**FMIS Community of Practice Meeting #61**

**Optimizing the Unified Chart of Accounts Design**

**Tips for Public Financial Management Practitioners**

Date / Time : December 10, 2020 / 07:00-8:30 Washington DC time

Venue : WebEx

Opening address : Cem Dener, Lead Governance Specialist, World Bank Group (WBG)

Speakers : Elena Nikulina, PEMPAL Treasury COP Resource Team Leader, WBG

Mark Silins, PEMPAL Treasury COP Lead Thematic Advisor

Moderator : Cem Dener, Lead Governance Specialist, WBG

Participants : 83 participants from 35 countries. List of participants is at Annex 1.

WebEx video :  [**Video Link**](https://web.microsoftstream.com/video/6abd807d-1d4b-4abc-9976-822bf6eefe9f)  (1 hr 32 min)

**Meeting Notes**

* ***Opening remarks***

Mr. Cem Dener initiated the session with a warm welcome to all participants joining this event which was a collaboration between the FMIS CoP and the PEMPAL network, both of which are supported by the WBG.

* ***Presentations and Discussions***

Ms. Elena Nikulina[[1]](#footnote-1) introduced participants to the PEMPAL network and specifically to the Treasury Community of Practice (TCOP). The theme of the chart of accounts design has been on the TCOP agenda since the early years of its existence and most member countries have been revisiting it periodically in the context of various improvements to their PFM systems. TCOP working group on public sector accounting and financial reporting was established in 2013 and in 2014 a paper, largely focussed on the unification of the economic segment of the CoA was prepared. The broader UCoA continued to be topical, given its central role in reform and automation so TCOP decided to revisit and expand the original paper, to address many of the related reform issues. This resulted in the paper which is being introduced to you today. The paper reflects significant work by TCOP members, and was the focus of discussions at numerous VCs and at a face-to-face meeting in Moscow in 2019. Much of the practical content and concepts in the paper evolved directly from those meetings, and the contributions of TCOP members.

Mr. Mark Silins delivered a brief presentation on what a UCoA is and why it is important. He noted that in the past, classifiers were developed in a simple way often for specific reporting purposes, for example the budget or financial reporting. The advent of automation and better integration of the PFM framework has highlighted the limited nature of these classifiers. The UCoA seeks to unify all of the major reporting and control requirements into a single structure, and expand reporting coverage and capacity for a range of stakeholders.

Mark emphasised the importance of a consolidated view of the PFM framework when developing the UCoA, and indicated that criticisms of FMIS in countries regarding reporting capabilities were often a reflection of poor or limited CoA design – simply put, if you do not capture the required detailed information at the transactional level, it will not be possible for even the best FMIS to report this information. Thus designing a comprehensive UCoA is key for comprehensive reporting across the PFM framework.

Mark noted that ideally UCoA coverage should extend to the entire general government[[2]](#footnote-2) sector (and if possible extend beyond to the public sector) and include: all funds, all bank accounts, extend from the highest strategic level of government down to the lowest level delivering services, the spending units, cost centres and projects; and include all major reporting requirements including macrofiscal, budgetary, financial and statistical reporting. The UCoA should also adequately support management reporting for MDAs as well. While it will never be possible to design a UCoA to meet every possible reporting requirement, if well designed, it will be able to meet most reporting, and certainly the major reporting requirements in government, including external reporting against COFOG, GFSM 2014, IPSAS compliant financial reporting and reporting on the use of development partner resources.

Mark also noted that it was not possible to conceive of such a broad design in the past, given software and data storage limitations. However, it is critically important for each country to consider this for any future UCoA redesign. To not do so will limit the integration of the different PFM systems in government, and perpetuate reporting differences and delays in reporting. He particularly noted the important role of the ICT practitioner in assisting functional departments understand not just their own reporting needs, but the overall importance of an integrated and consolidated view of the data structures. He finished by expressing his hope that the paper would support countries and officials address the overall design of the UCoAs to better support a more integrated view of the PFM framework.

* ***Q&A Session***

The following questions/comments were shared by the participants (answers largely reflect discussions during the session, however, in some cases additional elements have been added to enhance understanding):

* What's the treatment of extrabudgetary accounts?

EB funds are usually part of general government and as such should be consolidated for reporting and cash management purposes where possible. The UCoA must include structures for this purpose. In some countries EBFs utilize the FMIS and GL too. Even when they operate their own accounting system, they should be included in the UCoA to at least allow consolidation of financial information and, where possible, cash in a TSA. There are also always many transactions between EBFs and central government and these need to be identified and eliminated on consolidation. This is a relatively easy process when the EBFs operate within the same FMIS, as these transactions can be undertaken internally in the GL and can be automatically eliminated on consolidation.

* Is it possible to meet the specific reporting requirements of MDAs/spending units, for example for reporting specific pharmaceuticals for a hospital?

When designing the economic segment it is important to consult with MDAs and spending units to ensure it is not designed just for central agency reporting requirements. While it may not always be possible to include every item required at the most detailed reporting level, it is usually possible to accommodate most of the requirements. This might not extend down to the specific medicines purchased (although this level of detail is possible) , but certainly it would be reasonable for an economic segment to include items for medicines in general. One option used in some countries is to establish a general structure in the UCoAs, and then allow more detailed items to be recorded at lower levels. Thus the general code could be medicine 123456, with specific medicines coded to 123456XX, allowing up to 99 additional different numeric items below the UCoA level. By using an alphanumeric rather than just numeric code even more ‘children’ could be included. These lower level codes could be user defined or allocated centrally. The latter option would ensure reporting of the same detailed items consistently across different MDAs. Thus if COVID XX medicine was issued by more than one entity, it would use the same unique code. An alternate option would be to codify this outside the UCoA using unique product codes and this could then be linked with the UCoAs for reporting. Georgia takes this approach whereby all procurements use a unique WTO product code and this in turn links to specific economic items in the UCoAs.

* What have been the main challenges during budget execution using a UCoA?

As with any change process, ensuring users understand the new UCoAs is critical. Thus it is important to supplement the UCoA with detailed electronic instruction manuals and to provide extensive training for officials too. Given time and proper support, officials seem to adapt well to the new structures, and often find them more useful. Of course, if the short code approach is implemented the new structure maybe less complex for users in spending units than what it replaces providing immediate benefits to all including in terms of the accuracy of recording.

* We revised the SCOA and a main request from the national treasury was to include non-financial information. Similarly the development partners wanted specific report linking output indicators (like gender) with expenditure. What's your experience on this?

Performance information and indicators are important if we are to properly measure the results and impact of government spending decisions. These indicators will link to the UCoA, for example at the program, subprogram or activity level of for the ministry or spending unit. They may also include financial information used for indicators derived directly from the FMIS. However, the indicators themselves should not normally be an explicit part of the UCoA, but linked through a separate register and probably separate sub-system. The financial data captured in the GL of the FMIS classified according to the UCoA would then be matched with the PIs for detailed analysis. As an example, the cost of teaching per student (input indicator) could be derived from the salary classification for teachers and applied as a value for each student. This could be done at the national level, regionally, by school district, by school and by category of student, assuming all of these classifiers are in place, both in the UCoA but also for the teachers, etc.

In relation to gender, if the cross cutting segment is created, or you have a mapping table for gender budgeting, then the indicators relating to gender would also be linked in the same way as described above.

* Is it possible to implement unified COA using different systems (FMIS) ?If yes what is the impact of that to reporting ?

Absolutely, in fact modern system design makes the UCoA an essential element to ensure interoperability between different sub-systems in government across the PFM framework. (see slide 14/15). It also allows the data classified in accordance with the UCoA within the sub-systems to be consolidated, either in FMIS or in a master database for reporting purposes. Thus if each SU has its own accounting system, (as occurs in some countries) if the UCoA is in place, financial data from each system can be passed electronically to a central system, monthly, weekly or daily for consolidated reports. Proper reporting is therefore enhanced by ensuring the UCoA is consistently used across all the sub-systems. It also allows other data elements used in the specific systems (eg Tax Identification Numbers, gender and social inclusion performance indicators) to be linked/combined with the UCoA structures to produce a variety of different reports for stakeholders.

* Gender based Budgeting is assuming critical policy advocacy in many countries. How does the unified COA account for such specific expenditure information?

The challenge is in defining how this reporting requirement will be captured in the UCoA. Options include: mapping from the existing CoA, adding specific elements to the existing UCoA to capture gender based information, and/or using a cross cutting segment to allow transactions to be recorded as either gender or not gender related. In most countries it will probably be a combination of the last two options that works best, adding specific accounts/items to the existing UCoA elements where specific spending occurs for gender budgeting (see country approaches in slide 18) – eg for specific government programs or a department for example, and also creating a cross cutting classifier (slide 19), which will be applied to every transaction – this will ensure that spending related to gender social inclusion are identified separately from other spending, for example on defense. If the UCoA is well designed and considers gender budgeting at the concept and design phase, even mapping tables can produce relatively useful reports.

* What is the plan for revision of the paper?

The PEMPAL Thematic Working Group on Accounting would welcome suggestions for the development of further components or issues for the paper. It is designed as a practical tool, and as such will probably be updated periodically as new issues are identified and country examples regarding solutions can be shared.

* Is there a need for separate systems such as CS-DRMS if FMIS utilizing the UCoA is in place?

Modern approaches to system design are moving away from a single FMIS concept to more modularized systems which are inter-operable. This is proving less risky for countries, more manageable and cost effective. The key is to ensure that each function uses common data elements and that transactions are consistently codified and managed across the entire PFM system. Thus a debt management module would be used to undertake specific modelling regarding the debt stock and allow analysis regarding the best mix of debt instruments for a country. This would not typically be a function or component of a core FMIS. Thus creating a FMIS that integrates debt management may not be the best option for a country, although processing the flows including repayments of principle, payment of interest and inflows from new loans should be recorded in FMIS and the general ledger. Ideally so would be the stocks and adjustments to the stocks of debt, e.g. through foreign exchange variations.

If however, a system was in place which duplicated the functions of FMIS, then it would be sensible to rationalize the operations, so that only the subsystem or the FMIS performed that function.

**Questions posed following event**

* In your model you include a Function segment which I assume is not budgeted to. The function can quite readily be mapped to spending unit etc. So why have it as a segment at all? I have the same view of location: we are not going to budget to it and we can redefine projects and spending units that overlap location boundaries, so why have a dedicated segment?

NB – some countries do budget by sector and function, including for budgetary controls. Ultimately however, controls must flow down to organizational units where services are delivered.

While budgeting is an important design element for the UCoAs, how money is spent is also critical. In many countries budgeting occurs at a higher level, where the focus is on strategic allocations and overall appropriation and cash management, whereas budget execution is more focussed on control and efficiency. A well designed UCoA will seek to capture both, and derive/apply the higher level controls from the detailed transactions undertaken in spending units. In countries where systems have not allowed a difference between budget control and actual spending, the tendency has been to budget at too detailed a level and execute at too high a level – effectively a compromise. In the future the goal should be to support both functions to be as effective as possible, without compromise. Our advice is to design the UCoA that best supports decision making, and then address the system limitations that may exist. This would mean codifying transactions at the most detailed level possible.

This is why each of these segments are specifically included in the UCoA – only after this has been developed can the “short code” be implemented. This ensures that genuine one-to-one relationships are mapped, and we do not create mapping by grouping the lower level elements together to fix a many-to-one problem.

Ultimately, if there are one-to-one or many to one relationships for all elements of a segment, then the segment can be derived from other segments as you propose. In doing this, however, you do not want to lose any reporting capabilities, eg give up project/activity reporting across locational boundaries – ideally you want to do both.

It is also worth noting that if you do not or cannot codify down to the lowest organisational level such as spending unit, cost centre and project, you cannot map the one-to-one relationships. Without the “short code” capability each segment must be explicitly recorded for each transaction. This is also why we include functions and location in the UCoA, to ensure that the final structure supports all possible situations, and countries lucky enough to codify to a very detailed level can institutionalize the “short code” approach for data capture.

* my principals like the idea that all transactions flow through the same segments, so we do not have one dedicated to defining development projects. I addressed this in my design by separating the spending unit from the org segment and creating what I called an “active budget” segment  which is the lowest common denominator as it were for both recurrent and development (I proposed five digits split by range rather than parent/child, since there are only two parents). I wonder if you have any thoughts as to whether this is a good idea, or could lead to problems?

There are many options available when designing the UCoA – whether a spending unit/cost centre is designed as the lowest level of an organisational segment or a separate segment should make no difference, as long as it is a unique register in either structure. You are proposing a unique register. Thus the proposed structure should work although there maybe some conceptual challenges with it.

Projects reflect a distinct time and value limited budget allocation which may have more than one source of financing. Projects are therefore a separate budget allocation managed by spending units, for example, by a primary school. In general the SU would want to be able to view its own recurrent budget and its separate project budgets in total and broken down into the budgetary components and funding sources. Development partners will also want to see their funding for projects separately too. What you would want to be assured of is that if you combine cost centres, spending units and projects in a single segment that this does not breach the principle of mutual exclusivity[[3]](#footnote-3) – do you need to report both dimensions in a transaction and if so does this approach prevent this? To assure this I would normally create a separate project segment from cost centres/ spending units. This segment can also be used jointly with the source of funds segment to quarantine funds including for DPs in the GL rather than in separate bank accounts.

As a final comment, while system limitations are important, they should not be a primary driver for design of the UCoA. Design the best UCoA that is required and then try and seek innovative ways to support the UCoA using ICT. Where code lengths are limited by a system, the core focus should be on ensuring the maximum level of detailed in unique registers for transactions, and reducing the hierarchies embedded in the segments. This ensures the required detailed recording of transactions for data analysis, and mapping tables can be utilized outside FMIS and the GL in the same way as the short code operates for higher level reporting and control works in Moldova (see slide 17). While it is not ideal for these actions to occur outside FMIS, not every country will be able to invest anew to overcome existing software limitations.

* ***Next steps***

Cem stated that the CoP members are grateful to Elena and Mark for their excellent presentation and responses to the questions of participants. Also, sincere thanks to the participants for their engagement, questions, and comments.

The URL of video recording is included. The meeting notes and presentation are posted under “Shared Documents/FMIS CoP Meetings” folder.

**Annex 1 –** List of WebEx participants (December 10, 2020)

| **#** | **Name** | **Position / Organization** | **Location** |
| --- | --- | --- | --- |
| 1 | Ms. Elena Nikulina | PEMPAL Treasury COP Resource Team Leader, WBG | Washington, DC |
| 2 | Mr. Mark Sillins | PEMPAL Treasury COP Lead Thematic Advisor | Australia |
| 3 | Ms. Ekaterina A. Zaleeva | PEMPAL Treasury COP | Russian Federation |
| 4 | Ms. Kesjana Halili | General Director, Ministry of Finance & Economy | Albania |
| 5 | Ms. Alma Beja | General Director of Treasury, MoFE | Albania |
| 6 | Ms. Alketa Braçe | Chief of Financial Reporting Section, MoFE | Albania |
| 7 | Ms. Brixhilda Nguli | Revenue & Liquidity Specialist, Treasury, MoFE | Albania |
| 8 | Ms. Arisa Lleshi | Financial Reporting Analyst, MoFE | Albania |
| 9 | Mr. Nazim Gasimzade | IT Director, Treasury Agency, MoF | Azerbaijan |
| 10 | Mr. Mark Sims | Accruals Prj Specialist - Min of Finance & Econ Dev | Botswana |
| 11 | Mr. Daniel Domelevo | Auditor General | Ghana |
| 12 | Mr. Tavaszi Zsolt | Responsible for Gov Vice President, MoNE | Hungary |
| 13 | Mr. Tamás Török | Public Mgmt Specialist, Div for Econ & Dev, MoNE | Hungary |
| 14 | Mr. Sandeep Dash | Deputy Controller General of Accounts, CGA, MoF | India |
| 15 | Mr. Donnex Chitsonga | Director of IT, Reserve Bank of Malawi | Malawi |
| 16 | Ms. Tseyen-Oidov Ariunsanaa | Head of Fin, Acct & Rep Division, Treasury Dept | Mongolia |
| 17 | Mr. Michael Ojo | SIFMIS Project Team Member, Ondo State | Nigeria |
| 18 | Ms. Biljana Minoska | Deputy Head of Treasury, Ministry of Finance | North Macedonia |
| 19 | Ms. Liljana Gjurovska | State Adviser for Treasury, MoF | North Macedonia |
| 20 | Ms. Mara Srezovska | State Adviser for Treasury, MoF | North Macedonia |
| 21 | Ms. Radmila Sandeva | Advisor, Ministry of Finance | North Macedonia |
| 22 | Ms. Renata Davitkova Pancheva | Head of Unit, Ministry of Finance | North Macedonia |
| 23 | Mr. Vlado Delevski | Head of Unit for Liquidity Mgmt & Proj, Treasury, MoF | North Macedonia |
| 24 | Ms. Angela Vasovska | Senior Associate, Ministry of Finance | North Macedonia |
| 25 | Ms. Aleksandra Petkanovska Trpeska | Senior Associate, Ministry of Finance | North Macedonia |
| 26 | Mr. Igor Dimitrovski | Senior Associate, Treasury Dept, Ministry of Finance | North Macedonia |
| 27 | Ms. Marija Kitanska | IT Infrastr Mgr, System Administrator, MoF | North Macedonia |
| 28 | Mr. Primož Komatar | Consultant, WBG | North Macedonia |
| 29 | Ms. Snezana Josifovska | Consultant | North Macedonia |
| 30 | Mr. Bartosz Staszewski | Head of Unit, Expenditure Policy Department, MoF | Poland |
| 31 | Ms. Aldona Lutrowicz | Specialist, Ministry of Finance | Poland |
| 32 | Ms. Katarzyna Szarkowska | Project Manager, State Budget Department, MoF | Poland |
| 33 | Ms. Malgorzata Bula | Ministry of Finance | Poland |
| 34 | Ms. Malgorzata Kulesza | Ministry of Finance | Poland |
| 35 | Ms. Anab Sabriye | Consultant (Accounting & FM), Office of Acct General | FGS, Somalia |
| 36 | Mr. Omar Salaad Hassan | Head of Accounting, Benadir Region | BRA, Somalia |
| 37 | Ms. Jenny Sinclair | Financial Adviser, Premis | Somalia |
| 38 | Mr. Ismail Abdi | Financial Adviser, Premis | Somalia |
| 39 | Mr. Hussein Mohamed | PFM Financial Adviser, Premis | Somalia |
| 40 | Mr. Phuong Bui The | Director, IT Department, VST, Ministry of Finance | Vietnam |
| 41 | Mr. Do Quang Huy | R&D Division, IT Department, Vietnam State Treasury | Vietnam |
| 42 | Mr. Thomas Martin | U.S. Dept of the Treasury, OTA | U.S.A. |
| 43 | Mr. Jesse Hughes | Professor Emeritus of Accounting, Old Dominion Univ | U.S.A. |
| 44 | Mr. Gerardo Una | Technical Assistance Advisor, IMF | Washington, DC |
| 45 | Mr. Alexander Rivera | Project Manager, Comprasal | El Salvador |
| 46 | Mr. Anupriya Kataria | Manager, PwC | India |
| 47 | Mr. Joe Cosma | Advisory Sector Leader, Govern & Infrastructure, E&Y | Nigeria |
| 48 | Mr. Douglas Hadden | Executive VP Strategy & Innovation, FreeBalance | U.S.A. |
| 49 | Mr. Aldo Sagastume | Vice President PFM, FreeBalance | Guatemala |
| 50 | Mr. Kemajl Ratkoceri | Senior PFM Advisor, FreeBalance | Kosovo |
| 51 | Mr. Eduardo Capecci | PFM Consultant, FreeBalance | Panama |
| 52 | Mr. Vijay Ramachandran | Consultant | India |
| 53 | Mr. Chandrashekhar Kaushik | Consultant | India, U.S.A. |
| 54 | Mr. Amit | Consultant | India |
| 55 | Mr. Des Ferguson | Consultant | Ireland |
| 56 | Ms. Wangari Muikia | Lead Economist, Expertise Global Consulting | Kenya |
| 57 | Mr. Afsa Ibrahim | Consultant | Kenya |
| 58 | Ms. Victoria Martynova | Consultant, IBM Global Business Services | Russian Federation |
| 59 | Mr. Murray Cowan | Consultant | U.K. |
| 60 | Mr. Richard Farmer | Consultant | U.K. |
| 61 | Mr. Sam Moon | Consultant | U.K. |
| 62 | Mr. Edwin Rodin-Brown | Consultant | Vietnam |
| 63 | Mr. Adrian Fozzard | Practice Manager, Governance GP, WBG | Washington, DC |
| 64 | Mr. Hans Anand Beck | Lead Economist, WB | Myanmar |
| 65 | Mr. Fabian Seiderer | Lead Public Sector Specialist, WBG | Bangkok |
| 66 | Mr. Paul Welton | Lead Financial Management Specialist, WBG | Lebanon |
| 67 | Mr. Arman Vatyan | Lead Financial Management Specialist, WBG | Armenia |
| 68 | Ms. Lilia Razlog | Senior Debt Specialist, WBG | Washington, DC |
| 69 | Mr. Pierre Messali | Senior Public Sector Specialist, WBG | Washington, DC |
| 70 | Ms. Oxana Druta | Senior Financial Management Specialist, WBG | Moldova |
| 71 | Ms. Galina S. Kuznetsova | Senior Financial Management Specialist, WBG | Russian Federation |
| 72 | Mr. Madhavan Balachandran | Senior Financial Management Specialist, WBG | Washington, DC |
| 73 | Mr. Arun Manuja | Senior Financial Management Specialist, WBG | Washington, DC |
| 74 | Ms. Fabienne Mroczka | Senior Public Sector Specialist, WBG | Washington, DC |
| 75 | Mr. Pascal Frerejacque | Senior Operations Officer, WBG | Austria |
| 76 | Ms. Sandrine Egoue Ngasseu | Public Sector Specialist, WBG | Burkina Faso |
| 77 | Ms. Silmara Moreira Da Silva | Financial Management Specialist, WBG | Brazil |
| 78 | Ms. Lusine Grigoryan | Financial Management Specialist, WBG | Armenia |
| 79 | Ms. Jean Owino | Finance Officer, WBG | Kenya |
| 80 | Ms. Tatiana Skalon | E.T. Consultant, WBG | U.K. |
| 81 | Ms. Natanee Thawesaengskulthai | Consultant, WBG | Washington, DC |
| 82 | Ms. Vida Ndilanha Nkya | Financial Management Specialist, WBG | Tanzania |
| 83 | Mr. Cem Dener | Lead Governance Specialist & Coordinator, FMIS CoP | Washington, DC |

1. Ms. Nikulina led the entire network from 2012 to 2019, and has been directly involved in the formulation of the paper. She continues as mentor/leader of TCOP today. [↑](#footnote-ref-1)
2. See Government Finance Statistics Manual ([GFSM 2014](https://www.imf.org/external/np/sta/gfsm/)) for a definition of general government and the public sector. [↑](#footnote-ref-2)
3. See the reference to the seven principles of CoA design in the paper or in the original IMF document authored by Sailendra Pattanayak & Julie Patricia Cooper ([Chart of Accounts : A Critical Element of the Public Financial Management Framework](https://www.imf.org/en/Publications/TNM/Issues/2016/12/31/Chart-of-Accounts-A-Critical-Element-of-the-Public-Financial-Management-Framework-25189), 2011) [↑](#footnote-ref-3)