Introduction to FIS

Introduction to the Financial Information System (FIS)

FIS is the main repository of data used by UofT for financial management and reporting functions. The primary functions of FIS include:

- Recording of all financial transactions in general ledger accounts
- Generating financial reports to meet management and statutory requirements
- Controlling overall spending through budgetary controls embedded in the system
- Generating the university's financial statements

FIS is comprised of three SAP components. This section focuses on how they work individually and how they relate to each other. The three components are:

1. *Financial Accounting (FI)*
   - FI is used to record all financial transactions in general ledger accounts for assets (i.e. A/R), liabilities (i.e. A/P), revenues and expenses. FI also produces the university's financial statements.
2. *Funds Management (FM)*
   - FM is used to identify the source of funding (i.e. Budget dollars) as well as control overall spending. FM will prevent the posting of a transaction for which there are insufficient budget dollars.
3. *Controlling (CO)*
   - CO is used to track revenues and expenses based on specific reporting requirements, i.e. by department or specific activity/project.

Each revenue or expense transaction processed within FIS will include a code supplied from each of these components and will answer the following questions:

1. *What revenue or expense activity occurred?* (FI)
2. *What is the source of funding? How much funding is available for spending?* (FM)
3. *Which department/project incurred the activity?* (CO)

Financial Accounting (FI)

For central reporting purposes, FI is considered to be the core of the Financial Information System. It is the only component which tracks, in addition to revenue and expense activity, balance sheet type activity such as assets, liabilities and retained earnings. For reporting purposes, the main FI user groups are members of the Financial Services Department and Business Officers responsible for Ancillary Operations since part of their responsibilities include the generation of complete financial statements.

For divisional or departmental purposes, FI provides the account codes to be used in recording revenue, expense, accounts receivable and accounts payable activity. These account codes are found in the following ledger and subsidiary ledgers:
- General Ledger
  - a collection of accounts used to record and classify all financial transactions as either asset, liability, revenue or expense.
- Accounts Receivable
  - a subsidiary ledger to the General Ledger, it is a collection of individual customer accounts used to keep track of monies owed to UofT.
- Accounts Payable
  - a subsidiary ledger to the General Ledger, it is a collection of vendor accounts used to keep track of amounts payable by UofT.

General Ledger
The General Ledger is a collection of accounts used to record all financial transactions, classified by type into one of the following categories:
- *Assets (account numbers 100000 – 499999)*
  - examples of asset accounts include cash, accounts receivable, inventory, land, buildings, equipment and investments.
- *Liabilities (account numbers 500000 – 599999)*
  - examples of liability accounts include accounts payable and long term debt.
- *Retained Earnings (account numbers 600000 – 699999)*
  - the cumulative "life-to-date" total of all annual surpluses and deficits over the years.
- *Revenue (account numbers 700000 – 799999)*
  - examples of revenue accounts include student fees, fees earned by UofT for services rendered or goods sold to external customers, investment income etc.
- *Expense (account numbers 800000 – 899999)*
  - examples of expense accounts include salaries and wages, benefits, office supplies, legal fees, depreciation, interest expense, utilities, etc.

Accounts Receivable Ledger
The Accounts Receivable Ledger is a collection of customer accounts used to track the outstanding dollar value of monies which are owed to UofT by students, governments, granting agencies and external clients that purchase goods and services from UofT.

Each department that collects external revenues is required to invoice its customers and have that invoice recorded in FIS so that UofT can monitor and track the outstanding amounts.
Recording of the invoice into FIS is done centrally by the Financial Services Department. The Financial Services Department will also process all payments received to the customer account on behalf of the department.

The account number ranges used by UofT for external billing customers are:
- 100000 – 199999 for general accounts receivable customers
- 200000 – 299999 for payroll customer billings
- 300000 – 399999 for governments and granting agencies

Accounts Payable Ledger
The Accounts Payable Ledger is a collection of vendor accounts used to track the outstanding dollar value of monies which are owed by the university to pay suppliers.

Each department is responsible for entering all accounts payable transactions into FIS. The production and mailing of the cheques is done centrally by the Financial Services Department.

The account number ranges used by UofT for recording vendor activity are:
- 100000 – 199999 for Canadian vendors
- 300000 – 399999 for United States vendors
- 400000 – 499999 for Foreign vendors

Business Area
The Business Area is a code used in FI to allow the preparation of more than one set of financial statements within a single company. UofT uses this code to separate the Ancillary Operations from the rest of the University business activity and forms part of the transaction coding when a posting is made to FIS.

Unless the transaction is related to Ancillary Operations, **the business area code will never need to be input or changed in a transaction being posted in FIS**. FIS has been programmed in such a way that for most transactions, the business area will automatically be selected and therefore no action is required on the part of the user.

The business area codes used by UofT to separate Ancillary Operations from the rest of the University's business activities are:
- 1000   UofT activity not including Ancillaries (default setting)
- 1001 – 1999   Ancillary Operations

Funds Management (FM)

FM answers the questions "what is the source of my funding (i.e. money)?" and "how much funding do I have left?" FM also contains a unique feature not present anywhere else in FIS - FM will prevent a transaction from being posted if there is not sufficient budget to cover the transaction. This feature is called "Funds Availability Control" and will be discussed in the section **How FM Controls Spending**.

Funding, a term that defines the source of budget dollars here at UofT, can come from a variety of sources. UofT receives funding from various governments, research granting agencies, private donors and sponsoring companies. UofT also generates funding from the sale of goods and/or services through departmental initiatives or most commonly through the Ancillary Operations. In order to meet management and statutory reporting requirements, UofT must be able to track and report on the different funding sources and the corresponding spending. The funding sources are categorized as follows:

Operating Funds - These funds are used to cover the general operating costs of UofT; such as academic and administrative salaries & benefits, utilities, supplies, etc. The funding sources that would typically be included in this category are revenues generated through departmental initiatives and the annual Operating grants from the Federal/Provincial governments.

Ancillary Operations - The funding sources that would typically be included in this category are revenues generated from the sale of residence or parking spaces, food and beverage. These revenues are offset by the expenses incurred in running the Ancillary Operations such as salaries & benefits, cost of goods sold, mortgage interest, etc.

Restricted Funds - The funding sources that would typically be included in this category are research granting agencies, private donors and sponsoring companies. Typically these funds have certain restrictions or conditions attached to how the money can be spent.

Capital Funds - These funds are used to cover the costs of construction or major renovations of buildings at UofT. The funding sources can include government agencies, donors, UofT departments contributing part of their Operating Funds, etc.

These categories are reflected in FM through the use of various account codes, namely *Funds Centers* and *Funds.*

FM account codes
FM contains three main categories of account codes which represent the FM coding part of a transaction posting in FIS. They are:
- *Funds Center (CFC)*
    - also known as Fund Centre, Commitment Funds Centre or CF Centre, this account code is a six digit code used to record and report the funding and spending for the Operating Fund and Ancillary Operations for the University's fiscal year. The CFC account is also used to reflect the organizational structure at UofT within FIS, and specifically within FM (see **Comparing the CFC account to the Fund account** for more details). At UofT, a CFC account is assigned, and represents, a Faculty, divisions or departments within that Faculty and Principal Investigators (PIs) within a division or department. In the case of Ancillary Operations, a CFC account is assigned to record the revenues and track the spending of a particular activity i.e. residences, parking, etc. All transactions posted in FIS using a revenue or expense general ledger account will have, as part of the transaction coding, a CFC account. This is true even if the transaction relates to Restricted or Capital funding or spending activity. This topic is discussed in greater detail in the **FIS Overview course**.
    - The CFC account is used to report financial activity based on the University fiscal year, May 1st to April 30th.
- *Fund*
    - this account code is a six digit code that is used to record and report the funding and spending for the Restricted and Capital Funds (i.e. research or capital construction) largely due to the fact that the Fund account allows "life-to-date" reporting and is not restricted the University's fiscal year, as is the CFC. A Fund account will only be used in an FIS transaction posting if the source of funding (i.e. budget) for the transaction resides in the Fund account.
- *Commitment Item (CI)*
    - this is an alphabetic code that is assigned to similar general ledger accounts, for example the commitment item SUPPLIES is assigned to each general ledger account used to record purchases of supplies. At UofT, one of the functions of this code is to report summarized results of the budgeted and actual transactions posted to all revenue and expense general ledger accounts. The other, more critical function is to restrict the spending for a particular activity e.g. purchasing

supplies, to a defined amount, e.g. $1,000. This topic is discussed in greater detail in the **FIS Overview course**.

To illustrate the relationship between FM codes and FI codes:
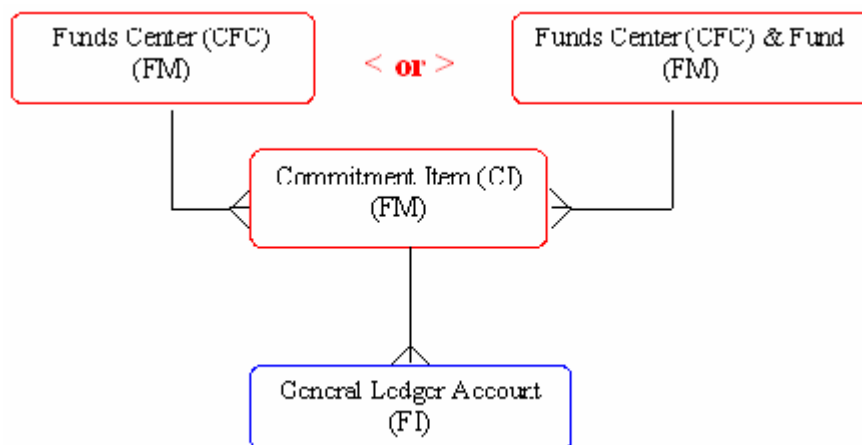
- A funds center can be used with many commitment items.
- A funds center & fund combination can be used with many commitment items.
- A commitment item has many similar general ledger accounts.

Using CFCs to reflect the organizational structure at UofT
Here at UofT, the governance or reporting that is required is done based on the organizational structure, which is hierarchical in nature. For example, Professor Smith has a budget given to him by his department, the Department of Chemistry. The Department of Chemistry received its budget from the Faculty of Arts & Science who received its budget from the Office of the Provost who gets his budget allocation from Governing Council (the very highest authority at UofT). FM allows the CFC's to be "linked" in such a way as to represent this hierarchical relationship between the Professor who has a very small slice of the overall budget right up through and to the Governing Council.

This "linking" is done through "parent" and "subordinate" CFCs. In the previous example, Professor Smith would be assigned a CFC#5 account which would be "subordinate" to the CFC#4 account assigned to the Department of Chemistry. Although CFC#4 is considered a "parent" to CFC#5, it would be considered "subordinate" to the CFC#3 account assigned to the Faculty of Arts & Science and so on.

As you will note in the chart below, funds are not organized in a hierarchical structure. The only way to identify which Faculty or department the Fund belongs to is to "link" it to a CFC account through the transaction posting. This topic is discussed in greater detail in the **FIS Overview course**.

Comparing the CFC account to the Fund account
Although the accounts are similar in that they are both used to record funding sources and the corresponding spending, there are some notable differences. The following chart lists the various characteristics of each type of account and how the University has chosen to use each account:

	Funds Center	Fund
Brief description	a six digit code that is used to record and report the funding and spending for the Operating Fund and Ancillary Operations on a fiscal year basis	a six digit code that is used to record and report the funding and spending for the Restricted and Capital Funds on a "life to date" basis
Periodic Reporting	fiscal year (May 1 to April 30)	any start or end date
Hierarchy	reflects the organizational structure at UofT	no hierarchy of its own, is linked to an organizational unit through transaction postings
Budgeting	fiscal year basis	overall basis
Types & Numbers	Operating Fund & Ancillary Operations accounts = (100000 - 109999) Principal Investigator accounts = (200000 - 209999)	Research Fund accounts = (300000 - 409999) Conference accounts = (420000 - 429999) Capital Fund = (430000 - 439999) Accommodations & Facilities accounts = (440000 - 469999)

How FM controls spending

FM is the only area within FIS where the system will control spending based on budgeted expenditure amounts through a process called *Funds Availability Checking*. In order to do this, FM keeps track of the following amounts:

- Budget
- Actual expenses + Commitments/Reserves = Expenditures
- Funds available

Every time someone attempts to post an expense to the system, FM will first calculate the amount of Funds Available to cover the new expense as follows:

> *Budgeted amount to cover expenses* minus *Actual expenditures recorded to date*

If the calculated amount is not sufficient to cover the amount of the new expense, FM will block the transaction from being posted. A message will appear letting the system user know that there were insufficient funds available to cover the transaction. This topic is covered in greater detail in the **FIS Overview course**.

Controlling (CO)

CO answers the question "Which department/project incurred the activity?" CO allows the system user to report on the planned spending and compare it to the actual postings of revenues and expenses for a specific department, program or activity at the general ledger level of detail. Departments and projects are identified in CO through the use of various codes, namely Cost Centers and Internal Orders.

CO account codes

CO contains four main categories of account codes which represent the CO coding part of a transaction posting in FIS. They are:

- *Cost Center (CC)*

- o a five or six digit code that represents the organizational unit or program that initiated a financial transaction. The CC tracks revenue and expenses for on-going / permanent business units or activities on a fiscal year basis.
- *Internal Order (IO)*
  - o a six digit code that can also represent an organizational unit or program that initiated a financial transaction. The IO is similar to a CC in every way except one - the reporting period of an IO does not have to correspond to the university's fiscal year. Many IOs are set up to report on a "life to date" basis.
- *Cost Element (CE)*
  - o "Cost Element" is the term used in CO to represent the General Ledger number (FI). General Ledger = Cost Element in every transaction posting regardless of whether the activity is revenue or expense.
- *Cost Element Group*
  - o Similar to the Commitment Item in FM, this is an alphabetic code that is assigned to similar cost element accounts, for example the cost element group SUPPLIES would contain all cost elements used to record purchases of supplies. This allows the reporting of summarized results of transactions posted to all revenue and expense cost elements.

To illustrate the relationship between CO codes and FI codes:
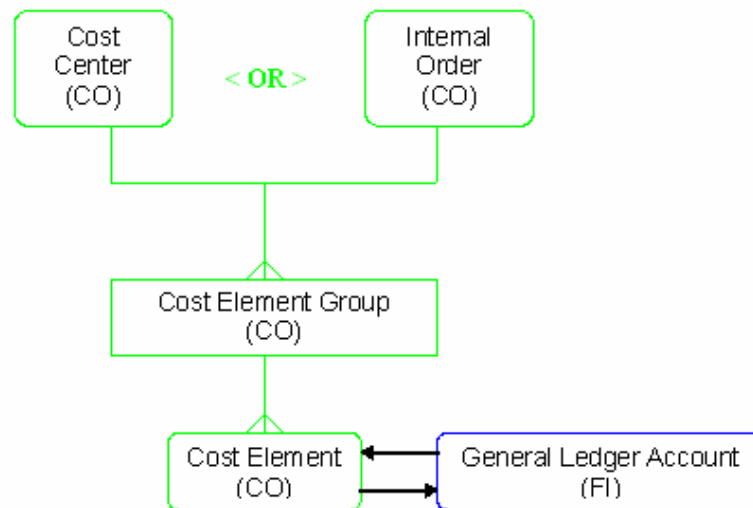
- A cost center can be used with many cost element groups and or cost elements
- An internal order can be used with many cost element groups and or cost elements
- A cost element group account represents several similar cost elements
- A cost element represents a general ledger account (same code / number)

Using CCs to reflect the organizational structure at UofT
Similar to FM, the accounts in CO are organized in such a way as to reflect the organizational structure of the University. Where FM uses the "parent" and "subordinate" relationship between the CFC's to reflect the organizational structure, CO uses "Cost Center Groups". Each Cost Center Group is a collection of CCs at the same "level" in the hierarchical structure reflected in FM. All CCs belong to a Cost Center Group.

As noted in the chart below, IOs are reported as part of the organizational structure through their relationship to a CC. The relationship between the IO and the CC as well as a more detailed discussion on Cost Center Groups is covered in the **FIS Overview course**.

Comparing the CC account to the IO account

Although the accounts are similar in that they can both be used to record the financial transactions of a department or project, there are some notable differences. The following chart lists the various characteristics of each type of account

|	Cost Center	Internal Order
Brief description	a five or six digit number that represents the organizational unit or program that initiated a financial transaction	a six digit number that can also represent an organizational unit or program that initiated a financial transaction
Periodic Reporting	based on the fiscal year (May 1 to April 30)	any start or end date, annual or "life to date"
Hierarchy	grouped to reflect the organizational structure at UofT	no hierarchy of its own, is linked to an organizational unit through its link to a Cost Center
Planning	fiscal year basis	fiscal year basis or overall
Types & Numbers	Operating Fund & Ancillary Operations = (10000 - 19999) Principal Investigator accounts = (200000 - 299999)	Capital Fund = (500000 - 599999) Conferences = (400000 - 409999) Departmental = (920000 - 929999)

Using CO for planning purposes

The name "Controlling" for this component of FIS is misleading in that there is no systemic control on spending in CO like there is in FM. CO provides the opportunity to plan the revenue and expense activity by cost element account. As a result of this distinction, "budget" amounts in CO are called "plans". To illustrate the difference, let's look at an example where a department plans to receive $10,000 from external sources and $5,000 from internal departments. Further, the department plans to spend this revenue as follows: $9,000 salaries & benefits, $3,500 supplies and $2,500 travel.   The fiscal year report for this unit, after all of the actual revenues and expenses have been posted may look like this:

Cost Element	Cost Element name	Plan	Actual	Variance
750000	Sales (external)	$10,000	$ 9,500	$ 500
799999	Internal contribution	$ 5,000	$ 5,000	
	Gross Revenues	**$15,000**	**$14,500**	**$ 500**
801000	Salaries & Benefits	$ 9,000	$10,000	-$1,000
825000	Supplies	$ 3,500	$ 2,000	$1,500
836000	Travel	$ 2,500	$ 2,500	
	Gross Expenses	**$15,000**	**$14,500**	**$ 500**

In FM, if the "budget" for salaries had been set at $9,000, the posting of salaries and benefits of $10,000 would not have been permitted because of the "Funds Availability Checking" feature. In CO, because the amount of $9,000 is only the "planned" spending (i.e. estimated) for salaries & benefits, the amount of $10,000 was allowed to be posted.

FIS Components – How They Relate to Each Other

FIS is comprised of three SAP components namely Financial Accounting (FI), Funds Management (FM) and Controlling (CO). The components work together to plan, budget, record, control and report on the financial activity at UofT. The following illustrates the relationship between the account codes used in each of the components:
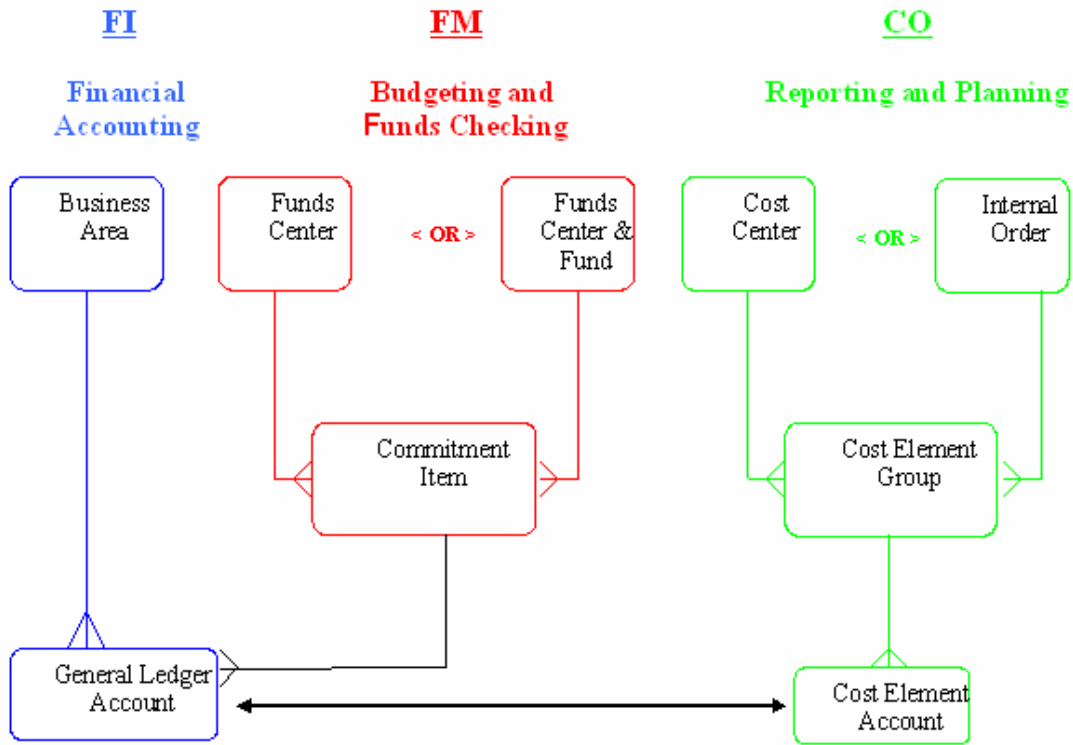
As you may recall, the general ledger account number in FI mirrors the cost element number in CO and every general ledger account number is also assigned to a commitment item in FM.

FIS Components – How They Compare to Each Other

Account codes used to track activity and used as selection criteria in reports:	Financial Information (FI)	Funds Management (FM)	Controlling (CO)
Financial reporting object (i.e. revenue / expense)	general ledger account	commitment items	cost elements/ cost element groups
Summary financial reporting on a fiscal year basis	business areas	funds centre	cost centre
Summary of financial reporting on a "Life-to-date" basis	business areas for balance sheet accounts only	fund	internal order
Budgeting/planning functionality	no	yes (Budgets)	yes (Plans)
Spending control enforced by system	no	yes	no
Financial reporting available: Trial balance > Balance Sheet > Income statement >	yes yes yes	no no yes	no no yes

FIS Components – How they work together

Throughout this document we make reference to how each of the FIS components provide information through the use of account codes in transaction postings to answer the following questions:

1) What revenue or expense activity occurred? (FI)
2) What is the source of funding? How much funding is available for spending? (FM)
3) Which department/project incurred the activity? (CO)

Presented here are two scenarios which will help demonstrate how the three FIS components work together. The first scenario is an attempt to relate the functionality found in FIS to our everyday lives, and the second scenario illustrates how the FIS codes would be used in a departmental transaction.

Scenario 1: Household budget management using the FIS Model
Consider a household which maintains two bank accounts; the first to handle all regular household expenditures and the second to save for a dream vacation.

- The account balances of each account is $1,500 and $1,000 respectively, and neither one allows for overspending (i.e. no overdraft protection). **This would relate to the FM component within FIS**
- Your household spending plan contains the details for how you intend to spend the money and would also be updated to record the actual spending. **This would relate to the CO component within FIS**
- Your cheque book will record the amount and the type of each expense you incur. **This would relate to the FI component within FIS**

To demonstrate, let's look at the status of the accounts at the:

Beginning of the Month:

Cheque Book (FI)	Bank Accounts (FM)		Household budget/plan (CO)			
				Plan	Actual (CE)	Variance
no transactions recorded	General Household		Household (CEG)			
	Funds Available	1,500.00	Food	$600.00		
			Clothing	200.00		
			Utilities	400.00		
			Car expenses	300.00		
				$1,500.00		
	Vacation Fund		Vacation (CEG)			
	Funds Available	1,000.00	This year	200.00		
			Next year	2,000.00		
				$2,200.00		

End of the Month:

Cheque Book (FI)		Bank Accounts (FM)		Household budget/plan (CO)			
					Plan	Actual (CE)	Variance
Household (CI)		General Household		Household (CEG)			
Food	$600.00	Funds Available	1,500.00	Food	$600.00	$600.00	$0.00
Clothing	0.00			Clothing	200.00	0.00	200.00
Utilities	500.00	Household (CI)	(1,500.00)	Utilities	400.00	500.00	(100.00)
Car expenses	400.00	Funds Available	0.00	Car expenses	300.00	400.00	(100.00)
	$1,500.00				$1,500.00	$1,500.00	$0.00
Vacation (CI)		Vacation Fund		Vacation (CEG)			
This year	180.00	Funds Available	1,000.00	This year	200.00	180.00	20.00
		Vacation (CI)	(180.00)	Next year	2,000.00	0.00	2,000.00
		Funds Available	820.00		$2,200.00	$180.00	$2,020.00

Notes: CI=Commitment Item; CE=Cost Element; CEG=Cost Element Group

General Observations:
- The spending will be limited by the amount of available funds in the bank accounts. This is equivalent to the "funds checking" concept in **FM**.
- The spending for a particular expense can exceed the "plan" as long as there is enough money in the account at that time; the spending of $200 on clothes had to be set aside because the actual utility and car expenses were more than the planned amount and after those were paid, there were no more funds available in the General bank account.
- Similar to **CO**, the Household budget/plan is simply an estimate; the actual expenditures can be higher or lower than the planned amount.
- The available funds in the vacation account are now $820, which is currently insufficient for the $2,000 vacation planned for next year. Additional sources of funding will need to be identified.

Scenario 2: UofT departmental transaction using the FIS Model
Photocopier supplies of $115.00 are purchased by the FAST Team in the Financial Services Department. We need to answer the following questions before we can proceed to post this transaction:
- What type of expense is this?
    o The answer is supplied by FI - this money is being spent on photocopier supplies, general ledger account = 825810.
- Where will the funds for this expenditure come from?
    o The answer is supplied by FM - the funds for this expenditure will come from the budget for the Financial Services Department, CFC = 100654.
- What organizational unit is spending the money?
    o The answer is supplied by CO - the FAST Team in the Financial Services Department, CC = 13424.

The transaction would be posted in each of the FIS components as follows:

Details	Financial Information (FI)	Funds Management (FM)	Controlling (CO)
$ Amount of transaction	$115.00	$115.00	$115.00
Organizational unit	Business Area 1000	CFC = 100654	CC = 13424
Photocopier supplies	GL = 825810	GL = 825810	CE = 825810
Category of expense	N/A	CI = SUPPLIES	CEG = SUPPLIES

This diagram is a modified version of the relationship diagram depicted in section 2.4.

The diagram compares the FI, FM and CO structures and shows how the various codes are associated with eachother in this transaction.

Bus. Area

CFC 100654

CC 13424

CI "SUPPLIES"

CEG "SUPPLIES"

GL 825810

CE 825810