Trade in Telecom Services

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The views expressed in this presentation are those of the author and do not necessarily reflect the opinions of ITU or its Membership. The author can contacted by e-mail at tim.kelly@itu.int.

Agenda: Trade in Telecom Services

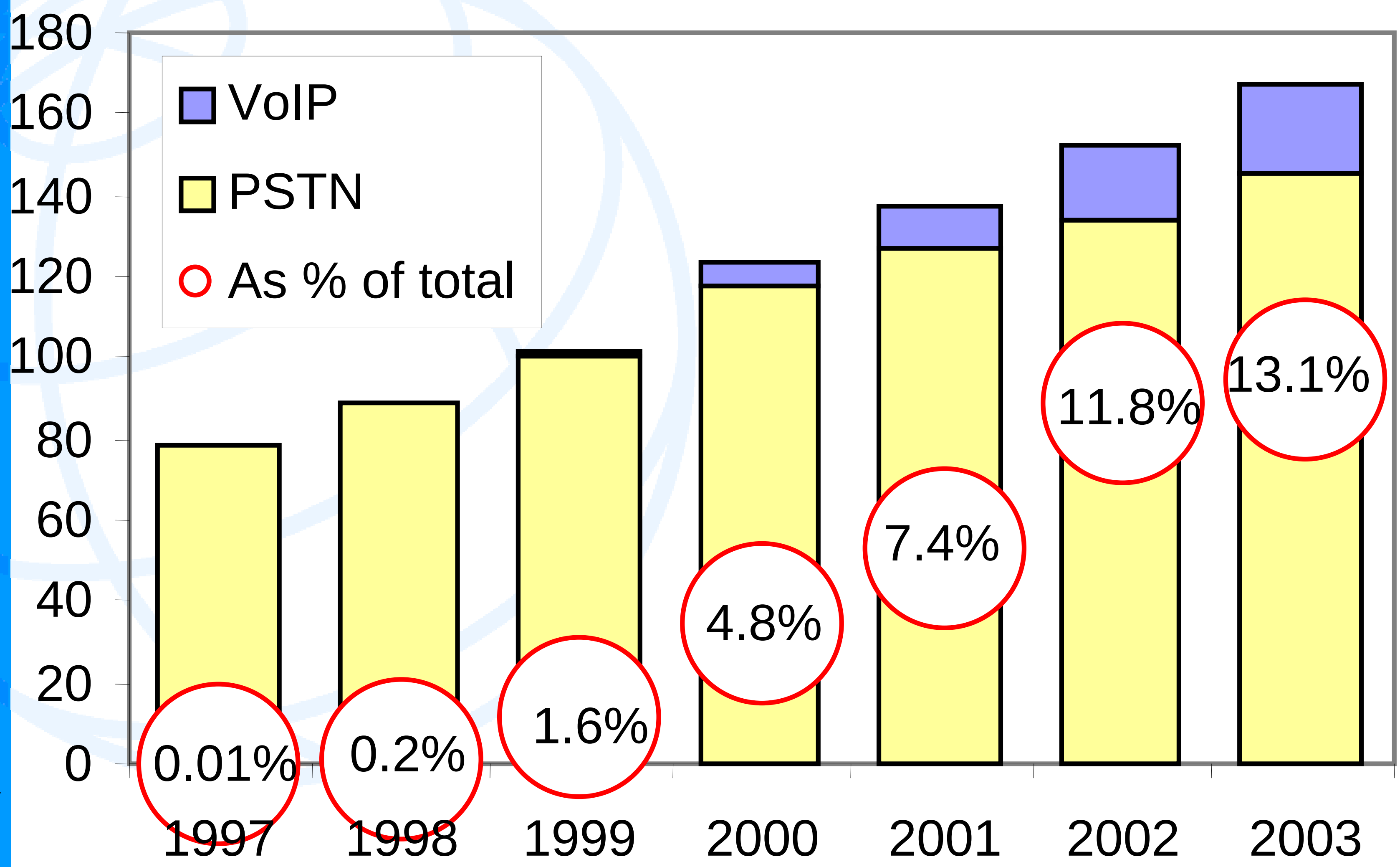
- The theory
  - How to trade telecom services
  - How it has affected the telecom services market
- The history
  - A brief introduction to accounting rates
  - Basic Telecoms Agreement (1997)
  - Current status of liberalisation worldwide
- The market
  - Trends in International telecom services
  - How much has changed since 1997?

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., international calls)
  - Commercial presence (e.g., Foreign Direct Investment)
  - Consumption abroad (e.g., cross-border roaming of mobiles)
  - Movement of staff (e.g., consultancy services)

International voice traffic

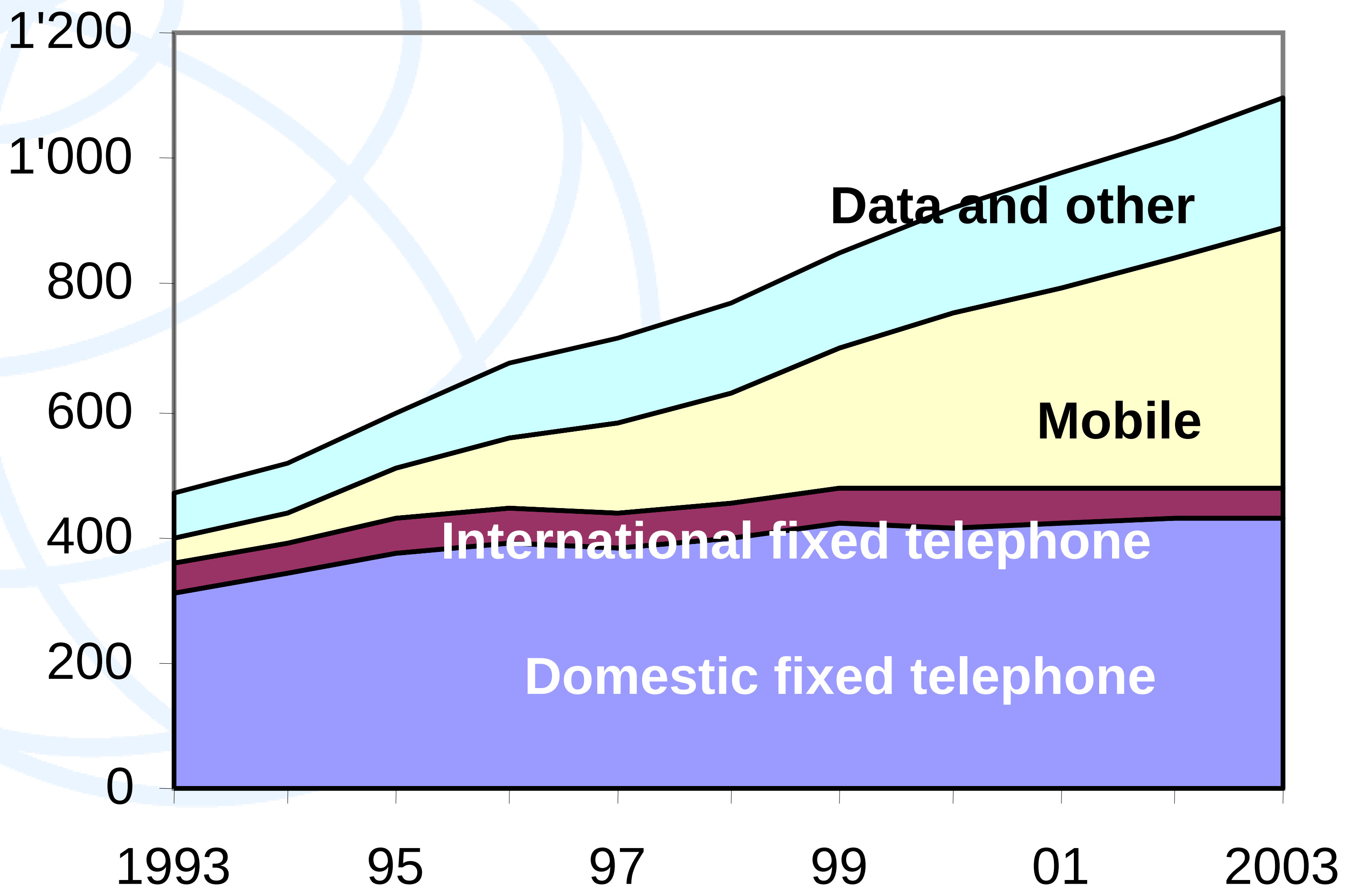
(in billions of minutes)



Source: ITU / TeleGeography

Sources of telecom revenue

Worldwide, in US$ billions



Source: ITU World Telecom Indicators Database.

General Agreement on Trade in Services (GATS) principles relevant to telecoms

- 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)
- Negotiating Group on Basic Telecoms (NGBT)
- 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 1997
  - 69 countries signed agreement
  - 61 countries committed to Regulatory Reference Paper, in whole or in part

Regulatory Reference Paper (1)

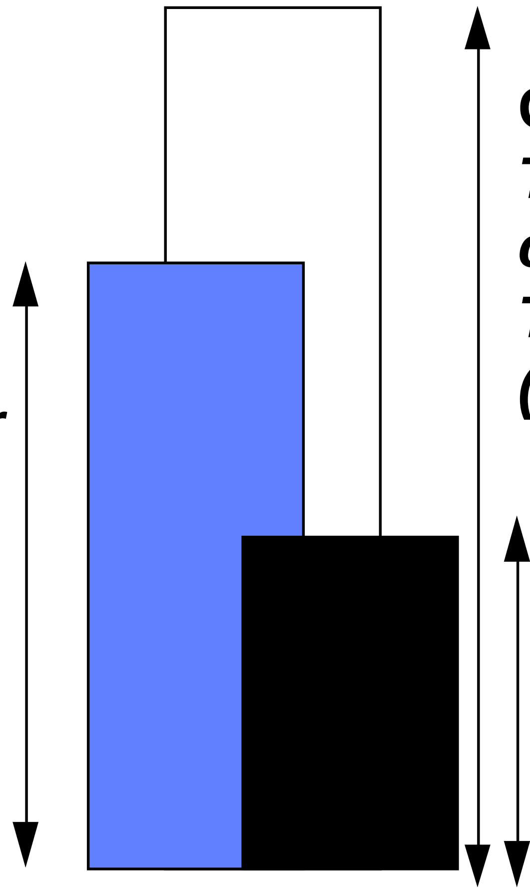
- **Competitive safeguards**
  - prevention of anti-competitive practices
  - engaging in anti-competitive cross-subsidisation
  - withholding information
- **Interconnection**
  - provided under non-discriminatory terms
  - cost-oriented, transparent and timely
  - additional network termination points 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

What are accounting and settlement rates?

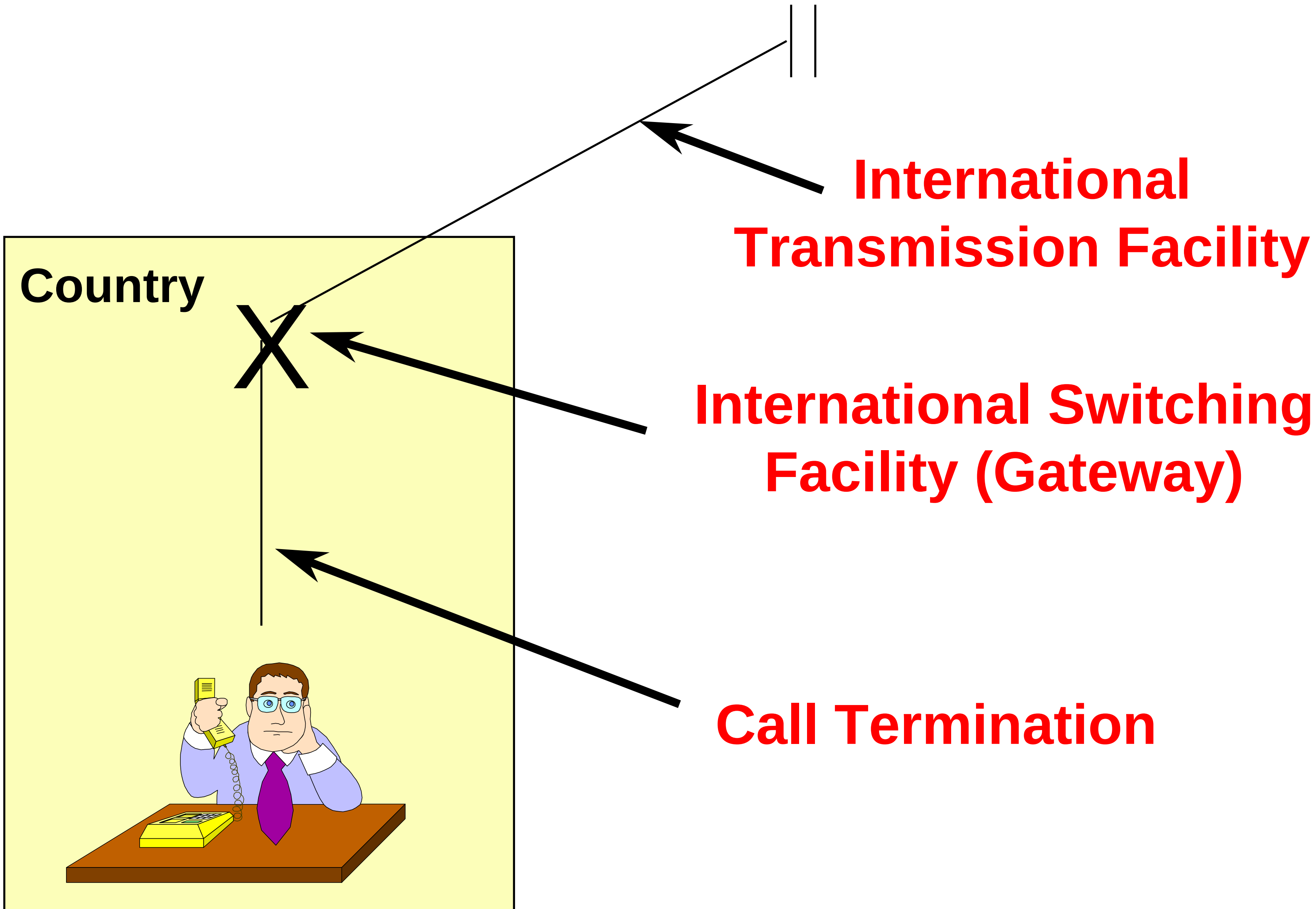
Accounting rate
Internal price between PTOs for a jointly-provided service



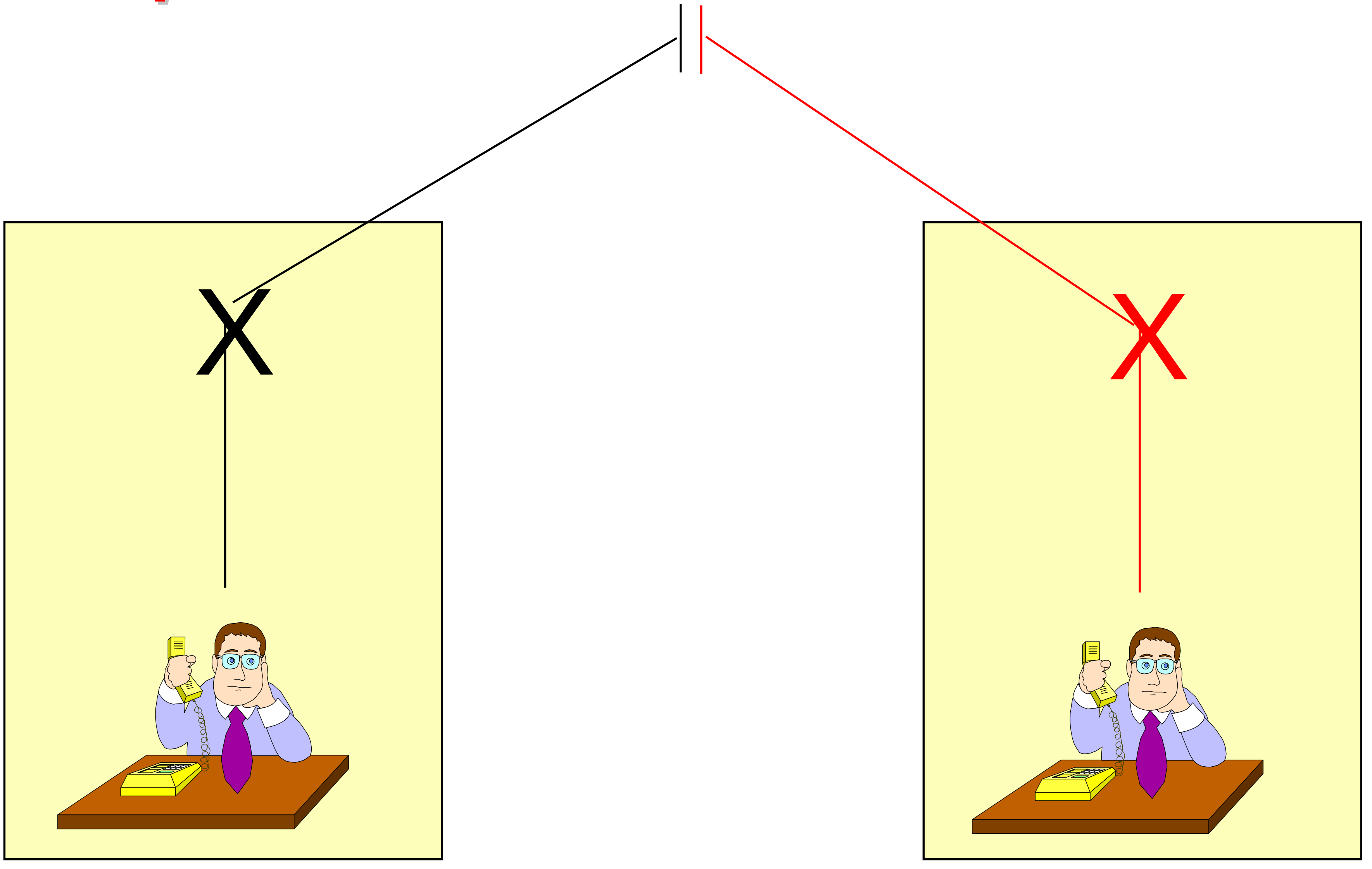
Collection charge
The amount charged to the customer by the Public Telecommunication Operator (PTO)

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

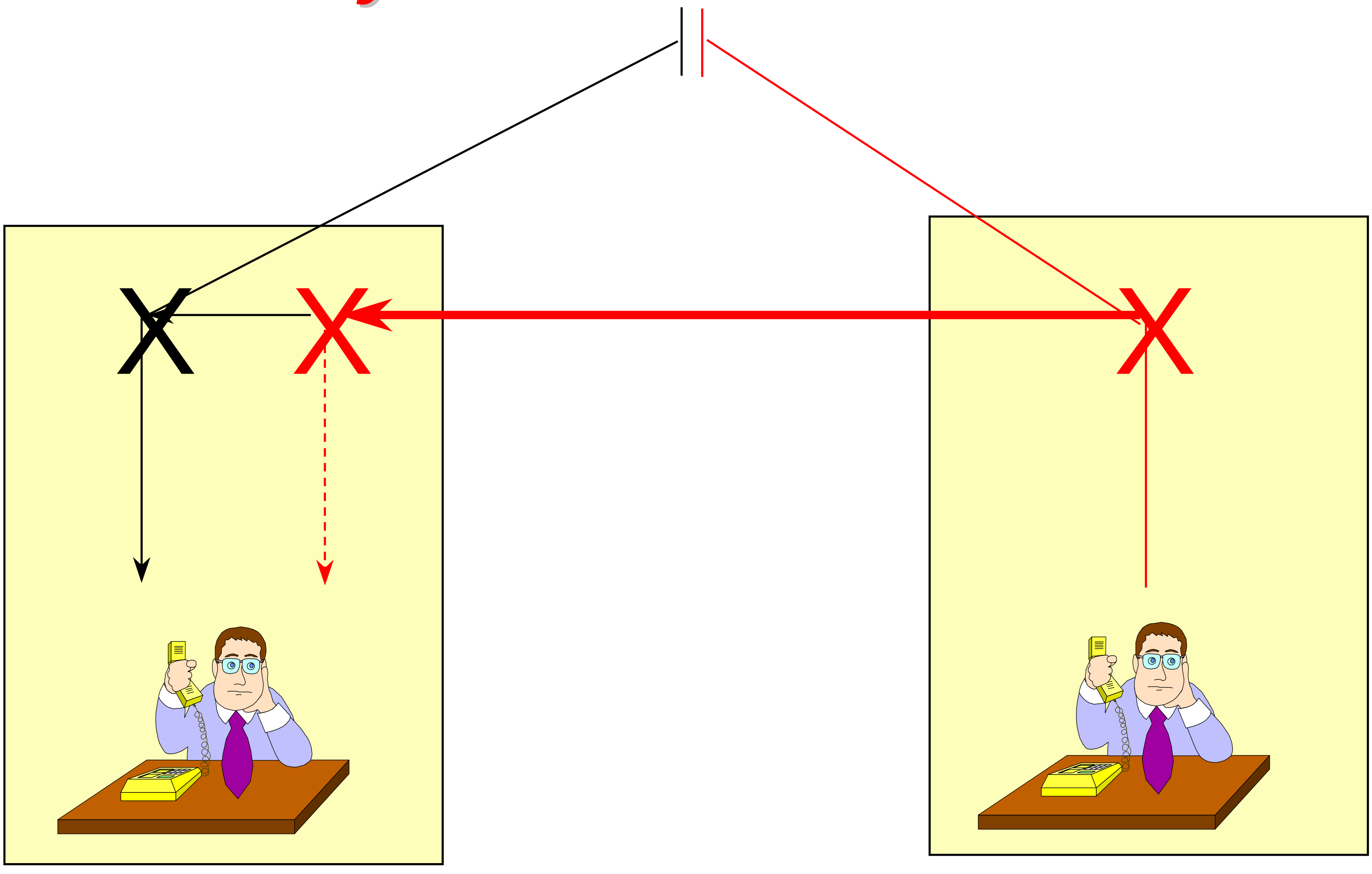
What the accounting rate covers



Traditional regime:
Joint provision of service



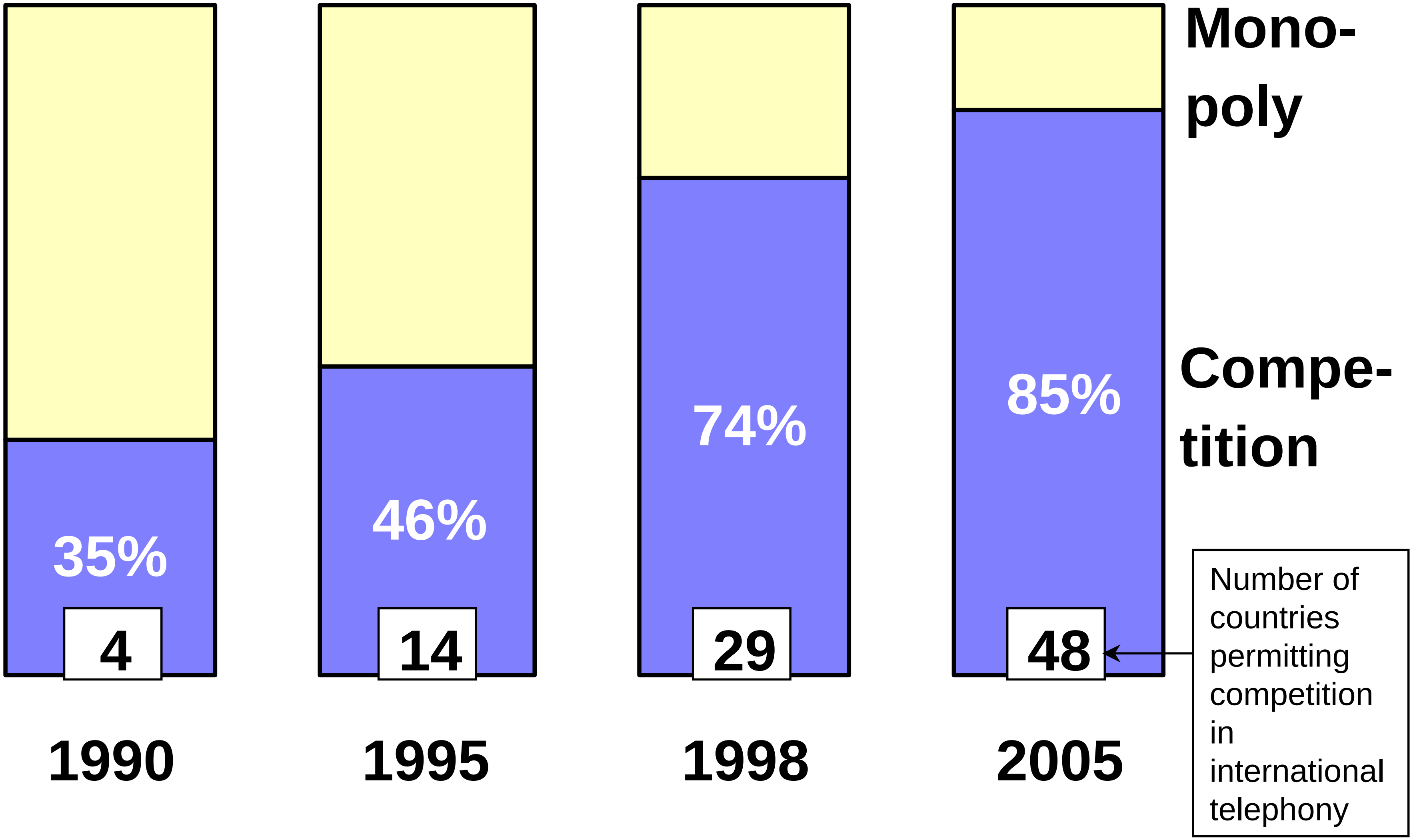
Trade-based regime:
Market entry and interconnection



Accounting rates and international interconnection rates: What differences?

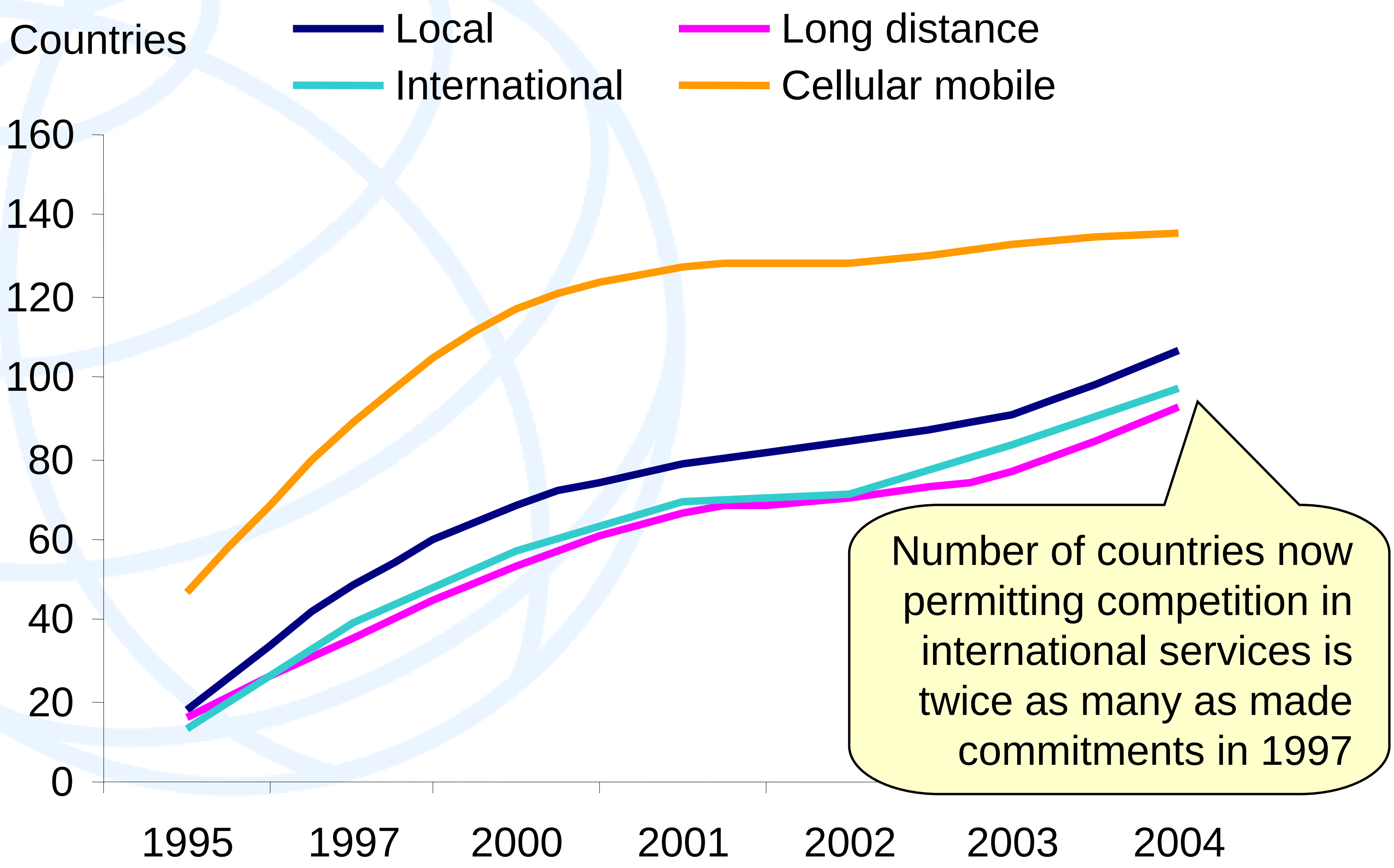
Accounting rates	*International interconnection rates*
Normally symmetric (accounting rate split 50/50)	Asymmetric (charges may vary between countries)
Bilaterally negotiated	Set unilaterally, but subject to trade discipline
Discriminatory (different rates with different correspondents)	Non-discriminatory (same reference interconnect offer offered to all carriers)
Half-circuit regime (not normally unbundled)	Full-circuit regime (can be unbundled)

Percentage of outgoing international traffic open to competition



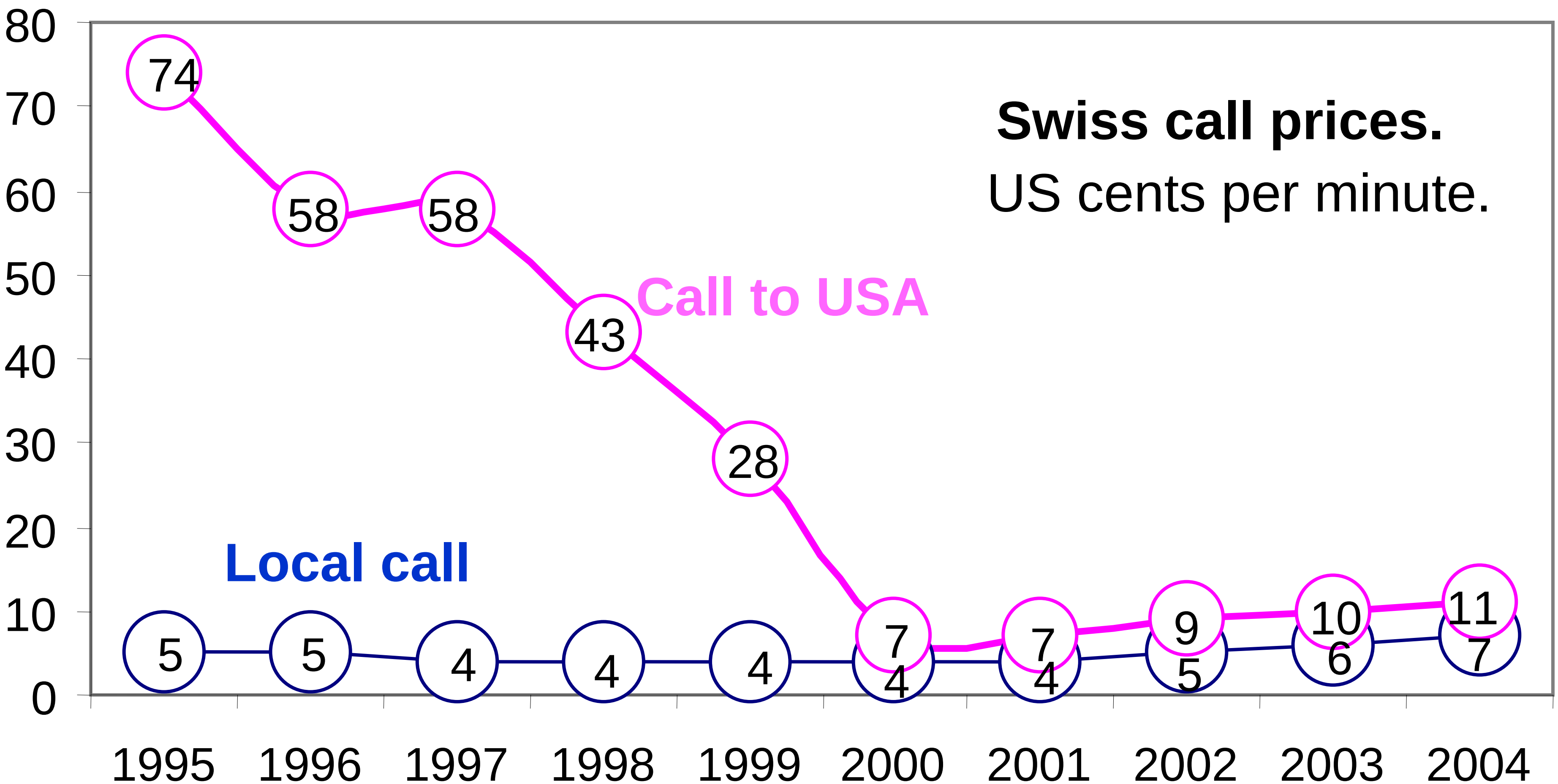
Note: Analysis is based on WTO Basic Telecommunications Commitments and thus presents a minimum level of traffic likely to be open to competitive service provision. *Source:* ITU, WTO.

Number of countries allowing competition, by service



Source: ITU Telecom Regulatory Database.

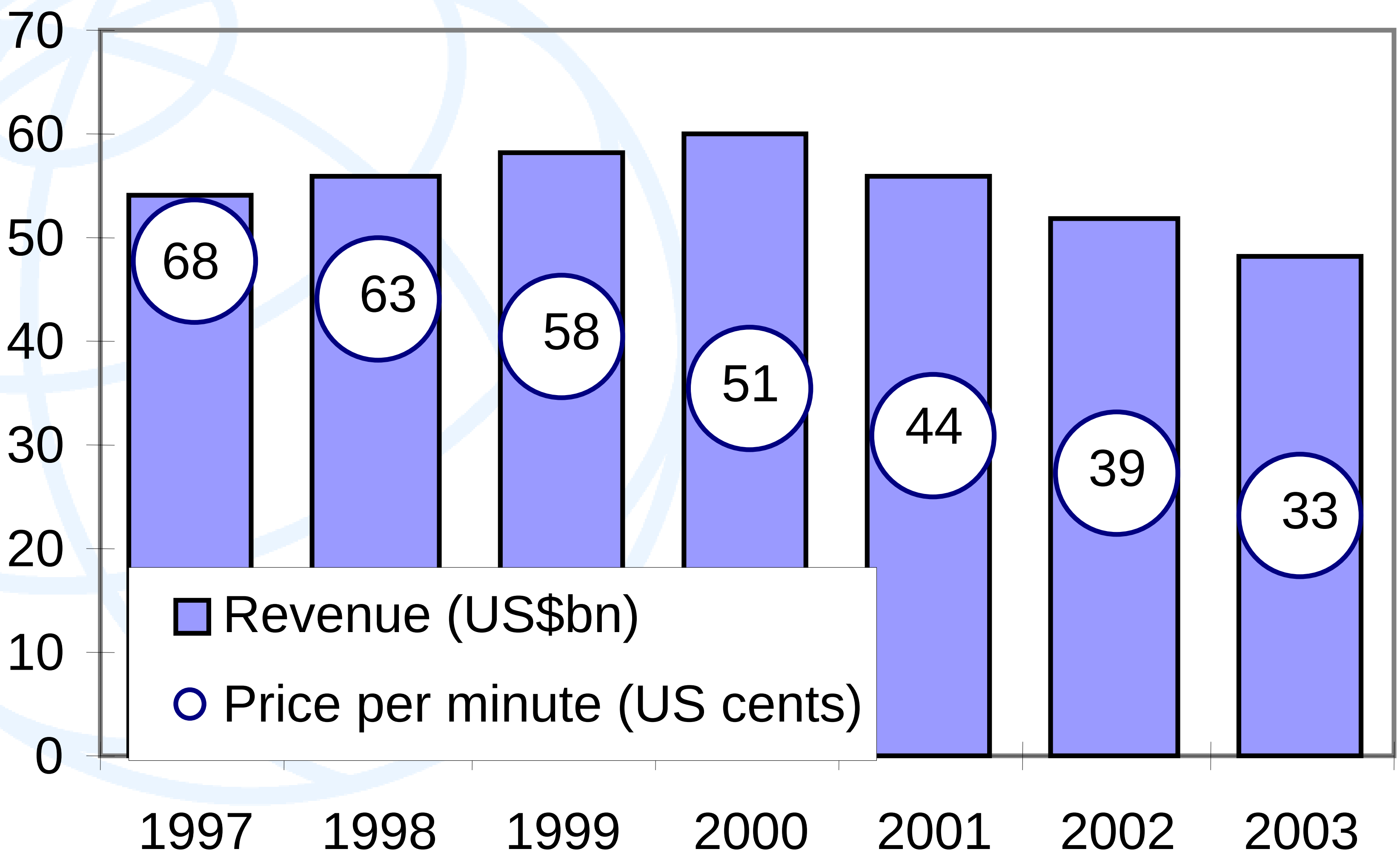
The international call price squeeze



Source: ITU “Trends in Telecom Reform, 2000/01”

International voice traffic trends

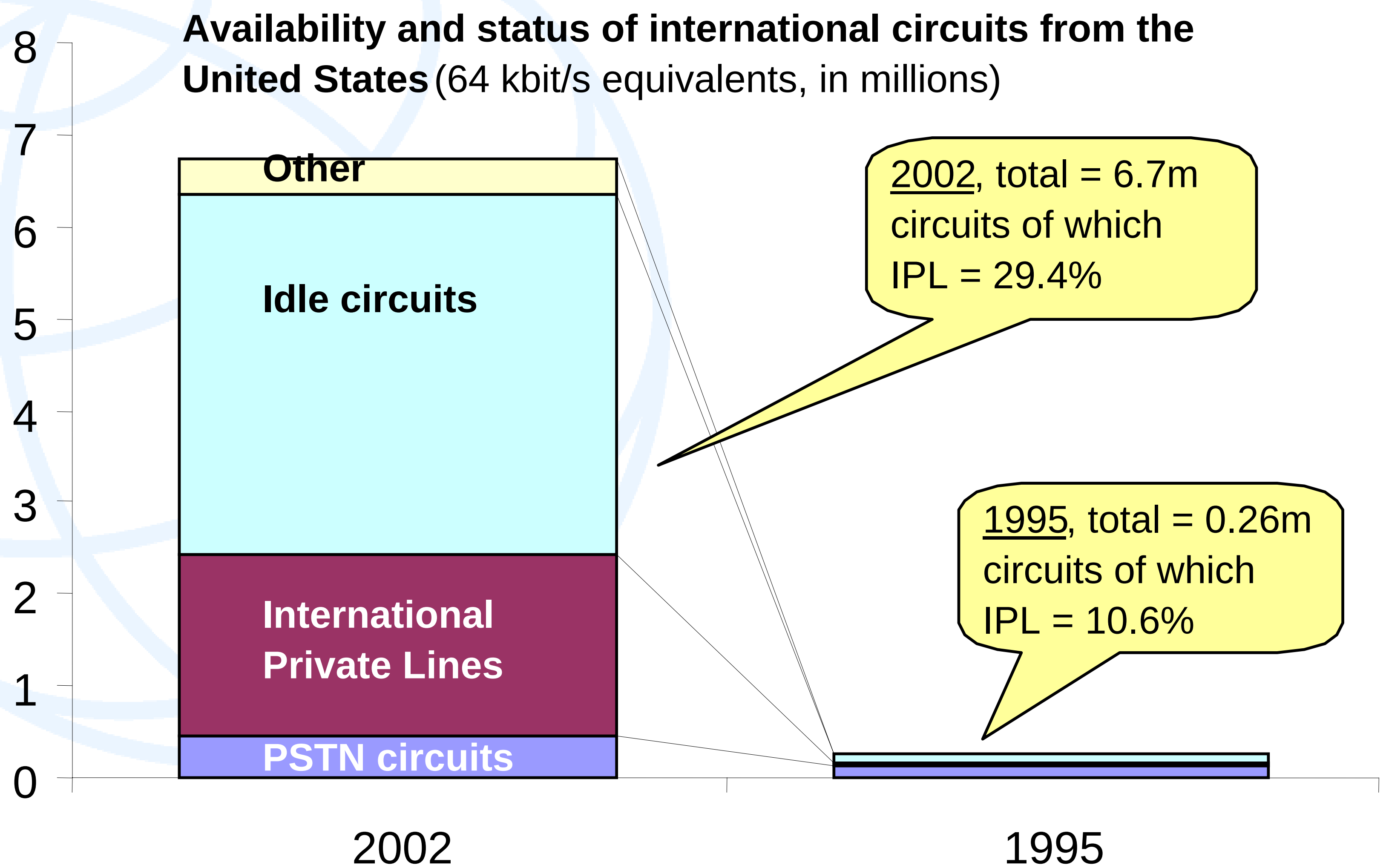
Revenue (US$bn) and price per min (cents)



Source: ITU World Telecom Indicators Database.

Changing mix of int’l circuits

Rise of international private lines



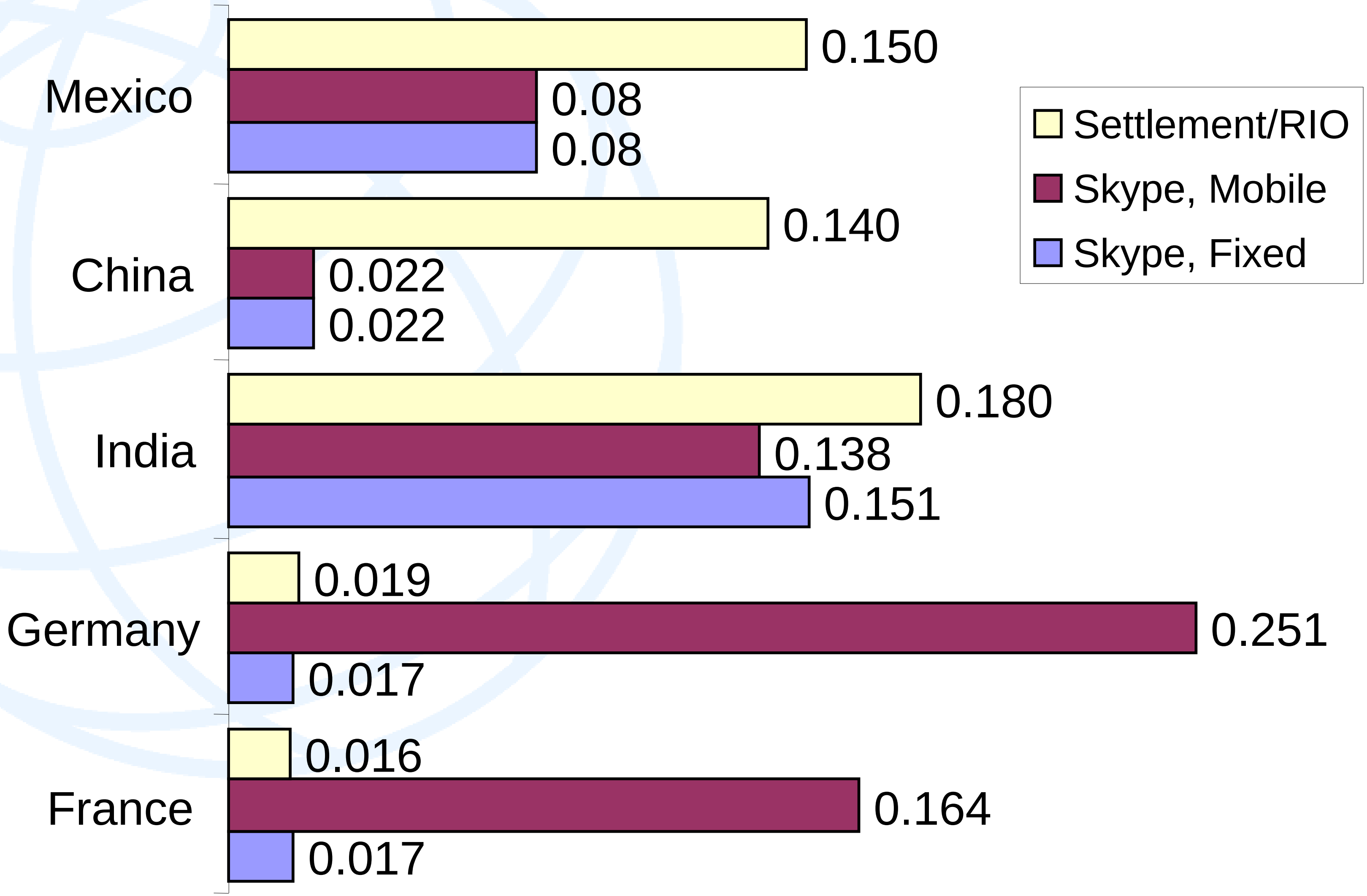
Source: ITU, adapted from FCC Circuit Status Report.

The "third coming" of IP Telephony

- **1995-1999:**
  - **"Internet phone", offered primarily over the public Internet (e.g. FreeWorld Dial-up, DialPad)**
- **2000-2002**
  - **"VoIP", offered as discounted telephony over IP-based networks (e.g. Net2Phone, iBasis)**
  - **Collapse of dot.com bubble left many VoIP companies struggling as incumbent PTOs also offered VoIP services or acquired VoIP operators (e.g. China Telecom, Teleglobe)**
- **2003-present**
  - **"Voice over broadband", offered as free or flat-rate chat plus discounted calls to PSTN/mobile users (e.g. Vonage, Skype)**
  - **"Corporate IP", as users shift both data and voice to a unified IP platform**

Selected rates for call termination

In Euro cents per minute

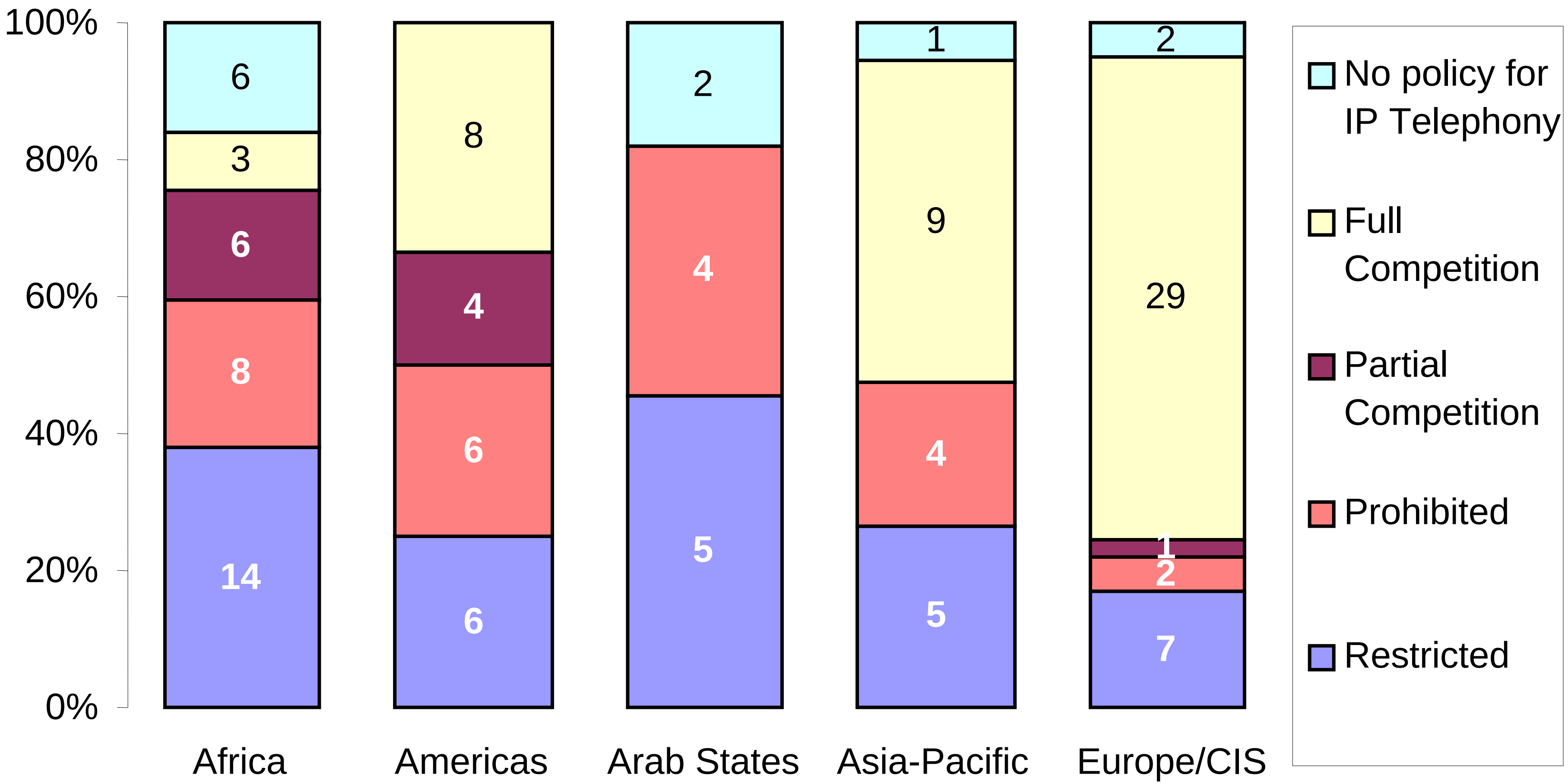


Note: Mobile and fixed rates are for SkypeOut (a VoIP service). Settlement is from US and Reference Interconnect Offer is for double tandem.

Source: Skype, FCC, Analysys.

Regulatory status of IP Telephony

By region, 2003



Note: Based on responses from 132 economies. “Prohibited” means no service is possible. “Restricted” means only licensed PTOs can offer the service. “Partial competition” means non-licensed PTOs may use either IP networks or the public Internet. “Full competition” means anyone can use or offer service.

Source: ITU (2005, forthcoming): General Trends in Telecom Reform”

Likely situation in five year's time

Major technological and regulatory trends

- IP-based traffic indistinguishable from PSTN
  - Around 100 bn minutes of IP-based international traffic in 2008, or >50% of total
  - Many carriers will have all IP-networks
  - A majority of voice traffic will originate on wireless networks and much of it will be IP-based
- Numbering convergence
  - ENUM will allow calls to and from IP voice on multiple different devices
  - Numbering plan will allow for non-geographic and device-indendent VoIP numbers
- Voice over IP over mobile
  - Voice will increasingly travel over data channel in mobile networks to provide discounted calling prices

Revisiting the “modes of trade” seven years after 1997 agreement

- Cross-border
  - Still the primary form of telecom services trade, but interconnect and VoIP is replacing accounting rates. VoIP will make it more difficult to tax traded services.
- Commercial presence
  - Although more than half incumbents are privatised, foreign ownership is probably *less* now than three years ago for fixed-line PTOs, but much greater for mobile operators
- Consumption abroad
  - Greatly increased, due to roaming of mobiles. Now subject to competition policy investigations in EU
- Movement of staff
  - Has not grown as much as expected, mainly due to outsourcing of call centres, software development etc.

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**