Alternatives to Costing Methodologies: Cost proxies, Best practices

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Note: The views expressed in this presentation are those of the author and do not necessarily reflect the opinions of the ITU or its membership.

Agenda

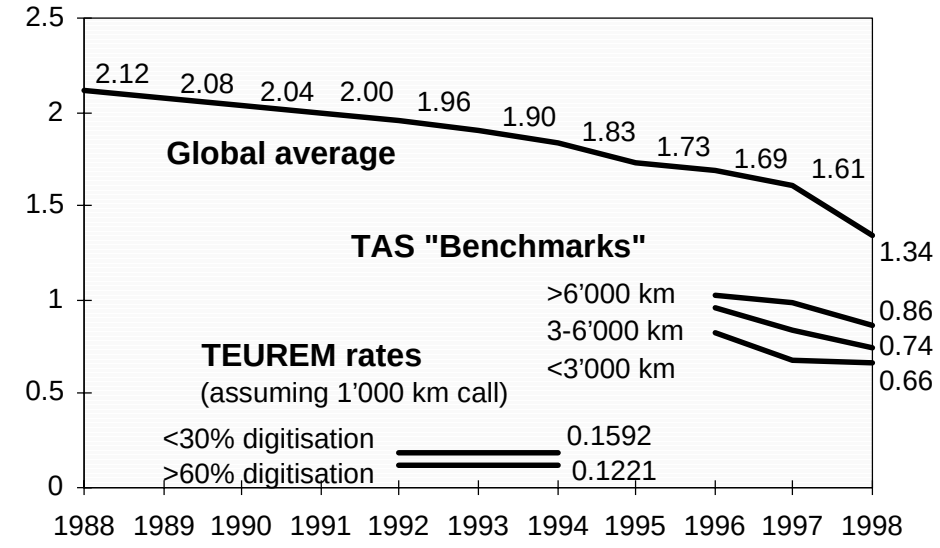
- Why not just use a cost model?
- Cost proxies
  - ⇨ FCC Benchmarks
  - ⇨ Cost proxies for transit routes
- "Best practices"
  - ⇨ Teledensity bands
  - ⇨ Published settlement rate data
- A possible way forward
  - ⇨ Focus Group Chairman's Working Document (http://www.itu.int/intset/focus/index.html)

Why not use a cost model?

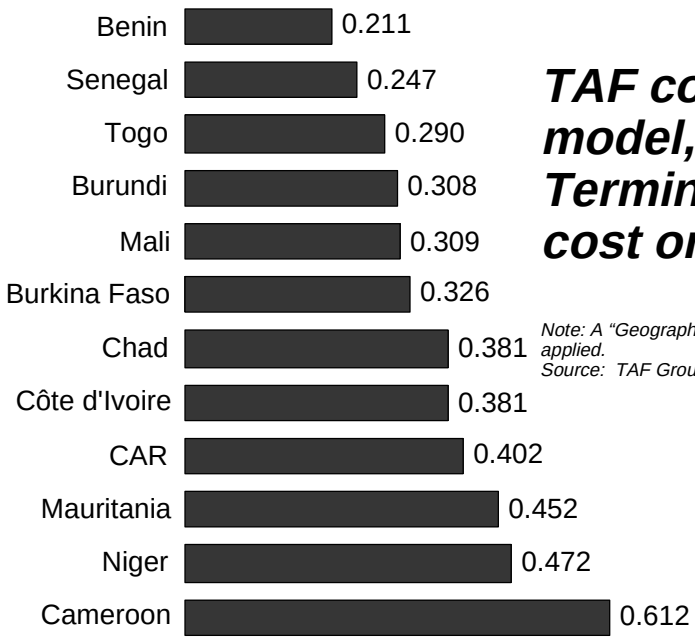
Using a multilaterally agreed, universal cost model would be an ideal solution but:

- **Alternative cost methodologies produce very different results:**
  - ⇨ **Fully distributed costs (e.g., TAS model)**
  - ⇨ **Long-run incremental costs (e.g., OFTEL cost model for interconnection pricing)**
- **Regional Tariff Groups (TAF, TAS, TEUREM) have followed different approaches**
- **Costing methodologies require cost data which many PTOs do not have**

Global average, TAS and TEUREM accounting rates, in SDR per minute



Source: ITU-T Study Group 3



TAF cost model, 1998. Termination cost on SDRs

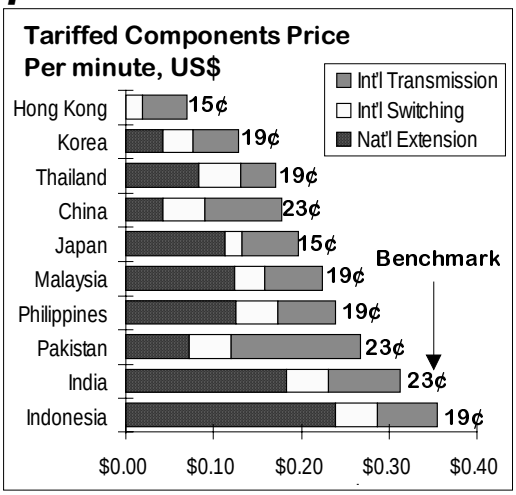
Note: A "Geographical correction" is applied.
Source: TAF Group.

Alternative 1: Cost proxies

- **What is a cost proxy?**
  - ⇨ **A surrogate or substitute used in the absence of reliable data or an agreed methodology**
- **Possible cost proxies for direct relations:**
  - ⇨ **Interconnect prices (national extension)**
  - ⇨ **Domestic call prices (national extension)**
  - ⇨ **TEUREM component value for switching**
  - ⇨ **International Private Line (IPL) prices (int'l transmission)**
- **Possible cost proxies for transit relations:**
  - ⇨ **International circuit costs**
  - ⇨ **Best practice IPL costs**

A cost proxy example: FCC Benchmarks

- **3 elements:**
  - ⇨ **international transmission;**
  - ⇨ **int'l gateway;**
  - ⇨ **national extension**
- **Based on operator's tariffs and FCC estimates**
- **For each income level, an average of the tariff rates for countries in that category were used to set the benchmark**

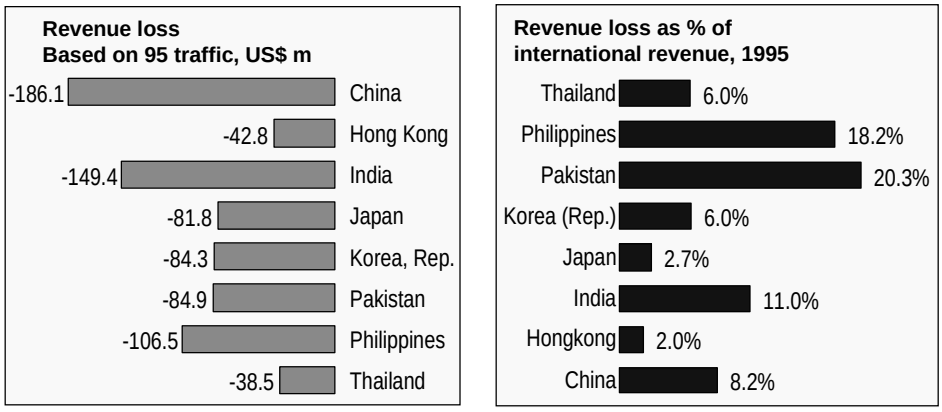


NB: Many smaller countries were excluded from the analysis but are nonetheless included in income group averages

Who fits where? Asia-Pacific region

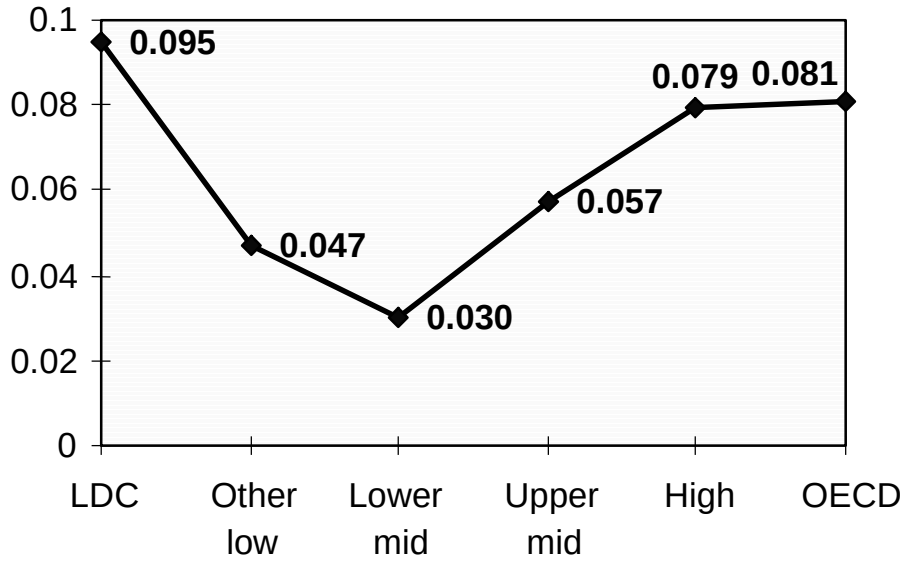
Income group	Teledensity Less Than One	Low Income (less than $726)	Lower Middle Income ($726-$2,895)	Upper Middle Income ($2,896-8,955)	High Income ($8,956 or more)
Benchmark rate	23¢	23¢	19¢	19¢	15¢
Deadline	1/1/2003	1/1/2002	1/1/2001	1/1/2000	1/1/1999
Countries	Afghanistan Bangladesh Bhutan Cambodia Lao PDR Myanmar Nepal	China India Mongolia Pakistan Sri Lanka Viet Nam	Fiji Indonesia Iran Kiribati Korea, DPR Maldives Micronesia P. N. Guinea Philippines Thailand Tonga Vanuatu W. Samoa	Korea, Rep. Malaysia N. Caledonia	Australia Brunei Fr. Polynesia Hong Kong Japan Macao New Zealand Singapore Taiwan-China

Potential impact of FCC benchmarks policy



Source: ITU.

Local call prices and national income
In SDRs, for a peak-rate three minute call



Source: ITU Secretariat Contribution No. 26 to Focus Group (http://www.itu.int/intset/focus/transit1.doc)

Weaknesses of cost proxy approach (for direct relations)

- Produces widely disparate results
  - ⇨ Int'l transmission estimates range from less than 1 cent to more than 25 cents per minute
- National tariffs are often not yet rebalanced to reflect underlying cost trends
  - ⇨ Local call price is "zero" in a number of economies; unrelated to costs elsewhere
  - ⇨ Interconnect prices often reflect "negotiated" prices, not necessarily costs
- Insufficient countries covered by FCC
- FCC methodology under legal challenge

Proposed application of cost proxy approach for transit shares

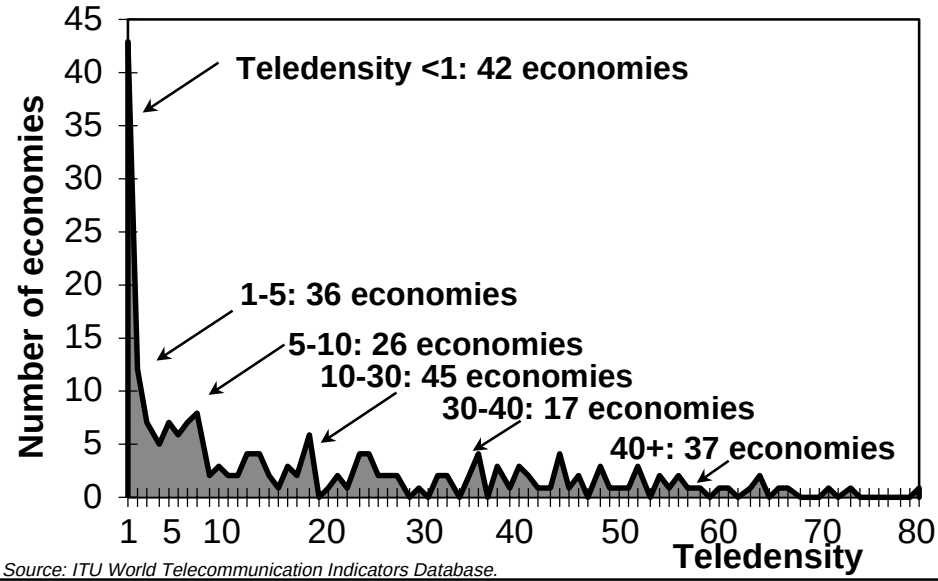
Routes with <350 K mins	350K - 1.5m mins	Routes with >1.5m mins
64 kbit/s	256 kbit/s	1.5 Mbit/s
0.06 SDR	0.05 SDR	0.03 SDR
8.0¢	6.7¢	4.0¢

Source: Focus Group Chairman's Working Document.

Alternative 2: "Best practices"

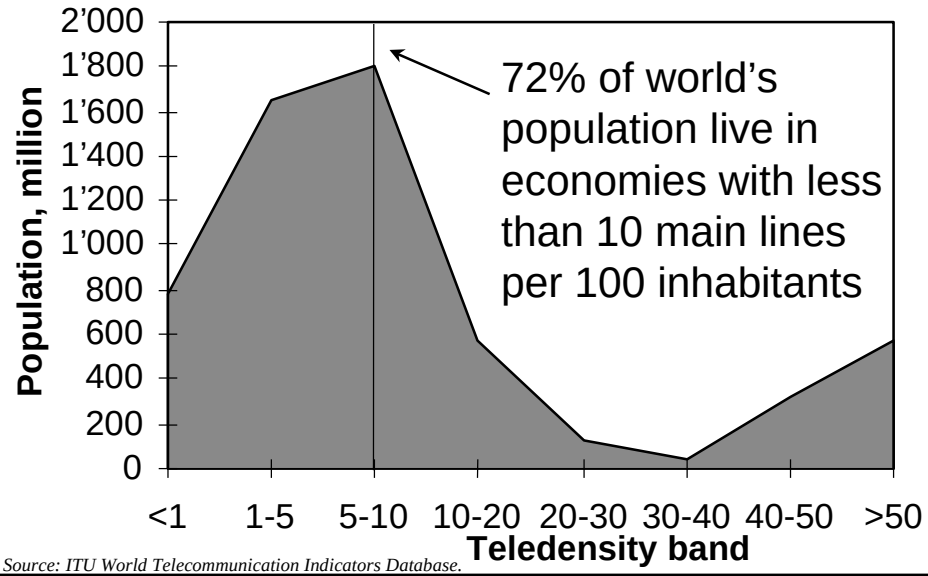
- **What is "best practice"?**
  - ⇨ **Best practice refers to a business technique whereby a company might compare itself to the acknowledged leaders in a particular field**
- **How can best practices be applied to defining target rates?**
  - ⇨ **Dividing countries into different categories, for instance by teledensity or income group**
  - ⇨ **Analysing published settlement rate data (e.g., published by FCC, OFTEL, TCNZ)**
  - ⇨ **Taking an average of the lowest [5] [20%] of existing published rates in each category**

Teledensity by number of economies



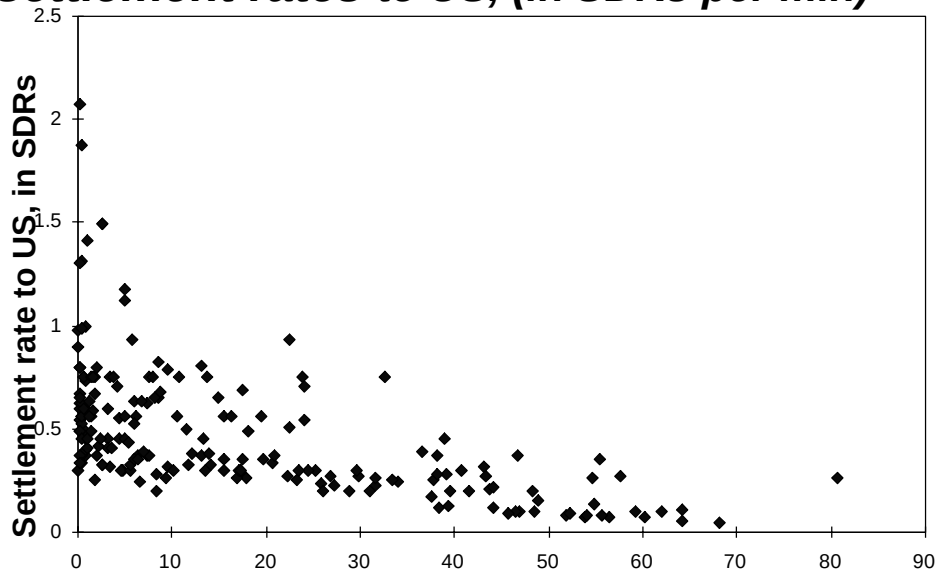
Source: ITU World Telecommunication Indicators Database.

Teledensity by share of global population



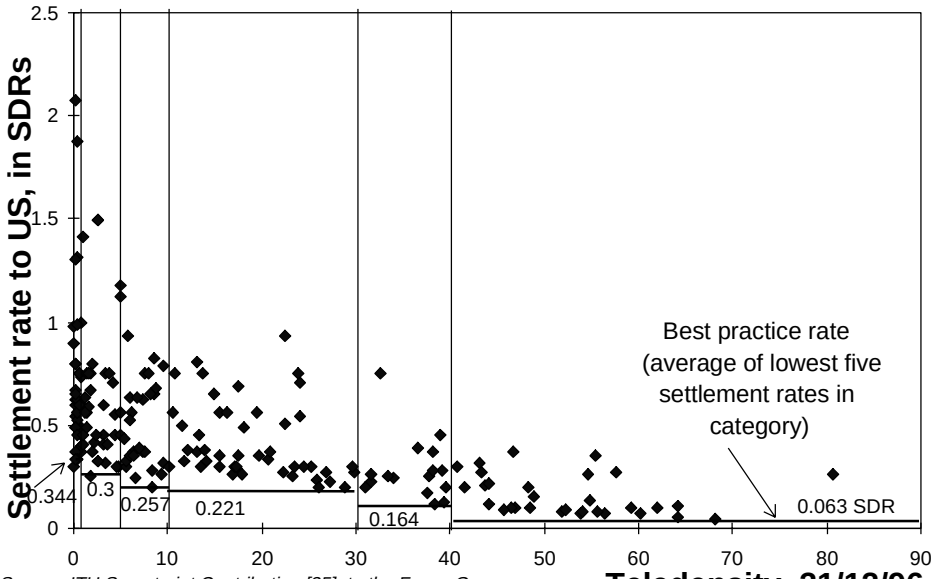
Source: ITU World Telecommunication Indicators Database.

Relationship between teledensity and settlement rates to US, (in SDRs per min)



Source: ITU Secretariat Contribution [35] to the Focus Group.

Illustration of "best practice" rates, based on average of lowest five



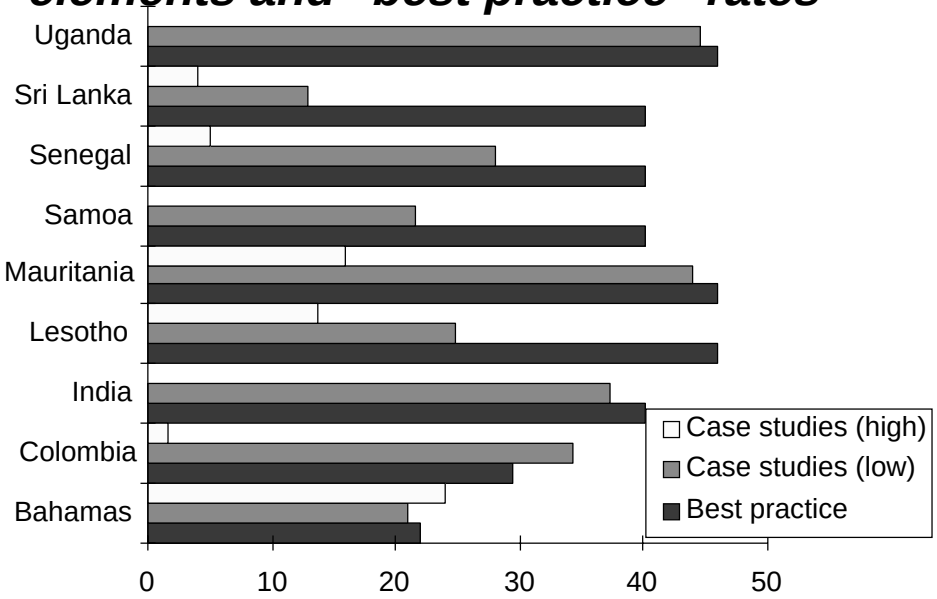
Source: ITU Secretariat Contribution [35] to the Focus Group.

Examples of possible target rates using a "best practices" methodology

T < 1	1<T<5	5<T<10	10<T<30	30<T<40	T>40
0.344 SDR	0.300 SDR	0.257 SDR	0.221 SDR	0.164 SDR	0.063 SDR
46.0¢	40.0¢	34.1¢	29.5¢	21.9¢	8.0¢

Source: Focus Group Chairman's Working Document.

Comparison of case study cost elements and "best practice" rates



Source: ITU Secretariat Contribution [35] to Focus Group

Methodological questions to be addressed

- **How many categories (e.g., 4, 6, 8?)**
- **How to define "best practice"?**
  - ⇨ **Average of lowest five in each category**
  - ⇨ **Average of lowest 20 per cent in each category**
- **What is the cut-off date for data**
  - ⇨ **1/1/98 for teledensity data**
  - ⇨ **1/1/98, 1/6/98, 1/9/98 for settlement rate data?**
- **What settlement rate data to use?**
  - ⇨ **Only published data, or all data submitted to Focus Group?**

Conclusions

- Cost methodology would be the best approach, but not really feasible within time available
- Cost proxies represents a possible approach, but not necessarily a stable platform for analysis
- “Best practices” approach, based on analysis of published settlement rates, represents a possible consensus approach