Standard Chart of Accounts
CSIA Statistics Committee
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What is a Chart of Accounts?

A Chart of Accounts (COA) is the list of account numbers or codes used to track company financial information. This provides the organizational structure for how financial data is recorded and is designed to simplify financial reporting. Practically all accounting systems use a double entry system. Every transaction consists of one or more positive amounts (debits) which are entered into one or more accounts and negative amounts (credits) which are entered into one or more other accounts (balancing accounts). The total of the debits and credits are always equal for every transaction making the sum total of all entries always equal to zero. The integrity of the accounting records can easily be checked by ensuring that the sum total of all accounts added together is always equal to zero.

Values are reported in the individual accounts grouped by periods of time referred to as fiscal periods. A fiscal period is typically aligned with a calendar month but it may also be aligned with a series of weeks such as 4-4-5 in which the first period is 4 weeks duration the second period is 4 weeks duration and the third period is 5 weeks duration. This cycle continues until a full year is accounted for. A full year of periods is called a fiscal year and could start at any time within a calendar year but is always the same year over year. Some companies will also have a thirteenth period that is used to enter any adjustments required and is not an operational period.

The accounts are organized into five basic groups which makeup the two primary financial reports:

Balance Sheet – This report provides a view of the current financial status of the company. The numbers in it are accumulated values since the inception of the company. Accounts in the balance sheet are:

- Assets
- Liabilities
- Equity

Income Statement – This report represents the financial results for the current fiscal year (or other reporting period). The values are zeroed at the beginning of the fiscal year and accumulate over the rest of the year. This report is sometimes called a profit and loss statement or P&L. It includes the following accounts:

- Revenue
- Expenses

Within each group of accounts, the number of accounts and the organization of the accounts are totally up to the individual company. Some typical accounts are regularly used in order to generate typical financial reports. Others are defined based on the individual needs of the company.

Some trade groups have created sample or typical COAs for their industry. Most accounting software packages provide template COAs that are generic for certain types of companies and are customizable for the user's specific needs.

Benefits of a Standard Chart of Accounts

In order to assist small and developing companies and to provide a basis for defining financial data for statistical benchmarks, the CSIA Statistics Committee has developed a proposed "standard" chart of accounts. This COA is not intended to be a comprehensive or definitive chart of accounts for all system integrators but simply a baseline for discussion and consideration. Small companies may use this chart of accounts as a place to start in developing their own. Others may consider some of the ideas and concepts presented here and incorporate the best ones into their financial systems.

However, the primary purpose for developing and presenting a standard chart of accounts is to provide clear definition of the financial data being requested and presented in our statistical data. Without clear definitions, each survey respondent may provide financial data based on different assumptions and be organized differently. By connecting the survey questions to a standard chart of accounts, respondents can see precisely what information is being requested and in what context. It is our goal that through better definitions, we can collect more accurate and uniform responses from our members, thus improving the quality and reliability of the statistics being reported.

Multiple Business Operations

Some companies only provide system integration services. However, many system integration companies also provide panel fabrication services, calibration, construction and other related products or services. In order to better track the performance of each portion of the business, larger companies organize their operation into business units (a.k.a. cost centers, profit centers, departments, etc.). By segregating the financial data for different business units, it is easier to analyze and monitor the financial performance of each type of business operation.

Accounting systems generally provide for tracking of separate business units using one of the following methods:

1. *Track each business unit as a separate company.* For larger companies it may be appropriate to track each business operation independently using a full chart of accounts for each. Financial reports can be produced by business unit. For company-wide reporting, individual business unit financial data are consolidated (or combined together) to produce corporate financial reports.
2. *Use sub-accounts for each business unit.* Some companies choose to implement sub-account codes or numbers to provide a breakdown by business unit on certain codes. Then by summing the sub-accounts together, the account total provides the information for company-wide reports.
3. *Use another data field for business unit designation.* Some accounting software packages have the ability to flag each transaction with a business unit (or department) code. Then at report

generation time, the user can select a single business unit, a collection of business units or the entire company.

Regardless of which method you use to track your financial data, if your company has more than one product or service offering, it is recommended that you segregate your business operations into at least the following business units:

- Corporate and/or administrative business unit (overhead)
- System Integration business unit(s)
- Manufacturing and/or Construction (may be combined or separate) business unit(s)
- Business units for other types of products or services

Another possible breakdown of business units may be by location. If you have more than one office, it may be beneficial to track each location as a separate business unit.

One should consider the benefit of improved reporting versus the cost of tracking by business unit. There is added complexity and cost associated with using multiple business units.

Overhead Allocation

When tracking business units separately, some business units exist only to provide support to others. For example, the corporate (or overhead) business unit does not generally have a revenue source and is not expected to make a profit. The total cost of this business unit must be transferred (or allocated) to the other business units that it serves.

The allocation of overhead costs from a central administrative business unit to the other operational business units can be done any number of ways. The total overhead cost can be split between the operational business units using some proportional calculation or other formula appropriate to the way the company functions. Some companies choose to allocate overhead costs in different ways for different costs. For example, business licenses and fees which are based on sales can be allocated to operational business units in proportion to their individual revenue amounts. Other costs such as payroll related costs can be allocated in proportion to labor costs or headcount.

Regardless of which method of allocation is chosen, it is important that each operational business unit experiences an appropriate portion of the company's overhead expenses.

Recognition, Accruals and Prepaids

Not all expenses are incurred evenly over time. Likewise, not all revenue is collected uniformly over time. If revenue is reported in one month and the expenses associated with generating that revenue is reported in another month, the financial reports will not accurately reflect the profitability of a business unit or the company. Without some mechanism to ensure that revenue is reported in the same month as the associated expenses, the financial statements will show wild swings in profitability and company performance.

Typical accounting practice is for revenue to be reported (or "recognized") based on the achievement of the business operations. This can be done on a percentage completion basis which means that the revenue for a particular project is not reported when the invoice is entered or when the payment is received from the customer, but is recognized as the work is being accomplished. For example, if 25% of the work is done, then 25% of the revenue for that project is recognized. This is called cost over cost revenue recognition. the revenue is credited to the revenue account and debited to a balance sheet account commonly called WIP (work in process) but formally called "Costs and Expected Earnings in Excess of Billings"

Similarly if an invoice is sent to the customer before the work is actually completed it should not show up as revenue. This would be typical of a down payment on a large fixed price job. The account that holds this value is a liability account on the balance sheet commonly called Deferred Revenue but more formally called Billings in Excess of Costs and Expected Earnings.

In order to spread expenses over time, two methods are used: accruals and prepaid expenses.

Some expenses are accumulated over time and paid in lump sum on a future date. An example of this might be employee bonuses that are paid once a year. Each month, a calculated portion of the bonus is charged as an expense and accrued into a specific balance sheet account. Then when the bonuses are paid, they are reported against the accrual account. The goal would be that this accrual account returns to zero when the bonuses are paid. If not, then an adjustment should be made in the accrual calculation.

In a similar manner, some expenses are paid up front and cover some particular period of time. For example, worker's comp insurance is typically paid once a year, at renewal time. This once a year expense can make that month look artificially unprofitable. By charging the insurance payment to a balance sheet account and then reporting one twelfth (1/12) of the expense each month, the cost is spread evenly over the months of the year.

An additional accrual is often done to report equipment or material that has been received but the vendor has not yet sent the invoice. This Accrued A/P account is a balance sheet account.

Note: The use of accruals or prepaid expenses that cross the end of a tax year can affect taxable income calculations. Care must be taken to implement these items in accordance with applicable tax rules and Generally Accepted Accounting Practices.)

Account Numbering Systems

Early accounting software systems used numeric account numbers which made it easier to summarize and total various accounts. This meant that the organization structure of the accounts was encoded into the numbering scheme. Most accounting systems today allow you to label your accounts with letters, numbers or both and define the interrelationships between accounts separately from the account number. However, it is still traditional and common to use a numbering system that makes it easy to remember account numbers and look up information.

The standard chart of accounts shown below includes an example of a simple numeric scheme and a more extensive one for a larger company. Your accounting system or company may use a different numbering technique.

Standard Chart of Accounts

Balance Sheet

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
Assets			
Current Assets			
	10100 - Cash	10100 – Cash	Cash on hand, in a petty cash drawer or other cash held by the company
	10200 - Bank Accounts	10200 - Checking 10300 – Savings	General or specialized bank accounts including checking, savings or other deposit accounts (create a different account number for each account)
	10300 - Short Term Investments	11000 - Cert. of Deposit 11100 - Marketable Securities 11200 - Government Securities	This includes any short term investments such as CDs, marketable securities, government securities or other short term investments. These are not as liquid as a checking or savings account but can be accessed within a reasonably short period of time.
Receivables			
	11000 - Accounts Receivable (A/R)	12000 - Accounts Receivable 12100 - Retention Receivable	Accounts receivable includes money owed to the company as a result of customer invoicing. This could be broken down into sub-accounts by business unit or by type of invoice (i.e. completed work and retention)
	11100 - Notes	13000 - Notes Receivable	If you provide any financing for your customer, short term notes due from the customer would be recorded here.
	11200 - Due from employees	14000 - Travel Advances 14100 - Employee Purchases 14200 - Payroll Advances	Money due from employees would include travel advanced, payroll advances, employee purchases or any other money owed to the company on a short term basis from its employees.
Other Current Assets			
	12000 - WIP	15000 - WIP 15100 - Finished Goods	Work in Progress includes any completed operations which have not yet been billed. (A.K.A. costs and expected earnings in excess of billings) This is calculated based on the difference between revenue recognized and invoices generated.

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	12100 - Inventory	15200 - Raw Materials 15300 - Parts Inventory	Current value of materials for sale. This includes raw materials and parts. Completed assemblies or products resulting from manufacturing operations would generally be reported under WIP but may be reported under a separate account. Because these items do not have an identified buyer they are reported at cost.
	12200 - Allowance for Bad Debts	15400 - Allowance for Bad Debts	This account may be used to accrue, over a period of time, some percentage of receivables, past due receivables or other amount determined based on history, as an allowance to offset the write-off of a bad debt or uncollectable receivable. This avoids the write-off from occurring all at once and spreads the expense over multiple accounting periods.
	12300 - Prepaid Expenses	16000 - Prepaid Commercial Insurance 16100 - Prepaid Workers Comp Ins 16200 - Prepaid Rent 16300 - Prepaid Maintenance Agreements 16400 - Prepaid Real Estate Taxes	Some items may be paid in lump sum but the expense is spread over multiple accounting periods (e.g. insurance, taxes, maintenance costs, rent, etc.) In such case, the total amount paid is entered here and the expense is allocated out on a periodic basis. A separate account should be set up for each class of prepaid expense.
Fixed Assets			
	13000 - Property, Plant and Equipment (A.K.A. Furniture and Fixtures)	17000 - Buildings 17100 - Manuf. Machinery 17200 - Construction Equipment 17300 - Vehicles 17400 - Furniture 17500 - Computers and Software 17600 - Leasehold Improvements	Each company must determine what items that are purchased for company use or consumption may be expensed when purchased and which must be depreciated over time. In general, any real estate, buildings, furniture, machinery and other items requiring significant investment must be depreciated over its lifetime (see your tax advisor for how to determine depreciation rates and periods). These items should be recorded here. Create separate accounts for different classes of items. You may be required to pay local property taxes based on different classes of property.

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	13100 - Accumulated Depreciation	18000 - Acc. Dep. Buildings 18100 - Acc. Dep. Manuf. Machinery 18200 - Acc. Dep. Construction Equipment 18300 - Acc. Dep. Vehicles 18400 - Acc. Dep. Furniture 18500 - Acc. Dep. Computers and Software 18600 - Acc. Dep. Leasehold Improvements	Record the cumulative amount of depreciation claimed for your Fixed Assets here.
	13200 - Other Non-Current Assets	19000 - Organization Costs 19100 - Goodwill 19300 - Patents and Licenses	This account may include other items that are considered capital that may have fixed value or may be amortized over time. These may include organizational costs, patents and licenses, intangible assets, etc.
Liabilities			
Payables			
	20000 - Accounts Payable (A/P)	20000 - A/P Trade 20100 - A/P Retentions 20200 - A/P other 20300 – Accrued A/P	Accounts payable includes invoices and other money owed by the company as the result of business operations. This is the list of bills that must, at some time, be paid.
	20100 - ST Notes Payable	21000 - ST Notes Payable	Short term notes payable generally includes any loans or other notes that must be paid within the next 12 months.
	20200 - Current portion of Long Term Debt	22000 - Current portion of Long Term Debt	Any loans or notes that mature in over 12 months are recorded in acoounts listed below under Long Term Notes. However, the payments due on such notes during the next 12 months should be recorded here.
	20500 – Deferred Revenue	22500 – Billings in Excess of Costs and Expected Earnings	Down payments or invoices for work yet to be completed
Payroll Accruals			

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	21000 - Accrued Payroll	23000 - Accrued Salaries and Wages 23100 - Accrued Bonuses 23200 - Accrued Commissions	As employees work, their payroll costs are accrued here and that accrual is reduced each time payroll is paid. The balance in this account shows the amount of pay the company owes its employees as of the reporting date. This account may be broken down by regular payroll, bonuses, commissions, etc.
	21100 - Accrued Taxes	24000 - Social Security 24100 - Medicare 24200 - Federal Withholding 24300 - State Withholding 24400 - Local Withholding 24500 - Fed. Unemployment Taxes 24600 - State Unemployment Taxes	At each payroll date, the payroll and other taxes withheld or accrued are recorded here. This accrual is reduced when the taxes are paid to the government or other entity on whatever frequency required by regulation (monthly, quarterly, annually). Accounts should be set up for each tax type or each tax authority.
	21200 - Accrued Benefits	25000 - 401k Contributions 25100 - 401k Matching 25200 - MSA Contributions 25300 - HSA Contributions	Money collected from payroll deductions that apply to employee benefits should be recorded here. There should be an account for employee deductions for 401k contributions, medical savings accounts and other employee paid benefits. The accrual is reduced when the money is paid to the benefit provider.
	21300 - Accrued Vacation	26000 – Accrued Vacation	As employees work they earn paid vacation time off. The cost of that time is recorded in this account. This account is reduced as the vacation is taken.
	21400 - Accrued PTO	27000 – Accrued PTO	This is similar to the account above but would also include an allowance for other types of Paid Time Off (PTO) such as sick time or jury duty. This account is reduced as the time off is taken or if an employee is no longer eligible for the paid time off.
Other accruals			

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	22000 - Other Accruals	26000 - Accrued Corporate Taxes 26100 - Accrued State F & E Taxes 26200 - Accrued interest 26300 - Accrued Rent due	Unlike prepaid expenses as seen above, some items are paid after the fact but are spread over a period of time. This may include rent, interest, property taxes, state and local franchise and excise taxes, etc. Amounts are accrued here on a periodic basis and reduced when paid.
Long Term Debts			
	22100 - Notes Payable	27000 - Notes Payable	Loans that are established with a repayment period of over 12 months are generally considered long term debts. The principle amount due is recorded here and is reduced over time as payments are made.
	22200 – Mortgages	28000 – Mortgages	Mortgages for purchase of real property are generally established for repayment over multiple years. They should be recorded here and the principle reduced over time as payments are made.
Equity			
	30000 – Capital	30000 - Capital Stock 31000 - Treasury Stock 32000 - Paid in Capital	This account represents the amount of the direct investment of capital by the owners. If the company has shareholders, the monetary amount paid to purchase stock is recorded here. (This is not the current value of the stock.) This account may also include cash or other consideration paid in to the company by its owners. Separate accounts should be used to track outstanding stock, treasury stock and paid in capital.
	31000 - Retained Earnings	33000 - Retained Earnings	This account records the total profit (or earnings) earned by the company in previous years but not yet paid to the owners.
	32000 - Current Earnings	34000 - Current Earnings	This account records the total profit (or earnings) earned by the company so far in the current fiscal year. This accumulates each month and when the year-end closing work is done, it is moved to Retained Earnings and starts over from zero for the new fiscal year.

Income Statement (P&L)

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
Revenue			
	40000 – Revenue (Sales)	401000 – Revenue (Sales) (Integration) 402000 – Revenue (Sales) (Electrical Installation) 40300 – Revenue (Sales) (Panel Fabrication) or 401010 – Revenue (Sales) (Integration) NY 401020 – Revenue (Sales) (Integration) CT 401030 – Revenue (Sales) (Integration) VT 402010 – Revenue (Sales) (Electrical Installation) NY 402020 – Revenue (Sales) (Electrical Installation) CT 402030 – Revenue (Sales) (Electrical Installation) VT 40310 – Revenue (Sales) (Panel Fabrication) NY 40320 – Revenue (Sales) (Panel Fabrication) CT 40330 – Revenue (Sales) (Panel Fabrication) VT	Companies choose whether to use cash basis or accrual basis accounting. There are rules governing whether you can use cash basis accounting or must use accrual based accounting. (Please see your accountant if you think you are using cash basis.) Most integrators use accrual based accounting and this standard chart of account is designed on an accrual basis. Revenue (or Sales) in accrual based accounting is the total of: the portion of the sales price attributable to work completed to date for projects in process, the total sales price for completed projects, and any other goods and services delivered to the customer. Revenue is not the same as total invoicing. Revenue should be broken down by type of goods and services delivered (e.g. integration projects, panel fabrication, calibration services, electrical contracting, etc.) For multi-state companies, it may also be beneficial to breakdown revenue by state.
	49000 – Returns and Allowances	491000 – Service Charges & Late Fees 492000 – Sales Discounts	These accounts allow for adjustments to revenue such as any service charges or late fees charged to the customer. Also, this allows for recording discounts offered to the customer for early payment.

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
Expenses			
CoGS (Cost of Goods Sold)			
	501000 - Reimbursable Expenses	501000 – Travel Expenses 502000 – Travel Meals and Entertainment 503000 – Travel Accommodations and other expenses 504000 – Shipping and Freight	Some expenses are directly reimbursable from the customer such as travel expenses or other cost associated with the project. These expenses may be billable at cost without markup so it is good to keep them separate from material costs listed below.
	51000 - Direct Expenses	511000 – Purchased Equipment 512000 – Purchased Software 513000 – Panel Materials 514000 – Instrumentation and Field Materials 515000 - Equipment Rental	Equipment, software, raw materials and other items purchased specifically for incorporation into a project and delivery to the customer are included here. These items are usually sold with some markup or are included in the fixed price of the project. If panel fabrication is tracked as a separate revenue source, the costs associated with these services should be tracked separately from material sold with the integration services. The same is true for field materials used in construction or installation services if tracked as a separate revenue source.
	52000 - Subcontracts	5210000 – Engineering Subcontracts 5220000 – Panel Fabrication Subcontracts 5230000 – Other Value-Added Subcontracts 5240000 – Installation Subcontracts 5250000 – Other Non-Value-Added Subcontracts	This account records the costs of using subcontract services such as any outside panel fabricator, electrical contractor or installation or construction contractor. Subcontracts to individual consultants may be tracked separately below.

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	53000 - Direct Labor	5310000 – Engineering Labor 5320000 – Electrician Labor	These accounts track the direct salary costs of the company's employees who work directly on projects. These employees are the directly billable staff. It may be beneficial to track different groups of employees, especially if the company is multi-state. Also, employees from different revenue sources should be tracked separately. This account typically holds the raw unburdened costs for labor.
	54000 – Consultants or Contract Labor	5410000 – Consultants or Contract Labor	This account is used to track labor costs of non-employees such as outside consultants when their cost are passed on to the client.
Sales, General & Admin			
			Overhead costs include general and administrative costs associated with running the business and not directly associated with any specific project or product. This includes management and administrative labor, payroll taxes, the cost of employee benefits, taxes, insurance and many other general operating expenses. The accounts should be organized to enable management to easily see and understand where overhead money is being spent. Costs in this section are referred to as indirect costs or "below the line" cost.
	60000 - Admin Labor	601000 - Indirect Labor, Principals 602000 – Indirect Labor, Sales & Marketing Employees 603000 – Indirect Labor, Other Indirect Employees 604000 – Indirect Labor, Direct Employees 605000 - Temporary Labor	

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	61000 - Payroll costs	611000 - Medicare 612000 - Social Security 613000 - Federal Unemployment Taxes 614000 - State Unemployment Taxes 615000 - Worker's Compensation	
	62000 - Benefit Expenses	621000 - Employee Insurance Expenses 622000 - 401k Plan 623000 - Other Employee Benefits	
	63000 - Advertising	631000 - Marketing Materials 632000 - Advertising	
	64000 - Depreciation and Amortization	641000 - Depreciation 642000 - Amortization	
	65000 - Insurance	651000 - General Liability Insurance 652000 - Professional Liability 653000 - Other Corporate Insurance	
	66000 - Licenses	661000 - Business Licenses 662000 - Other Licensing Fees	
	67000 - Meals and Entertainment	670000 - Meals and Entertainment	
	68000 - Office Supplies	680000 - Office Expenses	
	69000 - Professional Fees	691000 - Accounting Fees 692000 - Legal Fees	
	70000 - Rent and Leasing	701000 - Rental Expense 702000 - Equipment Rental (Not project related)	
	71000 - Repairs and Maintenance	711000 - Facility Maintenance 712000 - Equipment Repairs	

	Simple Numbering Scheme	More Complex Numbering Scheme	Description of Account
	72000 - Shipping and Freight	721000 - Postage 722000 - Shipping Costs (Not project related)	
	73000 - Taxes	731000 - Property Tax 732000 - Franchise and Excise Tax 734000 - Sales Tax	
	74000 - Telecommunications	741000 - Phone Charges 742000 - Internet and Other Data Communications	
	75000 - Travel Expenses	750000 - Travel Expenses	
	76000 - Utilities	761000 - Utilities, Gas 762000 - Utilities, Electric 763000 - Utilities, Water	
Other income and expenses			
	80000 - Other Income	811000 - Interest Income 812000 - Gain on Sale of Asset 813000 - Rental Income 814000 – Currency Gains/losses	Income not directly related to business operations should be reported separately to avoid affecting profitability analyses. For example, interest on savings is based on the company's investment of cash rather than its system integration business operations.
	82000 - Other Expenses	820000 - Loss on Sale of Assets	Expenses not directly related to business operations should be reported separately. For example, the loss on the sale of an asset is mostly related to the choice to dispose of an asset before it is fully depreciated rather than the result of system integration or other business operations.
	90000 - Income Taxes	910000 - State Income Taxes 920000 - Federal Income Taxes	Financial statements typically report net income before taxes. As a result, income taxes are reported last so they can be excluded from such reports.