

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS

*Bureau de développement
des télécommunications*



**POPULATING COSITU
TAF SEMINAR APRIL 7-11, 2003 BAMAKO
MALI
BY JOHN PRINCE**

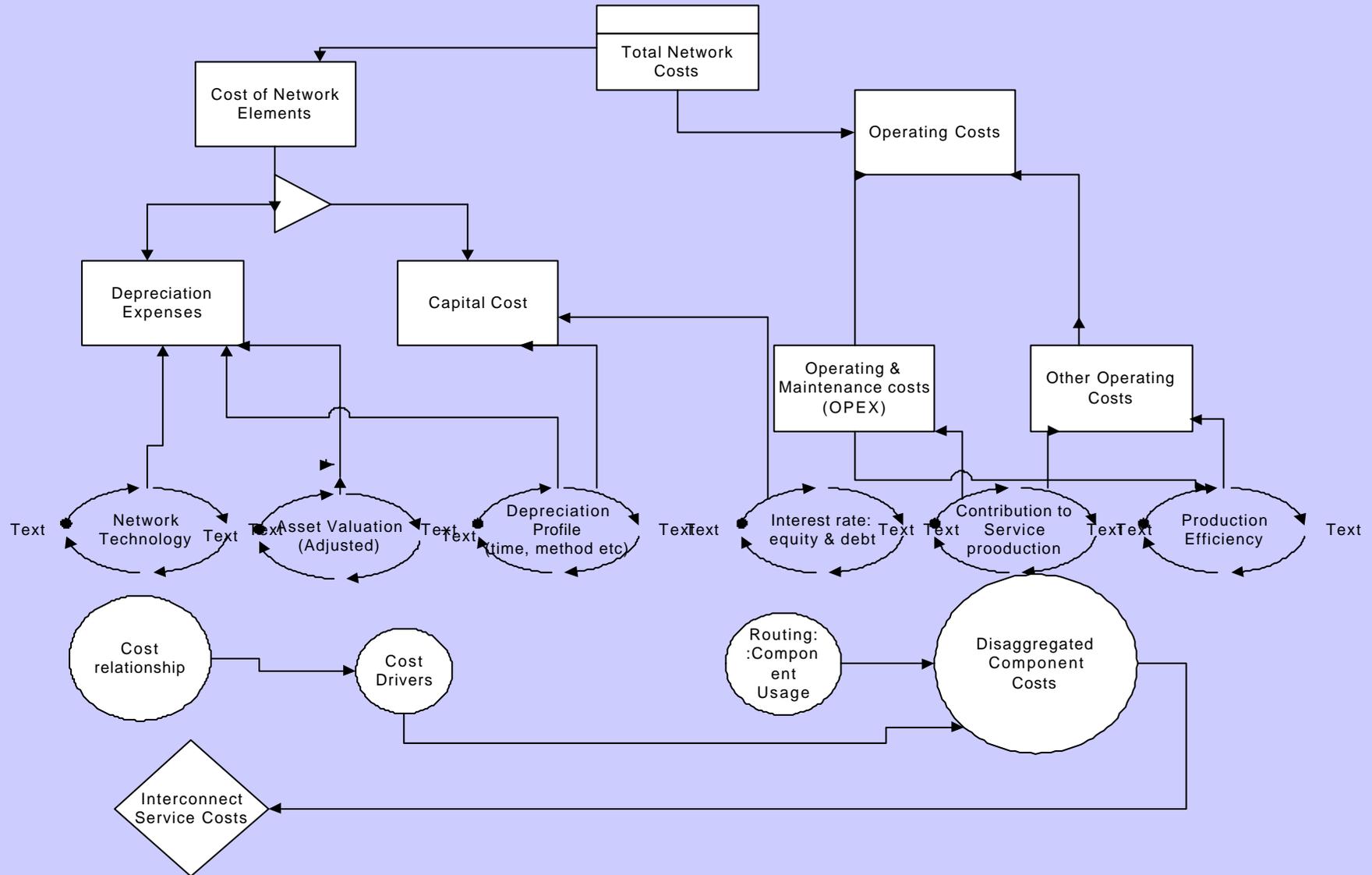
Choosing Costing Method

Characteristics	Top Down	Bottom Up
Positives	<ul style="list-style-type: none">•Based on Actual Costs.•Reconcilable.•Reflects actual situation.	<ul style="list-style-type: none">•Less issues of confidentiality.•Efficiency & transparent.•Lower unit cost.
Negatives	<ul style="list-style-type: none">•Requires Confidential info.•Efficiency problems.•Higher unit costs.	<p>May underestimate/omit costs.</p> <p>Non-realistic OPEX modeling.</p>

Issues of Reconciliation

- Treatment of depreciation: difference in network concepts.
- Network Structure & Efficiency: difference in network evolution.
- Fundamental Difference in Treatment of OPEX.
- Variance in treatment of common costs.

ABC & COSITU



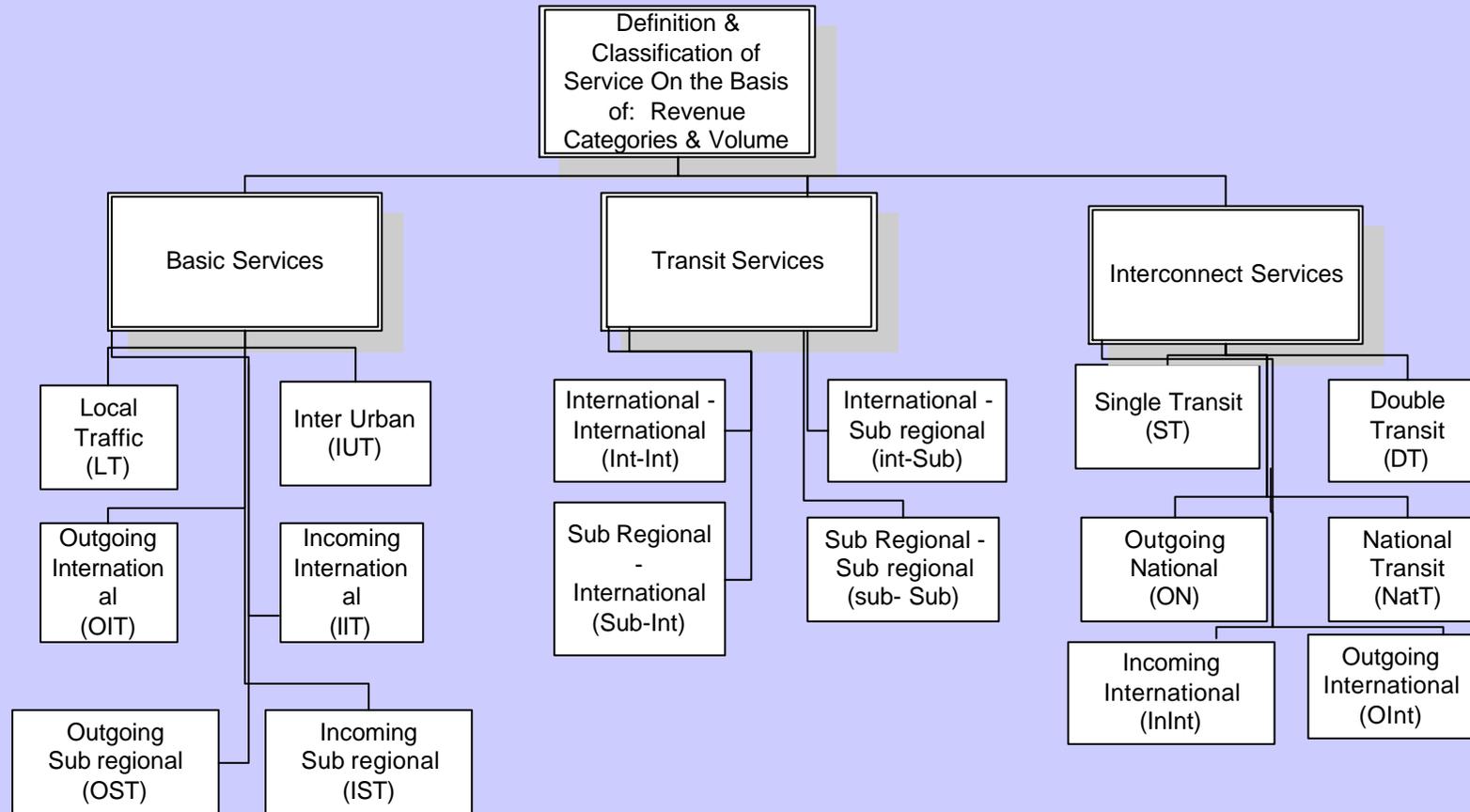
Human Resource Complement

- Cost Accountant
- Financial Accountant
- Network Engineer
- Information System Technician
- Economist/Statistician
- Management Support.

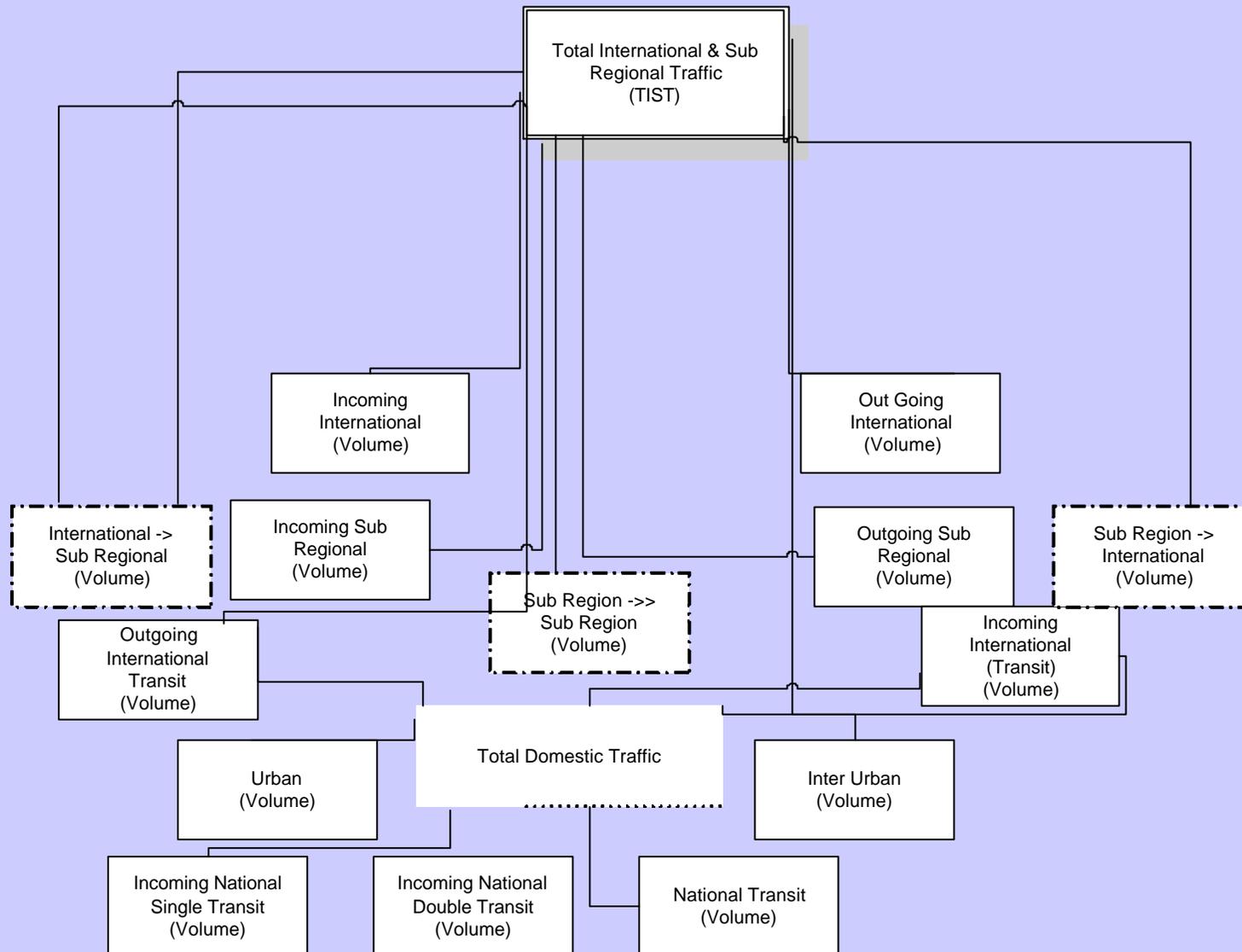
Economic Criteria

- Fully Distributed
- Incremental
- Long term, Short term, Medium term.
- Computation of Weighted Averages
- Defining Efficiency criteria
- Measuring the constituents of depreciation & Capital costs, etc.

Service Definition & Classification Blue Print



Define & Record Current Traffic



Current Demand

Service Type:	Successful Attempts	Failed Attempts	Total Attempts	Total Minutes
Urban				
Int Urban				
In Int				
Out Int				
ISub				
OSub				
Int-Int				
Int-Sub				
Sub-Int				
Sub-Sub				

Current Demand

- Current demand for calls over network, D_c is equal to total number of call attempts that engages the switches. Total call attempts is the sum of successful, (S_c) and unsuccessful, (U_c) attempts. Data on current Demand can easily be extracted from the switching network in the disaggregated format:
 - **1. $D_c = S_c + U_c$**

Current Demand

Service Type	Successful Attempts	Failed Attempts	Total Attempts	Total Minutes
INST INDT ON NT INI OGI NT				
Total				

Total Demand

- Expected Demand ED_c is current throughput of traffic adjusted by a factor η , to account for net growth in traffic.
- $ED_c = h_c D_c$
Total Demand is the sum of D_c , ED_c
- $TD_c = D_c(1 + h_c)$

Detailing Network Elements

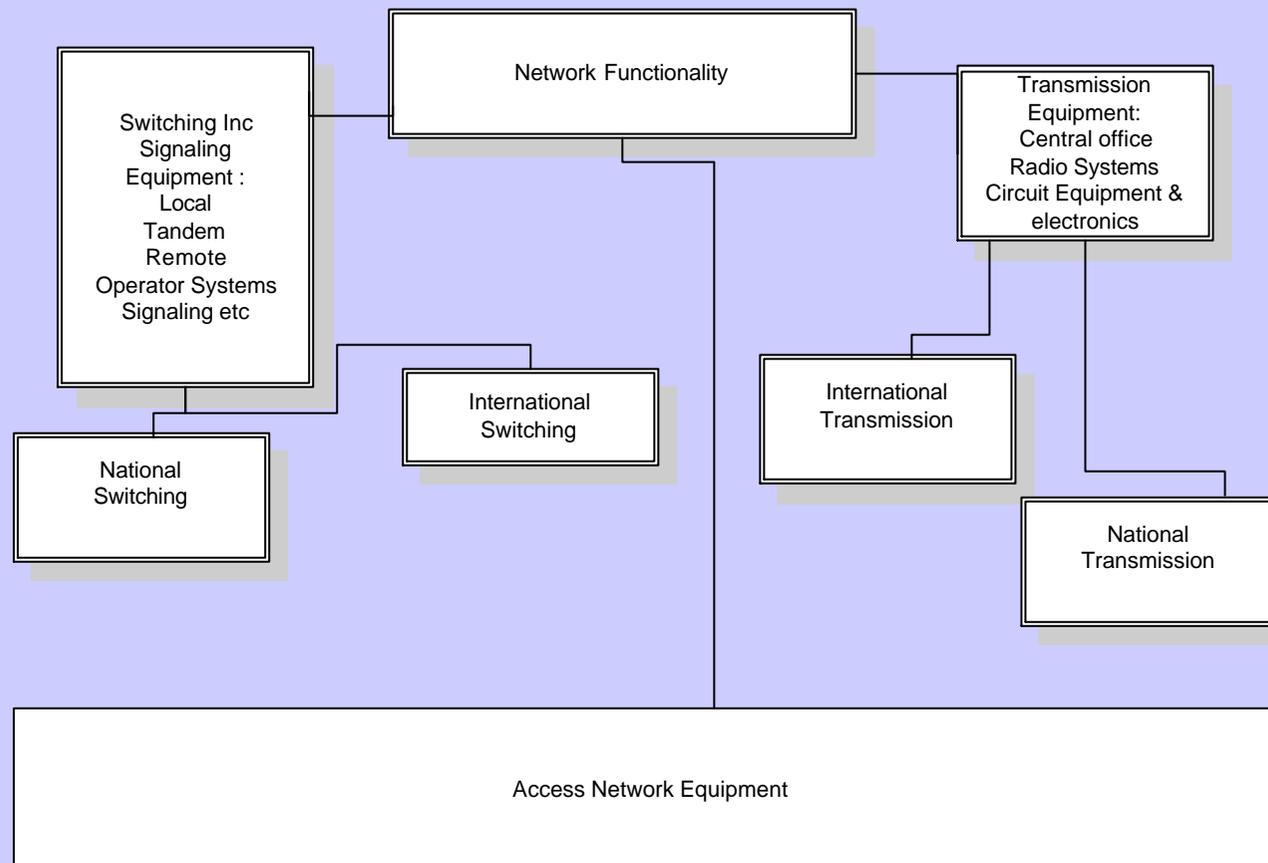
Local Loop <ul style="list-style-type: none">•	Poles, Underground Conduit, Cable, Pillar, Line Cards etc
Switching/Signaling	Line termination and trunk termination equipment, signalling and call setup equipment, etc
Transmission	Satellite equipment, Micro Wave equipment, Fibre Optic equipment and transmission electronics.

Posting of Assets Costs & OPEX

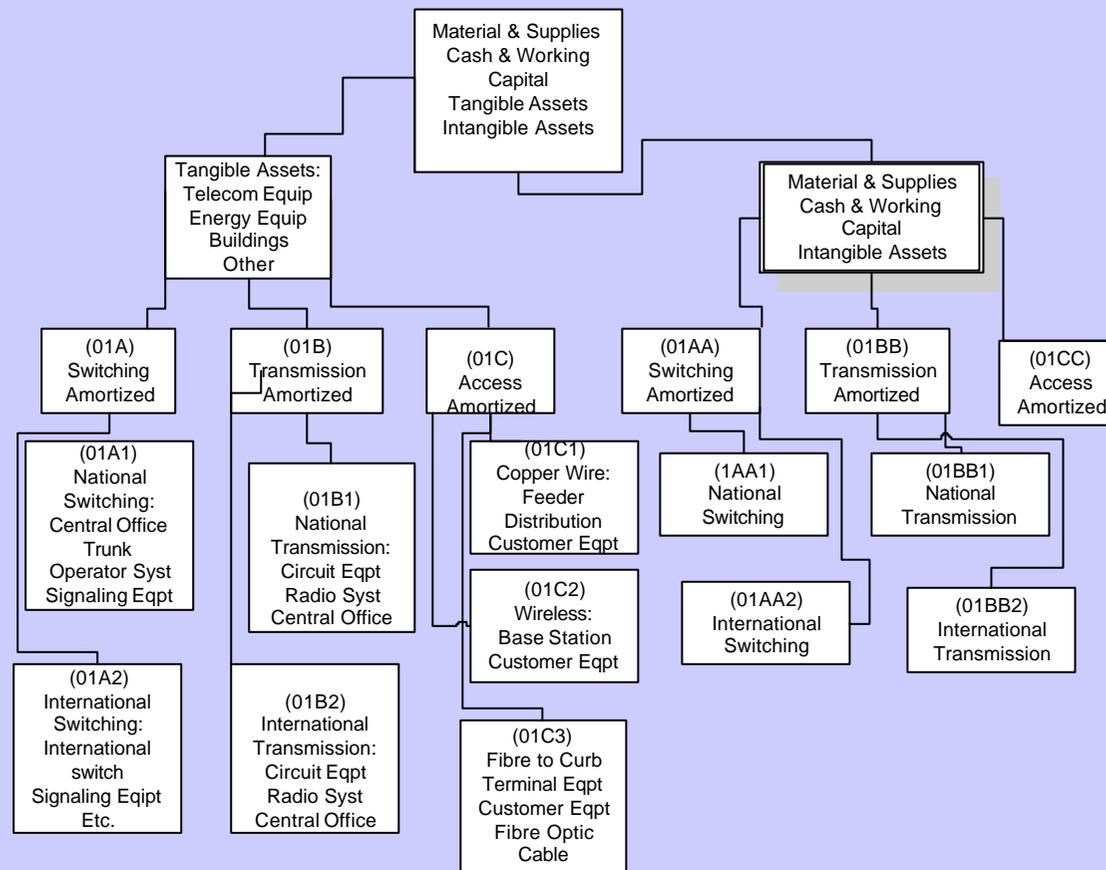
Network Technology

- (T) Telephone
- (I) Internet and other IP services
- (C) Mobile
- (O) Other Services

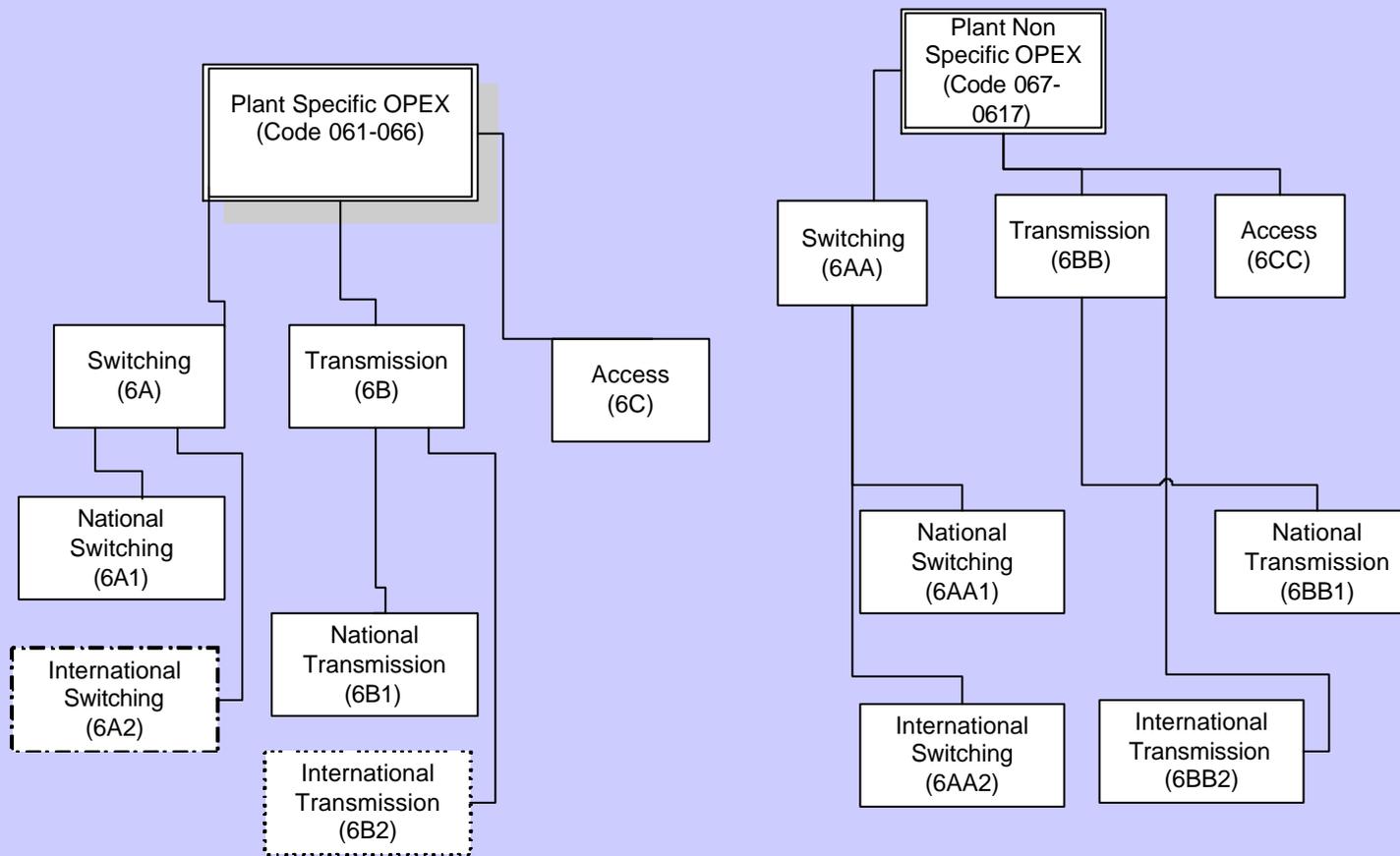
Network Assets By Function & Jurisdiction Schematic



Asset Amortization by Function & Jurisdiction



Opex Annualization By Function & Jurisdiction



Posting OPEX

Operating Costs

- - Plant Specific Operations Expense
- - Plant Non-Specific Operations Expense
- - Customer Operations Expense
- - Corporate Expenses

Operating Expenses By Function & Jurisdiction

- Code Plant Specific OPEX
- 061 Network Support OPEX
- 062 General Support OPEX
- 063 Central Office Switching
- 064 Operator Systems OPEX
- 065 Central Office Transmission
- 065 Info origin/Terminal OPEX
- 066 Cable & Wire OPEX

Plant Non Specific

- 067 Other Property, Plant & Equipment OPEX
- 068 Access Non Specific OPEX
- 069 Other Network Opex
- 0610 Dep & Amort OPEX
- 0611 Customer Operation OPEX
- 0612 Executive & Planning OPEX
- 0613 Operating Taxes
- 0614 General & Administration Opex

Plant Non-Specific

- 0614 Marketing
- 0617 Services
 - » Telephone Operator
 - » Publishing Director listing
 - » Corporate services
 - » All other services