

PEM PAL Baku November 5 - 8, 2012

Issues in Public Sector Accounting

Presentation by Michael Parry

Introduction

This presentation deals with four issues to be considered during this workshop:

1. Standards and financial reporting
2. The role of cash and accrual
3. Combining cash and accrual accounting
4. Automation and consolidation

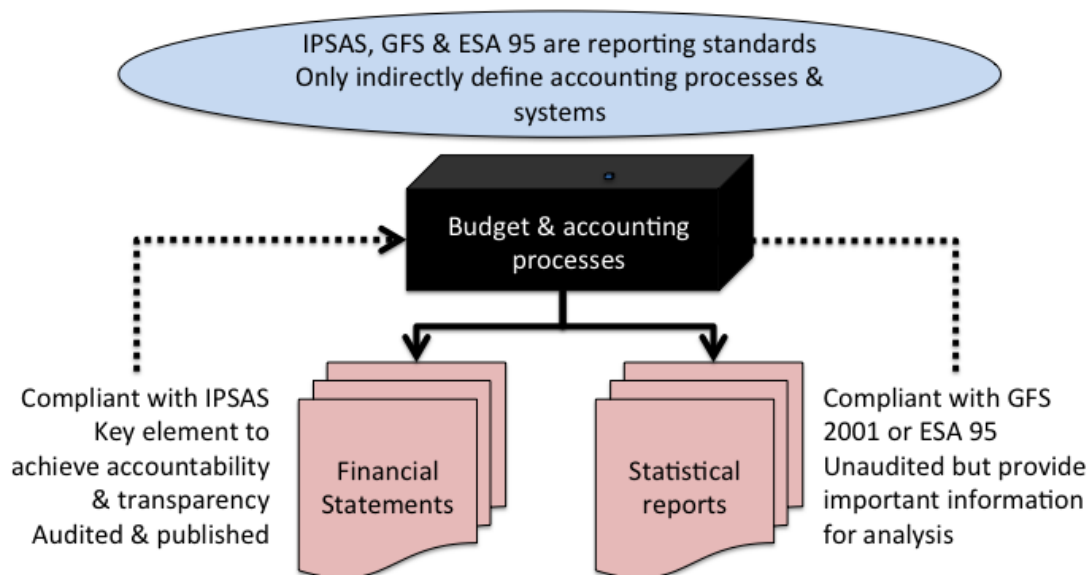
Issue 1: Reporting standards

All of International Public Sector Accounting Standards (IPSAS), Government Finance Statistics (GFS) Manual and the European System of Accounts (ESA) 95 are reporting standards. They define:

- In the case of IPSAS the form and content of General Purpose Financial Statements
- In the case of GFS or ESA 95 the form and content of statistical reports.

None of the above standards directly define the accounting processes. However they indirectly influence the accounting processes because such processes must have the capability to produce financial reports in accordance with the standards. This relationship is summarised in Figure 1 below.

Figure 1: IPSAS and GFS as reporting standards



GFS and ESA 95 require the accrual basis of reporting (although the IMF has indicated that cash information is acceptable for GFS if no accrual information is available). IPSAS has standards for both cash and accrual basis reporting, but the International Public Sector Accounting Standards Board (IPSASB) has made it clear that the long-term objective should be accrual accounting.

This poses three questions as indicated below.

Question 1 - what is the accrual basis?

The accrual basis recognises all entity economic flows whether or not they involve money transactions, and also all assets belonging to and liabilities of the entity. The six key features of double entry accrual accounting are:

1. The concept of the accounting entity - a legal "person" that owns assets and incurs liabilities
2. Accounting transactions are recorded in a single monetary unit, e.g. US \$
3. Accounting relates the following opposites:
 - a. Increases and decreases in physical holdings of cash and goods
 - b. Increases or decreases in debt to or by other individuals or entities
 - c. Increases and decreases the entity's own assets and liabilities
4. Net equity (sometimes referred to as "Funds" for public sector entities) as the difference between the entity's assets and liabilities
5. Surplus (or deficit) as the net increase (or decrease) in equity over a period of time
6. The accounting period as the period of time over which the surplus or deficit is measured.

Question 2 - why accrual?

The merits of accrual accounting for the public sector have been disputed. But there is no doubt that accrual accounting offers clear advantages over simple cash accounting.

Firstly, it is the basis of a universal and inclusive accounting model that manages, control and reports:

- Assets and liabilities
- Cash and other economic flows
- Financing balances and flows

It is noteworthy that the accounting model is the only universal and comprehensive model of activity for all entities, whether in the public or private sector.

Secondly accrual accounting enables enhanced control. This is because it encompasses all assets and liabilities and all economic flows. For example, there could be asset registers not linked to the accounting system, but such registers would have no automatic check that their contents are linked to the business economic flows. Double entry is an important control tool.

Finally accrual accounting is an enabling tool for transparency and accountability. Because the accrual accounting system holds information on all economic flows,

assets and liabilities of the entity, it enables comprehensive reporting. Furthermore when such reports - financial statements - are independently audited and the results published they have increased credibility.

Where there is no experience of accrual accounting there is an argument for making the move to accrual a low priority. But most PEMPAL countries have experience of accrual accounting (see below on the role of cash and accrual) and wish to continue to develop the accrual methodology enabling financial statements to be prepared that are compliant with accrual IPSAS.

Question 3 - why standards?

Using accrual accounting creates a large volume of information that can be aggregated and reported in very different ways to provide different pictures of the entity. Standards are essential to define how accounting information is presented and to ensure consistency across jurisdictions and between entities.

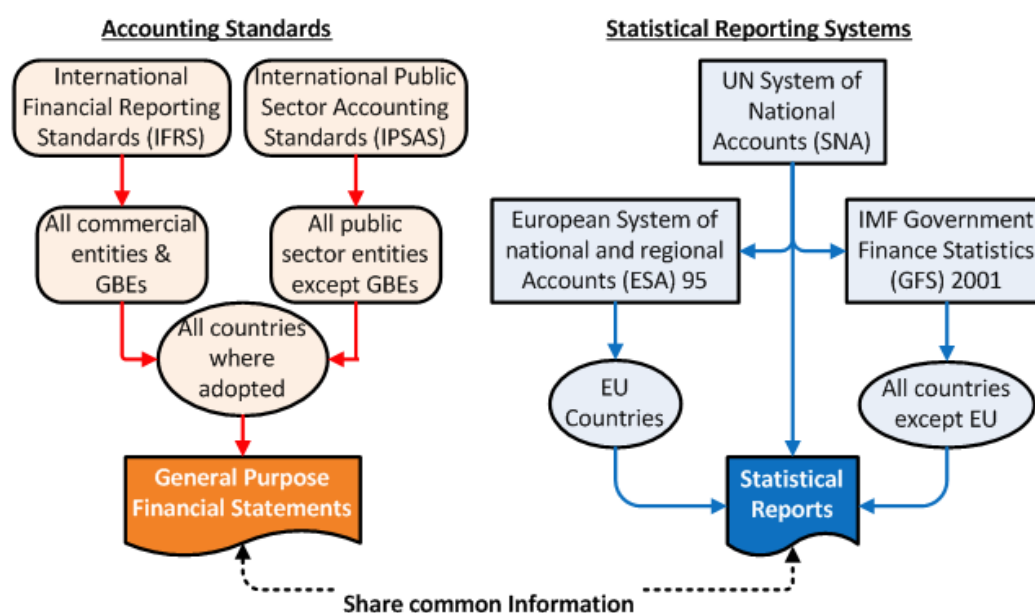
Standards always exist either explicitly or implicitly:

- Explicit standards are international (IPSAS) or national standards for financial statements and standards such as GFS or ESA 95 for statistical reports
- Implicit standards are the rules and regulations according to which financial reports are produced.

Different standards

There is sometimes confusion about the respective roles of different standards. Figure 2 below summarises the different role of different set of standards.

Figure 2: Relationship between different reporting standards



Note: Government Business Enterprises (GBEs) as defined in IPSAS are for practical purposes identical to the GFS definition of “Public Financial and Nonfinancial Enterprises”.

Commercial entities including GBEs all report in accordance with International Financial Reporting Standards (IFRS). All non-commercial public sector entities up to and including sovereign governments should prepare financial statements in accordance with IPSAS or equivalent national standards.

Statistical fiscal reports may be prepared under either GFS 2001 or ESA 95. The latter is applicable to EU countries (including EU accession countries). All other countries should use GFS. The current version of GFS is set out in the GFS Manual 2001 (this has since been updated and the latest version is on the IMF web site).

Issue 2: The role of cash and accrual

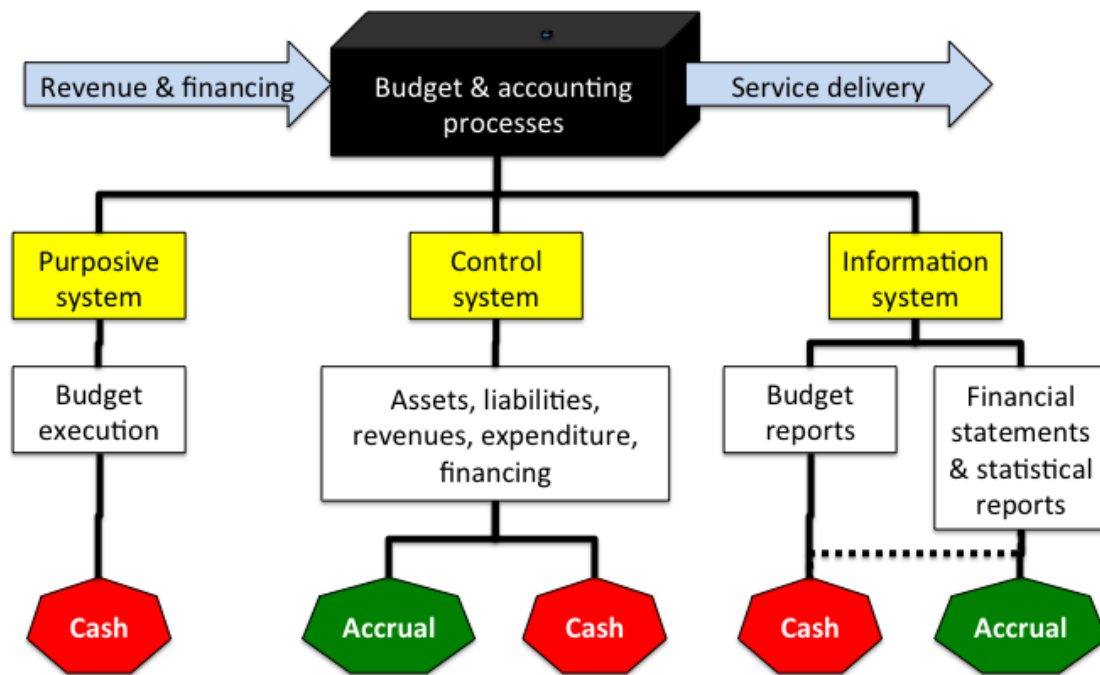
Most countries in the region were part of, or influenced by, the Former Soviet Union (FSU). The FSU defined accounting procedures according to concepts of the Marxist labour theory of value. An accrual approach was adopted in 1987. The FSU accrual methodology is still being used in many budget institutions across the region. The FSU methodology does not meet the requirements of International Public Sector Accounting Standards (IPSAS) for accrual reporting for a number of reasons, e.g. it does not lead to financial statements, does not value land, there is no provision for revaluations, etc. Nevertheless the methodology contains most of the elements required to implement full accrual accounting.

With the move to a market economy and the need to exercise budgetary control, cash based accounting systems have been introduced in most national treasuries. This approach has been reinforced by the automation of treasury processes. Most PEMPAL countries now have computerised cash based treasury accounting systems. Thus in many PEMPAL countries there is a dichotomy between the accrual accounting systems used budget institutions and Treasury cash systems. In many countries both systems continue to operate in parallel.

Should PEMPAL countries move to a single accrual basis accounting methodology?

From a reporting perspective there are clear advantages of accrual accounting, as explained above. But accounting is a system that serves multiple functions. Because public sector budgets in all PEMPAL countries are cash based cash information is required for some purposes as illustrated in Figure 3 below.

Figure 3: Multiple functions of accounting systems



Thus the “accounting system” is in fact three different types of systems:

1. A purposive system that enables the execution of the budget.
2. A control system enabling control over, for example, the assets, liabilities, revenues, expenditure and financing of the entity.
3. An information system enabling budget reporting, financial statements and statistical reports.

Some of these functions require cash accounting and others require accrual accounting.

- Budget execution involves cash payments and therefore is cash based.
- Control requires both cash and accrual
 - Cash for budget execution control
 - Accrual for control of assets, liabilities and economic flows.
- Reporting
 - Budget reporting will need to be cash based to correspond with the cash budget
 - Financial statements and statistical report will preferably be accrual based.

It is concluded that public sector governments require **both** line item cash **and** accrual information for the above purposes.

Issue 3: Combining cash and accrual accounting

The conclusion above is that both cash and accrual accounting is required. Furthermore, both types of information are required at the line item (i.e. individual account code) level to meet the above requirements.

This issue is unique to the public sector because public sector budgets are typically cash based. Commercial entities will normally budget on an accrual basis. Hence in the latter case all reporting will also be on an accrual basis. This creates a problem because accounting methodologies and systems have typically been developed for commercial entities and hence will not be designed to provide a line item analysis of cash expenditure.

The issue is how to achieve the requirements for both cash and accrual information from one methodology and accounting system? There are four options as summarised in the following sub-sections.

Option 1: Cash only

Under this approach the main accounting methodology of government is the cash basis.

- The cash basis is used both by treasury and by budget entities.
- Information on assets and liabilities is kept outside the accounting system, e.g. fixed asset registers, loan registers
- Financial statements are prepared using the cash basis IPSAS.
- The IMF has indicated that cash basis information is acceptable for GFS reporting where note accrual information is available.

The advantages of this cash only basis approach are that it is simple, consistent with the budget and if modified cash is used it also holds information on financial assets and liabilities.

The problem arises of the accrual type accounting currently used by many budget institutions. Should this be abandoned and all entities required to adopt the cash basis, or would there continue to be two separate accounting systems? The latter is considered as Option 3 below. If all entities are required to adopt cash much valuable accrual information and expertise will be lost.

Advantages and disadvantages are summarised below.

Table 1: Cash only

| Advantages | Disadvantages |
|---|---|
| 1. Simple | <ul style="list-style-type: none"> • Lose benefit of single system embracing assets, liabilities & related flows |
| 2. Consistent with budget | <ul style="list-style-type: none"> • Existing accrual systems and information lost |
| 3. If modified cash basis used also holds information on financial assets & liabilities | <ul style="list-style-type: none"> • Can only apply cash basis IPSAS |

Option 2: Accrual only

The second option is the opposite of Option 1 - adopt accrual accounting across the whole of government. This would involve moving all budget entities to an IPSAS compliant accrual basis and then integrating this with an accrual based system for Treasury. This transition would generally be achieved by adopting a single software application - Financial Management Information System (FMIS) - across the whole of government. Though challenging this would be made more feasible because the system would be consistent with the way most Commercial Off The Shelf (COTS) accounting packages are designed to function.

Reporting would be compliant with the accrual basis IPSAS and accrual information would be used for the GFS or ESA 95 reports.

Table 2: Accrual only

| Advantages | Disadvantages |
|---|---|
| 1. Consistent with GFS, ESA 95 & accrual IPSAS | <ul style="list-style-type: none"> Implementation involves major system implementation and business process reengineering of accounting processes across the whole of government |
| 2. Retains and builds on existing accrual expertise & information | <ul style="list-style-type: none"> Only aggregate cash flow information available |
| 3. Comprehensive – includes all flows, assets & liabilities | <ul style="list-style-type: none"> Problem of controlling the execution of a cash budget |
| 4. Possible to design reports approximating to cash basis (see below) | <ul style="list-style-type: none"> Difficulty of budget reporting (IPSAS 24 compliance) |

As indicated above, it is possible to design a reporting system even under accrual accounting that approximates to cash basis reporting. The table below illustrates how this can be achieved. There will only be a limited number of differences between the results from the cash basis and the accrual basis and adjustments can eliminate most of the differences.

Table 3: Cash reporting under accrual accounting

| Item | Required adjustment from accrual to cash reporting | Comment |
|---------------------------|--|--|
| Capital expenditure | Show actual cash flow | Easily available from asset accounts – manual adjustment |
| Depreciation/amortization | Eliminate from reports | Depreciation ledger accounts omitted from cash reports |
| Revenue | Cash basis | Acceptable under accrual IPSAS |
| Financing flows | Report actual flows | Available from loan accounts – manual adjustment |

| Item | Required adjustment from accrual to cash reporting | Comment |
|----------------------|--|---|
| Expenditures | Use accrual information | Difference to cash only material if large changes in working capital |
| Other economic flows | Eliminate from reports | Usually easily identified from ledger accounts – omit from cash reports |

The following notes further explain the above adjustments:

- Capital expenditure and depreciation - under the cash basis the actual cash expenditure replaces the depreciation charge. It may be possible to automate this adjustment or otherwise it will have to be made manually.
- Revenues - even under accrual accounting is acceptable to treat tax and non-tax revenues on a cash basis. Similarly financing flows will be reported on an actual cash basis.
- Expenditures - normally accrual expenditures will be very similar to cash expenditures. The only exception will be where there are substantial changes in working capital. Therefore as a general rule accrual expenditure information can be used as an approximation to cash in the reports.
- Other economic flows - there may be the need for other adjustments to accrual information in respect of other economic flows, for example for revaluations which are not a cash flow. These adjustments will have to be made on an item-by-item basis as appropriate.

In producing the above “cash” reports from an accrual system the concept of materiality is important. The report may not be 100% accurate, but provided there are no material differences to a cash basis it will be a useable approximation.

Option 3: Two separate systems

Option three involves operating two separate systems in parallel - a cash basis system (e.g. in Treasury) and an accrual system (e.g. in budget institutions). In fact this reflects the existing situation in many PEMPAL countries.

This twin-system approach enables all requirements to be met. Accrual IPSAS compliant financial statements and GFS reporting will be possible from the accrual information whilst cash basis budget control and reporting will be possible from the cash basis systems.

The advantages of this approach are clear. It meets all requirements, it reflects the actual situation in many countries, it enables Treasury cash reporting whilst budget institutions continue to produce accrual reports, which can be used for financial statements, and GFS reports.

On the other hand there are very substantial disadvantages. The approach involves complexity, confusion and duplication of work and systems. Information is entered twice, once in each system, giving rise to the opportunity for errors. For this and

other reasons that are likely to be problems in reconciling the results from the two systems.

The advantages and disadvantages are summarised below.

Table 4: Two separate systems

| Advantages | Disadvantages |
|---|--|
| 1. Enables Reporting under GFS, ESA 95 & accrual IPSAS | <ul style="list-style-type: none"> Complexity, confusion, duplication of work and having two separate systems and methodologies operating in parallel |
| 2. Retains and builds on existing accrual expertise and information | <ul style="list-style-type: none"> Information has to be entered twice - once in each system |
| 3. Comprehensive – includes all flows, assets & liabilities | <ul style="list-style-type: none"> Increased risk of errors, duplicated or omitted information |
| 4. Enables cash control and reporting | <ul style="list-style-type: none"> Problem of reconciling information from two systems |

Option 4: one system combining cash and accrual

This leads us to the final option - a single methodology (and probably a single FMIS) operating in both the Treasury and all budget institutions that enables line item reporting on both a cash and an accrual basis. This approach enables management of the cash basis budget, cash reporting on budget execution but also accrual information for control, financial statements and GFS.

This approach meets all requirements. It avoids complexity, confusion and duplication and combines all information in a single system with no need for reconciliation. However such a system is more difficult to design and, unless well designed, may be more difficult to operate. It may not be feasible in some Commercial Off The Shelf (COTS) accounting packages.

The advantages and disadvantages are summarised below.

Table 5: Integrated cash and accrual system

| Advantages | Disadvantages |
|---|---|
| 1. Meets all requirements | Complex to design and implement |
| 2. Avoids complexity, confusion & duplication | May be more difficult to manage |
| 3. All information in single system so no reconciliation issues | May not be feasible in some Commercial Off The Shelf (COTS) accounting packages |

There are three methodologies that can be used to design a combined system.

Table 6: Methodologies for a single system enabling both cash and accrual reporting

| Methodology | Explanation | Issues |
|--|--|--|
| 1. Enable through design of processes, | For example cash sub-ledger design in the Tajikistan chart of accounts - both accrual and cash transactions recorded against line item codes | <ul style="list-style-type: none"> • Difficult to design and operate • Multiple data entry required • May not work in some COTS packages |
| 2. Specify as mandatory requirement when procuring accounting software | This requires the COTS package to have available functionality to provide this information and also the ability of the system implementer to be able to design reports using this information. | <ul style="list-style-type: none"> • May not be properly understood and/or implemented by software suppliers • May not be feasible in some COTS packages |
| 3. Custom develop accounting software to meet requirement | Requires detailed specification as to how this functionality will operate in the custom developed system | <ul style="list-style-type: none"> • Difficult to specify and design • It may be beyond developer capability • Other disadvantages of custom software |

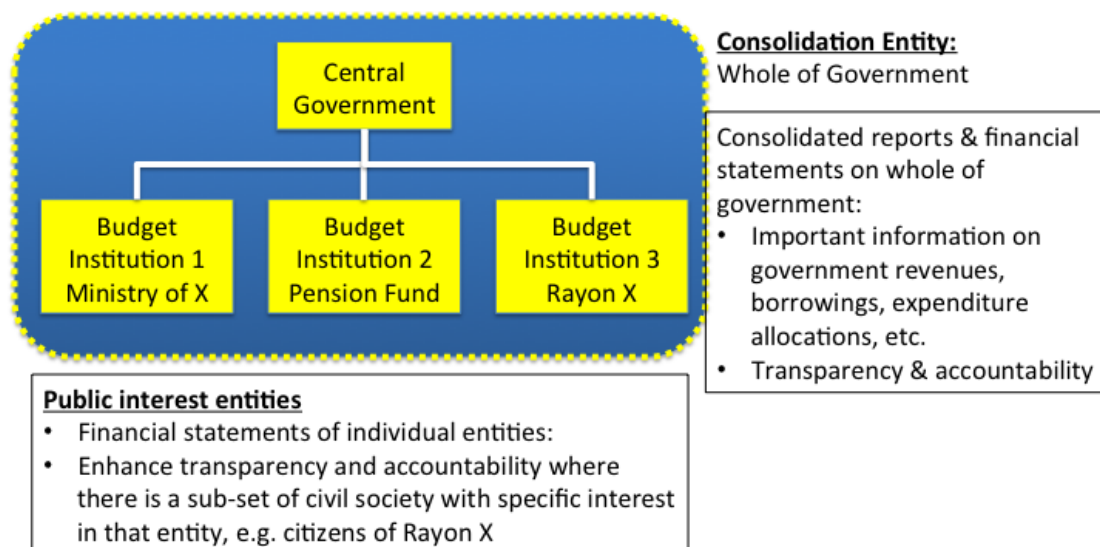
Conclusions

Clearly the ideal solution is option 4 combining both requirements within a single system. However, for the reasons indicated this may be difficult to achieve.

Issue 4: Automation and consolidation

Consider the concept of consolidation as summarised in Figure 4 below.

Figure 4: Consolidation concepts



The example is of a government with just three budget institutions - a ministry, a pension fund and a Rayon. Consolidated information will be required for the whole government including these three budget institutions. This information will include:

- Consolidated budget reports- enabling control of the whole of government entity
- Consolidated financial statements - enhancing transparency and accountability.

Without consolidation the information is fragmented and it is not possible to achieve a comprehensive picture of the activities of government. Consolidation is essential to provide useful information.

In addition, in some circumstances it will be important to produce external financial statements for individual budget institutions within the consolidation entity. This will be, for example, where there is a subset of the citizens of the country with a specific interest in that entity. For example where the entity is a Rayon then citizens within the Rayon would have such interest.

Public sector entities that require separate financial statements may be referred to as “public interest entities”.

The process of consolidation

The process of consolidation involves more than aggregation of information. It is necessary to eliminate flows between entities that are being consolidated. A common example would be where one sub-entity within the consolidation pays taxes or fees to another sub-entity within the consolidation. The consolidation exercise must eliminate such inter entity transfers so that only external flows are reported. This is a requirement of both GFS and IPSAS.

Example

| Department | Revenues | | | Expenditures | | |
|-------------------------------------|----------------------------|------------|-------------|--------------|------------|-------------|
| | External | Internal | Total | External | Tax | Total |
| Department X | | | | \$2,000.00 | \$1,000.00 | \$3,000.00 |
| Department of taxation | \$2,000.00 | \$1,000.00 | \$3,000.00 | | | |
| Aggregate revenues/ expenditure | \$2,000.00 | \$1,000.00 | \$3,000.00 | \$2,000.00 | \$1,000.00 | \$3,000.00 |
| Less: internal transfers | (Tax paid by Department X) | | \$-1,000.00 | | | \$-1,000.00 |
| Consolidated revenues/ expenditures | | | \$2,000.00 | | | \$2,000.00 |

The same process applies to eliminating inter-entity balances, e.g. when one entity within the consolidation has a liability to another entity. Since there is no overall

asset or liability the inter-entity liabilities and assets have to be eliminated on consolidation.

Conclusions on consolidation and automation

The process of eliminating such into entity flows, assets and liabilities can be complex and is difficult to automate. Often it will require manual adjustments and in many cases it may only be possible to eliminate the more inter-entity important flows.

Michael.parry@michaelparry.com

www.michaelparry.com