Trade in telecommunications & accounting rate reform

Dr Tim Kelly *, Head, Strategy and Policy Unit, International Telecommunication Union, 30 April, 2001



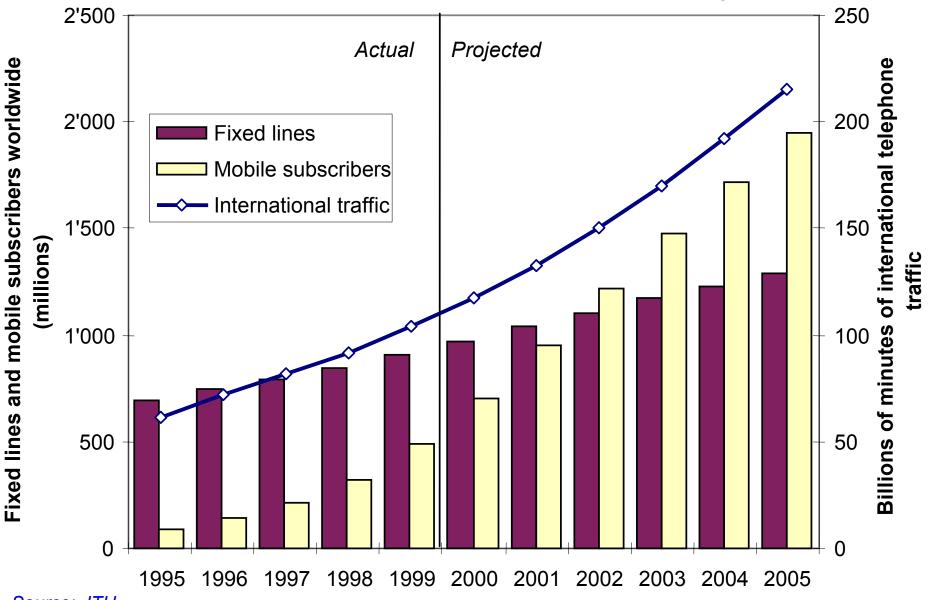
* The views expressed in this presentation are those of the author, and do not necessarily reflect the opinions of the ITU or its membership. Tim Kelly can be contacted at tim.kelly@itu.int.



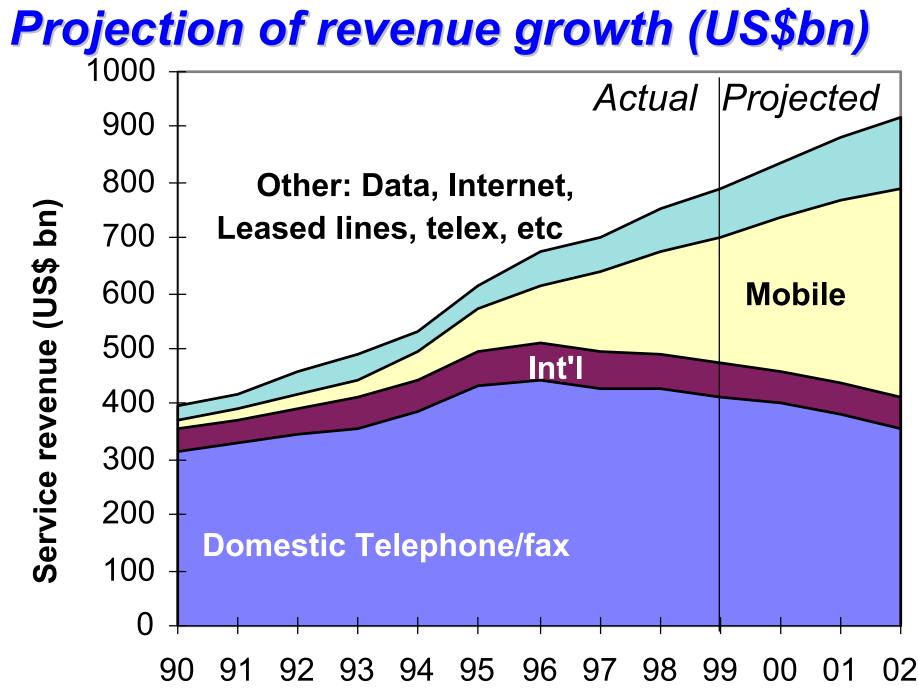
Agenda

- Trends in telecoms worldwide
- Trade in telecommunications
 - The GATS and the WTO Basic Telecoms Agreement
- The stakes:
 - Market liberalisation
 - ⇒ Shift from a bilateral to a multilateral trade regime
- Reform of the accounting rate system
 - What is the accounting rate system?
 - ➡ What are the problems?
 - What are the possible solutions?
- ITU/WTO co-operation
- What does it all add up to?

Projection of growth trends, fixed and cellular subscribers and int'l traffic, 1995-2005

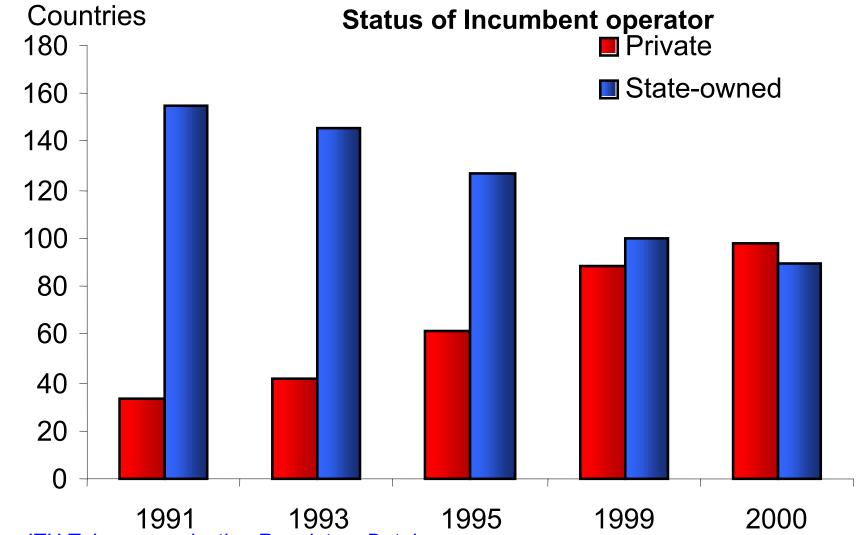


Source: ITU.



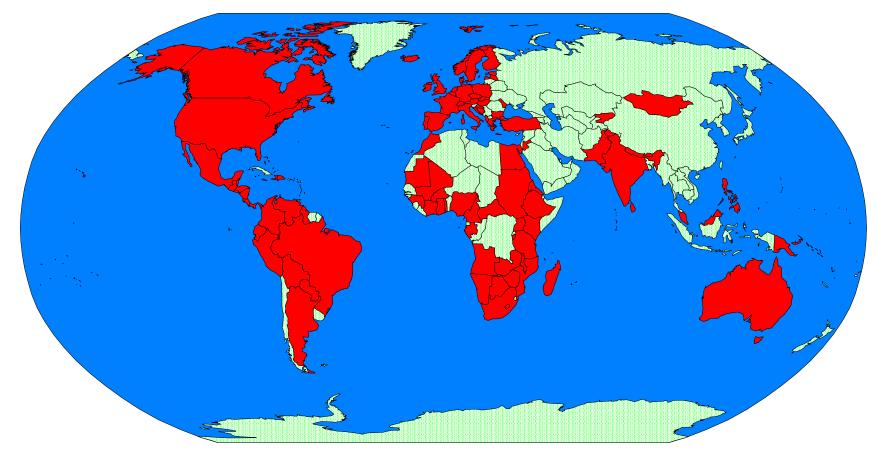
Source: ITU.

Increasing involvement of private sector in supply of services



Source: ITU Telecommunication Regulatory Database.

Role of government shifting from participation to regulation



Source: ITU Telecom Regulatory Database.



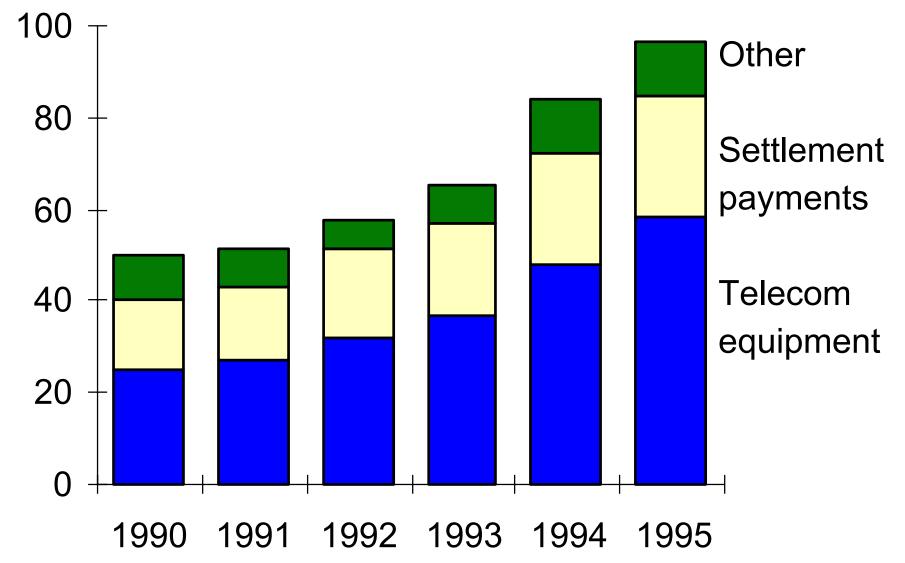
Countries with Separate Regulatory Body



Trade in telecoms

- Dual role of telecommunications
 - ⇒ As a facilitator of trade in other sectors (GATS)
 - ⇒ As a directly traded product and service (BTA)
- How can telecom services be traded? Modes of delivery
 - ⇒ Cross-border (e.g., call re-origination)
 - Commercial presence (e.g., Foreign Direct Investment)
 - Consumption abroad (e.g., calling cards)
 - Movement of staff (e.g., consultancy services)

Global Telecom Trade, US\$ billion

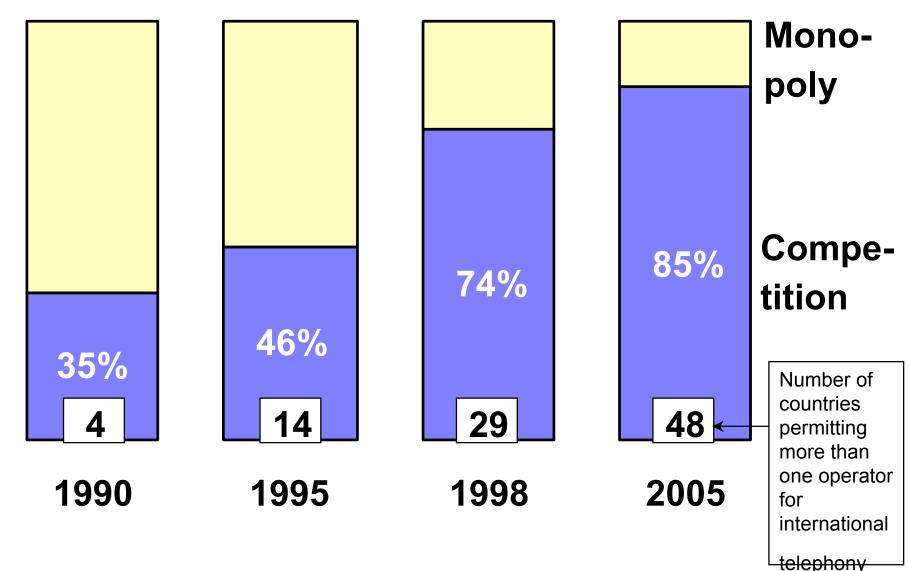


Note: "Other" includes privatisation receipts, cross-border roaming of mobiles, consultancy, FDI, foreign aid etc. *Source:* ITU "World Telecommunication Development Report, 1996/97"

Countries permitting competition in basic telecoms:

<u>1990</u>	1995	<u>1998</u>	
Japan	Australia	Australia	Japan
United Kingdom	Canada	Austria	Korea (Rep.)
United States	Chile	Belgium	Mexico
	Finland	Canada	New Zealand
	Japan	Chile	Netherlands
	Korea (Rep.)	China	Norway
	New Zealand	Denmark	Philippines
	Philippines	El Salvador	Russia
	Sweden	Finland	Spain (Dec 98)
	United Kingdom	France	Sweden
	United States	Germany	Switzerland
		Ghana	Uganda
		Hongkong SAR	UK
		Israel	USA
		Italy	
		Ireland (Dec 98)	plus others

Percentage of outgoing international traffic open to competition



Note: Analysis is based on WTO Basic Telecommunications Commitments and thus presents a minimum level of traffic likely to be open to competitive service provision. *Source:* ITU. WTO.



What's covered, what's not?

<u>Covered in WTO telecoms</u> agreements

Government measures

 Individual country commitments (schedules) providing market access to stated markets in telecom services

 Related agreements (GATS, Information Technology)

Regulatory principles

Commercial presence (foreign direct investment)

Not covered in WTO basic telecoms agreement

Non-government measures (e.g., commercial contracts)

 Market areas not covered in individual commitments or stated as exemptions

Rest of world (including China, Russia etc)

Accounting rates and settlements

Broadcasting and audiovisual industry



Trade in telecommunications

General Agreement on Trade *in Services (GATS) principles*

- Most-favoured nation (MFN), Article II
- Transparency, Article III
- Domestic regulation, Article VI:
 - qualification requirements and procedures
 - ➡ technical standards
 - licensing requirements
- Monopolies and exclusive service supply (Article VIII)
- Market access (Article XVI)
- National Treatment (Article XVII)



Basic Telecom Agreement

- Process initiated in 1994 to extend GATS commitments to basic telecoms (i.e., voice)
- Process reached "standstill" in April '96. Sticking points:
 - Reaching Critical Mass of countries
 - ➡ "One-way by-pass" of accounting rate system
 - Status of mobile satellite services
- Negotiations re-opened, 15 Jan-15 Feb 1997
- Successful conclusion on 15th February
 - ⇒ 69 countries signed agreement
 - 61 countries committed to Regulatory Reference Paper, in whole or in part



Regulatory Reference Paper (1)

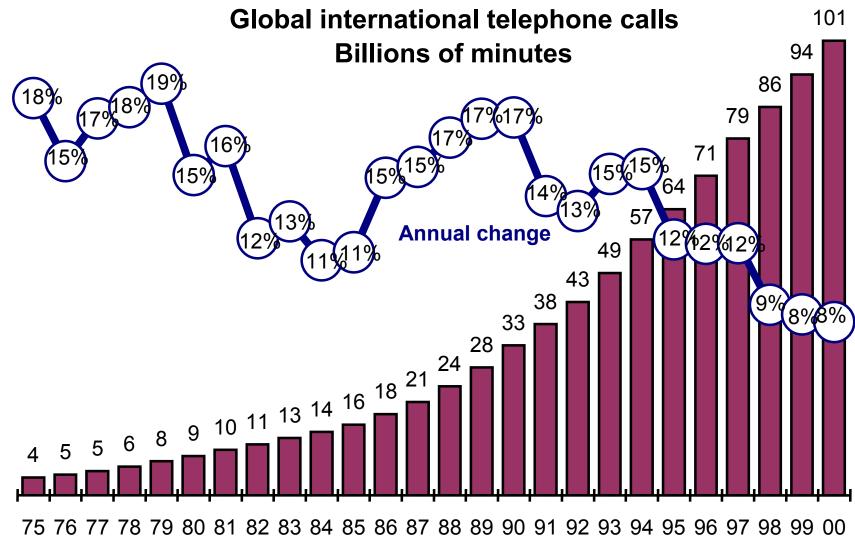
- Competitive safeguards
 - prevention of anti-competitive practices
 - engaging in anti-competitive cross-subsidisation
 - withholding information
- Interconnection
 - provided under non-discriminatory terms
 - ➡ cost-oriented, transparent and timely
 - additional network termination points on request at cost-oriented rates
 - Published terms and rates
 - Disputes procedure



Regulatory Reference Paper (2)

- Universal Service Obligations
 - ⇒ at discretion of Member State
 - no more burdensome than necessary
- Licensing criteria
 - ➡ publicly available
 - ➡ transparent process
- Independent regulatory authority
- Allocation and use of scarce resources
 - objective, timely, transparent and non-discriminatory procedures for allocation

The International Telecom Traffic Roller-coaster



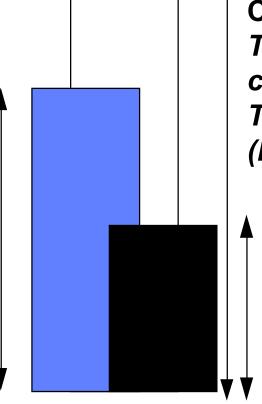
Source: ITU "Trends in Telecom Reform, 2000/01"



Trade in telecommunications

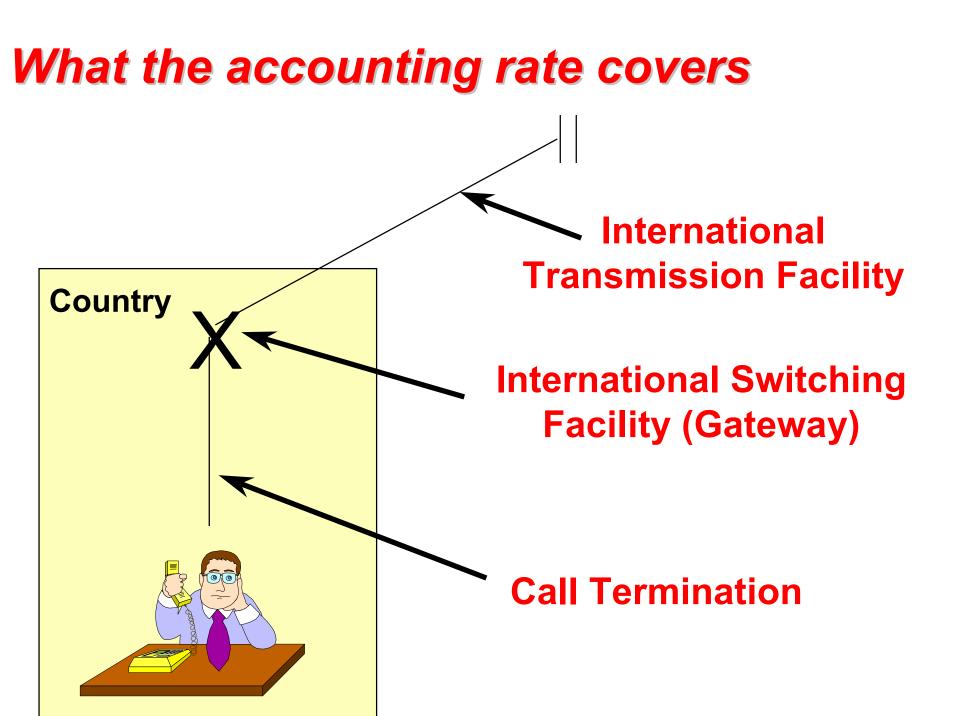
What are accounting and settlement rates?

Accounting rate Internal price between PTOs for a jointly-provided service

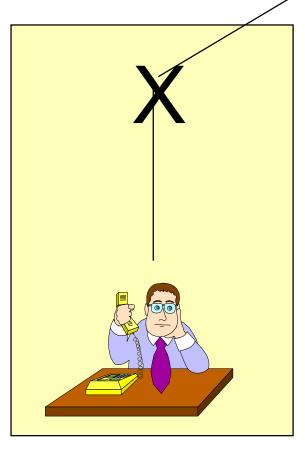


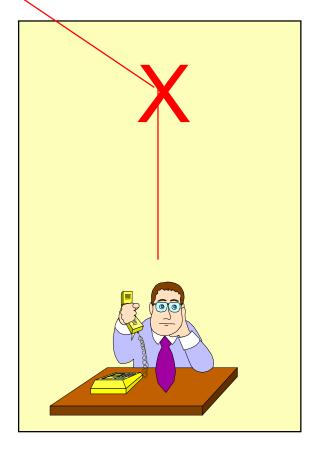
Collection charge The amount charged to the customer by the Public Telecommunication Operator (PTO)

Settlement rate *Payment from one PTO to another. Normally, half the accounting rate*



Traditional regime: Joint provision of service



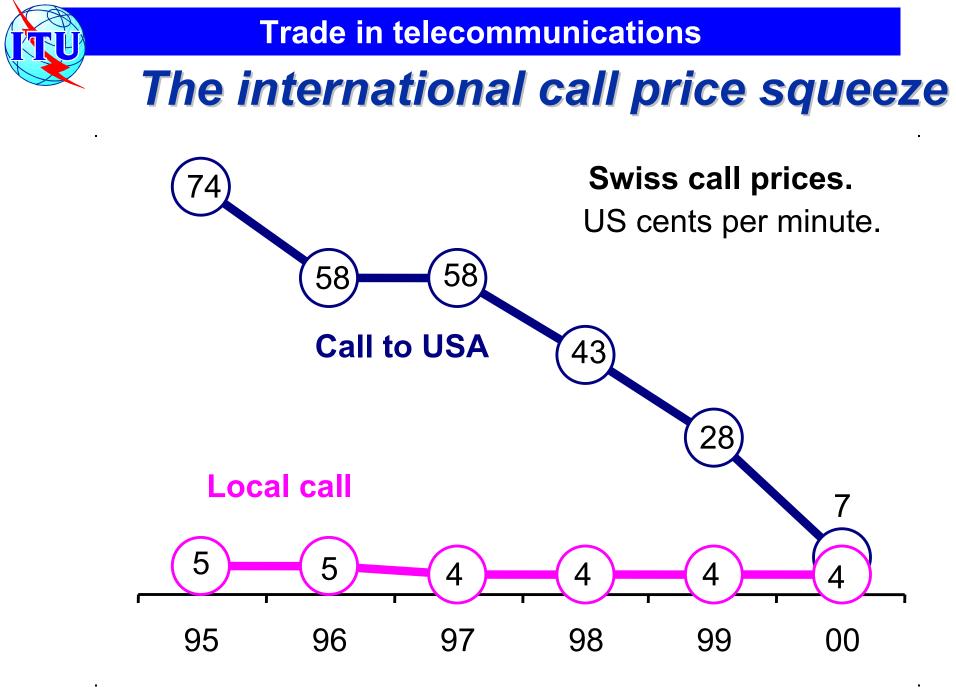


Emerging regime: Market entry and interconnection



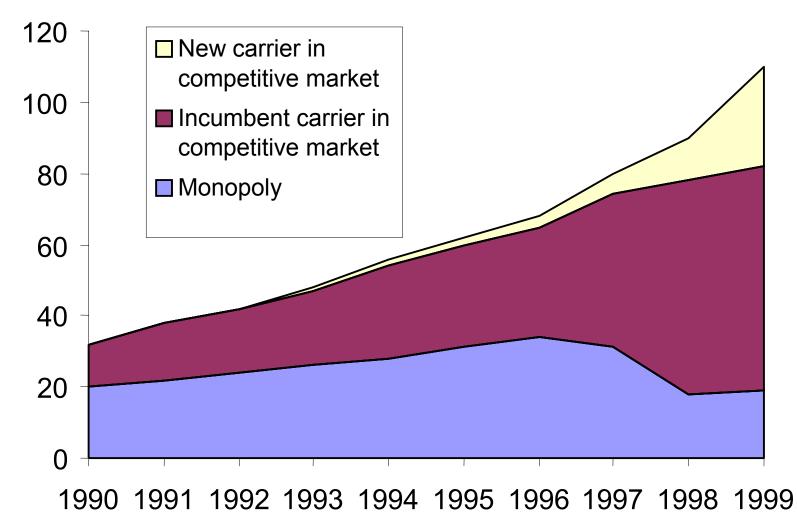
Accounting rate reform

- Accounting rates are traditional way of sharing revenues from int'l services
 - BUT, creates incentives among recipient countries to sustain rates at high level
 - Accounting rate system not well-adapted to competitive market environment
 - ⇒ Large imbalances in traffic and settlement payments
- Strong pressure to move towards a costoriented system
 - BUT, many developing countries are heavily dependent on net settlement payments
 - ➡ Transition may be quicker for some than others
 - ➡ Cost-oriented system may well be asymmetric



Source: ITU "Trends in Telecom Reform, 2000/01"

Increasingly competitive markets International traffic by carrier type, in billions of minutes



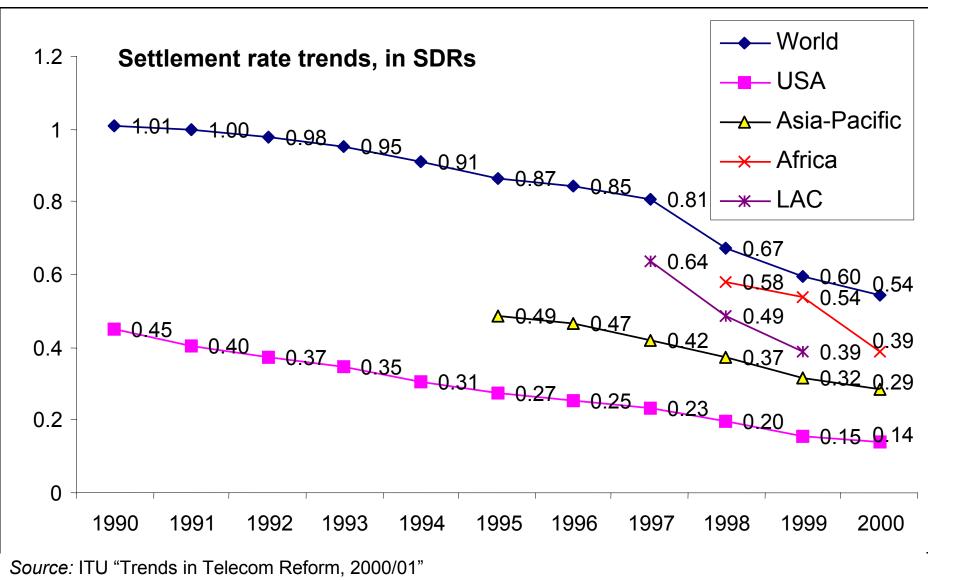
Source: TeleGeography, 2001.

The accounting rate regime unravels

• The bilateral accounting rate regime

- ➡ More than 100 years old
- Rates negotiated and accounts settled bilaterally
- Worked well in time of monopolies, state control and balanced traffic flows
- As market liberalisation increases …
 - ⇒ Price imbalances and traffic imbalances grow
 - Net settlements increase, creating incentives for operators receiving more traffic than they send to keep prices high
 - ... pressure for a multilateral agreement grows
 - WTO basic telecommunications agreement creates possibility for direct interconnection, but agreement avoids discussing accounting rates

Accounting rates are falling; but not fast enough to avoid by-pass?





Trade in telecommunications

Accounting rates and termination charges: What differences?

Accounting rates	Termination charges
Normally symmetric (accounting rate split 50/50)	Not necessarily symmetric (if costs differ)
Bilaterally negotiated	In theory, set unilaterally (though D.150 requires bilateral negotiation)
Discriminatory (different rates with different correspondents)	Non-discriminatory (same interconnect schedule offered to all carriers)
Half-circuit regime (not normally unbundled)	Full-circuit regime (can be unbundled)



Two-track approach

At conclusion of WTO negotiations on basic telecoms,

- Agreement for a moratorium on disputes related to accounting rates until 2000
- That moratorium now being discussed by Trade in Services Council
- At conclusion of ITU World Telecom Policy Forum,
 - Agreement to establish a Focus Group to establish "indicative target rates" for settlement rates in the transition to cost-orientation
 - A range of rates, of between 6 44 US cents per minute established, for countries with differing teledensity, despite strong opposition from the United States

Two alternative scenarios: ITU Focus Group targets, by teledensity (T), to be achieved by 2001 (2004)

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\$0.45	\$0.35	\$0.29	\$0.23	\$0.16	\$0.12	\$0.06

FCC Benchmarks, by income group

Low income, T<1	Low income	Low-mid income	Upper- mid income	High income
\$0.23	\$0.23	\$0.19	\$0.19	\$0.15
2002	2001	2000	1999	1998

Source: ITU Focus Group Report, FCC.

Focus Group Final Report and FCC Benchmarks compared

	FCC Benchmarks	ITU Focus Group
Coverage of analysis	72 countries	224 countries / territories
Range of rates (direct relations)	0.11-0.16 SDR	0.043-0.327 SDR
Transit shares	Not covered	0.03-0.06 SDR
Groups	4 by income + 1 by teledensity	7 by teledensity + 2 others
Target years	Multi-year: 1998, - 99, 2000, -01, -02	Year-end 2001 (2004)
Dependency on net settlements	Not covered	Extended transition

Potential impact of Focus Group Targets & FCC Benchmarks on Case Study Countries

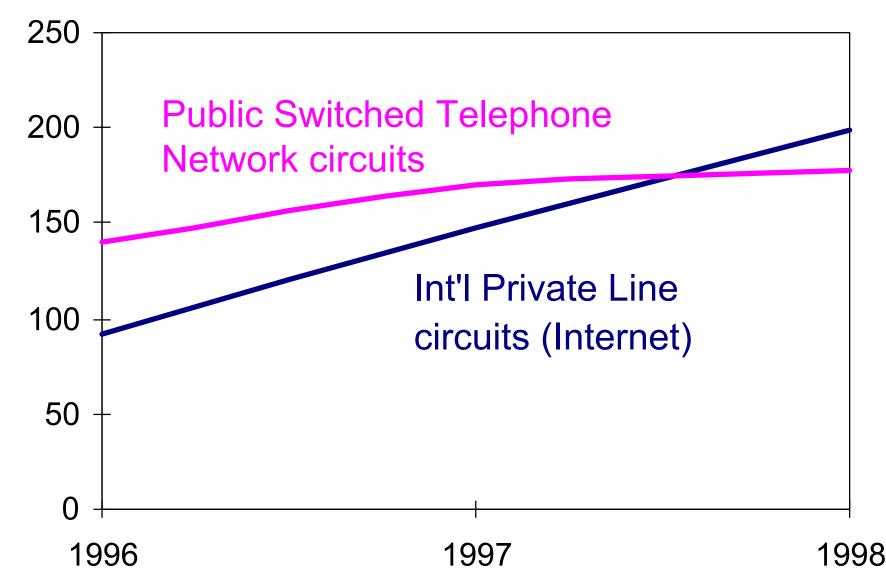
Country	Lowest settlement	Target rate/year	ITU FG change %	FCC % change
Dehemee		0.118 (2001)	40.40/	02.00/
Bahamas	0.225		-18.1%	-93.9%
Colombia	0.375	0.162 (2001)	-22.7%	-35.1%
India	0.592	0.251 (2002)	-18.3%	-31.5%
Lesotho	0.300	0.327 (2001)	-5.0%	-12.2%
Mauritania	0.622	0.327 (2001)	-17.9%	-26.0%
Samoa	0.300	0.312 (2001)	-5.0%	-28.3%
Senegal	0.633	0.312 (2003)	-12.6%	-48.5%
Sri Lanka	0.550	0.251 (2004)	-11.8%	-29.9%
Uganda	0.337	0.327 (2001)	-5.0%	-14.5%

The future (1): Will traffic be "too cheap to meter"? TransAtlantic cables, 1983-2000 100'000 100'000'000 Capacity (voice paths), growing by 10'000'000 64% p.a. 10'000 1'000'000 Cost per voice path (US\$) 100'000 1'000 **Capacity (voice paths** 10'000 100 1'000 Cost per voice path 100 10 (US\$), declining by 10 41% p.a. TAT-9 TAT-10 T-11 TAT-7 TAT-8 T-12/13 Gemini TAT-14 1983 1988 1992 1993 1995 1998 2000 1991

Source: ITU, TeleGeography Inc., FCC.

Note: Voice-path numbers assume a compression ratio of 5:1 to number of circuits

The future (2): Will IP render PSTN circuits obsolete? International circuit usage



Note: Based on usage of circuits between the US and the rest of the world. *Source:* FCC.



ITU/WTO Co-operation

- Opinion A of 1998 World Telecom Policy Forum Recommends applying the WTO Regulatory Reference Principles in ITU Member States
 - Competitive safeguards
 - Interconnection
 - Universal service
 - ➡ Licensing
 - Independent regulators
 - Allocation and use of scarce resources

Co-operation agreement between ITU and WTO considered by ITU Plenipotentiary and WTO Trade in Services Council and signed on 22 Nov. 2000 International interconnection: Issues for regulators

- Transparency: Should regulators require the publication or disclosure of settlement rates and/or interconnection rates?
- Intervention: What circumstances might justify intervention in negotiation of accounting rates or establishment of interconnect rates?
- Unilateral action: How should regulators respond to possible unilateral action by foreign regulators in setting benchmark rates?
- Mobile international connection: Does the development of 3G services require special attention from regulators?



What does it all add up to?

Philosophical

- Facilitating the transition to a competitive market environment
- ⇒ Birth of a global information society
- Telecommunications as a traded service

Practical

- Shift from a revenue-sharing to a cost-oriented regime for international telecommunications
- ➡ Market liberalisation now the dominant paradigm
- Efforts to provide a "soft landing" for those countries likely to be hardest hit by changes