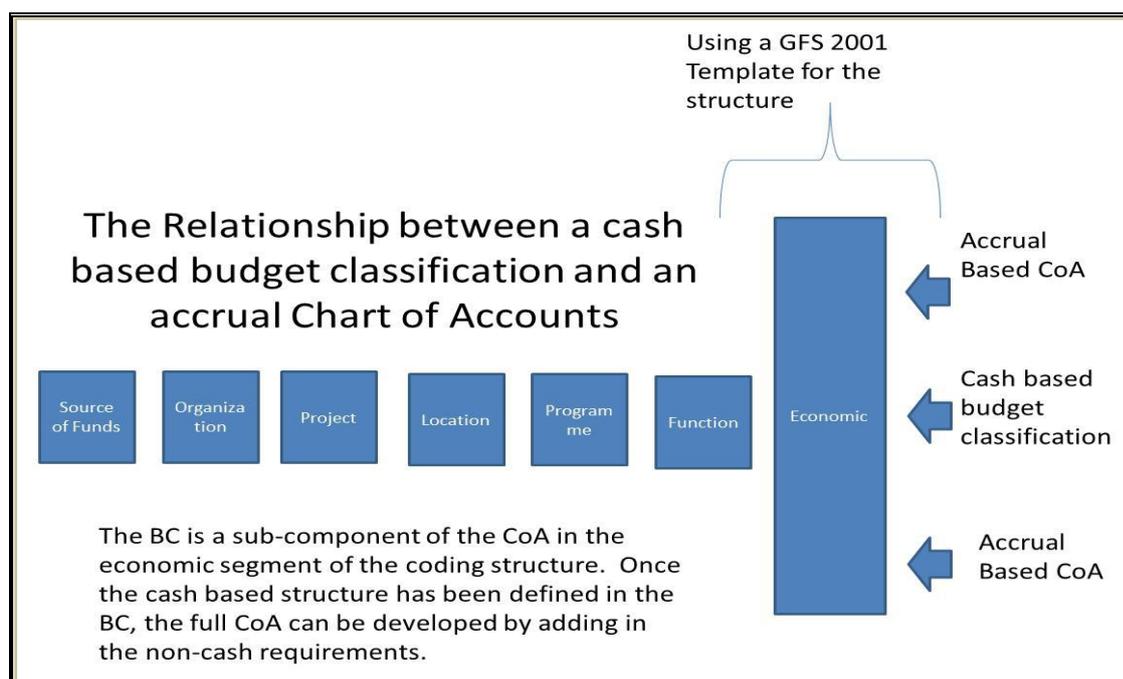
**GFSM2001 also provides a useful template for integrating different CoAs and the BC in countries.** In Moldova<sup>28</sup> for example, the GFSM2001 general structure was used to map the six different CoAs and BC structures. This was extremely useful in showing areas where the structures departed from each other and GFSM2001, and also where they converged. In general the structures did converge, which was not the general perception of most government accountants at that time (hence why different structures were created in the first place).

Figure 11 demonstrates how GFSM can be used to create a single integrated CoA and BC, even where a country manages its budget on a cash basis, while accounting in MDAs on a modified or full accrual basis. The economic component of the cash based budget classification is used as a building block for the full accrual economic segment, ensuring that all transactions, whether cash or accrual, are recorded in a uniform way<sup>29</sup>.

<sup>28</sup> Moldova is not currently using the integrated CoA due to delays in finalising its new IFMIS

<sup>29</sup> It is acknowledged that some countries will not budget at a detailed economic level. However, every country has some element of economic classification in the budget, even if it is only distinguishing between spending on capital (non-financial assets versus recurrent (expenses)).

**Figure 11 – Integrating a cash-based BC and Accrual CoA using GFSM2001**



**Where a country is seeking to create a single integrated and universal BC and CoA the following approach to integration is a useful strategy:**

1. Develop a mapping template to determine where the CoAs and BC converge and depart using GFSM2001 as a template;
2. Develop this mapping table at the lowest level required for consolidated reporting requirements, not necessarily at the lowest level of each of the different CoA structures;
3. Based on the areas of divergence, examine the underlying differences of each structure, and determine a solution. For example, the divergence may be due to one CoA not having the same level of detail as the other CoA;
4. Develop a working group to agree specific actions in each case. Options could include:
  - a. A change to the entities CoA to capture information at a more detailed level;
  - b. An agreement on how existing financial information would be broken down to assign approximate values for the level of detail required by the universal CoA;
  - c. An agreement that the breakdown would not occur, with information consolidated at a higher level, with an appropriate clarification in the notes to the consolidated accounts.
5. Ensure the focus is on developing the *Universal CoA* which represents the general reporting requirements for a country, with different reporting entities having the flexibility to include more detailed CoA information for internal management and reporting.<sup>30</sup> The *Universal CoA* must, however, be operating across all reporting entities.

<sup>30</sup>However, it is possible for a single CoA to meet the majority of reporting requirements for all reporting entities. Thus, the different or unique accounts would be on an exceptions basis, and only be developed at a level below the “Universal CoA”. This same approach could be used for specific, more detailed requirements within any ministry or agency. In some countries, these additional accounts are developed through the provision of an additional level in the economic segment which each reporting entity is able to use for its own internal reporting purposes.

6. Ensure the COA meets the requirements of both GFSM2001/ESA95 and IPSAS reporting.
7. Examine, in the longer term, whether the “Universal CoA” should become the minimum required reporting format (and thus the minimum requirement for the entity CoA), for all other reporting entities. This could be achieved through specific legislation or by the MoF using its powers, under existing legislation, to require specific reporting information from such entities.

**It is also important to recognise that while GFSM2001 may be a useful template for this integration, it is not in itself a good economic segment for a country.** GFSM2001 as a universal structure itself includes accounts which do not apply in every country but are in use across all countries. As an example, it is unlikely that any one country would require every tax code reflected in GFSM (however, it may be that different taxes are applied by different levels of government for the same consolidated entity, so allowing for this requirement, or even future changes or new taxes is also important in CoA design). In some cases GFSM2001 is also too aggregated for many countries, for example Goods and Services in expenses, which is a single code. Countries that seek to mirror GFSM2001<sup>31</sup> exactly in the CoA may therefore create issues in the future, particularly in relation to budget management where flexibility is key from one year to the next<sup>32</sup>. Thus GFSM2001 is recommended only as a general template and each country must and should develop its own economic segment to meet its own reporting requirements, particularly in relation to budget reporting and control. However, the economic segment should align with GFSM2001 and ideally include only generally accepted accounting concepts to ensure its integrity.

Examining TCOP member country economic segments provides some useful tips in terms of design:

- Ensuring a strong use of hierarchy in code design maximises the utility of the structure for reporting and accounting. Moldova provides an example of the six-digit segment where each level is designed for a specific reporting purpose (Box 3).

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<sup>31</sup> The advent of the new GFSM2014 draft manual highlights this issue, - countries that have exactly mirror GFSM2001 in their existing CoA may now need to redo the entire economic segment to accommodate the more detailed requirements in GFSM2014

<sup>32</sup> As an example, Azerbaijan has had a GFSM2001 based classification adopted by the Congress, which has caused it some flexibility issues in recent years.

### Box 3

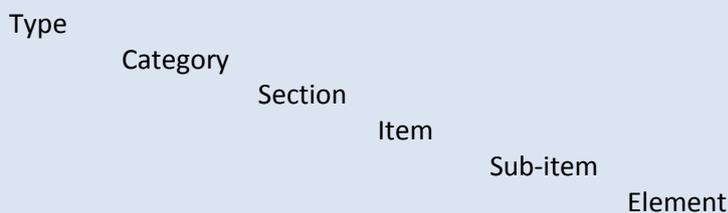
#### **Structure of the Economic Segment in Moldova – Using hierarchies to improve the structure and reporting capacity of the CoA**

The economic classification is a core component of the Unified Chart of Accounts and is structured into 6 levels: type, category, section, item, sub-item, and element.

Each Level of the economic classification has its individual value (Figure 1) represented by a single character, leaving a code generated from a total of 6 characters for the most detailed division by economic classification.

#### **Structure of the Economic Classification**

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
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For the purposes of these guidelines, the following definitions are used:

**Type** – grouping main economic transactions associated with the implementation of fiscal policy.

**Category** – grouping transactions according to the increase or decrease in value of the public sector assets and transactions in assets and liabilities.

**Section** – grouping economic items by generalizing the type of ownership, organizational form, the status of physical and legal persons, as well as by summarizing the frequency characterizing economic transactions, and the type of assets and liabilities.

**Item** – division of economic classification that summarizes sub-items according to certain general principles.

**Sub-item** - grouping items by the nature of economic transactions associated with an increase or decrease in the elements.

**Element** - a basic unit for undertaking budget spending in the economic aspect – the posting level of accounts to the general ledger.

- Use the GFSM structure as a guide not the GFSM codes themselves. Unfortunately GFSM is not consistent in its use of code length, which is usually a recommended requirement in modern accounting systems. Thus 22, the lowest level for goods and services in GFSM is equivalent to 2611 and 2621 the lowest level for grants in the same

structure. If you were using these two accounts in your system, and you had a six digit economic segment they could both be in the format 22XXXX and 2611XX to create a common coding length.

- In some cases, GFS economic codes are very high level. Detail should be provided as sub-divisions of the GFS codes rather than as new separate codes. This will facilitate aggregation to the GFS codes for reporting purposes.
- When designing any segment including the economic segment, ensure gaps are left between coding to allow further codes to be added, without impacting the integrity of the existing structure;
- Even if a country is only reporting on a cash basis, leave gaps for the non-cash elements of GFS, allowing for a future shift towards reporting on a modified accrual or full accrual basis. This would include recognising some non-cash transactions (e.g. grants in kind, consumption of fixed capital, etc.);
- Use descriptions which assist users of the accounts understand the economic nature of the account;
- It is generally useful to follow the same sequence in coding for the tax structure in a country segment as GFS uses. This would also include leaving gaps where existing types of tax are not currently utilised, in case these taxes are implemented in the future;
- Within administrative fees for revenue, there will be a great variety of codes for different reporting entities. It is useful to create groups of similar codes, to create some structure in this section of the accounts, and also to eliminate duplicative or similar accounts. If for example a number of reporting entities collect small amounts of similar fees or services, group these as one account. Given that non-tax revenues tend to represent a relatively small component of total revenues, an exhaustive level of detail is generally of limited use, and may actually make selecting the correct account overly complicated if too many similarly described codes are available (this should however, be balanced with the utility of analysis for different types of administrative revenues);
- In goods and services within the expenses class (as with fees in revenues), create groupings of accounts to improve reporting and usability of the accounts. In many countries these groups may also be either included as budget appropriations or allotment control codes from the MoF. Table 7 an example of hierarchy in goods and services.
- Ensure that different transfers are clearly separated as per GFS. Eg subsidies, grants and social benefits;
- As far as possible, define accounts classified as “Other Expenses” in GFS within clear accounting descriptions. “Other” in GFSM2001 includes insurance expense, scholarships, and transfers to non- government organisations. Most countries would want to specify these in their domestic economic segment rather than include them under “other” in the country economic segment (but they would be mapped to the correct GFSM2001 code);
- In non-financial assets, ensure that the minimum structure is reflective of GFSM2001. For most countries it will be important to have further breakdowns in accounts to adequately report on capital spending and for control purposes in MDAs. The structure will in turn underpin the structure of the assets register in government;

- In financial assets, all government bank accounts that have cash balances (exclude zero balance accounts) should be replicated in this class. This ensures the ledger can be used to reconcile to bank accounts<sup>33</sup> (ideally automatically), and that general ledger reporting can be used for cash-flow management and forecasting purposes. In addition separate bank accounts can be targeted for closure, or to become sub-ledger accounts within the Treasury Single Account;
- Adequate detail should be included for managing debt stock and flows, including either regular reconciliation with the debt management system, or even better, some type of interface;
- Equity (net assets) accounts will need to include accounts for closing the ledger each reporting period, and for countries undertaking modified or full accrual, to make regular adjustments for issues such as revaluation, etc<sup>34</sup>.
- In general, off-balance accounts should be limited to memoranda accounts to be reported in the notes to the financial statements. Examples would include contingent assets and liabilities.

**Table 7 – An example of hierarchy in the economic segment<sup>35</sup>**

<b>22</b>	<b><i>Use of goods and services</i></b>
<b>221</b>	<b>Travel Costs</b>
<b>2211</b>	<b>Domestic Travel</b>
221101	Domestic travel costs
221102	Domestic accommodation costs
<b>2212</b>	<b>International Travel</b>
221201	Foreign travel costs
221202	Foreign accommodation costs
221999	Other travel and accommodation costs
<b>222</b>	<b>Contractors and Consultants</b>
<b>223</b>	<b>Supplies</b>
<b>2231</b>	<b>General Office Supplies</b>
223101	Office supplies (paper, pens etc.)
223102	Printing & graphics material
223103	Freight and Postage

<sup>33</sup> In some countries the accounting system will have an independent structure for bank accounts, outside of the formal CoA. In such cases the full structure of all bank accounts may not be required

<sup>34</sup> In the accounting equation, assets less liabilities equals equity (net assets). This is the essence of double entry accounting. The general ledger of an accounting system must always ensure the double entry principle of the accounting equation is met, and equity accounts are a key component of that equation.

<sup>35</sup> The table is an example only and the full structure for all codes is not reflected.

223104	Minor maintenance
223106	Meeting expenses
223199	Other office expenses
2232	Consumables and low value equipment
2234	Computer Consumables and costs
224	Utilities
225	Training
226	Services
2261	Transportation and Vehicle Costs
2262	Marketing and Advertising
2263	Rent and Minor Maintenance of Buildings and Equipment
2264	Insurance
229	Other Goods and Services NEC

**In the Ukraine, a major limitation is imposed on the recording of the detailed CoA (analytical accounts) through the banking system.** The National Bank of Ukraine (NBU) restricts the length of the payment record in the interbank payment system to just 14 digits. This is not a sufficient length for the recording of either receipts or expenses using the new CoA, which is currently 30 digits in length. To overcome this, the Ukraine has come up with a shortened code that allows it to correctly record cashflows in the interbank payment system, and which then maps these codes to the more comprehensive CoA coding segments to allow a more complete set of accounting records and reports to be generated. This innovative approach can be seen in Table 8 which presents the coverage of the segments that are used in the Ukrainian CoA.

**Table 8. Example of the CoA segments in Ukraine – Overcoming Externally-Driven Restrictions on code length**

Level	Agency-level classification	Organization	Source of funds	Economic classification	Location	Program	Function	Agency subordination
1	Agency code (NNN)		Fund (FF)	Group (K)	Oblast (OO)	Program (MMM)	Function (F)	
2				Code (B)	Rayon (RR)	Subprogram (S)	Subfunction (PPP)	
3		Agency (SSSSS)		Subcode (CC)		Activity (AAA)		Subordination level (G)
	3 digits	5 digits	2 digits	4 digits	4 digits	7 digits	4 digits	1 digit

Since the maximum length of account in the electronic payment system of the National Bank of Ukraine is 14 characters, the coding system is used for analytical parameters of accounts using the following segments:

#### Example of coding revenue accounts

BBBB K SSS H RR TTT – account number coding (14 digits)  
 XXXX..... – balance sheet account (4 digits)  
 ..... X ..... – NBU EPS control digit (1 digit)  
 ..... XXX ..... – revenue reporting character (3 digits)  
 ..... X ..... – aggregate account attribute (1 digit)  
 ..... XX ..... – agency attribute (ACC) (2 digits)  
 ..... XXX .. – set-of-analytical-parameters number (3 digits)  
 BBBB – state or local budgets revenue accounts  
 SSS – reporting character that corresponds to the budget classification code for revenues (8 digits)  
 H – attribute of the aggregate account to credit budget territory tax (corresponds to the last digit of the year)  
 RR – attribute that corresponds to the agency-level classification code for budget expenditure or other attribute  
 TTT – sequence number that corresponds to the set of analytical parameters:  
 - code and name of the budget territory (oblast, city, rayon, township, village codes) (10 digits)  
 - budget code (2 digits)  
 - code and name of the Treasury authority (4 digits)  
 - code and name of the tax authority (2 digits)

#### Example of expense accounts coding

BBBB K GGG NNNNNN – account number coding (14 digits)  
 XXXX..... – balance sheet account (4 digits)  
 ..... X ..... – NBU EPS control digit (1 digit)  
 ..... XXX ..... – account type code (3 digits)  
 ..... .. XXXXXX ... – account holder number (6 digits)  
 BBBB – state and local budgets expense accounts  
 GGG – account type code assigned to the set of analytical parameters:  
 - agency-level classification code (3 digits)  
 - program expense classification code (State Budget) (7 digits) or functional expense classification code (local budget) (4 digits)  
 - unique spending unit (recipient) code (5 digits)  
 - the degree of subordination of the spending unit (1 digit)  
 - funds character (2 digits)  
 - code of the Treasury authority (4 digits)  
 - code of the tax authority (2 digits)  
 NNNNNN – the number that provides uniqueness of an account with an appropriate set of analytical parameters (assigned by software tools when opening an analytical account for the account holder)

**One of the major reasons given for separate CoA and BC is the use of different methods of accounting.** The most frequent difference is accounting for the budget on a cash basis, separately from MDA accounting, which is usually undertaken either on a modified or full accrual basis. This is indeed a challenge, but many OECD countries have never had different structures. So how is it that they have managed to always meet both reporting and management requirements for cash appropriation control and accrual reporting? The answer may be to recognise that the economic nature of the transactions does not change from cash to accrual accounting – rather it is the timing for recognising the transactions which changes.

**Not all accounting systems will be able to automatically support the different requirements for recognition in an integrated manner.** Thus where a country requires detailed cash based reporting for budget control and concurrently accrual or modified accrual information for financial reporting, specific measures may need to be developed to enable this.

**A number of TCOP member countries have recognised this issue and have designed their CoA to support cash and accrual reporting simultaneously.** The big challenge is generally in the asset and liability accounts, largely because it must be recognised that the cash flows only occur within a year (the balance or cashflows for the following year start from zero again), while the stocks of assets and liabilities carry forward from one year to the next, that is, they are cumulative.

**Countries have done this in different but similar ways. The first thing is to ensure that you can easily separate cash and accrual transactions for separate reporting.** Russia for example, has been doing this since 2006, and its approach was modelled by other TCOP countries. In addition, GFSM2001 also suggests countries separate stocks from flows, and also separates cash and non-cash flows.

The GFSM2001 economic framework distinguishes between stocks, transaction (flows) and other economic flows. The framework used by GFSM2001 is shown in Figure 12. There are actually two types of other economic flows: holding gains and losses, e.g. through revaluation of certain assets and liabilities (common examples would be for capital gains in buildings, a revaluation, and changes due to exchange rate variations), and volume changes in the value of assets and liabilities.

To calculate the closing balance of a specific non-financial asset the following steps are needed:

- Opening Balance
- Add acquisition of new assets
- Less disposal of assets
- Less consumption of fixed capital ( similar to depreciation)
- Adjust for other economic flows such as revaluation
- Gives the closing balance

Figure 12 provides an example for the machinery equipment account code 31121 in GFSM 2001.

**Figure 12 – GFSM2001 approach to Accounting for Transactions and other Changes in Stocks**

Opening Balance	Acquisition	Sale	Depreciation <sup>36</sup>	Holding Gains and Losses	Other changes in the Value of Assets	Closing Balance
61121	31121.1	31121.2	31121.3	41121	51121	61121

Thus, in this case, spending on new machinery is limited to one code 31121.1. The sale of machinery equipment no longer required is also limited to a single code 31121.2. Thus cashflows only occur against 31121, along with accrual acquisitions and sales. These transactions do, however, also affect the holding value (stock) of machinery, 61121. This approach creates the relationship between the transactions and accruals while at the same time maintaining “separate” sub-accounts. Effectively 31121 accounts only reflect flow transactions that occur during the year.

**This approach does not, however, distinguish between cash and accrual flows.** A simple modification will accommodate this as reflected in Figure 13.

**Figure 13 – GFSM approach to Accounting for cash and accrual**

Opening Balance	Acquisition/ Sale for Cash	Acquisition/ Sale - accrual	Depreciation	Holding Gains and Losses	Other changes in the Value of Assets	Closing Balance
61121	31121.1	31121.2	31121.3	41121	51121	61121

In the figure above, a debit to the subaccount 31121.1 or 31121.2 would be the acquisition either on a cash or accrual basis, with the credit being the sale/disposal. An ongoing requirement will be to ensure that the accrual transactions for acquisition and disposal are reduced when payment is made or received in cash, with the corresponding cash accounts increased. A well designed accounting system may be able to generate these transactions automatically.

Each country must decide whether it chooses to replicate the approach taken above, or a variation of this, or simply rely on the double entry or contra account to indicate the differences. For example, you could have the following:

- 3 for acquisition and disposal on a cash basis (original cost)

<sup>36</sup> Under GFSM2001 consumption of fixed capital applies not depreciation. Guidance on the difference can be found in in the manual

- 4 for acquisition and disposal on an accrual basis
- 5 for accumulated depreciation
- 6 for other changes
- 7 for opening and closing

The above approach is reflected in Figure 14.

**Figure 14 – Using the GFSM approach with different classes of accounts**

Opening Balance	Acquisition/Sale Cash	Acquisition/Sale Accrual	Depreciation	Other changes in Stocks	Closing Balance
71121	31121	41121	51121	61121	71121

Equally, the same could be done using the last digit of the account code in lieu of the first digit. In general accounting practice, the mechanism by which these different transactions are recorded is similar, but in this case the focus is on the contra or double entry account. Figure 15 shows how these transactions would be recorded in general accounting.

**Figure 15 – General Accounting and the use of Contra Accounts**

Type of Transaction	Asset Accounts	Contra Account
Opening Balance	Machinery	
Acquisition of new machinery	Debit to Machinery Account	Credit to Bank or Accounts payable
Sale	Credit to Machinery Account	Debit to Bank or Accounts Receivable
Depreciation	Credit to Accumulated Depreciation	Debit to Depreciation Expense
Revaluation of Machinery	Debit to Machinery Account	Credit to Revaluation surplus account in equity (net assets)
Impairment	Credit to Accumulated Impairment	Debit to impairment expense
Closing Balance	Machinery	

**Each approach records the accounting information separately for proper analysis.** In the first three examples, the flows are more explicit, with separate sub-codes. In standard accrual accounting, these different flows are not reflected in different subaccounts for the non-financial assets, but through the double entry accounts. In the long run, under full accrual accounting, the single account is the usual model. Each country must choose its approach as this will have a major impact on CoA design<sup>37</sup>.

<sup>37</sup> Under this approach, the government accounting system would need to be able to reflect both the cash and accrual transactions for budget reporting against each budget item, not just the accrual which may require system enhancements.

**Countries can improvise on the above approach to support local circumstances.** As an example, while Azerbaijan has developed a BC and CoA based on a GFSM2001 structure, it also wanted to maintain separate budgetary control and reporting over capital repairs of non-financial assets, as distinct from acquisition or the building of non-financial assets. This is a common requirement in budgeting for many countries. To achieve this, these expenditures are coded to other expenses in the economic segment, with mapping to the correct GFSM 2001 economic code. If Azerbaijan wanted to determine the total value of cash outflows for non-financial assets it simply needs to add the flows from capital repairs to the flows from acquisitions and building of non-financial assets. In the future it would also be possible for Azerbaijan to combine these codes into a single set of economic items, as per the approach in Figure 15 (simply by removing or deactivating the flow accounts for capital repairs).

**Figure 16 is an extract from Moldova’s economic segment.** In the Moldovan case, they wished to retain the inflow/outflow design of a GFSM86 structure, and also distinguish between transactions which give rise to cashflows and other changes in the stock of non-financial assets. Thus Moldova has used a variation to the approach represented in Figure 13. This provides a mechanism for Moldova to move from a purely cashflow model to a more integrated stocks and flow model. For detailed information on the nature of a specific flow, Moldova produces a report at the six-digit level. To determine whether the flows are increases or decreases, a report would be produced at the four-digit level. Finally to determine the net position regarding a specific category of asset, the report would be at the three-digit level<sup>38</sup>. In the future it would also be possible for Moldova to simply drop many of these detailed codes and migrate to the approach in Figure 15.

**Figure 16 - The Moldovan Approach to Separating Cash and other flows in Non-Financial Assets**

311	Buildings
3111	Increase in the value of buildings
311110	Purchase of buildings
311120	Repairs of buildings
311130	Free Transfer of buildings
311140	Revaluation of buildings - increase
311190	Other increases in the value of buildings
3112	Reduction in the value of buildings
311220	Free transfer of buildings
311230	Disposal of buildings
311240	Revaluation of buildings - reducing the amount
311280	Buildings transmitted to third parties
311290	Further reduction in the value of buildings

<sup>38</sup> This structure could have been further improved by using sub-codes which consistently distinguished between cash and non-cash flows.

**A further option could be to create parallel structures in the CoA, one which only contains cashflows, and one which includes all changes including the cashflows, an accrual structure<sup>39</sup>.** This has the benefit of creating a clear separation for cashflow analysis and reporting, but has the disadvantage of requiring an additional segment in the CoA and the general ledger. It may also create some integrity issues for the general ledger, as one component of the CoA, the cash segment, will not reflect all transactions reported against all the other segments.

**There are also timing issues in relation to the recognition of revenues and expenses on a cash and accrual basis.** However, in each case, the contra accounts shows where cash revenues and expenses are different from accrual revenues and expenses.

## Conclusions and Recommendations

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Poor CoA design has undermined the integrity of accounting and reporting in many countries. A number of TCOP member countries have recently undertaken reforms in this important area, and their experiences and approach to the reform provides some important guiding principles for other countries embarking on similar reforms:

- CoA reform should be in the context of broader PFM reform. Developing a PFM framework similar to the approach in Georgia can assist in better understanding the requirements in CoA redevelopment;
- An integrated BC and CoA is possible and preferred as it reinforces the interrelationship of budgeting and accounting;
- Countries should develop a CoA schematic and concept paper to be widely circulated among stakeholders to ensure all requirements are integrated and to improve understanding regarding the reasons for the reforms;
- A well-designed CoA should meet a range of major reporting requirements including, budget, financial, statistical and macro-fiscal reporting. MDA management reporting and transparency should also be a core consideration;
- GFSM2001 can be used as a useful template to ensure integrity in CoA design in relation to the economic segment;
- An economic segment should be pure in terms of its design and in general be limited to accounts which reflect general accounting concepts, and therefore align with GFSM2001; and
- As TCOP member countries proved, it is possible to have a CoA which can simultaneously capture information on a cash basis for budget reporting and control, and still record modified or full accrual transactions.

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<sup>39</sup> A further option would be to run two databases, one for cash and one for accrual which is the approach in at least one country

# Appendix 1

## Treasury Reference Model

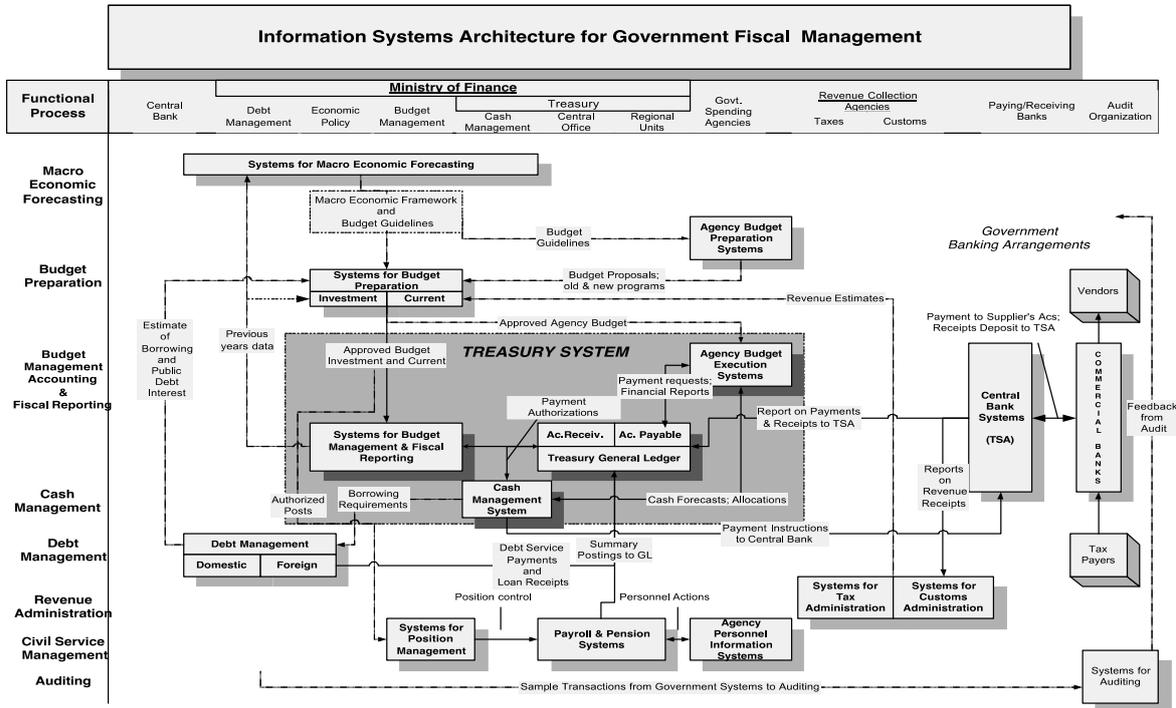


Figure 2: Overall Information Systems Framework for Government Fiscal Management