



Accounting Separation Guidelines for the Telecommunications Sector

Maintenance History					
Date	Change Details	Version			
December 6, 2006	First Draft	0.1			
June 27, 2008	Revised Draft based on comments and recommendations received in the 1 st round of consultation (Annex 1).	0.2			
April 29, 2009	Final document based on comments and recommendations received in the second round of consultation.	1.0			
February, 2012	Edited	1.1			

Table of Contents

1.	INTRODUCTION	4
1.1.	OBJECTIVES OF ACCOUNTING SEPARATION	4
1.2.	REQUIREMENTS FOR ACCOUNTING SEPARATION	5
1.3.	REVIEW CYCLE	5
1.4.	CONSULTATION PROCESS	6
2.	THE PRINCIPLES OF ACCOUNTING SEPARATION	7
2.1.	COST CAUSATION	7
2.2.	COST BASIS	8
2.3.	ALLOCATION METHODS	8
2.4.	COMMON COSTS	9
3.	THE APPROACH TO ACCOUNTING SEPARATION	10
3.1.	STEP 1 – HIGH-LEVEL ACCOUNTING SEPARATION	10
3.2.	STEP 2 – ALLOCATION OF COMMON / JOINT COSTS	12
3.3.	STEP 3 - ISOLATING NETWORK COSTS FROM BUSINESS STREAM ACCOUNTS	13
3.4.	STEP 4 – ALLOCATION OF NETWORK COSTS TO NETWORK SERVICES	14
3.5.	STEP 5 – PRODUCING INDIVIDUAL SERVICE PROFITABILITY	15
4.	ACHIEVING ACCOUNTING SEPARATION IN PRACTICE	16
5.	SCHEDULES	17
SCH	EDULE 1: REPORTING FORMAT FOR THE CORE NETWORK BUSINESS	18
SCH	EDULE 2: REPORTING FORMAT FOR THE CORE NETWORK BUSINESS	19
SCH	IEDULE 3: REPORTING FORMAT FOR THE LOCAL ACCESS NETWORK BUSINESS	20
SCH	IEDULE 4: REPORTING FORMAT FOR THE RETAIL FIXED BUSINESS	21
SCH	IEDULE 4: REPORTING FORMAT FOR THE RETAIL FIXED BUSINESS CON'T	22
SCH	IEDULE 5: REPORTING FORMAT FOR DATA SERVICES	23
SCH	IEDULE 6: REPORTING FORMAT FOR THE RETAIL MOBILE BUSINESS	24
SCH	IEDULE 7: REPORTING FORMAT FOR THE RETAIL MOBILE BUSINESS	26
SCH	IEDULE 8: REPORTING FORMAT FOR OTHER BUSINESS ACTIVITIES	27
	EDULE 9: REPORTING FORMAT FOR INTER-BUSINESS TRANSFER CHARGES	
	IMARY	
	IEDULE 10: REPORTING FORMAT FOR THE STATEMENT OF TRANSFER CHARGES.	
	IEDULE 11: NETWORK STATEMENT OF COSTS	
	IEDULE 12: STATEMENT OF COSTS OF NETWORK SERVICES	
6. -	ANNEX I: DECISIONS ON RECOMMENDATIONS	
7.	ANNEX 2: DECISIONS ON RECOMMENDATIONS	52

1. Introduction

1.1. Objectives of Accounting Separation

Accounting Separation is a regulatory tool to enable the Authority to ascertain whether there are anti-competitive cross-subsidies among services provided by a concessionaire, or whether a concessionaire is engaging in any form of anti-competitive pricing.

Separating the segments will enable the Authority to ascertain whether there are anti-competitive cross-subsidies among services provided by a concessionaire, or whether a concessionaire is engaging in any form of anti-competitive pricing. Accounting separation will also be used to assist in ensuring that charges for telecommunications services are cost-based, transparent and non-discriminatory.

Accounting separation requires the preparation of separate accounts for each of the different businesses operated by the same concessionaire, by identifying and allocating the costs and revenues associated with each business as well as the dealings between them.

The Authority is aware that a number of telecommunications regulators require that business operations be structurally divided into separate business units (retail and wholesale business, and/or fixed and mobile) so that charges between the two segments may be explicitly observed. The Authority may consider structural separation in the future, if it is determined that this is required to ensure fair competition. While structural separation is not required at this time, concessionaires will be required to keep separate accounts as defined by the Authority.

The Authority is equally aware that some regulators are looking at alternative models of operational separation, in which the access network is separated from the core network so that equivalent access services can be offered to all competing network and service providers. This model may become important in the future as well, particularly with the move towards next generation IP networks and the convergence of services (e.g. between fixed and mobile, and between telecoms and broadcasting). For these reasons the Authority may consider operational separation in the future, but it is not a requirement at this time.

1.2. Requirements for Accounting Separation

Section 24(1) of the Telecommunications Act 2001, the "Act" states that

"...a concession for a public telecommunications network or a public telecommunications service shall require the concessionaire to adhere, where applicable, to conditions requiring the concessionaire to...

(h) account for cost and keep such books of accounts and where the Authority prescribes by regulation the manner in which books are to be kept, to keep such books of accounts in accordance with such regulations".

In adhering to the Act, section A32 of the concession document stipulates that when directed in writing, the concessionaire shall implement such accounting practices as may from time to time be required by the Authority in accordance with Regulations made under the Act. This statement gives the Authority the option of prescribing, if necessary, regulations for the maintenance of the books of accounts of concessionaires.

The purpose of these draft guidelines for accounting separation is to require concessionaires, where necessary, to provide separate books of accounts for all services offered. The Authority has proposed definitions for the relevant markets to which these services will be classified in the *Proposed Price Regulation Framework for Telecommunications Services in Trinidad and Tobago*, and will use these markets to guide the process of the separation of accounts.

Statement on Requirement for Accounting Separation:

The Authority shall require <u>all</u> concessionaires that provide two (2) or more services¹ to adopt the guidelines outlined in this document and separate its accounts accordingly.

1.3. **Review Cycle**

As the telecommunications sector grows and develops into more efficient and competitive markets with new and innovative telecom services the need will arise for the Authority to revise and update the guidelines to be used for accounting separation. And as such, the account separation requirements for the sector may be modified in consultation with concessionaires, stakeholders,

¹ Services refer to telecommunications or broadcasting services as defined by the Telecommunications Act 2001 in addition to any other service not under the purview of the Telecommunications Act.

interested parties and the public, as the Authority deems appropriate. The maintenance history will be modified accordingly.

1.4. Consultation Process

On December 6th 2006, the Authority published the first draft of this document and invited the comments and recommendations from all interested parties. The first consultation period ended on January 29th 2007. The Authority received several comments from the following parties:

- > Telecommunications Services of Trinidad and Tobago (TSTT)
- > The Ministry of Public Administration and Information
- Windward Telecom
- Columbus Communications (Trinidad) Limited

The Authority has revised this Draft *Proposed Accounting Separation Guidelines for the Telecommunications Sector* taking into consideration the comments and recommendations received in the first consultation round.

The second consultation period ended on September 27, 2008. The Authority received several comments from the following parties:

- ➤ Telecommunications Services of Trinidad and Tobago (TSTT)
- > The Ministry of Public Administration
- > Digicel (Trinidad and Tobago) Limited
- Columbus Communications (Trinidad) Limited

Further changes to the document were made taking into consideration the comments and recommendations received in the second consultation round.

2. The Principles of Accounting Separation

The Authority will be guided by the following principles when implementing accounting separation:

- separated accounts must be prepared annually and must be based on a transparent cost allocation method.
- the transparent cost allocation method must be based on the principle of cost causality. This
 requires that costs must be attributed to components, services and businesses strictly in
 accordance with the activities that cause those costs to be incurred. This method must be
 consistent with the cost allocation principle established in *The Costing Methodology for the*Telecommunications Sector document.
- allocations under this methodology must specifically not be intended to, or have the effect of, bringing advantage to the concessionaire at the expense of its competitors.
- separated accounts must be prepared in accordance with generally accepted accounting conventions, unless such conventions are shown to be irrelevant.
- the allocation methodology must be applied consistently between accounting periods or, where a change in the method of application can be objectively justified, it must be noted and comparative data provided according to the revised basis of allocation.
- the separated accounts must be subject to annual audit, and to standards required by the laws of Trinidad & Tobago.
- the separated accounts audit shall coincide with the audit of the concessionaire's statutory accounts.

2.1. Cost causation

Revenues and costs should be allocated to the different segments of the concessionaire's business (e.g. wholesale, retail service or mobile, fixed networks) on the basis of causation. Costs and revenues should be allocated to those services that cause the revenue or cost to arise. In principle, each cost or revenue item should be reviewed, and the driver, or the activity that caused the cost to be incurred or the revenue to be earned, should be identified. The cost or revenue item should then be attributed to the service in which the activity is undertaken. It is the Authority's belief that *ex ante* costs being incurred, concessionaires could determine the service/business area that would cause same.

Asset and liability accounts must also be allocated between services to allow for the calculation of rates of return on shareholders' equity for each service. These rates of return will permit an

assessment of whether there is a cross-subsidy between different services provided by the concessionaire.

Cost causation will involve judgements on some matters, so it is important that the basis for these attribution methods be easily applied and transparent. In some cases causality can only be ascertained by examining cost data through a special study, using statistical analysis. In the event that costs cannot be assigned to a specific service category they should be included as a common cost.

2.2. Cost basis

The Authority prescribes that for the purpose of Accounting Separation, concessionaires employ a costing approach that is consistent with the *Costing Methodology for the Telecommunications Sector*. The cost basis, as well as other accounting principles used in preparing the separated financial results for the different segments of its business, must be consistent and in conformity with Generally Accepted Accounting Practice (GAAP). These are the same principles used by concessionaires in preparing audited financial statements.

2.3. Allocation methods

Allocation of costs, revenues, assets and liabilities must be on a clear, rational, and easily understandable basis. The methods of allocation and determination should be consistent over time. If changes in allocation are necessary (e.g. as a result of technology change, such as the current moves to Next Generation Networks), they should be identified to the Authority for approval. Additionally, costs and assets should be accumulated into groups or pools for allocation. These pools should be material in terms of financial magnitude.

To the extent possible, allocations should be made to the service generating the cost or generating the revenue. The Authority believes that it is appropriate where possible for the allocations to be based on resource usage, which drives costs and revenues. Allocations may be supported by special studies, cost data, or other methods. These data, if supporting the allocation, may include non-financial information that should separately be disclosed to the Authority.

2.4. Common costs

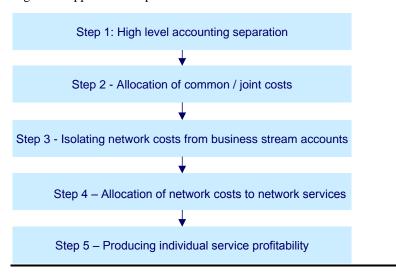
Common costs are by definition, shared costs that can not be causally linked to individual services, either directly or indirectly. In general, the percentage of common to total costs should be a small amount.

In the separated accounts, common costs must first be individually identified by type in accordance with the concessionaire's chart of accounts then allocated to each service/business in accordance with the *Costing Methodology for the Telecommunications Sector*. The allocation of common costs must be identified at first in total and then as a percentage across each business in a transparent and non-discriminatory manner.

3. The Approach to Accounting Separation

Figure 1 presents a 5-step approach to the development of separated accounts.

Figure 1: Approach to separated accounts

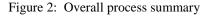


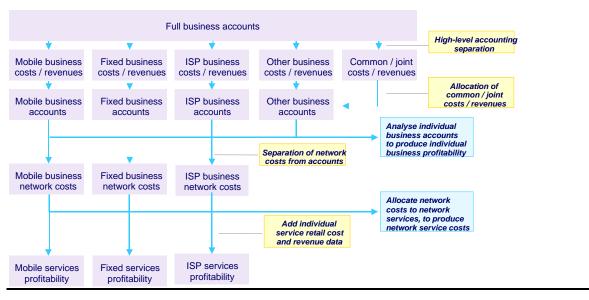
Each step is described in more detail in the following sections.

3.1. Step 1 – High-level accounting separation

When an accounting separation requirement is placed by the Authority on a concessionaire, the accounts should be separated over a static 'chosen period'. Typically, the first period used will be the last accounting year where audited accounts are available.

Figure 2 illustrates an example of accounting separation that a business with fixed, mobile and ISP business streams would follow in the event of an accounting separation requirement.





Each item of cost and revenue must be allocated to the relevant market as defined by the Authority. In the case of revenue, it is anticipated that most, if not all, revenues can be allocated directly to the business entity to which they are related. This is not the case for costs, however, because a relatively high proportion of the costs of the business are shared between the individual business entities. It is for this reason that two additional categories are required to capture remaining costs and revenues, these are:

- Other business costs / revenues to accommodate additional business functions, such as a CPE business
- Common / Joint costs / revenues to reflect the reality that there will be accounting items which are shared between a subset of the business streams (these are 'joint') or between all of the business streams (these are 'common'). In order to provide meaningful Income Statements for each business stream, it is necessary to allocate joint and common costs to the individual business streams, so that all costs are appropriately allocated to a business stream; this allocation step is described in Step 2 below.

As a rule, the following must be allocated to each identified business stream:

- Capital expenditure (Capex) costs, for both network and retail assets
- Operational expenditure (Opex) costs, for both network and retail activities
- All revenues related to the business stream.

3.2. Step 2 – Allocation of common / joint costs

The Authority requires that, as far as possible, all costs shall be allocated directly to each business market. Where joint and common costs are genuinely shared between some or all of the business streams or which cannot obviously be separated between groups of business streams, the allocation principle should ideally reflect the way in which costs are incurred. Possible examples of how joint or common costs could be distributed are shown in Figure 3.

Figure 3: Possible allocation principles for joint and common costs

Cost name	Cost type	Business streams sharing cost	Possible allocation principle
Transmission network leasing costs	Opex / Capex	Fixed business Mobile business	Ratio of fixed : mobile minutes carried
Network maintenance costs	Opex	Fixed business Mobile business ISP business	Number of maintenance staff man-hours spent on each business stream
Head office overall business costs e.g.: - Finance - Administration	Opex	Fixed business Mobile business ISP business Other business	Equi-Proportionate Mark-Ups (EPMU) to costs already incurred in each business stream

To support the cost allocation process a number of indicators will be used to best allocate costs to business streams, for example:

- the practices recommended by the European Commission in its guidelines on accounting separation; and
- a number of other national regulatory and policy documents which cover these issues.

3.3. Step 3 - Isolating network costs from business stream accounts

In this step the cost data in each of the identified business entities will be analyzed to produce network cost data. Figure 4 shows an approach for isolating network costs.

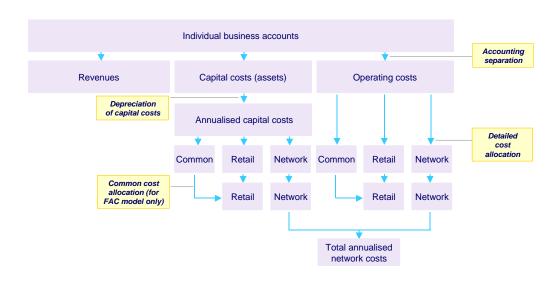


Figure 4: Isolating network costs from business stream accounts

The process follows these key stages:

- 1. **Accounting separation** the business stream accounts will have been grouped into revenues, capital costs and operating costs categories, as outlined in Step 1 above.
- 2. **Depreciation of capital costs** capital costs will be depreciated in accordance with the *Costing Methodology for the Telecommunications Sector*.
- 3. **Detailed cost allocation** all Opex and annualized Capex costs will be allocated to either appropriate network cost categories, a retail cost pool, or otherwise a retail / network common cost pool.

Figure 5 illustrates the network elements that are likely to be included in accounting separation exercises for fixed and mobile business entities (other systems may also be required, e.g. for value added services). It should be noted that with the moves to next generation networks (NGNs) some of these elements are gradually being replaced (for example, multi-service access nodes replacing remote switching units; media gateways replacing digital local exchanges and soft-switches replacing tandem exchanges) while the transmission network is gradually transitioning from circuit-switching to IP-based technology.

Figure 5: Network elements

Fixed network elements

- · Main Distribution Frame (MDF)
- · Remote Switching Unit (RSU)
- · Digital Local Exchange (DLE)
- · Digital Tandem Exchange (DTE)
- · International Switch Centre (ISC)
- · Voice over Internet Protocol switch (IPS)
- · Interconnect Gateway (IGW)
- · Network Management System (NMS)
- · Interconnect Billing (IBIL)
- · Intelligent Network platform (IN)
- · RSU transmission ring
- · Local transmission ring
- · Provincial transmission ring
- · National transmission ring
- Transmission link between gateways (T-GW-GW)
- · Transmission link DC1 to ISC.

Mobile network elements

- · Base Station (BTS)
- · Base Station Controller (BSC)
- · Mobile Switching Centre (MSC)
- · PDH transmission links
- · SDH transmission links
- · Inter-MSC Transmission (IMT)
- · Pre-paid service platform (PRP)
- General Packet Radio platform (GPR)
- · Short Message Service Centre (SMSC)
- · Voice Mail System (VMS)
- · Billing system (BIL)
- · Home Location Register (HLR)
- · Customer Management System (CMS)
- · Network Management System (NMS)
- · Interconnect Gateway (IGW)
- · International Gateway (INT).
- 4. **Common cost allocation** as implied above, there will be a number of Opex and annualized Capex costs which do not fall into either a network element category or the retail cost pool, and which must therefore be somehow allocated:

Statement on the Methodology for Allocation of Common Cost

The Authority proposes that common costs be allocated among services and network elements and must first be individually identified by type in accordance with the concessionaire's chart of accounts then allocated to each service/business in accordance with the Costing Methodology for the Telecommunications Sector.

3.4. Step 4 – Allocation of network costs to network services

Step 3 leads to a detailed categorization of annualized network costs (combining Capex and Opex) into network element cost categories. In order to produce annual costs for network services routing factor tables are employed.

 Routing factor tables are a method of allocating an appropriate portion of the total cost of a network element to each of the network services which use that element.

3.5. Step 5 – Producing individual service profitability

Step 4 describes how network costs can be isolated for each individual service. Assuming the concessionaire can supply its retail cost and revenue data for each individual service. The individual service profit is then simply:

- Individual service revenue, less
- Individual service network cost, less
- Individual service retail cost.

Individual service profitability in terms of the profit (EBIT) and return on capital employed can be calculated. A sample output is shown in Figure 6.

Figure 6: Sample output of individual service profitability

		M	obile				Fi	xed			Inte	ernet
	Call	Call	SMS	Data	etc	Call	Call	PSTN	Leased	etc		
	termination	origination				termination	origination	line	lines		ADSL	Dial-up
Revenues	х	,	х	Х	Х	х	х	Х	х	Х	х	Х
Opex	x		х	х	х	х	х	х	х	Х	х	х
EBITDA	х		Х	Х	X	Х	Х	X	X	X	Х	Х
Depreciation	х		х	х	х	х	х	х	х	Х	х	х
EBIT	х		Х	X	Х	Х	Х	X	X	X	Х	X
Mean capital employed	х		х	х	х	х	х	х	х	Х	х	х
Return on capital	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

4. Achieving Accounting Separation in Practice

The Authority will consult with the industry in developing the format for regulated accounts. In particular, the Authority proposes to develop a standardized chart of accounts, a standard set of asset lifetimes and a template for the submission of traffic data for the services under review. These detailed accounting formats for each of these areas would be published for industry comments in due course.

Statement on the Principles of Accounting Separation

The Authority proposes that the following principles should apply to accounting separation:

- separated accounts must be prepared annually and must be based on a transparent cost allocation method.
- the transparent cost allocation method must be based on the principle of cost causality and in accordance with the Costing Methodology for the Telecommunications Sector. This requires that costs must be attributed to components, services and businesses strictly in accordance with the activities that cause those costs to be incurred.
- allocations under this methodology must specifically not be intended to, or have the effect of bringing advantage to the concessionaire at the expense of its competitors.
- separated accounts must be prepared in accordance with generally accepted accounting conventions, unless such conventions are shown to be irrelevant.
- the allocation methodology must be applied consistently between accounting periods or, where a change in the method of application can be objectively justified, it must be noted and comparative data provided according to the revised basis of allocation.
- separated accounts are to be produced at the same periods as the concessionaire's accounts are prepared which may be quarterly or monthly as the case may be and submitted to the Authority twice per year at mid year and year end.
- the yearend separated accounts must be subject to independent audit at the concessionaire's cost, and to standards required by the laws of Trinidad & Tobago.
- the first submission of separated accounts are to be made available to the Authority within nine (9) months after the relevant financial year end.
- All subsequent submissions are to be made available to the Authority within three(3) months after the relevant financial year end.

5. SCHEDULES

Schedule 1: Reporting Format for the Core Network Business

INCOME STATEMENT	Current Period	Prior Period
Turnover:		
From Retail	X	X
Other operators	<u>X</u>	<u>X</u>
Total Turnover	X	X
Operating Costs	X	X
Of which		
Depreciation	X	X
Personnel Costs	X	X
Wages & Salaries		
Subsistence & Travelling	X	X
Overtime	X	X
CCA Adjustments ²	<u>X</u>	<u>X</u>
Total Operating Costs	X	X
Return ³	\overline{X}	\overline{X}
	_	
Return on Capital Employed		
Return	X	X
Mean Capital Employed	X	X
Return on Mean Capital Employed	X%	X%

² Current Costs Accounting (CCA) Adjustment - The change to historical costs arising from the revaluation of assets on a current cost basis. In the statements for individual business areas the adjustments comprise the unrealised holding gains or losses arising from changes in asset values, together with the effect on asset values and depreciation of the appropriate allocation of modern equivalent assets between businesses.

3 The calculation of the return should be consistent with the basis on which the cost of capital is calculated.

Schedule 2: Reporting Format for the Core Network Business⁴

STATEMENT OF FINANCIAL POSITION as at

	Current As at	Prior As at
Fixed Assets Tangible Fixed Assets Intangible Fixed Assets Investments	X X X	X X X
Total Fixed Assets	X	X
Working Capital Inventory Trade Receivables Other Assets Cash on hand & Bank Deposits	X X X X	X X X X
Total Working Capital	X	X
Liabilities Trade Payables Fund for liabilities & Charges Other Liabilities Total Liabilities	X X X —	X X X —
Total Capital Employed	X	<u>X</u>
Yield on Capital Employed	X	<u>X</u>

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⁴ All entries in the "Statement of Financial Position (Balance Sheet) should be average values for the year to which they relate. Where possible and material the average values shown should be weighted averages. If information is not available, a simple average of opening and closing balances may initially be used

Schedule 3: Reporting Format for the Local Access Network Business

INCOME STAT	TEMENT	Current Period	Prior Period
Turnover:	T	•	**
	Transfer charges to Retail	X	X
Total Turnover	From other operators (if any)	<u>X</u>	<u>X</u> x
Operating Costs Of which		<u>X</u>	<u>X</u>
	Depreciation	X	X
	Personnel Costs Wages & Salaries	X	X
	Subsistence & Travelling Overtime	X	X
CCA Adjustmen	ts	<u>X</u>	<u>X</u>
Total Operating	Costs	X	X
Return (excludin	g ADCs ⁵ , if any)	\overline{X}	\overline{X}
ADCs (if any)			
, •	From OLOs	X	X
	From Retail	X	X
Total ADCs		\overline{X}	\overline{X}
		_	
Return (including	g ADCs, if any)	\overline{X}	\overline{X}

RETURN ON CAPITAL EMPLOYED

As for Core Network

STATEMENT OF FINANCIAL POSITION

As for Core Network

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⁵Access Deficit Contributions (ADCs) - Contributions payable by other licensed operators (OLO) and the Retail Businesses to the Access Business for losses it sustains on the provision of services on the access network.

Schedule 4: Reporting format for the Retail Fixed Business

INCOME STATEMENT

INCOME STATEMENT	Current Period	Prior Period
Turnover		
Connection Charges	X	X
Installation Charges	X	\mathbf{X}
Other Connection Charges	X	X
Subscription Charges		
Residential	X	X
Single Line Business	X	X
Other Business (non-single Line)	X	X
Call Master Services Charges	X	X
Other Subscription Charges	X	X
On-Net Toll Charges		
Intra Exchange Toll Charges	X	X
Inter Exchange Toll Charges	X	X
Off-Net Toll Charges		
Outgoing Toll (Mobile)	X	X
Incoming Toll (Mobile)	X	X
(Outpayments)	X	X
International		
Incoming Toll	X	X
Outgoing Toll	X	X
(Outpayments)	X	X
Other International Charges	X	X
Domestic Calling Cards	X	X
International Calling Cards	X	X
Paystations	X	X
Local 800	X	X
Centrex	X	X
Operator & Director Assistance Charges	X	X
Other Turnover	X	X
Total Turnover	\overline{X}	$\overline{\mathbf{X}}$

Schedule 4: Reporting format for the Retail Fixed Business Con't

INCOME STATEMENT

	Current Period	Prior Period
Operating Costs:		
Operating Costs specific to Fixed Retail	X	X
Transfer Charges from Fixed Core Network	X	X
Transfer Charges from Fixed Access Network	X	X
ADCs paid to Access Network (if any)	X	X
Depreciation	X	X
Personnel Costs		
Wages & Salaries	X	X
Subsistence & Travelling	X	X
Overtime	X	X
Other Costs	X	X
CCA Adjustments	X	X
Total Operating Costs	<u>X</u>	<u> </u>
Return (excluding Universal Service Contribution, if any)	X	X
Universal Service Obligation Contributions from OLO	X	X
Return (including USO Contribution, if any)	X	\overline{X}

RETURN ON CAPITAL EMPLOYED

As for Core Network

STATEMENT OF FINANCIAL POSITION

As for Core Network

Schedule 5: Reporting format for Data Services

INCOME STATEMENT

		Current Period	Prior Period
Turnover	Dial-up Internet xDSL Subscription	$\frac{X}{X}$ X	$\frac{X}{X}$ X
	xDSL Connection Lease lines	X X	X X
Total Turnover	Other data Services	<u>X</u>	<u>X</u>
Operating Costs			
CCA Adjustmen		X X X X X Y) X <u>X</u>	X X X X X X X X X X
Total Operating	Costs	X	X
Return (excludin	g USO Contribution, if any)	X	X
USO Contributio	on from OLO	X	X
Return (including	g USO Contribution, if any)	X	<u>X</u>

RETURN ON CAPITAL EMPLOYED

As for Core Network

STATEMENT OF FINANCIAL POSITION

As for Core Network

Schedule 6: Reporting format for the Retail Mobile Business

INCOME STATEMENT

	Current Period	Prior Period
Turnover		
Handsets Charges	X	X
Activation Charge	X	X
On-Net Charges	X	X
Off-Net Charges		
Outgoing (Fixed)	X	X
Incoming (Fixed)	X	X
(Outpayments)	X	X
Outgoing (Mobile)	X	X
Incoming (Mobile)	X	X
(Outpayments)	X	X
International		
Incoming	X	X
Outgoing	X	X
(Outpayments)	X	X
Roaming		
Inbound		
Incoming	X	X
Outgoing	X	X
Outbound	X	X
SMS		
On-Net	X	X
Off-Net	X	X
(Outpayment)	X	X
MMS		
On-Net	X	X
Off-Net	X	X
(Outpayment)	X	X
Data Services charges	X	X
Subscription	X	X
Other Turnover	X	X
Total Turnover	\overline{X}	${X}$

Schedule 6: Reporting format for the Retail Mobile Business (Con't)

	Current Period	Prior Period
Operating Costs:		
Operating Costs specific to Retail	X	X
Operating Costs specific to Network	X	X
Depreciation	X	X
Personnel Costs		
Wages & Salaries	X	X
Subsistence & Travelling	X	X
Overtime	X	X
Other Costs	X	X
CCA Adjustments	X	X
Total Operating Costs	X	<u>X</u>
Return (excluding Universal Service Contribution, if any)	X	X
Universal Service Obligation Contributions from OLO	X	X
Return (including USO Contribution, if any)	X	X

Schedule 7: Reporting format for the Retail Mobile Business

STATEMENT OF FINANCIAL POSITION as at_____

	Current As at	Prior As at
Fixed Assets		
Tangible Fixed Assets	X	X
Intangible Fixed Assets	X	X
Investments	X	X
Total Fixed Assets	\overline{X}	\overline{X}
Working Capital		
Inventory	X	X
Trade Receivables	X	X
Other Assets	X	X
Cash on hand & Bank Deposits	X	X
Total Working Capital	${\mathrm{X}}$	\overline{X}
-		
Liabilities		
Trade Payables	X	X
Fund for liabilities & Charges	X	X
Other Liabilities	X	X
Total Liabilities	\overline{X}	${X}$
		
Total Capital Employed	X	X
		
Yield on Capital Employed	X	X
		

Schedule 8: Reporting Format for Other Business Activities

INCOME STATEMENT

	Current Period	Prior Period
Turnover	<u>X</u>	<u>X</u>
Total operating costs	X	X
Return	X	<u>X</u>

RETURN ON CAPITAL EMPLOYED

As for Core Network

STATEMENT OF FINANCIAL POSITION

As for Core Network

Schedule 9: Reporting format for Inter-Business Transfer Charges Summary

From/ To →	Fixed	Fixed	Fixed	Mobile	Total
	Access	Network	Retail	Business	
\downarrow			Services		
Fixed Access		X	X	X	X
Fixed Network	X		X	X	X
Retail Services	X	X		X	X
Mobile Business	X	X	X		X
Total	X	X	X	X	X

Schedule 10: Reporting format for the Statement of Transfer charges

Costs/Services	Fixed Retail Services	Intra Exchange	Calls to Mobile	Public Payphone	Directory Enquiry	International Outgoing Call	International Incoming Call	Data Circuits	Internet Service	Remaining Services	Mobile Business
Fixed Access	X	X	X	X	X	X	X	X	X	X	X
Fixed Network	X	X	X	X	X	X	X	X	X	X	X
Fixed Retail Services	X	X	X	X	X	X	X	X	X	X	X
Mobile Business	X	X	X	X	X	X	X	X	X	X	X
Total	X	X	X	X	X	X	X	X	X	X	X

Schedule 11: Network Statement of Costs

	Operating Costs TT\$	Capital Employed TT\$	Rate of Return %	Capital Costs TT\$	Total Operating and Capital Costs TT\$	Total Volume Minutes	Average Cost TT\$/Minute
Traffic Sensitive							
Subscriber Unit	X	X	X	X	X	X	X
Primary Switch	X	X	X	X	X	X	X
Secondary Switch	X	X	X	X	X	X	X
Transmission - Non-Length Dependent							
RSU to Primary/Secondary Link	X	X	X	X	X	X	X
Primary to Primary Link	X	X	X	X	X	X	X
Primary to Secondary Link	X	X	X	X	X	X	X
Secondary to Secondary Link	X	X	X	X	X	X	X
Secondary to Tertiary Link	X	X	X	X	X	X	X
Tertiary to Tertiary Link	X	X	X	X	X	X	X
Transmission - Length Dependent (Split as above)							
International Transmission	X	X	X	X	X	X	X
Directory Enquiry	X	X	X	X	X	X	X
International Directory enquiry	X	X	X	X	X	X	X
Private Circuits\Leased Lines	X	X	X	X	X		
Interconnect connections and rentals	X	X	X	X	X		
Other categories will be included as appropriate	X	X	X	X	X	X	X
Total Conveyance	X	X	X	X	X	X	X

Schedule 12: Statement of Costs of Network Services

	Traffic Sensitive	Subscriber Unit	Primary Switch	Secondary Switch	Non-Length Dependent	RSU to	Primary to Primary	Primary to		- 2	(Split as above)	International Transmission	Directory Enquiry	International Directory enquiry	Private Circuits\Leased Lines	Interconnect connections and rentals	Other cost categories will be included as required
Average Cost TT\$/Minute ⁶		X	X	X		X	X	X	X	X	X	X	X	X			
Total Costs ⁷												X	X	X	X	X	X
Usage Factors (Routing or Percent	age)																
Retail Services																	
Intra Exchange Calls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inter Exchange Calls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
International Calls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(Other retail services as appropriate)																
Other Activities Services																	
Apparatus Supply	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(Other services as appropriate)																	
RIO Services																	
Call Termination																	
Primary	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tandem	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(Other RIO services as appropriate)																	

April 29 2009 TATT 2/3/14

⁶ From Statement of Network Costs Schedule ⁷ Ibid

Schedule 12: Statement of Costs of Network Services (Con't)

	Traffic Sensitive	Subscriber Unit	Primary Switch	Secondary Switch	Non-Length Dependent	RSU to Primary/Secondary Link	Primary to Primary Link	Primary to Secondary Link	Secondary to Secondary Link	Length Dependent	(Split as above)	International Transmission	Directory Enquiry	International Directory enquiry	Other cost categories will be included as appropriate	Gradient Call Conveyance Cost
Average Cost Per Minute Retail Services ⁸																
Intra Exchange Calls		X	X	X		X	X	X	X		X	X	X	X	X	Peak X X Off - peak X X Weekend X X
Inter Exchange Calls (Other retail services as appro	opri	X ate)	X	X		X	X	X	X		X	X	X	X	X	Peak X X Off - peak X X Weekend X X
Other Activities Services Apparatus Supply (Other services as appropriate	e)	X	X	X		X	X	X	X		X	X	X	X	X	Peak X X Off - peak X X Weekend X X
RIO Services Call Termination Primary		X	X	X		X	X	X	X		X	X	X	X	X	Peak X X Off - peak X X Weekend X X
Tandem (Other RIO services as approp	pria	X te)	X	X		X	X	X	X		X	X	X	X	X	Peak X X Off - peak X X Weekend X X

⁸ Those costs are obtained from multiplying the average cost per minute by the usage factors, both of which are shown on page 32. These costs reflect the conveyance element of the service only.

6. ANNEX I: Decisions on Recommendations

The following summarizes the comments and recommendations received from stakeholders on the first draft of this document (dated December 6th 2006), and the decisions made by TATT as incorporated in this revised document (dated June 27, 2008).

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions		
		Section 1				
General	Windward Telecom	As one of the architects of the Canadian Radio-television and Telecommunications Commission's Phase One cost manuals in 1979, I applaud the Authority's efforts to implement a Costing Methodology which ensures that the costs associated with each business and service category are properly identified and quantified. Windward Telecom takes solace in the face that the Authority, "may consider structural separation in the future if it is determined that this is required to ensure fair competition."		The Authority notes Windward Telecom's comments.		
General (i) Missing Steps in the Regulatory Process	Telecommunica tions Services of Trinidad and Tobago			The Authority has revised section 1.2 to identify the concessionaires that will be required to adopt the guidelines set out in this document. This section states that all concessionaires, that provide two (2) or more services, shall be required to		

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⁹ Regional regulatory or Governmental agencies, Existing service and/ or network provider and affiliates, Potential service and/ or network providers and affiliates, Service/ Network Provider Associations/ Clubs/ Groups, General Public

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		is automatically required to produce accounts for any or all of the services that are provided in the markets listed in the Price Regulations Framework document. The guidelines go on to state that it has defined markets in the Proposed Price Regulation Framework document and "will use these markets to guide the process of the separation of accounts." This proposed price regulation framework is still under consultation. The wording in the proposed guidelines is written as if the framework where already established, which is not the case. It is clear, based on the proposed Pricing Regulations that the Authority intends to carry out such process to determine where there is dominance. Further, the Pricing Regulations provide factors which the Authority may take into account when	not intended to deal with market failure. It is meant	adopt the guidelines set out in this document. The Authority will amend the wording to "Final Price Regulation Framework."
		determining if Accounting Separation will be mandated. However, the policy gives no indication of how it will determine if accounting separation is an appropriate remedy for a market failure and the process it will use to come to that determination. Absent this it appears that the Authority can impose these obligations arbitrarily, just because The Telecommunications Act and concession allows it to do so. The actual provision from The Act states, "a concession for a public telecommunications network or a public telecommunications service shall require the concessionaire to adhere, where applicable, to conditions requiring the concessionaire to – account	Cross subsidies if they are in place, are detected and dealt with particularly across contested markets or and uncontested or where a concessionaire is deemed dominant in one or more markets.	

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		the guidelines leave unanswered the question at what point such a requirement would be lifted.] keep such books of accounts where the Authority prescribes by regulation the manner in which such books are to be kept, to keep such books of accounts in accordance with such regulations:"		
		In sections A 32 & 33 of the concession it states that, A32. Where directed by the Authority in writing, the concessionaire shall implement such accounting practices as may from time to time be required by the Authority in accordance with Regulations made under the Act.		
		A33. Such accounting practices are to be consistent with generally accepted accounting principles, where applicable, and may include (but are not limited to) accounting practices which allow for the identification or separation of the costs and charges for different services or types or kinds of networks and/ or facilities.		
		TSTT does not read either the provision in the Act or the concession to mean that this is a requirement, but rather, the operative words are "where applicable" and "may". As such, TSTT does not view this as a requirement, but a tool to be used if warranted.	The Authority will ensure that where Accounting Separation is mandated, it is in keeping with the requirements of the legislation.	

Document Sub-Section	Submission Made By: Stakeholder Category	Comments Received	Recommendations Made	TATT's Decisions
(ii) What Accounting Separation does and doesn't establish		TSTT urges the authority to propose a process by which after conducting thorough market definition and analysis and concluding that a concessionaire is dominant —whether accounting separation is an appropriate remedy to employ. Without this due regulatory process, there is a risk that the proposed policies could be burdensome on some operators, discourage investment or prevent welfare enhancing behaviour, such as bundled products. The Authority, in its consultative document Proposed Price Regulation Framework for Telecommunications Services in Trinidad & Tobago stated that '[i]n determining when and where it is appropriate to require accounting separation, the Authority may take into account' among other thing 'any indication of cross subsidy or anticompetitive pricing or other acts of unfair competition on its part.' Additionally, in this consultative document, the Authority states that separating the segments will provide the opportunity for the Authority to judge whether there is cross subsidy flowing between the services provided by the concessionaire.' In keeping with the European Commission definition, TSTT supports the view that the purpose of accounting separation is to provide an analysis of information derived from financial records to reflect as closely as possible the performance of parts of a business as if they were operating as separate businesses. The information from separated accounts can help regulators assess whether dominant operators are engaged in anticompetitive cross subsidization.		Where there are bundled products, the process of Accounting Separation would ensure that anti-competitive behaviour is avoided. It is the concessionaire's interest to determine the profitability of their product lines.

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		The Authority should, however, be aware that the evidence of cross subsidy is not necessarily evidence of anticompetitive pricing, and, in fact, the results of accounting separation can only be one piece of evidence in coming to a conclusion on whether such pricing has occurred or even whether cross subsidy is structural or just transitory. For example, new markets or services even within large companies are typically loss making. Accounting Separation, particularly along the lines that the Authority is proposing can not give a view of the long-term profitability of the business. In fact, accounting separation only gives a snapshot of the business — a snapshot at which a particular service may be loss making for a variety of reasons. Even if the results point to long-term loss making and negative impact on market entry, there may be no justification for an allegation of anticompetitive behaviour on the part of the service provider. For example, TSTT's fixed line pricing structure that currently exists in the market was inherited from an era long before market liberalization and is reinforced by existing regulation. This pricing structure is based on an old model that encouraged the flow of subsidies from international and other profitable services to domestic services — particularly access. This model no doubt discourages entry to local access services, yet TSTT cannot be faulted for this. Indeed, TSTT has on many occasions (prior, during and post		The Authority will require accounts to be prepared annually in accordance with the Accounting Separation Template and as such, the issue of a "snap shot." In time will not arise.
		liberalization of the telecommunications market) pointed out to		

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		the Authority that existing cross subsidies of this type are not only unsustainable, but are not consistent with the development of an efficient and competitive telecommunications market in Trinidad and Tobago. However, the Authority has declined all tariff applications to eliminate these cross subsidies.		
		Further, to come to any conclusion about the anticompetitive nature of financial flows, the authorities would have to determine whether the market is susceptible to anticompetitive pricing, be it predation or a price squeeze. In the case of predation, the alleged predator must be capable of carrying out the price reduction over a long enough time to drive		The Authority will utilize cost information to determine whether cross subsidies exist and not rely on the opinion of the concessionaire.
		competition out of the market and keep them out in order to recoup losses. This will not be possible in many markets, particularly where entry barriers are low. Price squeezes—where one operator prices inputs used by its competitors in the same downstream market to reduce or eliminate that competitor's profits—can arise only in the context of essential facilities.		The Authority is not averse to concessionaires implementing tariff regimes to eliminate cross subsidy. The Authority must be satisfied that this cross subsidy exists by using an appropriate costing methodology.
(iii) The Cost Implementing of Account	of ing	Finally, there are cases where certain services may become obsolete and the economic "cost" of the good or underlying asset used in producing a service may be less than its accounting cost. A related issue is the case in which a competitor prices below the "cost" of the regulated firm and, to stay in the market, the regulated firm must price below what its accounts say are the true costs. Ideally, the accountants will revalue the assets, making impairments to reflect the market		Whichever methodology is implemented must result in efficiency in the market. Hence the need for a price cap regime which minimizes costs while maintaining a high quality of service. The Authority will use "ex-ante" regulation to encourage competitors to

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
Separation		realities, but this process may lag behind the market pricing. In none of these cases is accounting loss making anticompetitive. TSTT is not convinced that Accounting Separation would be the best regulatory safeguard against anticompetitive behaviour at this time. We have outlined above the limitations of accounting separation in indicating whether a company is behaving anti-competitively. In addition to this, there may be serious cost implications for companies required to carry out accounting separation. It is not at all clear, based on the general description that the TATT has provided so far, how much effort will be required to implement Accounting Separation. As the Authority is aware, TSTT has implemented a sophisticated cost and profitability model. It has invested significant time and resources in the development of a fully distributed cost model. TSTT considers that its current model offers a robust framework to facilitate future accounting separation requirements. It is GAAP conforming, based on historic costs, follows the principles of cost causality and adheres to a reasonable cost allocation methodology.		enter the market and will not rely only on "ex post" regulation to solve market failures. The Accounts should reflect the reality. If a product is obsolete, then it should be written off immediately. The Authority recognises that there will be some impact on concessionaires who already have accounting regimes for cost allocation in place. The Authority will require implementation in accordance with the timetable.
		While we agree that the EU provides recommendations in its guidelines on accounting separation and cost allocation these guidelines are very general, and the actual model implemented in member states by the national regulatory authorities varies. TSTT supports the general position at the EU level, and believe that its cost model is consistent with that broad		The Authority must ensure that Accounting Separation is carried out on a similar basis for all concessionaires. It must be based on the Authority's proposed Costing

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		approach. However, the consultative document leaves in question what specific changes TATT might wish to make in the model. Changes could be limited to amending drivers and developing more transparent reporting, or they may be more demanding, involving for example a move to a new software platform.		Methodology and non-discriminatory and fair.
		If TATT is requesting TSTT to significantly alter its cost model, i.e., effectively build one anew, then we believe that the Authority would be better served in the short run to implement alternative competitive safeguards. Building a new model a short period of time is likely to be unwarrantedly expensive. The EU experience is that it took years to achieve compliant models that are compliant with existing guidelines in its member states. Closer to home, the regulator in Jamaica decided in early 2003 to adopt a new approach to accounting separation that required the incumbent to change modeling platforms, and the first P&Ls and balance sheets will come to light only by the end of this year.		The requirements will be based on the Costing Methodology and a new software platform is proposed.
		TATT should also be aware of the auditing requirements involved in accounting separation. We discuss this in the following section. TSTT believes that, if significant change is necessary in its existing cost model, accounting separation may be prohibitively costly as a short-term measure. If that is the case, in the interim, TSTT urges the Authority to consider analysis,		

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		Best practices from other newly developed market shows that this is exactly what other regulators have done. In Cayman and Barbados, for example, the regulators have conducted extended inquiries on anticompetitive behaviour without the requirement of accounting separation. They have focused instead on costs and revenues of the specific services or products under question. Even in well developed markets regulators are reconsidering their approach to accounting separation and other ex-ante remedies. For example, in regulators in US, UK and throughout Europe are moving towards more light-tough regulation and relying more on ex-post competition remedies to address market failures. Although the telecommunications market in Trinidad might be some time away from this model, we urge the Authority to be more forward looking in it development of regulatory policies in Trinidad and Tobago.		In determining the final format of its Accounting Separation Template, the Authority will take the experience of others including regional regulators into account.
1.1 Objectives of Accounting Separation	Ministry of Public Administration and Information, (MPAI)	These guidelines may be too broad and perhaps too inadequate to facilitate implementation in the short to medium term. MPAI suggests that more detailed guidelines be produced and that this be followed by a separate consultation process at a later date. MPAI's consultants seems to share this view: "In general, we are wary of the efficacy of using separations		The Authority considers structural

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		accounting as a basis for negotiating interconnection rates, as the process is likely to be expensive and time consuming, and could result in significant distortions even when carried out. Also, as in the UK and Australia, the Authority may conclude that organizational separation is required in order to create a level playing field (i.e., a structure under which the incumbent would be required to charge new entrants the same interconnection and wholesale rates as it would be required to charge its own retail units). In short, pursuing accounting separations in the context of dividing the incumbent into multiple arms-length subsidiaries should be considered from the outset."		separation to be the more long term remedy. Until this is in place however. The Authority intends to: (1) Identify each market. (2) Request that costs and revenues are accounted for separately. (3) Require service level agreements for each market with fixed prices for all concessionaires subject to accounting separation. A template will be provided to assist
	Columbus Communication s Trinidad Limited	CCTL applauds the Authority's intent to protect against cross-subsidy, and recognizes the importance of the Authority's efforts in this regard. CCTL firstly suggests that such accounting separation requirements only be imposed upon those against which complaints are lodged and the respective concessionaires do not remedy voluntarily, as the implementation of such a system is both costly and timely. Indeed, the costs associated with developing and maintaining separate accounting systems for each business line would increase the costs of provision of telecommunications services considerably, hence reducing the affordability of telecommunications services and reducing the effectiveness of a competitive telecommunications market. The increased	CCTL recommends that the Authority: (a) Implement accounting separation guidelines ONLY where absolutely required. (b) Be cognizant that service un-profitability does not necessarily translate to provision of service under cross-	a.) Guidelines will apply to all concessionaires who operate a telecommunications network and/or service and have the ability to subsidise. This will also apply where Broadcasting Services are provided over a Telecommunications Network. b.) The Authority is aware that cross subsidy may not be as a result of unprofitable services. As a result, all issues will be treated on a case by case basis.

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		expenditures include, but are certainly not limited to, increased personnel costs, significantly greater financial accounting system costs, and increased costs associated with the financial auditing of each separate business line. These are by no means negligible. Secondly, the Authority should also note that if a service is not profitable, it does not necessarily mean that the service is being cross-subsidized; a service may just naturally be under-performing. That is, the actual market demand has fallen short of the forecast, but increasing the price for the service may decrease demand further, while cessation of service provision may strand sunk investment without maximizing its return. Hence, the operator may continue to provide an unprofitable service if it believes that the business will in time grow sufficiently to justify the initial sunk investment costs. As such, it would not necessarily be classified as a cross-subsidy. Finally, CCTL appeals to the Authority to seek practical solutions in dealing with competitive regulatory matters, to ensure that any of the proposed regulatory actions can be swiftly enforced by the Authority and is not vulnerable to being tied up in litigation for years and years to come. It is well known that some litigation can be used as a tool to delay the development of a competitive market and bleed new entrant resources which are sorely needed and better served being deployed for country telecommunications infrastructure investment and services.	telecommunications policy at the earliest time	c.) Comments Noted.
		Section 2		
2. Principles of Accounting Separation	Telecommunica tions Services			1. The Audit of separated accounts will be carried out at the same time

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
	of Trinidad and Tobago	document does not specify the process by which the Authority approves that the accounting separation implemented by the concessionaire meets these principles. We propose that any concessionaire subject to accounting separation prepare a manual that details the cost basis, allocation methods and treatment of common costs for approval by the Authority well in advance of any requirement to produce the actual accounts. The Authority states that "the separated accounts must be subject to audit, and to standards required by the laws of Trinidad and Tobago". While TSTT understands that some level of audit would be needed as part of the accounting separation regime, the timing and extent of the audit can be key to determining timely compliance with the regulations as well as the cost.		that the concessionaire's regular audit is scheduled. This will assist in ensuring that there is consistency between the two accounting systems and at the same time, have the audit completed at the appropriate time. This is normally as recommended within six (6) months of the end of the financial year to which they relate.
		Regarding the timing of the audit, TSTT would propose that industry 'best practice' is to have regulatory accounts audited within six (6) months of the end of the financial year to which they relate. Moreover, in almost all cases in other jurisdiction of which this TSTT is aware, for example Jamaica, Guernsey and Bahrain, operators and auditors have required an extended time frame to submit initial sets of accounts. The complexity and resource requirements of activity based costing and separated accounting should not be underestimated. TSTT would ask that the Authority bear this in mind when imposing initial deadlines and suggest that a more appropriate timeframe for submission and publication in the first year would be nine (9) months, moving gradually towards six (6) months in subsequent periods.		2. The guidelines and template will indicate the format for production of the accounts. All concessionaires separated accounts must follow a similar format. In the first year as recommended, the Authority will consider extending the time for completion of these accounts. The Auditor is expected to be the concessionaire's auditor who will be provided with guidelines for the audit by the Authority.

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		We also urge the Authority to identify more clearly the responsibilities of the auditor. There are a number of ways that an auditor may be brought into the process. We believe that the option that ensures that the Authority has the confidence that an audited review is adequate is the following. The concessionaire proposes an auditor for approval by the Authority, so as to give the latter the ability to reject a candidate it deems unacceptable.		
		The document is silent on the costs of the audit, which may be significant. TSTT believes that it would be unfair for concessionaire to bear the cost of the audit alone. First, unlike statutory audits, the regulatory accounts are undertaken for the benefit for the industry as a whole and not solely the concessionaire implementing the accounting separation. Second, the concessionaire will be implementing the costing systems themselves at considerable, and exclusively internal, cost. It would be disproportionate to saddle the audit on the firm as well.		The Authority expects that since the Audit will be conducted by the concessionaire's auditor at the same time as the regular audit, the additional costs incurred can be met by the concessionaire.
		Another aspect of the role of the audit is the level of audit assurance. Basically, there is the choice between whether the audit should represent an opinion of 'fairly presents' versus 'properly prepared'. The key difference between the two opinions is that a 'properly prepared' audit attests that the costs and revenues in accounting separation have met the requirements as established in the approved costing manual. A 'fairly presents' audit will attest not only that the costs and		The Authority would advise that the Auditor say "fairly presents."

Document Sub-Section	Submission Made By: Stakeholder Category ³	Comments Received	Recommendations Made	TATT's Decisions
		revenues have been allocated as documented in the manual but will also involve a review of the logic of the allocation and cost drivers.		
		In the interest of keeping costs down, TSTT believes that the significant additional cost of a 'fairly presents' audit can be avoided by adopting a collaborative approach to the accounting separation can be agreed through discussion and reference to best practice by both the Authority and the concessionaire. TSTT further believes that the expertise within the concessionaire and the Authority will in many cases better qualify this type of analysis and decision making than would be available to any external auditor.		The Authority, together with the concessionaire will determine whether the cost allocation practices conform to that of the costing methodology. The Auditor will ensure that the separated accounts prepared by the concessionaire conform to the Template and Costing Methodology and/or model.
		Confidentiality TSTT is concerned that the guidelines did not mention treatment of confidential information. The Authority should be aware that the publication of commercially sensitive information is not necessary in order to requirement of		In keeping with the spirit of the legislation, the Authority will publish with due regard to confidentiality.
		separated accounts. It is the duty of the auditor and regulator to examine the accounts to ensure that the accounts properly reflect the finances of the business examined. The release of competitive service information would be unfair and could result in commercial damage to the concessionaire. This means, for example, that the concessionaire should be required to produce public statements only for lines of business in which it has been deemed dominant. Also, these lines of business should not be the individual services financials that		At this time, the Authority does not intend to request the publication of separated accounts. When the Authority establishes a need to do so, the guidelines will be amended in consultation with stakeholders.

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		the Authority will have full sight of, but consolidation of such individual services. There is no reason to have the financials of disaggregated business open for competitors to view Finally, only the costs and revenues should be required of each consolidated business service: no volume data should be required to be published.		
2.2 Cost Basis	Windward Telecom	Windward Telecom strongly believes that concessionaires should maintain the Historic Cost Accounting (HCA) approach given that arbitrary revaluation of assets will lead to distortions in depreciation expense and returns on assets. It should be noted that TSTT has for a significant period be permitted to recover depreciation costs through tariffs and any change would lead to intergenerational inequity.		The Authority will use HCA for the purpose of separated accounts.
2.3 Allocation Methods	Windward Telecom	In order to ensure that all carriers are consistent in their application of the methodology the Authority should further define common mechanisms for cost allocation based upon parameters such as: in service NAS, local loop utilization by voice or ISP (or simultaneous use in the case of broadband services), trunk bandwidth allocation.		The Authority accepts this position and agrees to define cost allocation mechanisms as far as possible to the level of detail required to provide the best analysis of costs. This cost allocation method should be consistent with the Costing Methodology.
		Section 3		
	Telecommunica	The purpose of accounting separation ought to be to focus on		

Document Sub-Section	Submission Made By: Stakeholder Category?	Comments Received	Recommendations Made	TATT's Decisions
	tions Services of Trinidad and Tobago	about anticompetitive cross-subsidy. The Authority can do this without requiring a P&L and balance sheet for long list of services. Typically, this means that accounting separation is not taken at the individual service level, but across broad categories of service. The list of markets that the Authority has listed in its Price Regulation Framework document appears too lengthy to constitute the categories of service for accounting		
		separation—if indeed this is what the Authority is proposing. If it is the case that the Authority is proposing accounting separation at a level of reporting as outlined on pages 8 and 9 of the proposed Price Regulation Framework for the Telecommunications Services in Trinidad and Tobago, then TSTT would like to point out that this is not only excessive and costly, but will be burdensome given the size and level of development of the local telecommunications market.		
		Although the level of disaggregation of separated accounts does not appear explicitly in the European Union laws, there are indications that the level of detail being proposed by the Authority for Trinidad and Tobago is extremely granular and hence disproportionate to the size of the local market. It would not be in keeping with the principle of proportionality that it outlined in its own consultative documents.		
		According the EU Interconnection Directive (Directive 97/33/EC), operators with significant market power should perform accounting separation between interconnection and		

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		other telecommunication activities. Additionally, recommendation 98/322/EC states that operating expenses, capital expenditure and revenues should be produced for at least the following activities: a) Core Network b) Local Access Network		These points are noted and the Authority will seek to design a system which addresses the degree of detail required for our needs.
		c) Retail activities d) Other activities Within the European Union accounting separation practices and in particular the level of disaggregation varies considerably. However, it is interesting to note that in smaller		
		states such as Malta, accounting separation information is presented at a much higher level of aggregation than in larger states such as UK. In Malta for example, separated accounts are required at a consolidated level for the core networks, local access network, retail activities and other activities. [MCA-Accounting Separation and Publication of Financial Information for Telecommunications Operators Consultative		
		Paper February 2002] In the UK, the requirements are much more detail. One reason for this is that larger market will require a greater level of disaggregation simply because they are bigger and more complex than smaller markets. The average fixed cost is also much lower in larger markets, than in smaller markets. Thus the policies generally reflect this proportionality principle.		
3.3 Allocation	of Windward	All carriers should have the ability to review the definition of		Comments noted.

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
Common/Joint Costs	Telecom	Equi-Proportionate Mark-Ups (EPMU) in detail prior to implementation. Of greatest concern to Windward Telecom are the allocation of		
		local loop costs and the inclusion of call management revenues within the local exchange service revenue basket. We presume that the methodology contained in Figure 3 is for		Comments noted. An Accounting Template will be
		illustrative purposes and will be expanded prior to the creation of a formal set of accounting methods.		provided.
		Section 4		
4. Achieving Accounting Separation in Practice	Public Administration and Information, (MPAI)	The Ministry notes with gratitude TATT's commitment to publishing detailed accounting formats for regulated accounts in six months.		
	Telecommunica tions Services of Trinidad and Tobago			Comments noted and will be
		TSTT does not understand why TATT deems it necessary to develop a standard chart of accounts. Certainly, what is important is the attribution methods used to ensure that costs		considered.

Document Sub-Section	Submission Made By: Stakeholder Category ⁹	Comments Received	Recommendations Made	TATT's Decisions
		are allocated to business and services consistent with the established principles of cost causality, objectivity, transparency etc. A standard chart of accounts is an unnecessary imposition.		
		TSTT has a similar concern with standard asset lives. As part of reports for separated accounts, TSTT would expect that explanations would be provided on accounting policies including asset lives. As is the normal practice in other jurisdictions, The Authority can then use this information to evaluate the reasonableness. In any event asset lives should be determined as part of the proceedings on costing. TSTT can see no reason why asset lives should be different for regulatory reporting.		
		Indeed, having different asset lives for regulatory reporting would mean developing and maintaining a separate asset register (separate from the existing statutory asset register), this would only add to the regulatory burden and cost to the industry plus it creates a problem of reconciling to the statutory accounts.		

7. ANNEX 2: Decisions on Recommendations

The following summarizes the comments and recommendations received from stakeholders on the second draft of this document (dated June 27, 2008), and the decisions made by TATT as incorporated in this revised document (dated April 29, 2009).

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		Section 1		
1.1 Objectives of Accounting Separation	Ministry of Public Administration and Information, (MPAI)	We disagree that the objective of accounting separation is the provision of separate financial statements for each business entity. Instead, the objective is regulatory control, while the separate financial accounts are a means to achieve it.	We suggest deleting the first sentence and rewording the rest as: "Accounting Separation is a regulatory tool to enable the Authority to ascertain whether there are anticompetitive cross-subsidies among services provided by a concessionaire, or whether a concessionaire is engaging in any form of anti-competitive pricing."	The Authority accepts the recommendations made and will change wording.
	Digicel (Trinidad & Tobago) Limited	TATT states, "The objective of accounting separation is to provide separate financial statements for each business entity as if it were a stand-alone business. Separating the segments will enable the Authority to ascertain whether there are anti-competitive cross-subsidies among services provided by a concessionaire, or whether a concessionaire is engaging in any	In summary, accounting separation as it is practiced abroad is aimed at preventing discrimination by a vertically integrated firm that controls the price	The Authority is of the view that all providers offering services in more than one market should fall within the accounting separation regime. This is the only reliable means of detecting cross subsidies.

¹⁰ Regional regulatory or Governmental agencies, Existing service and/ or network provider and affiliates, Potential service and/ or network providers and affiliates, Service/ Network Provider Associations/ Clubs/ Groups, General Public

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		International regulation literature suggests, however, that the primary objectives of accounting separation are rather different to what TATT wishes to use it for. From our research, the underlying objective of accounting separation is to combat discriminatory treatment of downstream competitors that need to buy an upstream (wholesale) "essential facility" if from a dominant vertically integrated firm. i.e. as a remedy, it is intended to address issues of anti-competitive discriminatory trading and cross-subsidisation by a firm that controls an essentially facility input.ii It should not be the intention of the regulator to monitor every provider who offers more than one service to the public. The impracticality of that is evident by the wide range of products offered by providers and the convergence of technologies used for various products.	Trinidad and Tobago, would be the monopoly incumbent, TSTT.	
		The European Regulators Group's (ERG's) common position paper sets out a proper statement of the principles of accounting separation regulation: "An accounting separation system is a comprehensive set of		
		accounting policies, procedures and techniques that can be applied to the preparation of financial information that demonstrates compliance with non-discrimination obligations and the absence of anticompetitive cross-subsidies."iii		

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		This is also supported by the World Bank sponsored infoDev publication titled the "Telecommunications Regulatory Handbook", which states that accounting separation and structural separation are regulatory approaches to reduce, or at least assist in the identification of, discrimination between a dominant firm and its competitorsiv		
		The endnote figurev provides a diagrammatic depiction of the structural situation that accounting separation is intended to address. In effect, accounting separation appears to require an operator to account for specified services as if the production of these services was in each case by a stand-alone firm.		
		TATT's words above suggest that for firms that are not able to discriminate in the pricing of essential wholesale inputs or to cross-subsidise with anticompetitive effect, accounting separation is not an appropriate or indeed especially useful regulatory remedy.vi Indeed, our research suggests that it is for these reasons that in practice accounting separation has only been considered a suitable measure for former monopoly fixed incumbents – and includes the separation of fixed from mobile operations		
		The evidence suggests it is very costly to implement, and is generally recognised by leading experts to be second best to operational separation or structural separation. Even when it is adopted to address discriminatory trading involving an essential facility input, accounting separation is increasingly		

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		understood to be inferior to operational or structural separation. The main reason is that in practice accounting separation is relatively ineffective unless carried out in enormous depth at which case the costs cannot be justified for operators other than perhaps the former monopoly provider. It also requires considerable regulatory resources to oversee implementation and make optimal use of the results.		
		The constraints of accounting separation are outlined by one of the EU's most respected advisers on telecommunications regulation, Professor Dr. Martin Cave, who states		
		"Accounting separation is designed to ensure parity between transaction prices paid by competitors for access and accounting prices paid by the separated entity's downstream affiliate. [] Of course such 'parity' is not complete in the sense that competitors' access payments are a genuine marginal cost for them, whereas the marginal cost of the same service to the vertically integrated incumbent is its marginal resource cost (the extra physical cost of producing one extra unit, translated into monetary units). The latter is likely to be much lower than the former, when access prices are based on long run average incremental cost, with mark up, while the production process exhibits economies of scale."vii, viii		
		It is worth noting that as a consequence of the recognition of the limitations of accounting separation, there are proposed amendments to the EU Regulatory Framework which will introduce the possibility of Functional Separation.ix		

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		Mobile networks do not control an "essential facility" Digicel's understanding of the topic suggests that accounting separation is not an appropriate measure to impose on mobile networks. Even if mobile termination rates were not regulated, they would be determined by mutual agreement between the operators involved; no mobile operator has the power to price unilaterally as occurs with an essential facility. Where this amount is cost oriented in each case the termination price can not be said to be discriminatory. The existence of a reciprocal termination charge which has been imposed on mobile network operators by the Arbitration Panel, means that there can be no discrimination or anticompetitive cross-subsidisation, which are the primary issues which accounting separation is intended to address. We show the situation in the endnoted figurex where a termination rate of 'X' applies for each mobile network for calls it receives from any other network for termination.xi We wish to point out that in the EU, member states' regulators need to make a finding of dominance in the specific market prior to imposing accounting separation.	should not be imposed on mobile network operators. Accounting separation is a policy that has been focussed most on markets in which [former] monopoly fixed network incumbents are dominant in the provision of essential wholesale inputs.	more than one market should from the inception of operators adopt accounting separation which in effect

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		Accounting separation is an ineffective remedy for the regulation of wholesale prices Digicel's research also suggests that accounting separation is not a suitable or effective remedy for addressing regulatory issues other than discrimination by a vertically integrated firm that is able to engage in anti competitive behaviour. Moreover, regardless of the accounting methods used, accounting separation does not generate the true (economic) cost for any service, i.e. it is practically not possible to design an accounting system that measures economic costs. The conclusion we have reached from our research is that accounting separation along with the implementation of a regulatory accounting system is neither a proportionate nor a cost-effective remedy for regulating the prices of wholesale services — most especially in regard to mobile network operators where, except arguably for termination on their own		
2 Principles of Accounting Separation - Amendment of Schedule	Digicel (Trinidad & Tobago) Limited	In sub–section 2f, the Authority states that "the separated accounts must be subject to audit".	The Authority should clarify who will be responsible for selecting the auditor. Also, we would like the Authority to explain what type of audit is to be conducted, the length of the audit, the cost	

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
			of the audit, the implications if the audit fails, to whom is the auditor reporting and whether the audit is to be conducted before/after/during the financial year.	
Principles of Accounting Separation - Submission of Separated Accounts	Digicel (Trinidad & Tobago) Limited	In sub-section 4b, the Authority says "a Concessionaireis required to submit its separated accounts within 3 months of the coming into force of the Regulationsthereafter submitwithin 6 months of the end of its financial year" After the close of its financial year, Digicel usually requires at least 6 months for its own financial statements to be completed. Only upon completion of same would we be able to commence the work necessary for submitting separated accounts. Therefore, the period suggested by TATT is impractical.	Audited separated accounts can only be prepared no less than nine (9) months after the financial year end. Regulation 4(c) should be amended accordingly and Regulation 4(b) should be revised to the earlier of that date or the three (3) month period.	
2.4 Common Costs	Ministry of Public Administration and Information, (MPAI)	There are many ways of allocating common costs, which can produce different results depending on the objective. We suggest that this is one area that TATT should prescribe rather than leaving it up to the operator's discretion.		The Authority will make cost pools as small as possible and provide examples.
<i>3</i>	Ministry of		We suggest that the	The Chart of Accounts will be in a

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
The Approach to Accounting Separation	Public Administration and Information, (MPAI)		fundamental approach to accounting separation must begin with a standard chart of accounts (provided by the operator), which must then be mapped to a cost ledger.	standardised format. Most financial applications provides can make allowance for an additional company.
3.1 Step 1 – High –level accounting separation	Ministry of Public Administration and Information, (MPAI)		We propose that TATT mandate the operators to produce monthly separated accounts (in line with their usual monthly financial accounting reports), thus staggering the submission of information and minimizing the burden on TATT to review an entire year's worth of data once per year	Comments noted and the Authority proposed quarterly accounts with reviews undertaken twice per year.
3.1 Step 1 – High level accounting separation Figure 2: Overall process summary	Administration	TATT must pay particular attention to the contents of this common/joint cost pool, as it is a typical means by which operators mask costs.		Comments noted.
3.2	Ministry of		We suggest that the	The Authority will consider this

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Step 2 – Allocation of common/joint costs	Public Administration and Information, (MPAI)		operators be mandated to produce a chart of accounts for the common/joint cost pool, to avoid/minimize the masking of other costs inside this area.	recommendation.
3.3 Step 3 – Isolating network costs from business stream accounts	Ministry of Public Administration and Information, (MPAI)	If the network elements can be represented by a tangible chart of accounts, with the business transaction stream directly feeding into it, there is a significant deterrent to operator "fiddling" with the figures.		This approach will be considered by the Authority.
3.5 Step 5 – Producing individual service profitability	Ministry of Public Administration and Information, (MPAI)		We suggest that Steps 1 to 5 should be a one-off operation	Compliance tests will be conducted on results.
	Digicel (Trinidad & Tobago) Limited	The headline of this section highlights a common fallacy; that accounting data can provide genuine economic cost information – the accepted research suggests otherwise.xii This section suggests that TATT is looking to analyse the profitability of individual services provided by any concessionaire that sells more than two services. TATT should be wary of the adverse message that this sends to current and prospective investors, i.e. that their business activities will be subjected to a level of oversight that is not practiced in any	Accounting separation is not a suitable mechanism for guiding the regulation of prices.	

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		liberalised telecommunications market. It is even suggestive of heavy handed control associated with centrally planned economies.		
		Digicel urges TATT to abandon this focus on policing retail service prices and profitability for markets in which there is not dominance. The market will do this far better than any regulator could.		
		It is also implied in this section of TATT's Guidelines that Return on Capital Employed represents an estimate of profitability that is useful for economic regulation purposes.		
		Our information which is supported by international recognised independent research contradicts this. ROCE is an accounting measure of profit which bears no accepted relationship to the economic concept of profit.xiii It is only the economic concept of profit that can guide a regulator in assessing whether a firm has made a reasonable profit or not.xiv,xv		
		Moreover, the main drawback of ROCE is that it measures return against the book value of assets in the business. To the extent that the assets book values do not reflect the actual second hand market value of the assets at the time ROCE is generated, the economic and ROCE values will diverge by potentially a large amount.		
		In accounting language, as the assets are depreciated, ROCE		

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		increases even if cash flow remains the same. Thus, firms with older assets that have attracted greater depreciation tend to have higher ROCEs than firms with younger assets. In an inflationary environment, cash flow goes up, but book		
		value remains the same. This would therefore increase ROCE, but can have the opposite effect on economic profit. Net present value (NPV) and internal rate of return (IRR) are the accepted ways to estimate the economic (real) profitability of a business or business units. A lengthy history of data is required to do this since profitability should be assessed over the life of the investments. The shorter the period of data, the more the analysis must rely on forecasts, (and as such are more likely to be arbitrary). This is particularly the case when trying to assess the profitability of a relatively new entrant.		
		TATT assumes that the concessionaire can supply cost and revenue data for "each individual service." Such information would be confidential and commercially sensitive.	TATT must disclose how this information will be used and kept from the competitors. The Regulations should contain some express provisions as to TATT's treatment of such information as confidential and the procedures for parties to make representations and	

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
			to obtain prior notice of drafts before any publication that uses the confidential information, even if in industry aggregates.	
4 Achieving Accounting Separation in Practice	Ministry of Public Administration and Information, (MPAI)	While this is critical to the desired outcome of this accounting separation process, we do not believe that the proposed reporting formats included in the Schedules can be used to generate a standardized chart of accounts.		
	Digicel (Trinidad & Tobago) Limited	The Authority intends to consult with the industry in developing the format for "regulated accounts".	This consultation should be completed prior to any implementation of accounting separation policies. In that regard, we ask that TATT furnish concessionaires with further particulars beyond the bare templates.	The Policy will be completed first, whilst the agreement on format will follow. The confidentiality guarantee will be consistent with standards already implemented with the Authority.
		The Authority proposes that separated accounts must be prepared annually and must be based on a transparent cost allocation.	TATT must establish guidelines that make clear its intentions with this information, specifically	

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			guarantee confidentiality and set out procedures for publication in any form whatsoever. This applies for the accounts as well as all the information disclosed in the templates in Schedule A.	
Schedule A – Templates in particular Templates 3-13	Digicel (Trinidad & Tobago) Limited	Digicel would require TATT to elaborate on the meanings on various line items in these templates before we can give any proper comment on the feasibility of providing such information and the time frames involved.	TATT should issue explanatory notes for the line items in each such template and the intended objective of the information collected for same.	The Authority will provide explanatory notes for line items on the template.
General	Ministry of Public Administration and Information, (MPAI)	Our perspective is that it is most essential to maintain an "audit trail", so to speak from the cost model to the cost separation reports. Much of the relevance of the whole regime of cost modeling and by extension the cost separation based on that modeling, will be lost if the evidence that will attest to the reliability of the data obtained is not properly structured into a homogenous and manageable body of information useable by regulator and operator alike. To maintain an audit trail requires that common denominators of cost definition, cost categorization and cost "chart of account" identity be applied across the production platforms of both cost modeling and cost		

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		we feel this commonality of denominators must be (through the adoption of) a generic chart of accounts to be useable by all operators of telecom services. There can be compromises that take into consideration the size of the enterprise, which means a modified chart (down-sized) for smaller operators. The chart of accounts gives the regulator the power to determine and set the ground rules of what cost (cost defined)is posted where(account identity)and how they are grouped or rolled up(cost category) into more complex costs (i.e. shared cost pools, common costs pools, service distribution pools etc). With this "trail" the regulator can track or trace the treatment of most if not all costs,(single or compounded), straight from the operators accounting cycle to its ultimate, reporting framework.		
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		that common denominators of cost definition, cost categorization and cost "chart of account" identity be applied across the production platforms of both cost modeling and cost separations.		
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			Other benefits of the chart of accounts are as follows:	Comments noted.
			a. Reduces any incidences of manipulation when costs are posted, by	

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			taking away any	
			ambiguity in the	
			treatment of	
			transactions within	
			the business	
			processes of the	
			operator. By	
			terminating the	
			accounting	
			transaction cycle of	
			the operator	
			through a direct	
			posting to an	
			account (of the	
			generic chart of	
			accounts) on a real	
			time basis (a	
			manner similar to	
			that of the financial	
			accounting system),	
			a proper audit trail	
			from transactions to	
			cost recordings is created and	
			created and sustained.	
			b. The five steps of Section 3 "Approach to Accounting	

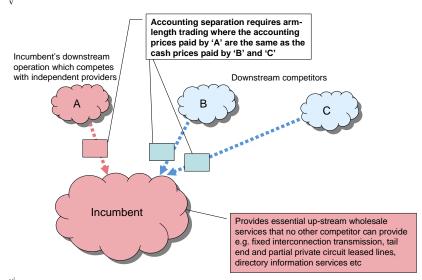
Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
			Separation" can constitute a one off exercise that will not need repeating year after year. c. Better identification of Work in Progress - as it can be easily cross referenced from the chart of accounts to capital projects completed or in progress at any point in time	
General	Ministry of Public Administration and Information, (MPAI)	If using the generic chart of accounts provides the foundation for the progression and integration of the costing methodology and cost separation reporting. Then the Figures presented in Section 3. "Approach to Accounting Separation "must show graphically or diagrammatically the devolution of the various categories or cost groupings of specified accounts from the chart, within each of the steps 1 -5. This will establish an underpinning of the "chart of accounts" to each of the different stages of the cost separation exercise.		Comments noted
		While Section 4 alludes to the introduction of a standardized chart of accounts we feel it is a prerequisite or, "foundation" for the overall exercise and must be promulgated as part of this consultative Guideline document. Just as the reporting schedules are presented in this document at the outset, so too		

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		should an indicative chart of accounts also be presented. This		
		will allow consultation and refinement of the chart at an early		
		stage as well as allow TATT a fair period to examine further		
		its plausibility based on operator feedback and industry		
		speculation. The concept of a standardized chart of accounts is		
		sound but can also be easily criticized and resisted so TATT		
		needs to lunge forward and provoke the debate and prepare the		
		industry for this inevitable new feature. It is only with strong		
		resolve will this initiative gain a sound footing. It is sound		
		because it closes the door on many inadvertencies and		
		inconsistencies and virtually eliminates the advantage		
	351.1	operators now have to manipulate their costs representations.		
General	•	As shown in the reporting schedules 3, 4, 5 and 6 TATT		Current Cost Study will form part of
	Public	intends to allow the Current Cost Accounting (CCA)		the work by the consultant on the Cost
	Administration	Adjustment to be included by operators in their cost separation		Model.
	and	reporting. While this is an accounting matter dealt with in		
	Information,	IFRS, we believe TATT is still obliged to present some		The methodology will be defined in
	(MPAI)	introductory methodology for formulating the CCA adjustment		developing the Cost Model.
		and a statement and explanation on what is TATT's ideology		
		on current costs and the concepts that underpin these		The Authority expects that this
		guidelines e.g. capital maintenance concept(physical vs.		costing methodology will provide:
		financial, revaluation difference to equity vs.		T f f: 1 1-4-
		income/expenditure, treatment of backlog depreciation,		Transparency of financial data
		valuation of assets with reference to specific price changes and or general inflation. In order to introduce current cost		provided by concessionaires
		accounting many bases or premises need to be adopted. There		for regulatory purposes.
		seems to be a need somewhere here to state all the supporting		• Data which will assist in
		concepts that form the whole picture for the application of the		Data which will assist in identifying anti-competitive
		current cost accounting (CCA) convention. This is necessary		identifying anti-competitive behaviour (eg cross
		current cost accounting (CCr) convention. This is necessary		behaviour (eg cross

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General	Ministry of Public	for the clarity and consistency of any methodology. The plausibility of any methodology is mainly evident through the validity and relevance of the premises and concepts upon which such methodology stands. Schedule 11. Network Statement of Costs – we believe that all transmission should be non length dependent and the issue of		The Authority considers this as Trinidad & Tobago is small and
	Administration and Information, (MPAI)	length dependent (distance sensitive) be excluded. We base this on the fact that T&T and its fixed line network topology can safely be considered to consist of average distances/lengths between primary and secondary links and secondary and tertiary links alike. Introducing distance sensitive calculations will complicate things and derive little cost difference that can create an impact on network costs in the context of this schedule.		distance may not impact on cost. Consideration will be given to moving away from distance sensitive prices. Information will be collected and a determination made whether it is relevant or not and make an independent assessment.
General	Ministry of Public Administration and Information, (MPAI)	Schedule 9 and 10 alludes to aggregated costs being charged to services and thus representing an allocation of total business unit costs (Access, Core, Retail, Mobile and Other)to the individual services, one likely to be done as an end of period exercise. However with an appropriately devised chart of accounts these transfers should be engaged monthly, quarterly by operators. Also, the transfer charges should represent		 The aim of accounting separation: Prices must be the same for any service provider. Transfer price must be detailed for each service. More transparency is required.
		market prices of the services provided. This is widely accepted as the most efficient transfer price. In cases where equivalent market prices cannot be objectively obtained,		Kindly refer to pricing treatment for wholesale services in Price Regulation

Document Sub-Section	Submission Made By: Stakeholder Category ¹⁰	Comments Received	Recommendations Made	TATT's Decisions
		another transfer pricing method must be recommended e.g. average cost, full cost plus regulated mark up etc. TATT should provide more detail guidance on the transfer pricing regime to be adopted by operators and not leave it up to them. This area is another door for manipulation of costs and attempts should be made to keep it tightly closed from the initial stage.		Framework at http://www.tatt.org.tt. The Authority will consider the proposal for alternative transfer pricing mechanism where equivalent market prices cannot be obtained.
General	Digicel (Trinidad & Tobago) Limited	Digicel wishes to stress the complexity of the regulation of upstream essential facility inputs needed by downstream competitors. Accounting separation is but one remedy whose primary purpose is to address the problems associated with this sort of market power.		Accounting separation will not apply where only one service is operated. However, if triple play is provided over a mobile network, then accounting separation will apply.
		It is not suitable or indeed helpful remedy to apply to mobile only operators – and in practice we see that the most respected regulators abroad do not impose accounting separation on mobile networks.		

infoDev is a global development financing program among international development agencies, coordinated and served by an expert Secretariat housed in the Global ICT Department (GICT) of the World Bank.



vi The seminal research which addresses the theory is by Jean-Jacques Laffont, Patrick Rey, and Jean Tirole, (1998), "Network Competition: I. Overview and Nondiscriminatory Pricing", *The RAND Journal of Economics*, Vol. 29, No. 1. pp. 1-37.

For those who are not comm

¹ For those who are not competition experts, an "essential facility" is an upstream bottleneck that can not be economically replicated by competitors and access to it is essential in order for competition to develop downstream. The test for the essentiality of the upstream input must be based on a finding that it is not economically replicable over the medium term; being difficult to replicate is not enough for it to be considered an "essential facility". See Robert O'Donoghue and Jorge Atilano Padilla, (2006), *The Law and Economics of Article 82 EC*, Hart Publishing, Portland.

Most although not all types of price discrimination at a retail level are actually in the public interest. See Louis Phlips (1983), The Economics of Price Discrimination, Cambridge University Press.

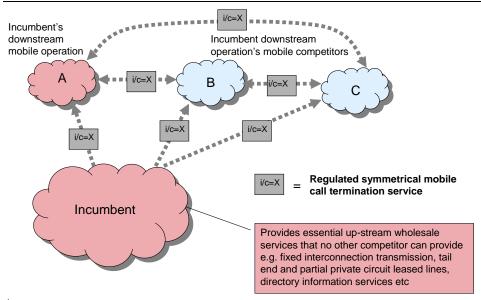
ERG (05) 29, Common Position, "Guidelines for implementing the Commission Recommendation C (2005) 3480 on Accounting Separation & Cost Accounting Systems under the regulatory framework for electronic communications", p.4.

iv "Telecommunications Regulation Handbook" (2001), *infoDev*, p3-8.

wii Martin Cave, (2006), "Six Degrees of Separation: Operational Separation as a Remedy in European Telecommunications Regulation", Communications & Strategies, No. 64, 4th Q.

viii Marin Cave is long standing adviser to the UK telecommunications regulator, was for many years a Member of the UK Competition Commission, and is a frequent adviser to the European Commission as well as governments, regulators and administrations around the World.

[&]quot;In addition the new and exceptional remedy of functional separation will enable regulators to force companies to split their networks from the provision of services. This will support regulators' efforts to ensure all market players (including transnational players) are given access to the basic infrastructure they need, on equitable commercial terms"; quoted from "2007 EU Telecoms Reform #10: A more effective regulatory system", European Commission 2007.



xi Indeed, where mobile networks have been permitted to choose their own termination rate, networks have sometimes chosen different MTRs. The reason for this seems likely to be explained by the fact that a mobile network is an example of a multi-sided market, and in such markets different termination rates relate to different competition strategies and provide no proof of discrimination or cross-subsidisation – an issue we take up further below.

A useful way of explain why the issue of discrimination and cross-subsidy is irrelevant to free-standing MNOs is that we are each able to provide the same services; we can say that the "competitive arena" is the same for us all. If rates are cost-oriented but different, no MNO is discriminating or cross-subsidising to anticompetitive effect.

xii There is a wealth of information on this topic – see for example, Fischer F.M., and McGowan J.J., (1983), "On the misuse of accounting rates of return to infer monopoly profits", *American Economic Review*, vol. 71, 1, pp. 82-97.

xiii Economic profit arises when the firm's revenue exceeds the total opportunity cost of its inputs. The economic concept of costs includes a normal return to equity capital, which is still an evolving area of academic research.

xiv See note 15

The complexities of trying to assess the reasonableness of wholesale or retail prices by analysing accounting data are discussed in a 214 page report for the UK Competition Commission: UK Office of Fair Trading. (2003) "Assessing Profitability in Competition Policy Analysis". Economic Discussion Paper 6. A report prepared for the Office of Fair Trading by OXERA (economic consultants) and its panel of experts.