

EXPERT LEVEL TRAINING ON TELECOM NETWORK COST MODELLING FOR THE HIPSSA REGIONS

Banjul

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Session 6: Calculation of call termination using different cost concepts (a practical exercise)



Agenda

Aims and objectives for this session



Introducing Normalia

- All the practical exercises in this workshop concern the fictitious African country of Normalia.
- Normalia is a typical (“normal”) country with regulatory challenges similar to those in your country.
- The details required for each practical exercise are presented in the slides / handouts.



Telecoms in Normalia

Telecom Sector Regulator (TRAN)

Fixed Telecoms

- 15% teledensity
- Telecom (100%)

Mobile Telecoms

- 40% teledensity
- Telecom (70%)
- Normcell (30%)
- Mobilco (new)



Interconnection rates

- TRAN follows international best practice and is inclined towards cost-based rates
- But following previous practice it has given Telecom and Mobilco 3 months to negotiate interconnection
- Meantime TRAN has appointed an internal Cost Engineer-Accounting Team (CEAT) to report on different cost standards:
 - Stand alone costs (SAC)
 - Fully allocated costs (FAC)
 - Long run incremental costs (LRIC)



Cost data obtained from Telecom

A. 2G Network – Direct On-net Costs

\$ 172 M

B. 3G Network – Direct On-net Costs

\$ 48 M

C. 2G Network – Direct Interconnect Costs

\$ 160 M

D. 3G Network – Direct Interconnect Costs

\$ 35 M

E. Shared Network - Direct Costs

\$ 180 M

F. Retail- Direct Costs

\$ 280 M

G. Network – Indirect OPEX

\$ 90 M

H. Common and Overhead Costs

\$ 70 M

These costs are exclusively for the mobile network (all costs shared with fixed services have been allocated in proportion to traffic volumes)



Volume data obtained from Telecom

Mobile Subscribers

- 2G – 12 million
- 3G – 3 million

Mobile Traffic (minutes p.a.)

- On-net – 4,000m
- Termination – 2,000m
- Origination – 1,500m

For the purpose of this exercise you may assume that there are no other mobile services – SMS and data are insignificant.



Your task

GROUP WORK EXERCISE 1

As CEAT, advise the Board of TRAN as follows:

- Calculate or estimate the approximate SAC, FAC and LRIC (TSLRIC) of mobile termination for 2G, 3G and combined?
- Which cost standard should apply to the mobile termination rate (MTR)? Why?
- Should there be a different MTR for 2G and 3G traffic? Why or why not?



Reporting format

	2G	3G	2G+3G
SAC			
FAC			
TSLRIC			

All costs to be shown in \$ cents per minute

