

CYPRUS TELECOMMUNICATIONS AUTHORITY (CYTA)

STRICTLY CONFIDENTIAL

COSTING SYSTEM MANUAL



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CYPRUS TELECOMMUNICATIONS AUTHORITY (CYTA)

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A. CONCEPTUAL FRAMEWORK

FOR THE FULLY ALLOCATED COSTING SYSTEM



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I. INTRODUCTION

This document addresses the key conceptual and practical issues surrounding the definition and specification of the Fully Allocated Cost (FAC) framework. It also addresses the assumptions used for product costing.

CYPRUS TELECOMMUNICATIONS AUTHORITY (CYTA)

II. FRAMEWORK FOR FULLY ALLOCATED COST

1. <u>CYTA Accounting records</u>

CYTA is a corporate body established by Law and is responsible for the provision, maintenance and development of electronic communication facilities, both local and overseas.

CYTA provides a variety of advanced electronic communication services, covering the whole spectrum of customer needs for both voice and data communications, fixed and mobile.

CYTA records its transactions in the accounting records in accordance with Cyprus legal requirements and generally accepted accounting principles. Within these records detailed data is maintained in respect of the manner in which the transactions have arisen. Assets, liabilities, income and costs are recorded by type.

2. CYTA Fully Allocated Product Costing

Further to its accounting records, CYTA maintains costing records and delivers costing results by product. Product costing is the allocation of operating expenses and Cost of Capital to CYTA's product portfolio using the fully allocated cost method. As a result all cost recorded in CYTA's accounting records is allocated to products.

3. <u>Basic Cost Allocation Principles</u>

The following principles are applied for the allocations of costs:

(a) Costs are allocated to those services or products that cause the increase of the costs in question;

(b) The allocation bases are objective and not intended to modify the cost of one service to the benefit of another service;

(c) As a rule, the cost allocation principles do not change from year to year, without objective justification, and any such changes are described and applied retroactively to previous years, if this affects significantly the final result of the calculation at hand;

(d) The allocation of costs is transparent and detailed, and allow for review and verification;

(e) Costs are reconciled to the reliable and authoritative source of Financial Statements

(f) The allocation process is concerned itself with analyzing categories of cost which will have a material impact on the results.

All costs are apportioned using the Activity Based Costing methodology. This consists of a two-stage process comprising apportionment of costs from General Ledger and Fixed Asset Register to defined Activity Based Costing pools and mapping of these pools to Products.



4. INPUT DATA

a. Operating Costs

Operating costs refer to the annual costs incurred by CYTA and are made up of Staff costs, depreciation, maintenance materials, services provided by third parties as well as other operational expenses.

Costs are drawn from the accounting records. The methodologies applied to the costs, which vary according to the nature of the costs and the way in which they are recorded, are set out below.

i. Direct and directly attributable costs

Certain costs can be attributed directly to specific Cost Pools (Ordinary Cost Pools (ORD), Customer Facing Activities (CFA), Network Elements (NE) and Central Overheads) or Products and, therefore, do not require apportionment.

ii. Indirectly attributable costs

Other costs cannot be directly associated with particular Cost Pools or Products, and require indirect apportionment. These costs include general costs of CYTA's departments that service various products or departments, which are recorded on a cost centre basis using the Activity Based Costing process, where a specific apportionment base can be identified and measured.

The above cost type also includes other costs, such as the costs of transmission equipment, which are used to support a number of network services. These costs are grouped and then apportioned to Network Elements using network statistics, surveys or other methods of analyses.

iii. Unattributable Costs

As stated above CYTA utilises, wherever possible, objective data relating to cost drivers. There is, however, some expenditure for which no specific apportionment bases can be readily derived. These costs are only attributable to the business as a whole and are not attributable to services using cost causality. These costs represent central corporate overheads, such as bank charges and general legal expenses. They are apportioned to Products on a pro rata basis relative to the total attributable costs for each product.

b. Mean Capital Employed and WACC

Mean capital employed is defined by CYTA as mean total assets less current liabilities and provisions other than those for deferred taxation, excluding corporate taxes, long term liabilities, excess cash and investments. The mean is calculated using the values at the beginning and end of the period.

The apportionment of capital employed follows a similar approach to that used for operating costs.

Furthermore the WACC is calculated by separate studies and is also used as an input data.



c. Non-Financial Data

Non financial data refers to real data relevant to the specific period (e.g. number of customers per product, volume of traffic minutes)

5. <u>SUPPORTING SYSTEMS</u>

As stated above all costs are recorded in CYTA's accounting records. These records are supported by a number of systems each having a significant role in the cost recording process. The systems are the following:

a. <u>Project and activities Management system (PAM)</u>

PAM receives all information from the following systems

- Stock and Stores -materials issued from stores and used for the development, maintenance and operation of the telecommunications network
- Timesheets system-records all information relating to labour hours and consequently staff costs through employees' timesheets
- invoices for services provided by third parties

For each project or activity the cost categories are maintained through the costing process. PAM has interfaces with both the Fixed Asset Register and the General Ledger which are explained below.

b. Fixed asset register (FAR)

All data relating to capital expenditure are recorded in the fixed asset register upon completion. As a result the FAR records are categorised into accounts which contain all information relating to the type of equipment and year of installation. These accounts are used to calculate depreciation and net book value per type of equipment, per account. This information is used as an input to the costing system. FAR has interface with the General Ledger which is explained below.

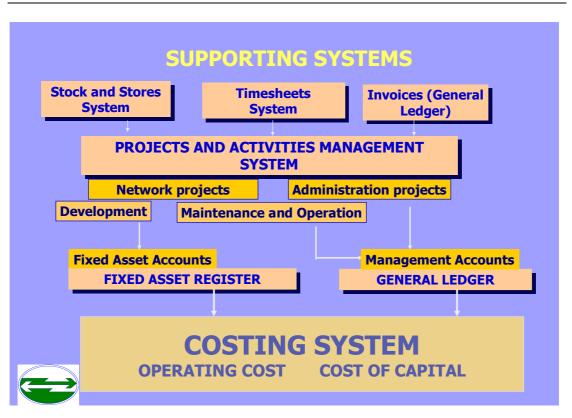
c. General Ledger

The General ledger receives information from the Project and activities Management system on a monthly basis and from the fixed asset register on a quarterly basis. All projects in the PAM system are either Capital, Administration, Maintenance or Operational projects. Only development projects end in FAR.

These projects are linked to an account in the general ledger. All accounts from the General Ledger are inputs to the costing system.

The supporting systems and their interrelation with the Costing System are presented graphically below:





The allocation of costs in the costing system is done through stages based on the cost pool categories identified.

6. Costing system Cost Pools

Ordinary Cost Pools (ORD)- They relate mainly to departmental and supporting services costs. The ORDs are either directly allocated to products or other cost pools (CFAs, NEs) or even reallocated to other ORDs. The allocation bases used are based on specific studies carried out in each case.

Network Elements (NEs) – They select all network cost accounts and their allocation is mainly based on studies carried out by the engineers'. Network elements are further allocated to other cost pools relating to subscription or traffic products.

Transmission Products (TX) – Cost relating to transmission is allocated to the TX cost pools. This cost is then allocated at a later stage to the ROUT cost pools if the transmission elements relate to traffic, or to specific products such as ATM and Leased Lines.

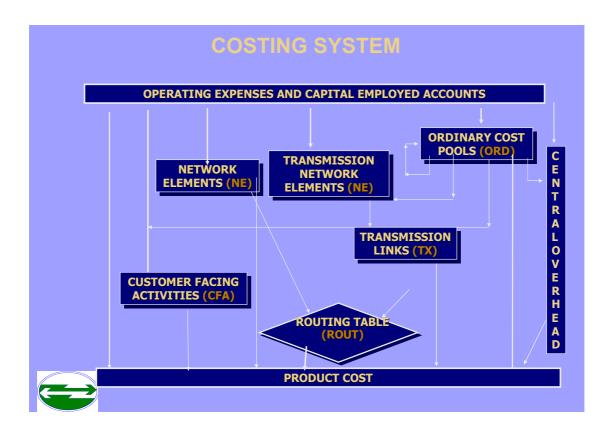
Routing Factors (ROUT) – Rout cost pools gather network element cost (NE) which relates to traffic and further allocates it to products based on the service scenarios and traffic minutes.

Customer Facing Activities (CFA) – They relate to customer support activities such as application handling, complaint handling, billing etc and are directly allocated to products.

Central Overheads (COH) – These costs represent central corporate overheads, such as bank charges and general legal expenses. They are apportioned to Products on a pro rata basis relative to the total attributable costs for each product.

The following diagram shows how accounts and cost pools are allocated into the system to arrive at the cost per product.





7. Outputs

Once all allocation processes are completed the system produces final results comprising of the following:

Total Cost per Product – Total cost is made up of operating cost and cost of capital per product as allocated through the costing system. The Cost of capital is calculated using the mean capital employed per product and the WACC.

Unit Cost per product – Total cost per product divided by the volume of each product.

Analysis per cost pool - Analysis of all elements allocated to each cost pools or product into materials, labour, depreciation, and other payments.

8. <u>Reliability of Results</u>

The reliability of results is enhanced through the reconciliation of costing results to the General Ledger and also trough traceability and audit trail which is facilitated through reports provided by the system.