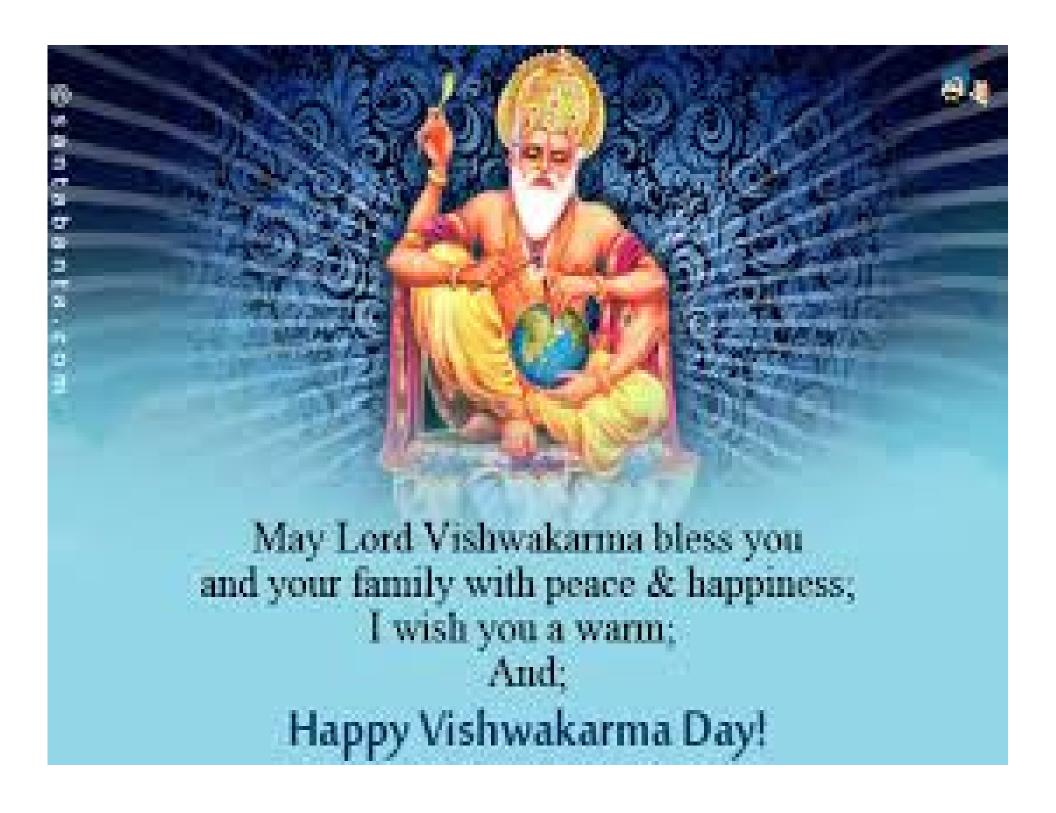
## Cost Audit in SAP Environment

CMA Suresh Pimple 20th Feb. 2016 CEP Program at Aurangabad



## Objective

Provide participants with an overview of the necessary aspects needed to understand general SAP concepts, and obtain usable data extractions from SAP for the purpose of serving mandatory Cost Audit in India.

#### SAP

- SAP: System, Applications and Products in data processing.
- SAP AG is 4<sup>th</sup> largest software company in the world
- SAP system is a business software package designed to integrate all areas of a business
- It provides end to end solutions for financials, manufacturing, logistics, distribution etc.
- All business processes are executed in one SAP system and sharing common information with everyone.

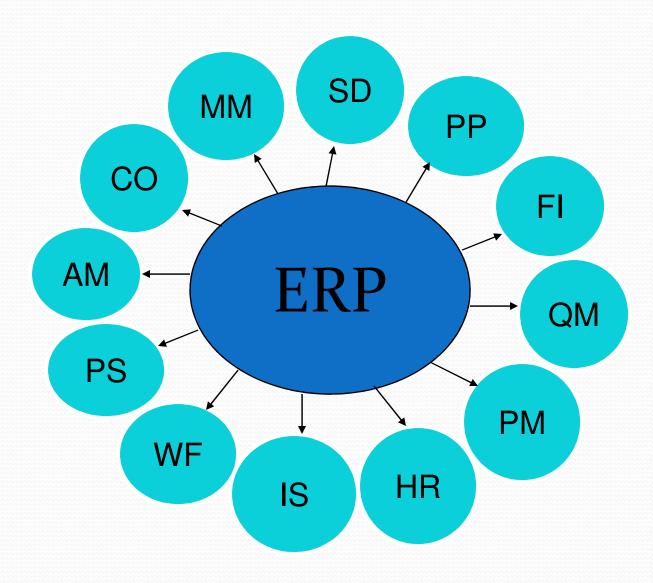
#### History

- Founded in 1972 by 5 IBM Engineers Hopp, Welenreuther, Hector, Tschira and Plattner.
- ➤ SAP R/1: R stands for real time data processing. One tier architecture in which 3 layers i.e. Presentation, Application and Database are in one system/server
- SAP R/2: 1979: Handle different languages and currencies. Two separate servers: One Presentation and 2<sup>nd</sup> Application plus Data base.

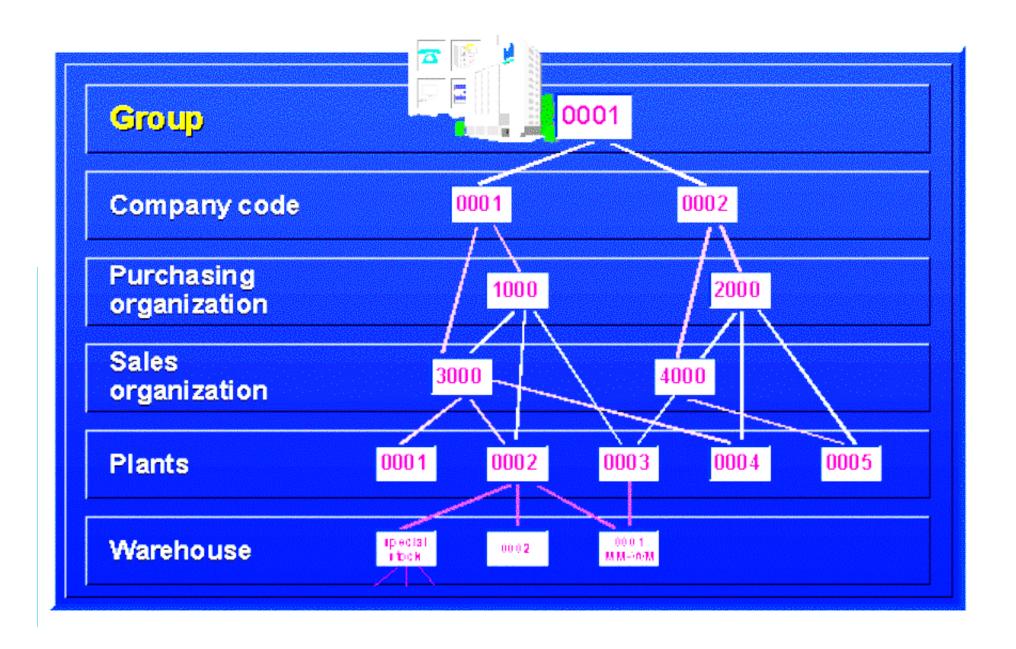
## SAP R/3

- Client /Server version of the software
- > 3 tier architecture in which 3 layers
- ✓ Presentation-Server 1
- ✓ Application –Server 2
- ✓ Database- Server 3
- Further development: My SAP Business Suite, SAP Industry Solutions, SAP Solution Manager etc.

#### SAP-R/3 Enterprises - Application components

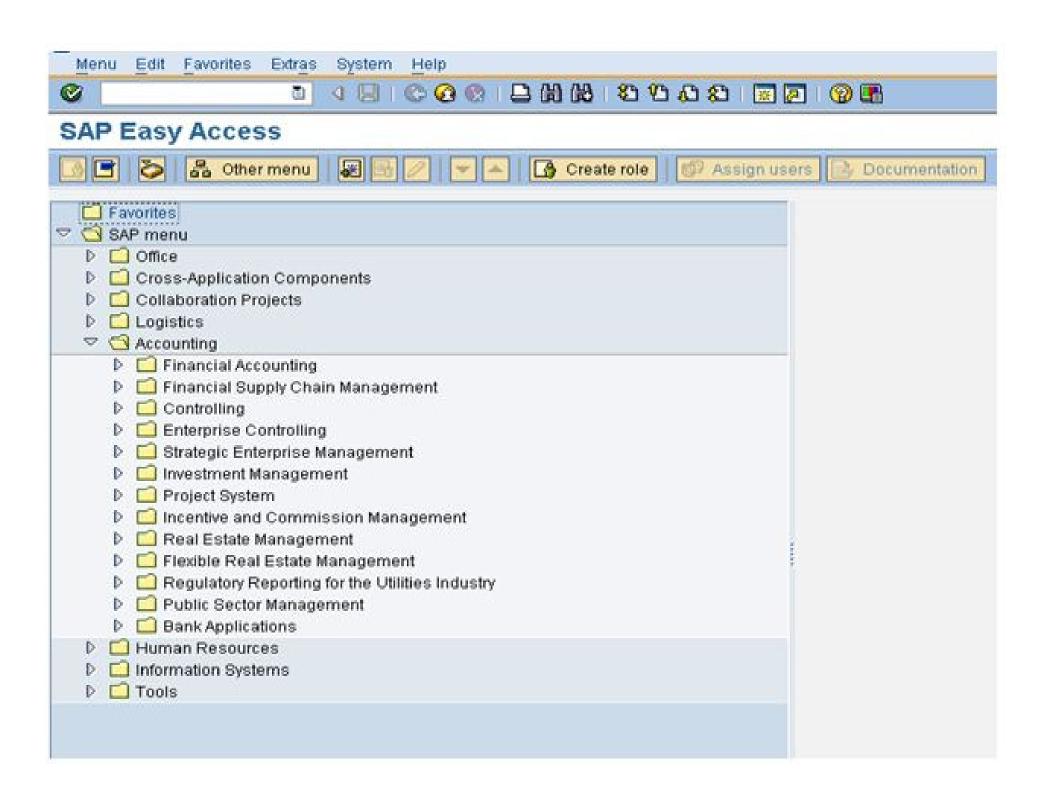


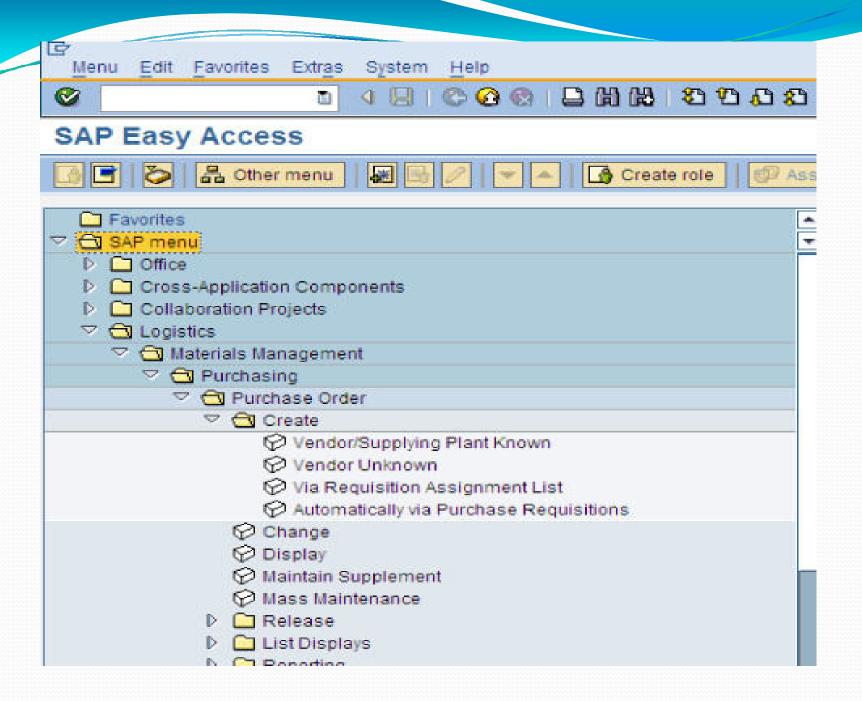
#### SAP - Organizational Structures



#### SAP 3 Modules and Integration

- FICO- Finance & Control
- ❖PP –Production Planning
- MM- Material Management
- **SD-** Sales & Distribution
- HR- Human Resources, etc.



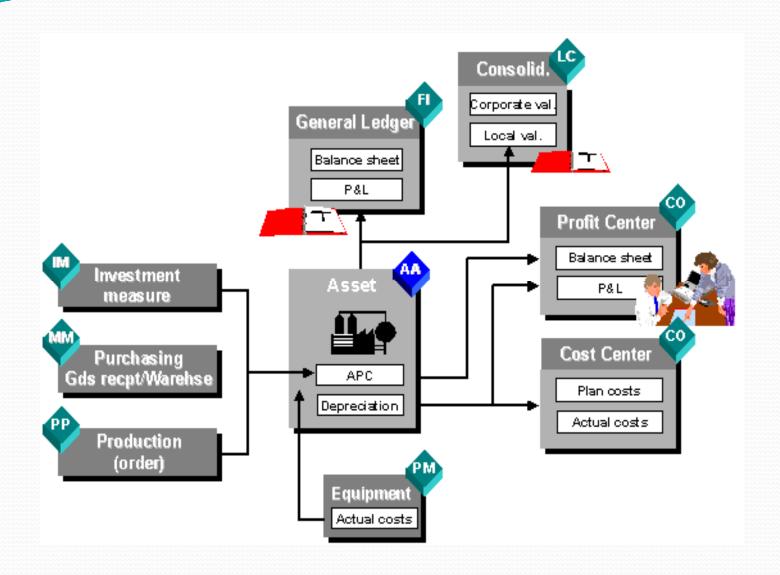


#### **FICO**

- FI: Financial Accounting
- CO: Controlling
- Both modules stores financial data (including Cost Data)
- FI: Records, collects and processes financial transactions or information on a real time basis to provide the necessary inputs for external (statutory) reporting purposes.

## CO: Controlling

- For Management decision making purpose and for internal reporting; typically include following functions:
- Cost element accounting
- ✓ Cost Centre Accounting
- ✓ Profit Centre Accounting
- ✓ Internal orders
- ✓ Product Cost Controlling
- ✓ Profitability Analysis.
  Before going into details we will look other related modules:



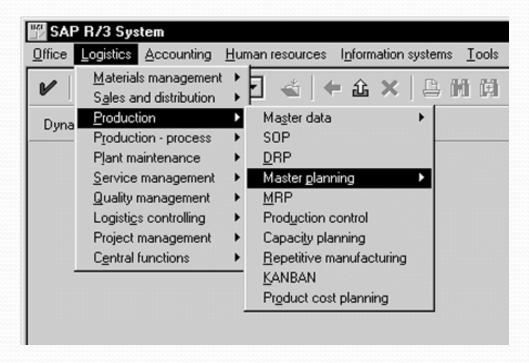
#### MM: Material Management

- Support the procurement (Vendor Registration, Porelease etc.)
- □Inventory functions (Storing, issue, stock)
- Consumption based planning and inventory
- □Integrated fully with all modules such as FICO, SD, QM, PP etc.
- □Items codes for all material RM, WIP (Semi Finished Goods), FG etc.
- ■Semi FG get converted to FG. SFG is child of FG.



## PP: Production Planning

- Plan and control the manufacturing activities.
- Issue of Productions Orders
- Monitoring stocks of semi finished goods



#### SD: Selling and Distribution

- Sales Order handling
- Distribution of shipments to customers
- Billing process, customer invoicing

Accordingly other modules like HR: Human Resources, Plant Management, Quality Management etc.

#### SAP: Character

- Real Time Processing
- Secure Information
- Multi Currency
- Use Best business practices

## SAP Advantage

- All modules work together in one system by sharing information.
- Consistent practice across entire division
- No duplication of data
- Automated Monitoring and multi dimensional and flexible reporting
- Standardization of business processes
- Make planning, Scheduling, Tracking and management easier leaving more time to perform value added work.
- Ability to provide clear cut roles with authorizations
- Enabling integration with e commerce
- No hard copies: Savings on overheads such stationer, File, Storage etc.

#### More About CO

- Controlling provides information for management decision making.
- Facilitates co-ordination, monitoring and optimization of processes.
- Records consumption of production factors and services
- Documents actual events- production/services provided

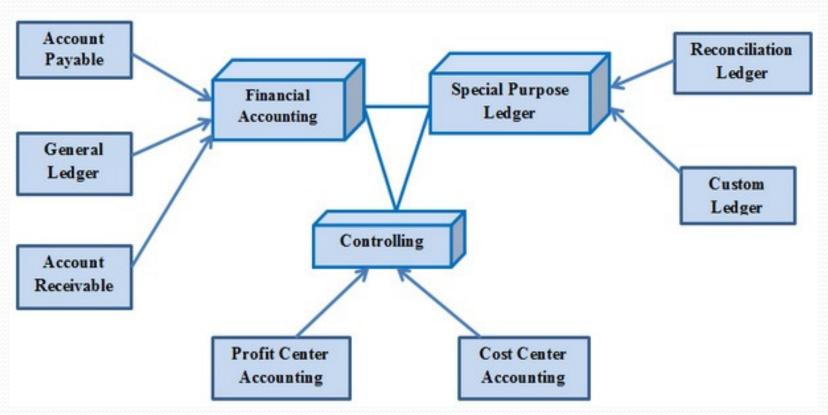
#### CO: continued

- Variances are generated by comparing actual data against planned. Variances are useful for controlling
- Contribution margin accounting is used to control the cost efficiency or individual areas of an organization

## Integration of FI and CO

- Even though FI and CO are independent the data flow takes place in between them regularly and automatically
- System assign the costs and revenues to different cost objects such as cost centres, business processes, projects or orders
- The relevant accounts in Financial accounting are managed in controlling as cost elements or revenue elements. This enables to compare and reconcile values from controlling and accounting.

# FI and CO Coordination:



## Organization in Controlling

- Company Code and Business area in Financial Accounting related to Controlling areas.
- Overhead cost controlling components enables to plan, allocate, control and monitor overhead costs. This is useful for profitability analysis and product costing.
- Standards are specified for control of costs and evaluation of internal activities.

#### Methodology

- Expenses are assigned to the cost centres or to the jobs that triggered them.
- Expenses are allocated based on the basis decided by the Company. There are numerous methods for determining the bases.
- Many overheads costs assigned to cost objects are converted to direct costs e.g. Certain quality cost can be assigned directly to product.

## Methodology continued

- At the end of the period, when allocations have been made, the target costs are compared with the corresponding actual costs based on operating rate (Cost Centre rate)
- Variances are further analyzed for managerial accounting.
- Automatic allocations in SAP minimizes entry of actual data and reduces the work involved.

## **Overhead Cost Controlling**

- Cost Element Accounting: Cost and Revenue element accounting details the costs and revenue incurred. Accrual is calculated for valuation differences and additional costs. Cost Element accounting in Controlling and Financial Accounting are reconciled.
- Cost Centre Accounting: Costs are assigned to the subareas of the organization where they have the influence.
- By use of the above two, costs are assigned to cost objects.

#### Extracting data from Cost Audit

- Material Cost Data is taken from MM module.
- For handling in data T codes are required to be used. T code is shortest way to reach at required menu.
- On the SAP there is layered structure and place to put T Code.
- MMoi-Master Creation (Given to employees in the Store/Purchase department)
- MMo2-Modification (Supervisor/Manager of above employees)
- MMo3 –Viewing (Read only) for MM head and other departments like Finance, Accounts, Controlling, PP, SD etc. These are users of this information.
- MM6o-Centrally all departments to view

## MM viewing

- To see the stock ⊗ for any period>
- MB 5B in summary form
- MB 5 N in detailed form
- Materials include RM, WIP(Semi Finished), FGs

#### **BOM**

- BOMs are created by PP departments.
- T codes are ..
- CS-o1 BOM creation
- CS-o2 BOM modification
- CS-o3 –Viewing.
- Controlling department uses BOM for costing.
- BOM is multiple layer picture.

#### **Purchase Orders**

- Purchase department prepares purchase orders .
- Purchase order checking may be done in Accounts/Controlling for tax/grouping of materials like material group, or capital/revenue type, Imported/Local.
- Purchase orders are released by T Code
- ME 28 : Purchase order release
- ME 2 N : Viewing of PO by others including Controlling.
- GRN are made by Stores Dept and stock is increased and automatically after release of GRN.

#### Functions of Controlling Dept..

- Scrutiny of TB: F 01
- P & L : SL 00000028
- General Ledger viewing : FB 1 N
- Material viewing : MM 03
- Material Variance Report:

MTO: FG

MTS: WIP

#### Cost Roll Up

- Finding out the cost from SAP data:
- Either for Individual product or for the period for particular plant or for the company.
- Cost is for FG or Semi finished Goods completed
- For product : BOM is viewed by T Code CS 03
- Routing is viewed by T Code CA 03
- Batch inputs like power/ water, Maintenance are given seen by KP-26

#### Cost Roll Up

- Cost is built up in Roll Up by accumulating
- Product cost from BOM and conversion cost from routing.
- Cost Centre wise rates are determined by system of power, water, maintenance etc. based on routing time (m/s hr) the values are attached to the product.
- Cost Roll up is released by Controlling Deptt.
- T Code : CK 24

#### Cost Roll Up

- T Code: MR 21 is based on advoc basis by Controlling Dept. if some data is incorrect or not available.
- CK-13 N is view of Cost by other departments.
- Cost Roll is on the date of month end for the period to be relevant.

## Std Inputs for costing

- T code : KP 26
- Actual prices or standard prices used for different RMs
- Variable cost Power/ Maintenance/Qc etc. are given for the standard costing lot structure (Batch or period) for each cost centre.
- Fixed overheads are revised quarterly or based on budget/revised budget.

### Cost Roll up

- Z reports are localized reports.
- Variant reports are defined for individual person which are frequently required by him.
- Cost Roll up is made no revision is possible as it also effects stocks which are valued and Revaluation is posted in General ledger
- COGS is period end report giving cost of goods sold.

### **Cost Audit**

- Profit Centre wise TB become available.
- Cost Sheets as required by Cost Audit are not available.
- Data from system become available and for audit this data need to be used for Cost Audit.
- For controlling RM variances are available.

#### Cost Records:

- 1. Audited Trial Balance, Balance sheet, Profit and Loss Account
- 2.List of Products and Services.
- 3. List of Production Cost Centres and Service Cost Centres.
- 4. Primary Allocation Statement.
- 5. Utility Schedules e.g. Power, Water, Air, Steam etc.
- 6. Secondary Allocation Statement.
- 7. Charging of Cost to Product.
- 8. Product Cost Sheets.
- 9. Reconciliation Statement of Costing and Financial Profit.

# Base Record required for preparation of Final Cost Record:

- ➤ Fixed Asset Register: Quantity and Value Cost Centre wise bifurcation.
- Depreciation working: Review
- RM Ledger- product wise consumption
- Wages- For permanent/temporary/casual workers- line wise/cost centre wise
- Salary sheet for allocating salaries cost centre wise.
- Quantity data of purchase and utilization of various utilities
- Consumable details/Repair & Maintenance details
- Quantity data of production, sale & stock transfer
- Machine Hours and Labour Hours for charging cost to product

| Ī | Cost Audit Requirement: Filing of Annexure                                                             | SAP Availability                                                                       |
|---|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|   | Cost Addit Requirement. Filling of Affilexure                                                          | SAF Availability                                                                       |
|   |                                                                                                        |                                                                                        |
| 1 | General information                                                                                    | Manual                                                                                 |
| > | CIN No. of company                                                                                     | Manual                                                                                 |
|   | Address of ROC or principal place of business                                                          | Manual                                                                                 |
| > | Address of Corporate office & Email ID                                                                 |                                                                                        |
|   |                                                                                                        |                                                                                        |
| 2 | Accounting Policy Of Company                                                                           | Recast from SAP data                                                                   |
| > | Cost center/ Cost object and Cost drivers                                                              | Available from SAP: MM, HR,PP, PM Module                                               |
| 7 | Accounting of Material ,Stores, Employee , Utilities & relevant Component.                             | Available from SAP:<br>Bases of allocation outside                                     |
|   | Accounting, Allocation Absorption of Over head Accounting of By-product, Joint Product, Scrap, Wastage | Outside Cost Data to be used: Bases separately Quantities available: Valuation outside |
|   | Valuation of Inventory, Methodology of Inter unit transfer/Inter company/Related party.                | As per costing method to be done                                                       |
|   | Accounting of Depreciation & other relevant policy adopted by company.                                 | Idle Assets/Zero value<br>asset to be considered<br>separately                         |

|   | Cost Audit Requirement: Filing of Annexure                   | SAP Availability                       |
|---|--------------------------------------------------------------|----------------------------------------|
|   | Product Service Detail                                       | ,                                      |
| > | CETA heading of Product                                      | Manual                                 |
| > | Net operational revenue & other Extra ordinary income if any | Scrutiny of GL and TB outside          |
| > | T/O as per Excise/Service Tax records                        | Reco : Manual job                      |
| _ | Quantitative Information                                     |                                        |
|   | Installed Capacity & enhanced during year                    | Available from SAP                     |
| > | Capacity available through Leasing & loan license            | Available from SAP                     |
| > | Actual Production under different head                       | Available from SAP                     |
| > | product as per excise records                                | Available from SAP                     |
| > | Purchase or Import of Finish goods                           | Available from SAP                     |
| > | Change in Opening & Closing Stock                            | (Manual if valuation of FG is outside) |
| > | Self /Captive consumption                                    | Available from SAP                     |
| > | Actual sales : Domestic, Export, Trading                     | Available from SAP                     |
|   |                                                              |                                        |

| <b>Cost Audit Requirement: Filing of Annexure</b> | SAP Availability |
|---------------------------------------------------|------------------|
| 5Material & Utility Detail                        |                  |

| QTY of materia | l consumed their rate & Category: |
|----------------|-----------------------------------|
|----------------|-----------------------------------|

> Indigenous/Imported/self Mfg. Available from SAP

> Qty of utilities & their rates Available from SAP

Qty if Utilities generated within the company such as

> electricity, steam ;& their cost of generation Available from SAP

### Detail of Industry Specific Operating Expenses if

6 any. Scrutiny of SAP TB

#### 7 Records

- > Fixed assets Registers Available from SAP
- > Salary & wages Details Available from SAP
- > Stock Quantitative detail, FG, WIP, Captive Consumption. Available from SAP
- > Machine hours , Labour hours Standers & Actual Available from SAP
- > Finacial Staements Balance sheet, P&L, Trial Balance Available from SAP

## Cost Audit Requirement: Filing of Annexure SAP Availability 8 Related Party Transactions

| > Name of party CIN /PAN | Manual |
|--------------------------|--------|
|--------------------------|--------|

> Name of product & nature of transaction, Qty.

Available from SAP

Transfer price, Normal price, Basis adopted for determine

> the normal price Manual with SAP data

#### 9 Indirect Tax reconciliation

| > | Asseable value.  | Excise Duty  | , Service tax ,Cess V    | /AT A   | vailable from SAP       |
|---|------------------|--------------|--------------------------|---------|-------------------------|
| _ | 1 ibbeable value | Discipe Daty | , beliffee eazi , eebb i | <b></b> | ivaliable il oili bi il |

- > Stick tranfer, duty freee clearance, Available from SAP
- > CENVAT Credit Utilised on Input & Capital goods Available from SAP
- > Duty paid through PLA/Cash Available from SAP
- > Diff between Duty paid & recovered Available from SAP
- > Interest/Penalty paid Available from SAP

## Limitations of SAP for Mandatory Cost Audit

- ✓ Depreciation on Zero Value Assets: Used but value not considered hence costs are understated
- ✓ Depreciation on Idle Assets: Considered for Costing hence costs are overstated.
- ✓ Trial Balance available profit centre wise and not cost centre wise hence allocations are required.

## Contd.. Limitations of SAP

- ✓ Large No. of cost centres : Makes allocation outside system difficult.
- ✓ Cost centre wise salary wages cost not available
- ✓ Wastage valuation difficult. Recycled waste valuation is not at actual . Input substitution method difficult.

### Conclusion

- SAP system is for requirement of data for external purposes and management controlling.
- Security concerns are met (CIA).
- Real time data is available.
- For Cost Audit data is available but for statutory audit external working is required.

# Thank you,

CMA Suresh Pimple.

20/02/2016