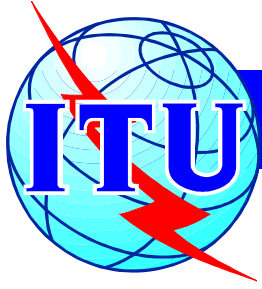


# Trends in international telecom traffic, costs and prices

**Dr Tim Kelly, International Telecommunication Union (ITU) Closing Workshop on the costing and pricing of telecom services in the Arab States, Tunis, 29 Nov - 2 Dec 1999**



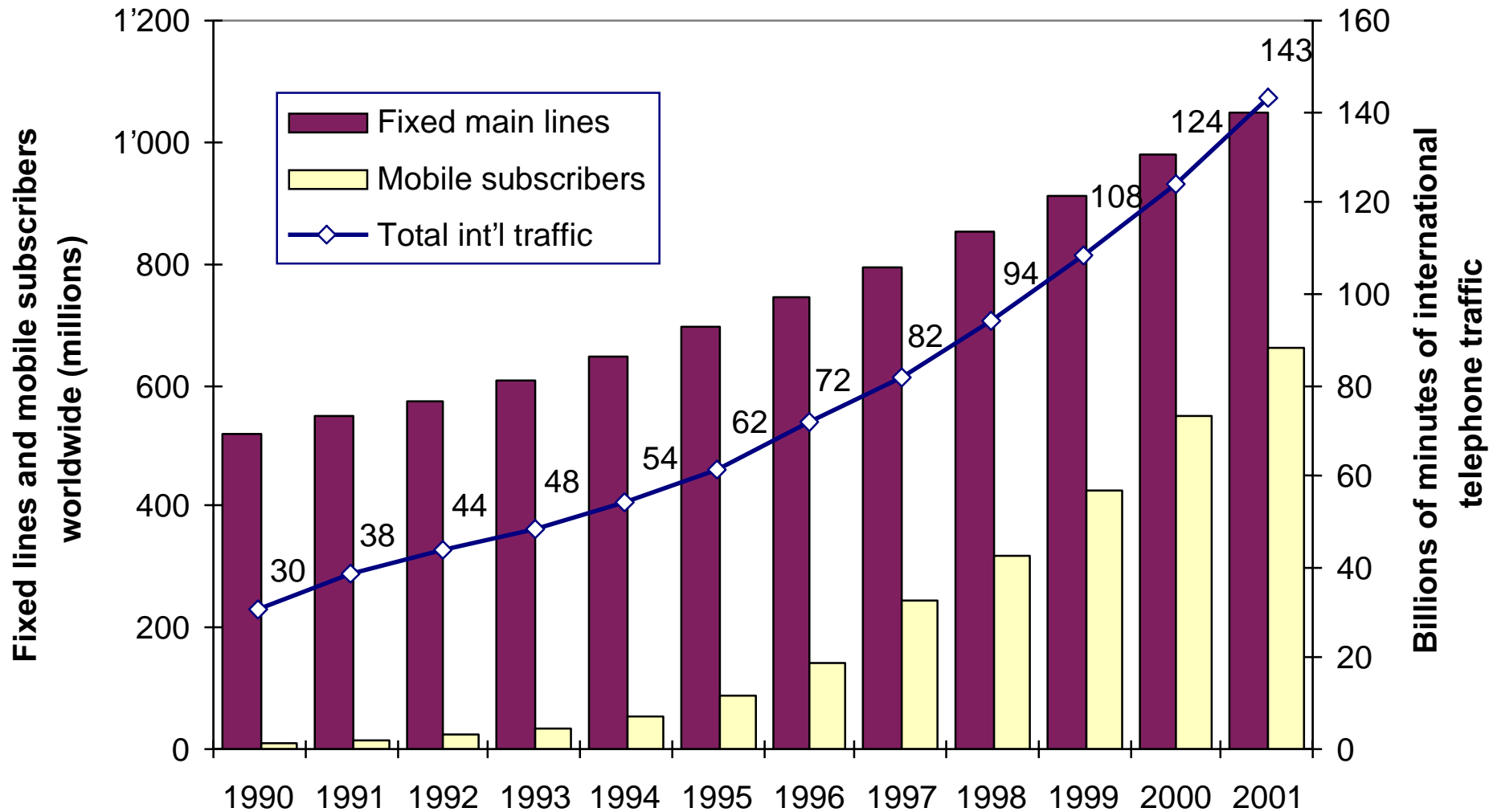
*Note: The views expressed in this presentation are those of the author and do not necessarily reflect the opinions of the ITU or its membership. Dr Tim Kelly can be contacted by e-mail at [Tim.Kelly@itu.int](mailto:Tim.Kelly@itu.int).*



## ***Agenda***

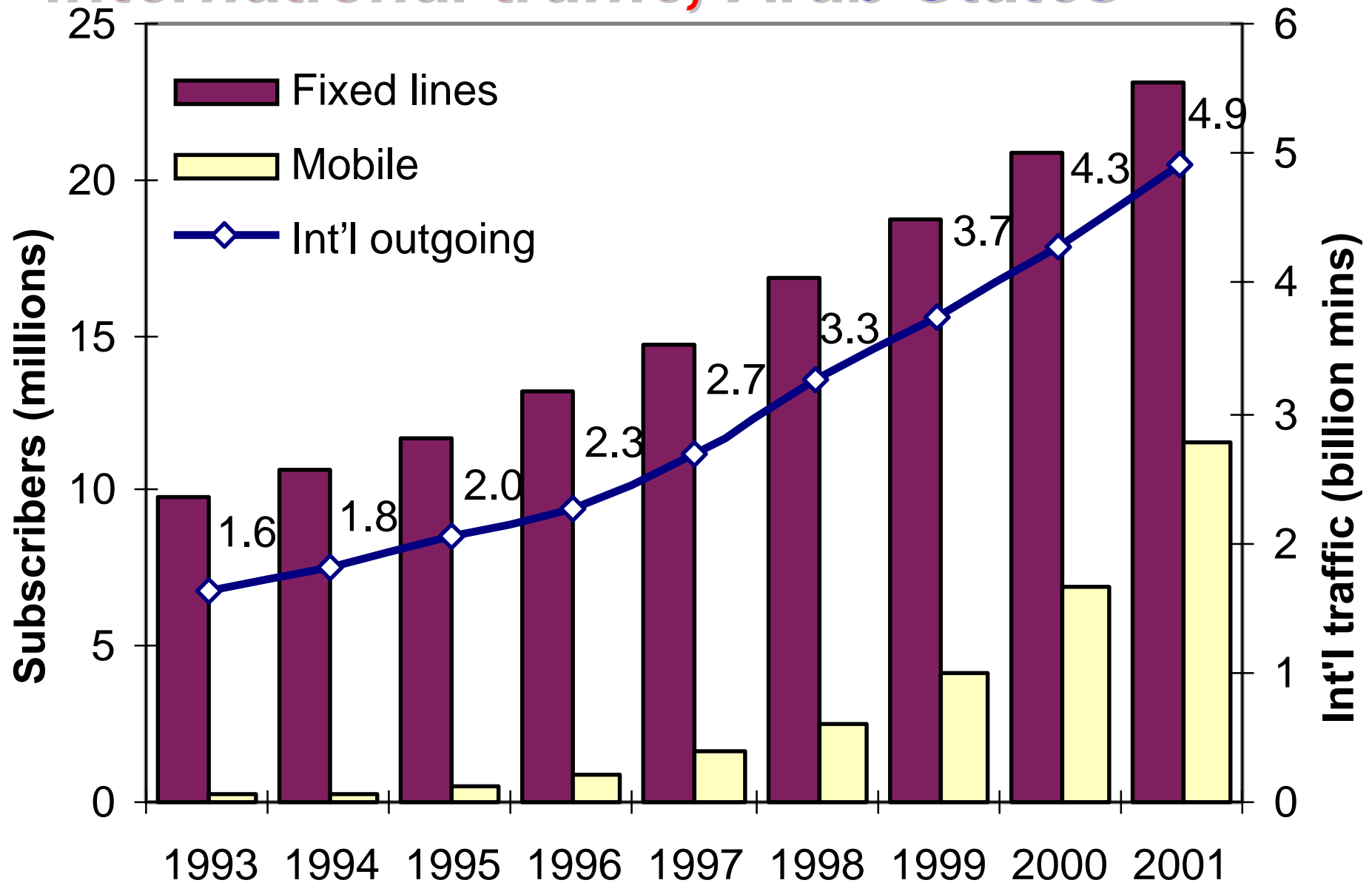
- **Trends in international traffic**
  - ⇒ **Worldwide**
  - ⇒ **Arab States**
- **Regional breakdown of traffic**
- **Market shares**
- **Competitive markets**
- **Cost and price trends**
  - ⇒ **FCC benchmarks**
  - ⇒ **ITU Focus Group, indicative target rates**
- **Conclusions**

# Trends in subscribers and international traffic, Worldwide



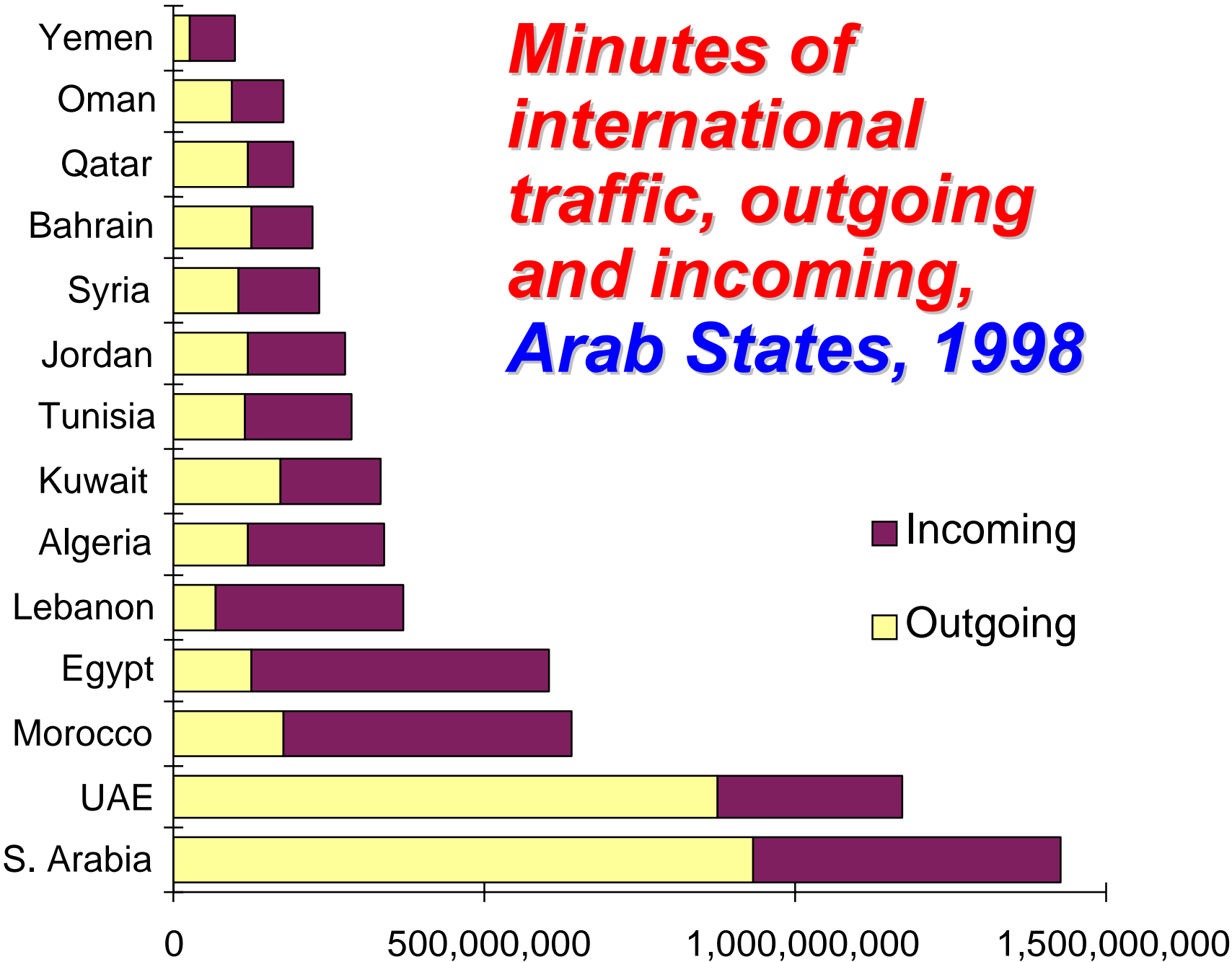
Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# Trends in subscribers and international traffic, Arab States



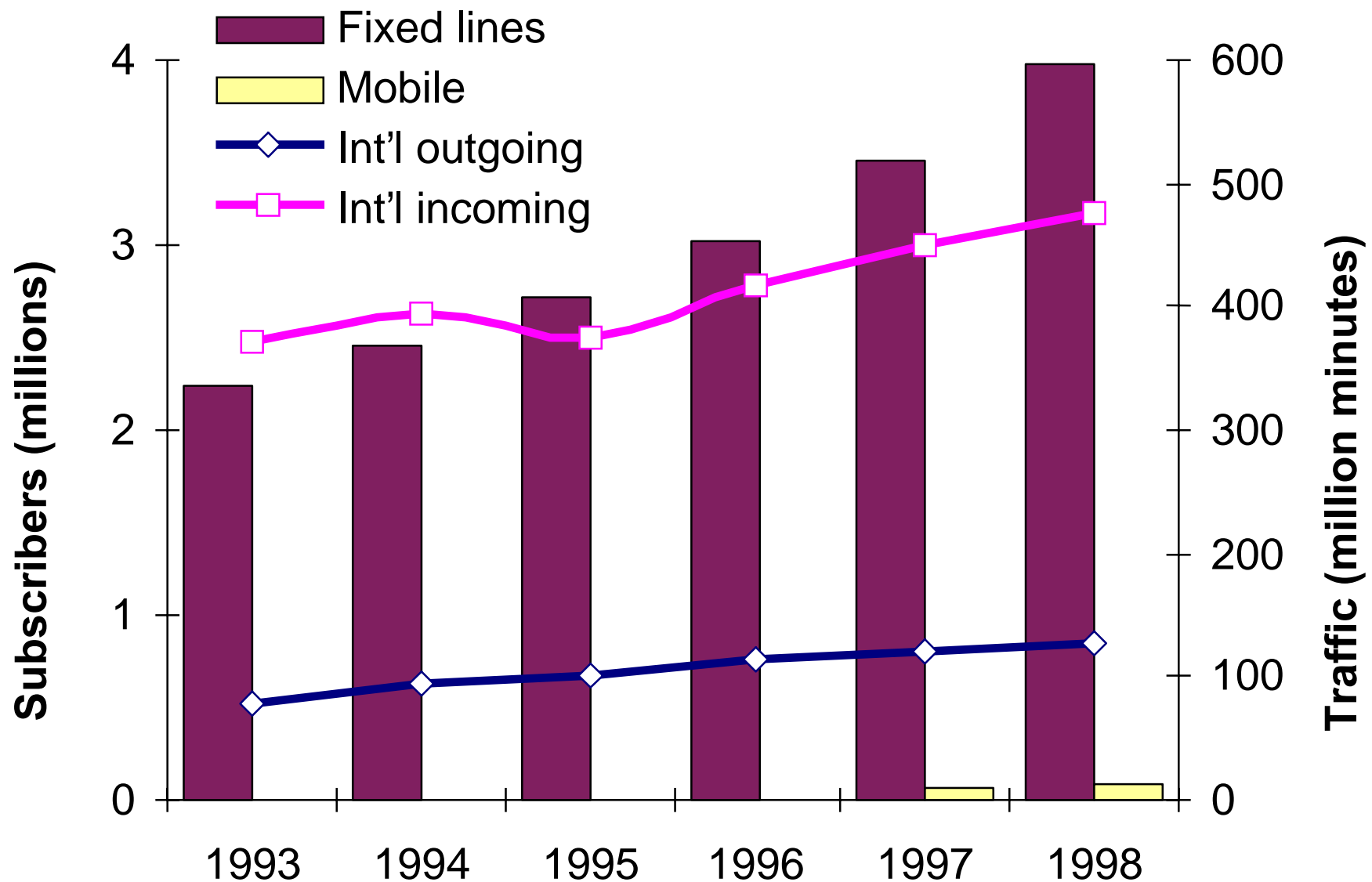
Source: ITU World Telecommunication Indicators Database.

***Minutes of international traffic, outgoing and incoming, Arab States, 1998***



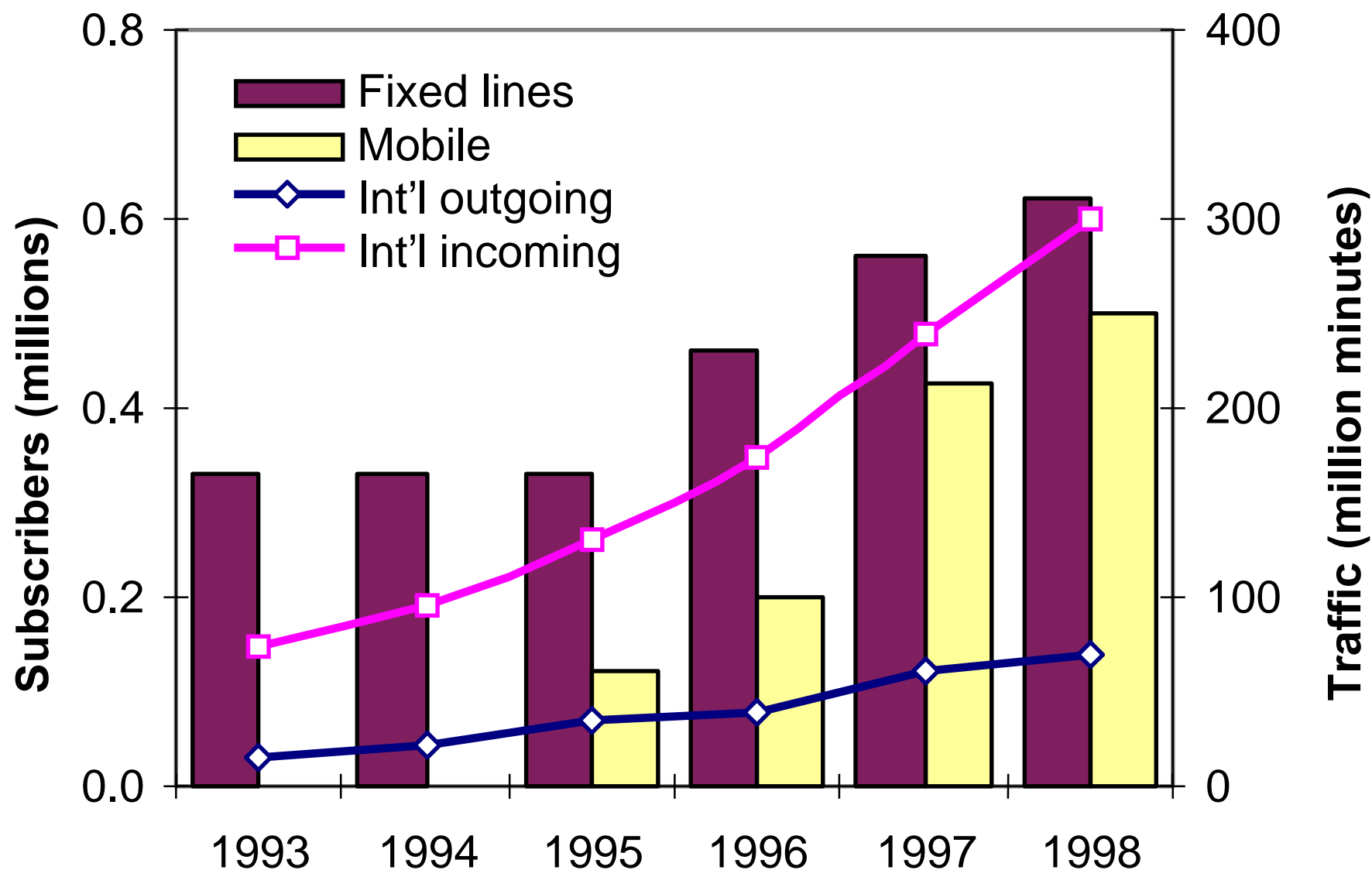
Source: ITU World Telecommunication Indicators Database. Note: Excluding States with <100'000 minutes.

# Trends in subscribers and international traffic, Egypt



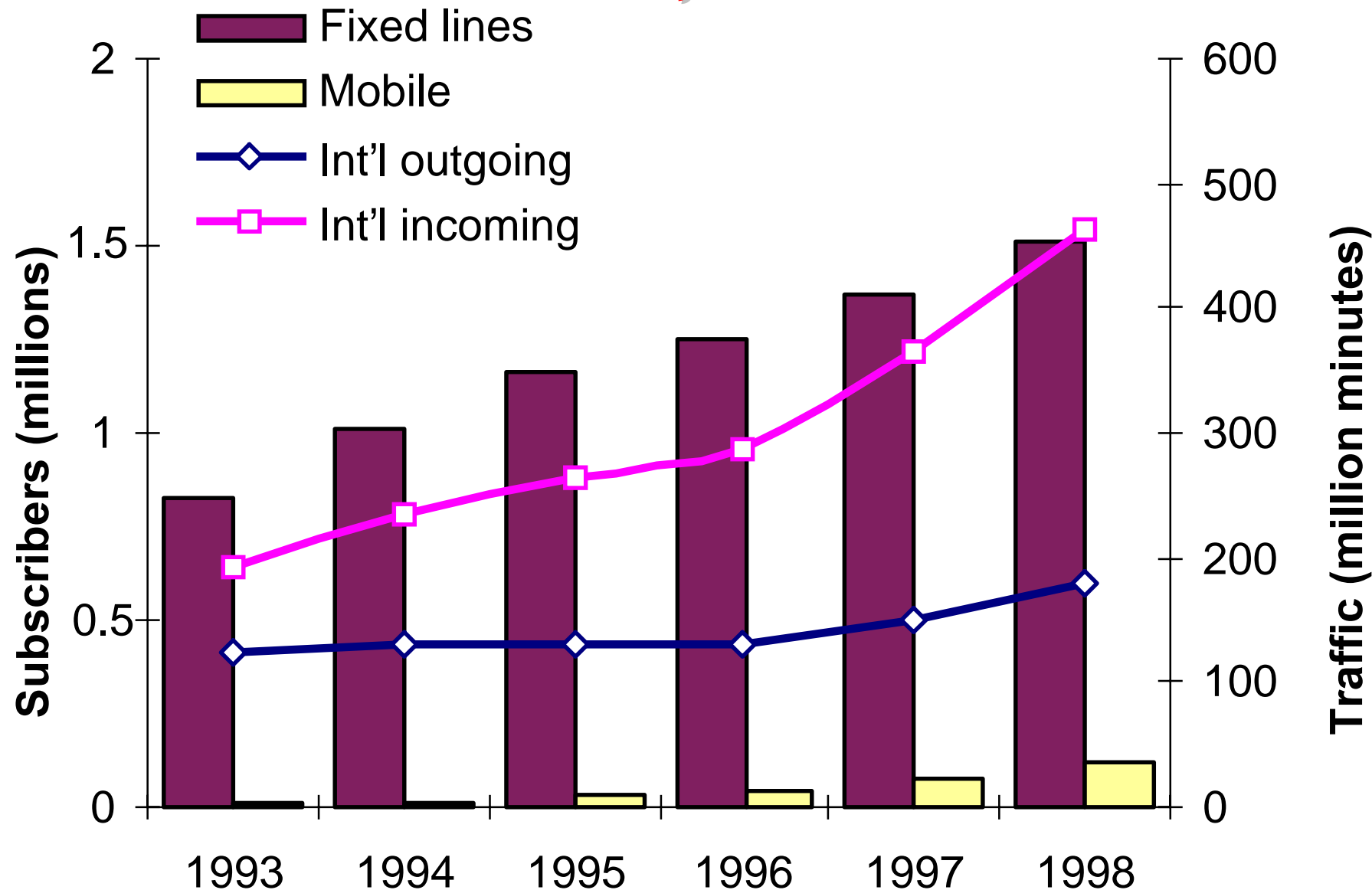
Source: ITU World Telecommunication Indicators Database.

# Trends in subscribers and international traffic, Lebanon



Source: ITU World Telecommunication Indicators Database.

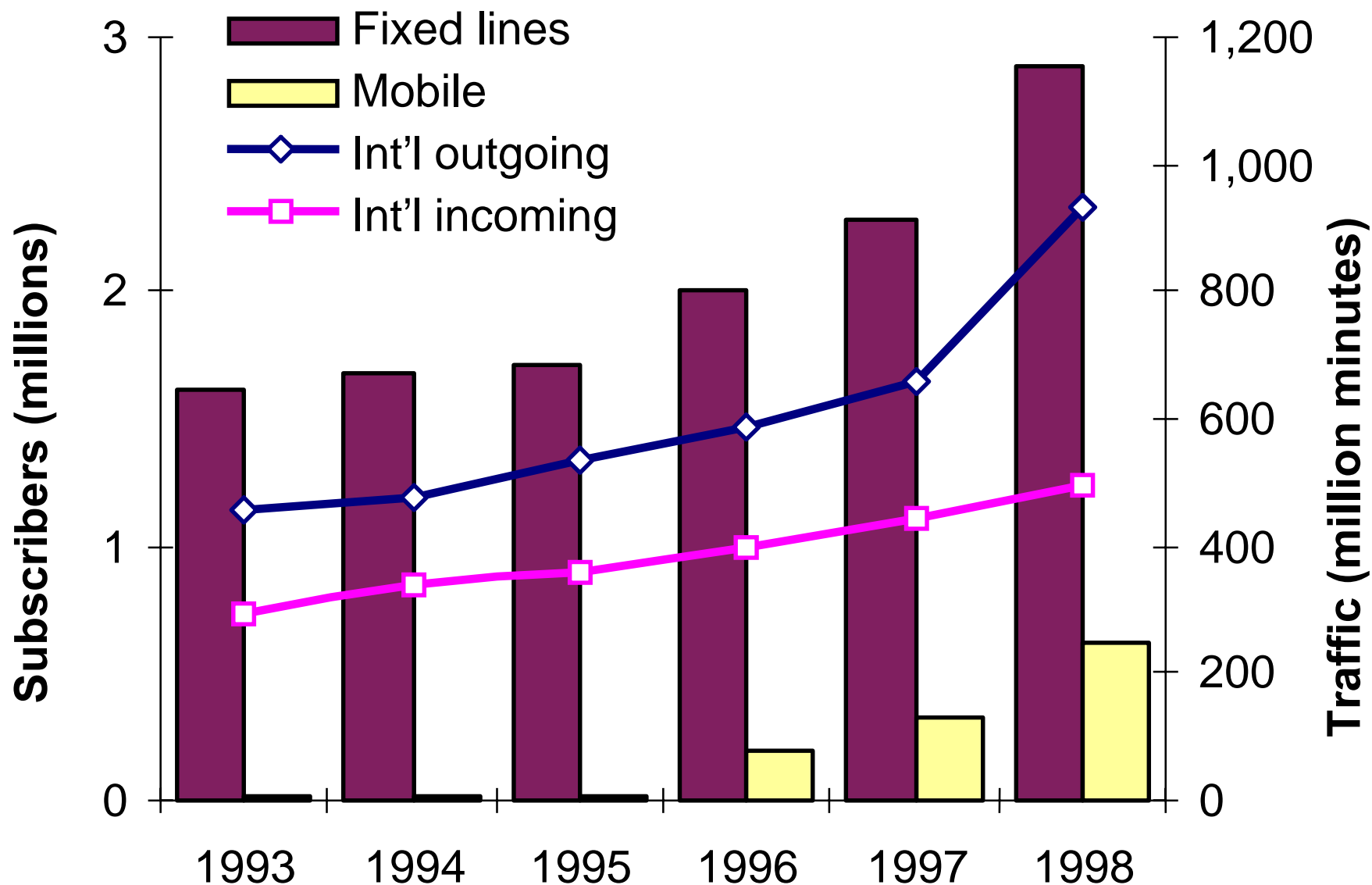
# Trends in subscribers and international traffic, Morocco



Source: ITU World Telecommunication Indicators Database.

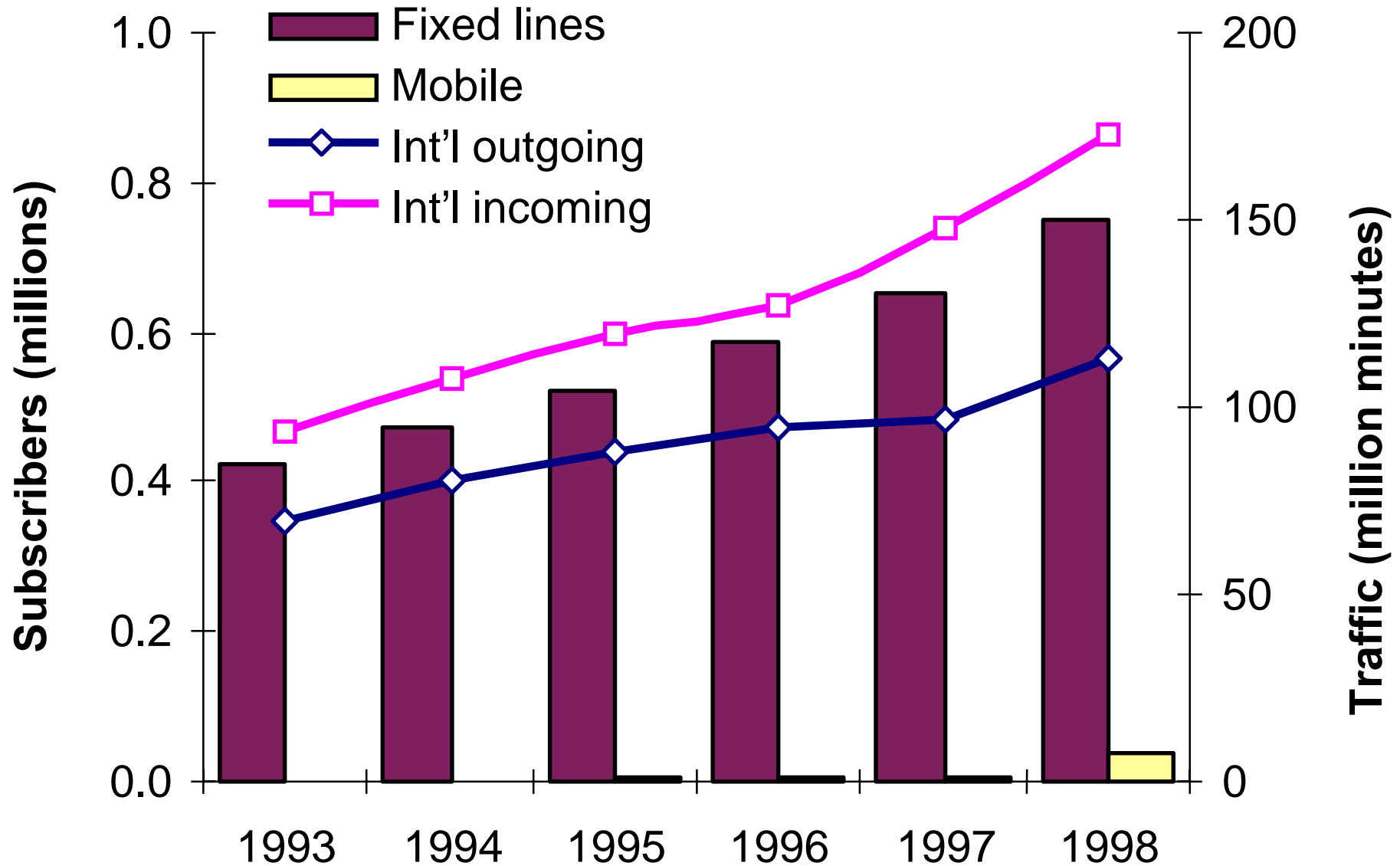


# Trends in subscribers and international traffic, Saudi Arabia



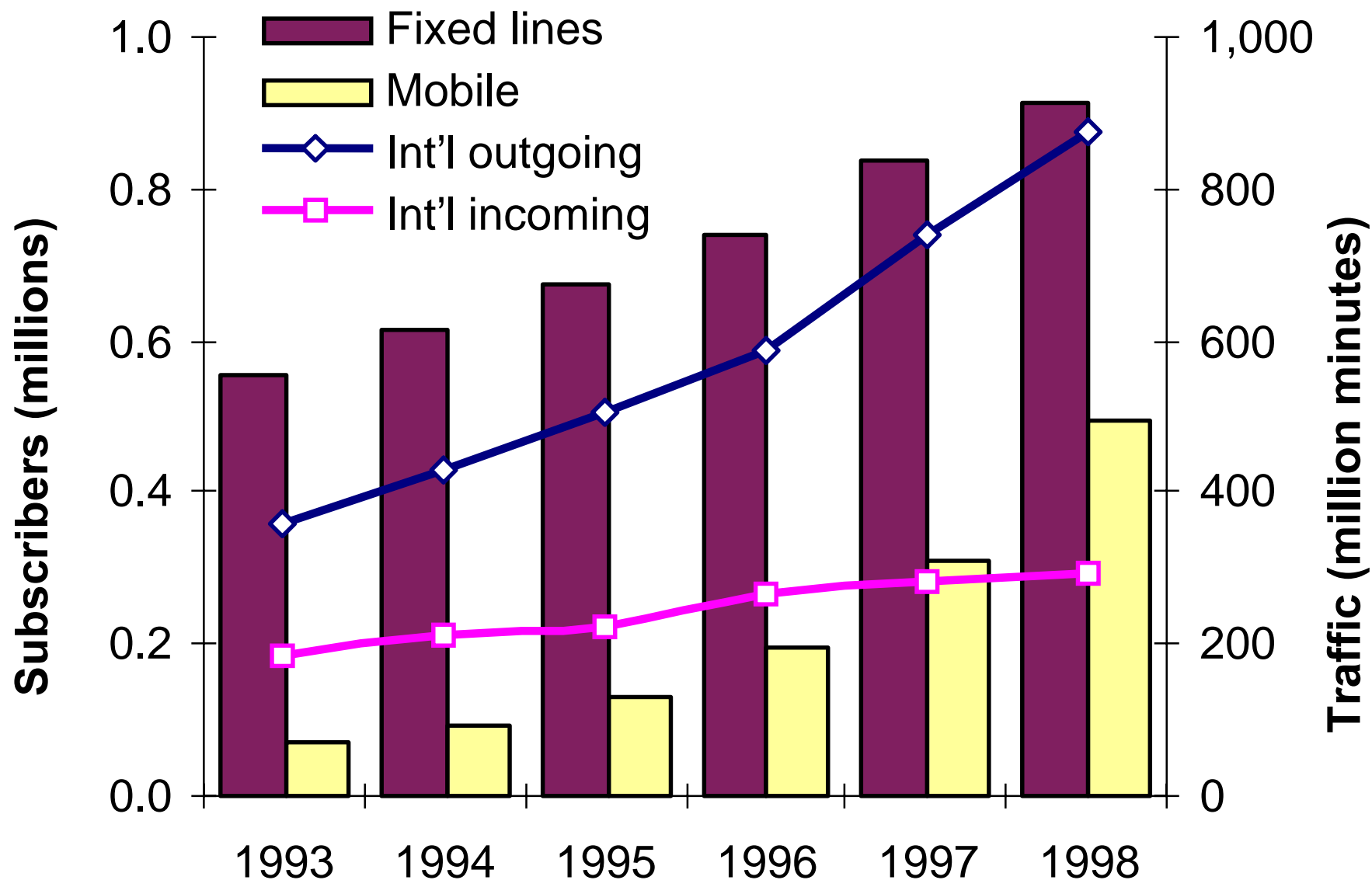
Source: ITU World Telecommunication Indicators Database.

# *Trends in subscribers and international traffic, Tunisia*



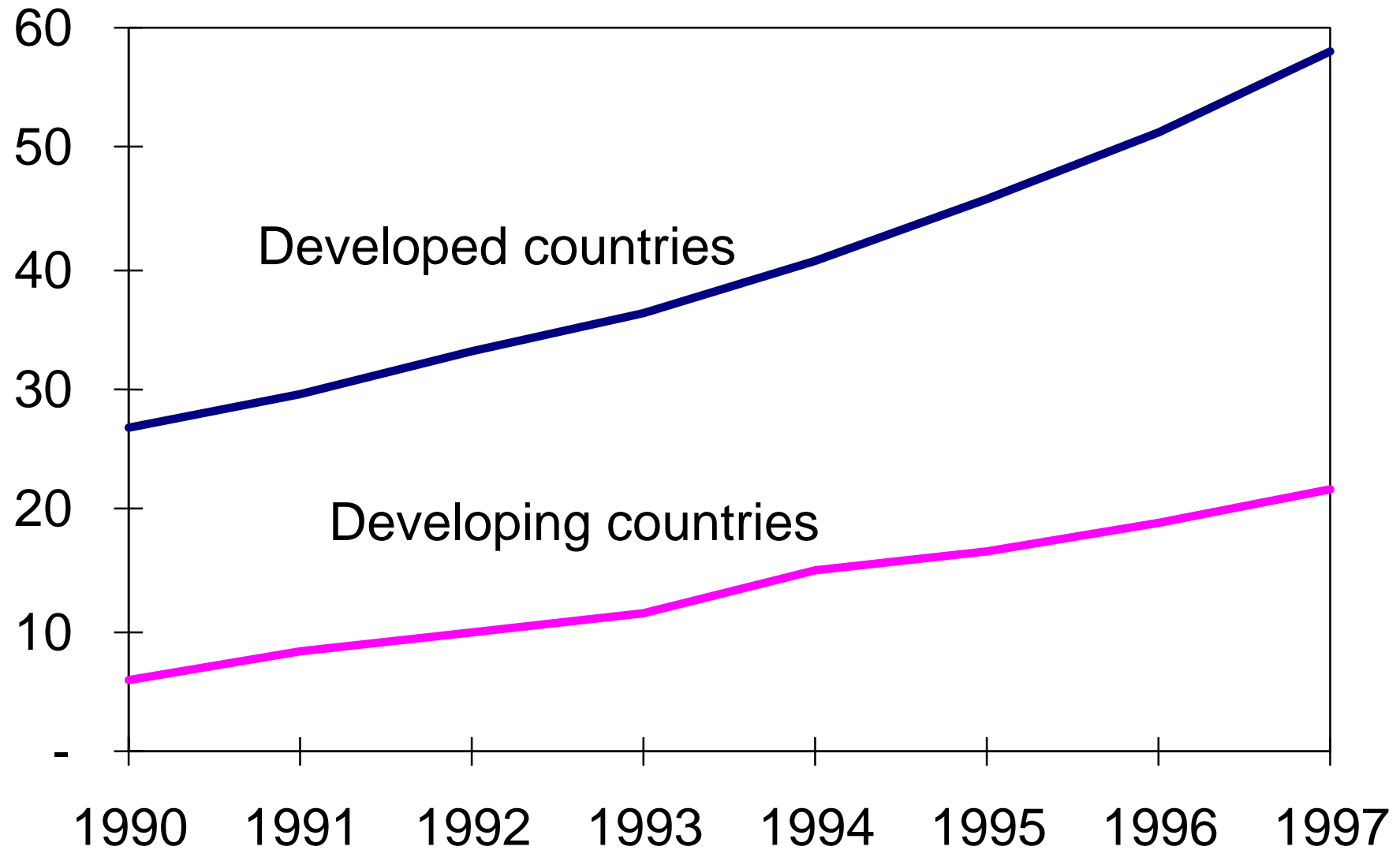
Source: ITU World Telecommunication Indicators Database.

# Trends in subscribers and international traffic, UAE



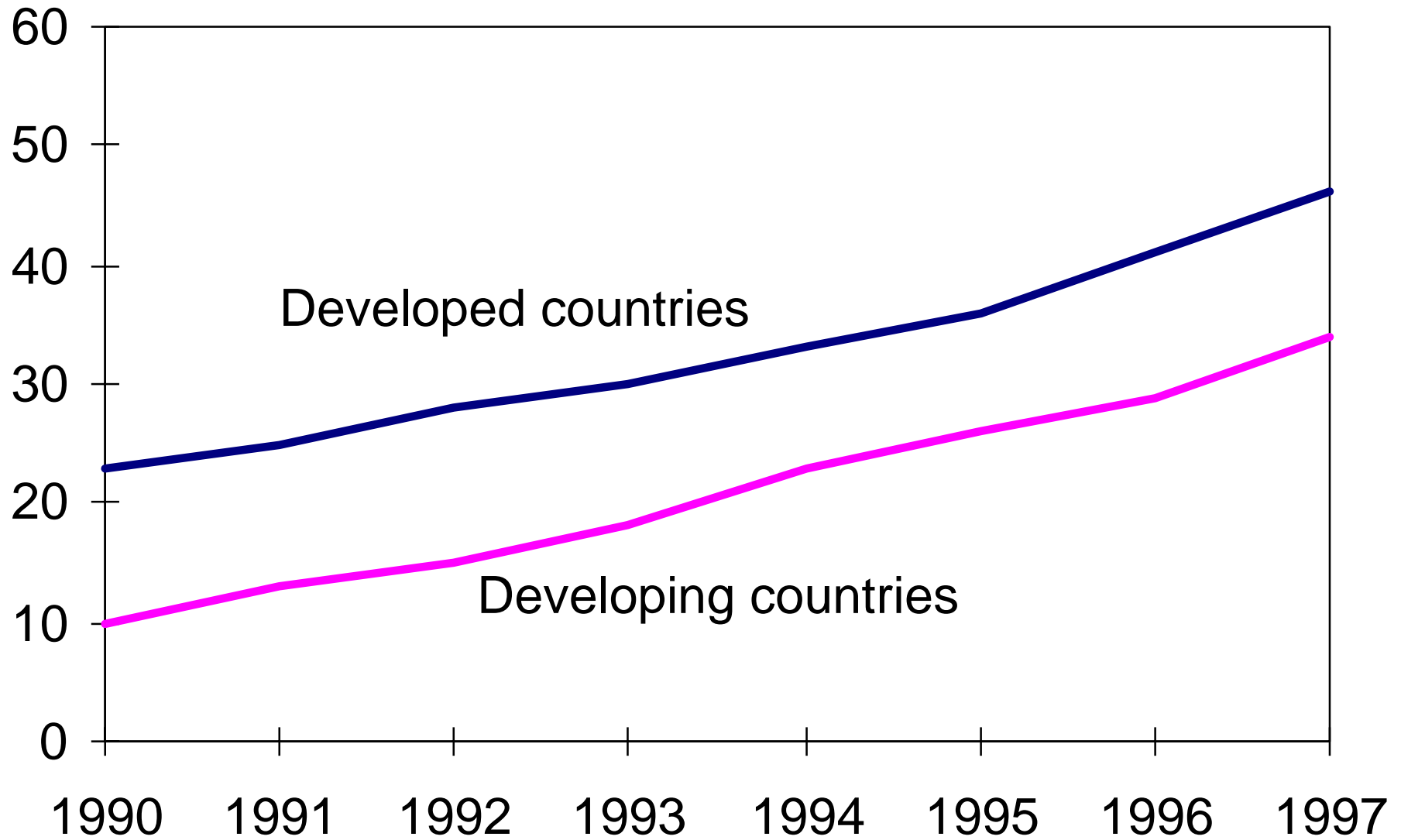
Source: ITU World Telecommunication Indicators Database.

# ***Trends in outgoing traffic, bn minutes***



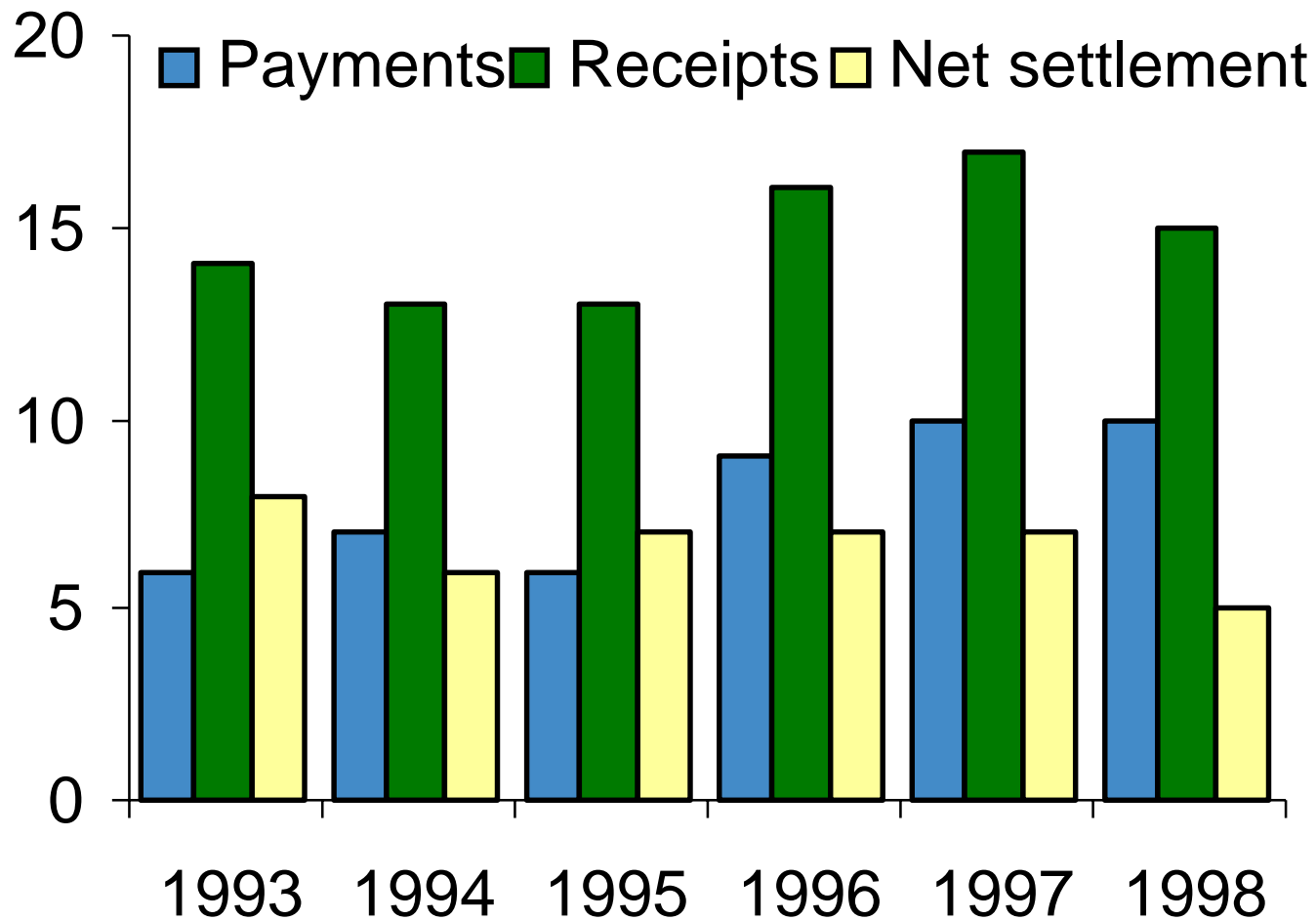
Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# ***Trends in incoming traffic, bn minutes***



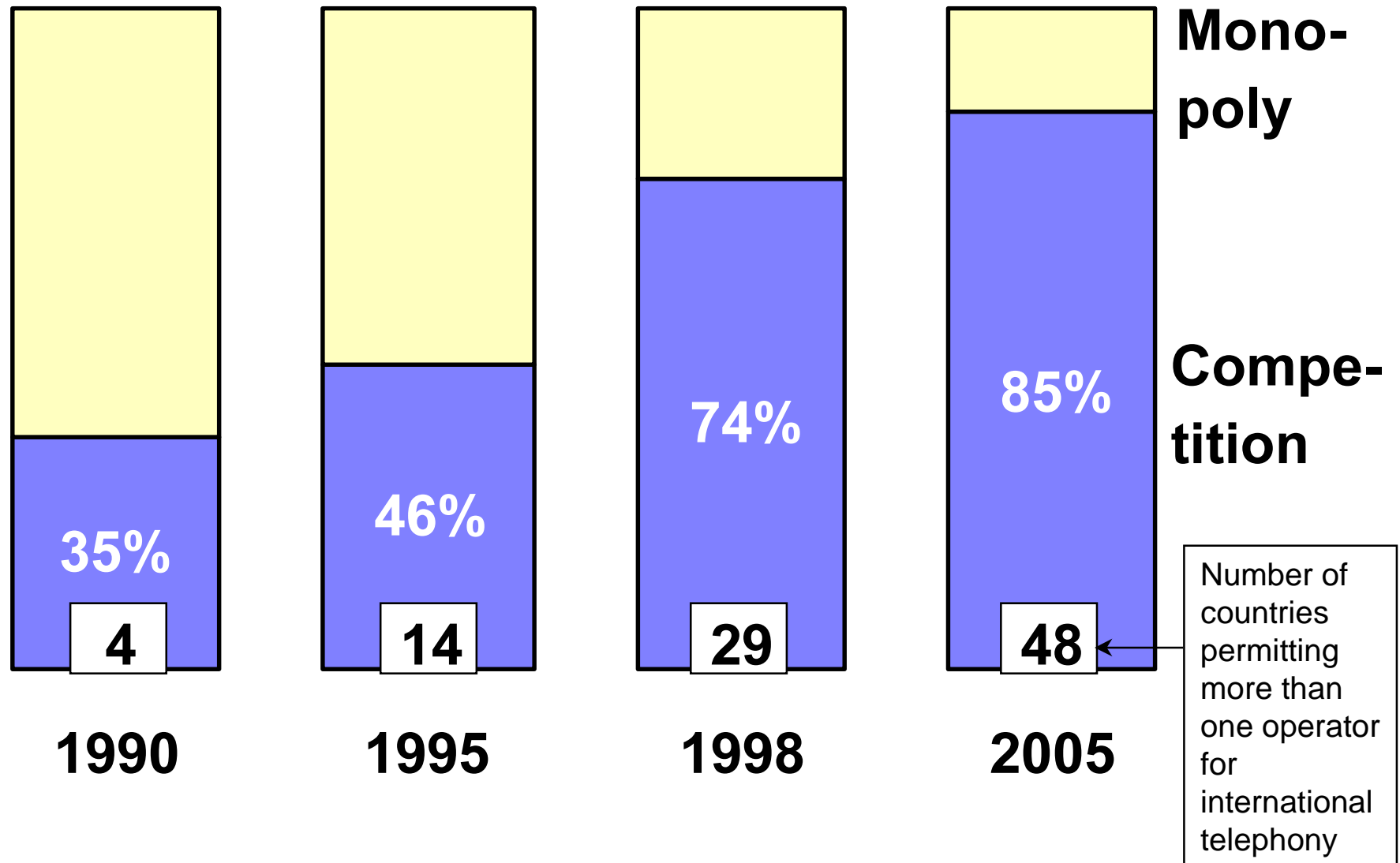
Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# ***Trends in settlement payments and receipts, Developing countries, US\$bn***



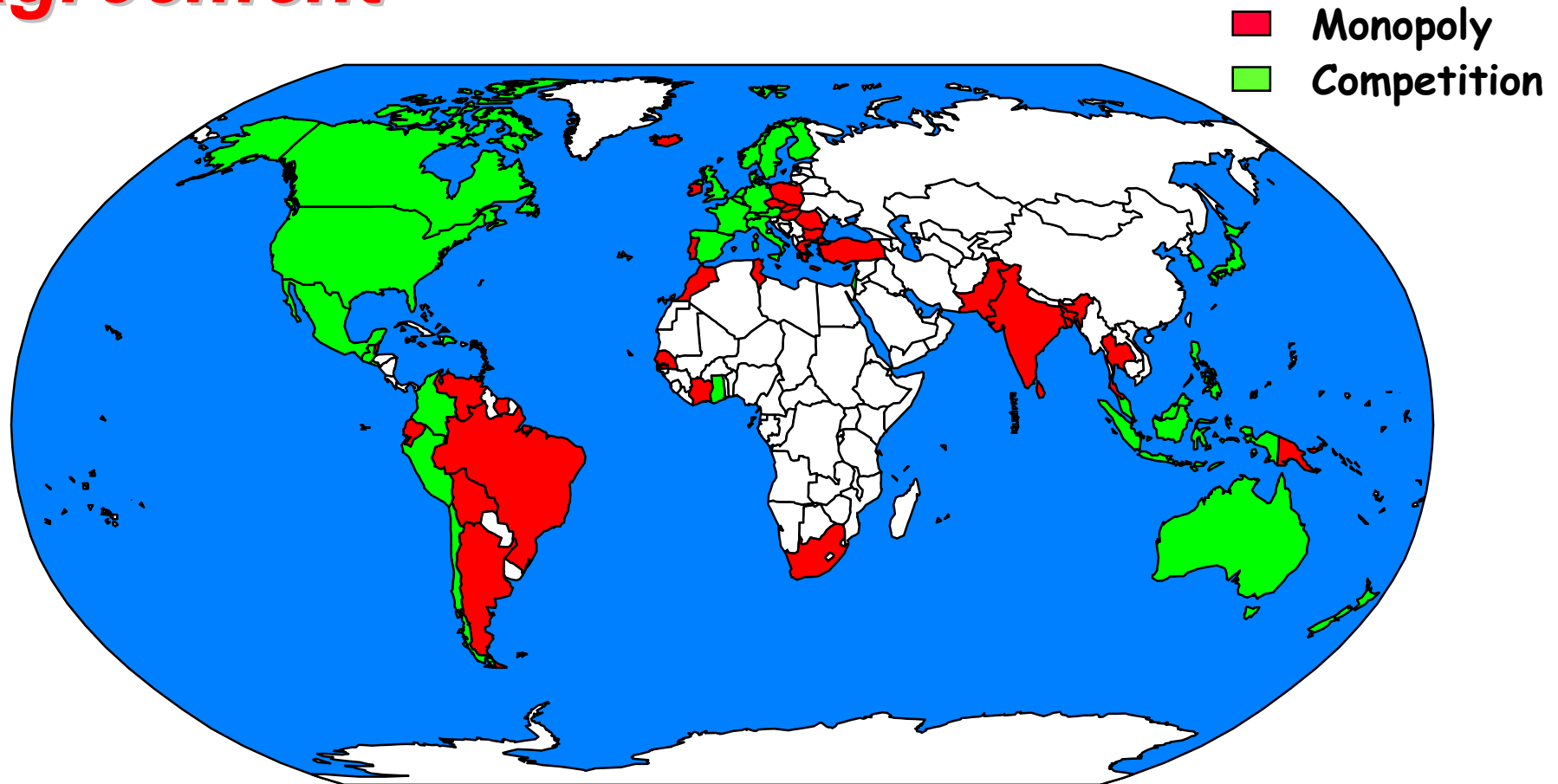
Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# 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.

# ***Level of competition in international services in WTO basic telecoms agreement***



Source: ITU Telecommunication Regulatory Database.



# ***Countries permitting int'l competition***

<b>1990</b>	<b>1998</b>	
1 Japan	1 Australia	20 Israel
2 New Zealand	2 Austria	21 Italy
3 UK	3 Belgium	22 Japan
4 USA	4 Brunei D.	23 Korea (Rep.)
	5 Canada	24 Malaysia
<b>1995</b>	6 Chile	25 Mexico
1 Australia	7 Colombia	26 Netherlands
2 Canada (partial)	8 DPR Congo	27 New Zealand
3 Colombia	9 Denmark	28 Norway
4 Chile	10 Dominican Rep.	29 Peru
5 Denmark	11 El Salvador	30 Philippines
6 Finland	12 Finland	31 Russia
7 Japan	13 France	32 Somalia
8 Korea (Rep.)	14 Germany	33 Spain (after Dec. 1998)
9 Malaysia	15 Ghana	34 Sweden
10 New Zealand	16 Guatemala	35 Switzerland
11 Philippines	17 HK-China (after Dec 1998)	36 Uganda
12 Sweden	18 Indonesia	37 Ukraine
13 UK	19 Ireland (after Dec. 1999)	38 UK
14 USA		39 USA

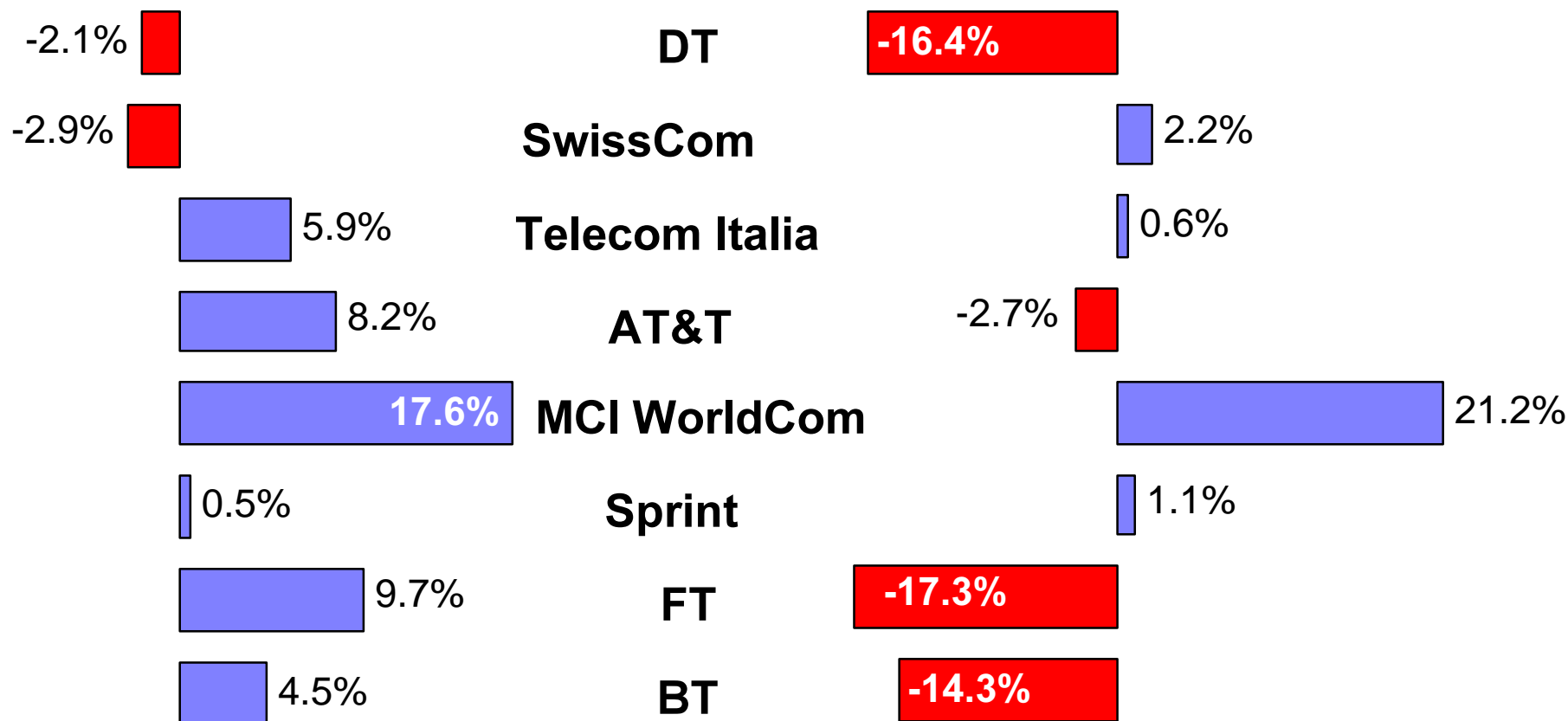
## ***Top 10 PTOs by outgoing int'l traffic***

<b>PTO</b>	<b>1998 Bn Mins</b>	<b>% change 97/98</b>
<b>AT&amp;T (97 data)</b>	<b>10'331</b>	<b>8.2%</b>
<b>MCI WorldCom (97)</b>	<b>7'313</b>	<b>17.6%</b>
<b>Deutsche Telekom</b>	<b>4'711</b>	<b>-2.1%</b>
<b>France Telecom</b>	<b>3'400</b>	<b>9.7%</b>
<b>Sprint (97)</b>	<b>2'759</b>	<b>0.5%</b>
<b>BT</b>	<b>2'710</b>	<b>4.5%</b>
<b>Telecom Italia</b>	<b>2'339</b>	<b>5.9%</b>
<b>SwissCom</b>	<b>1'901</b>	<b>-2.9%</b>
<b>Telefonica</b>	<b>1'803</b>	<b>15.1%</b>
<b>Hongkong Telecom</b>	<b>1'718</b>	<b>-2.1%</b>

Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# Selected PTOs, performance 1997/98

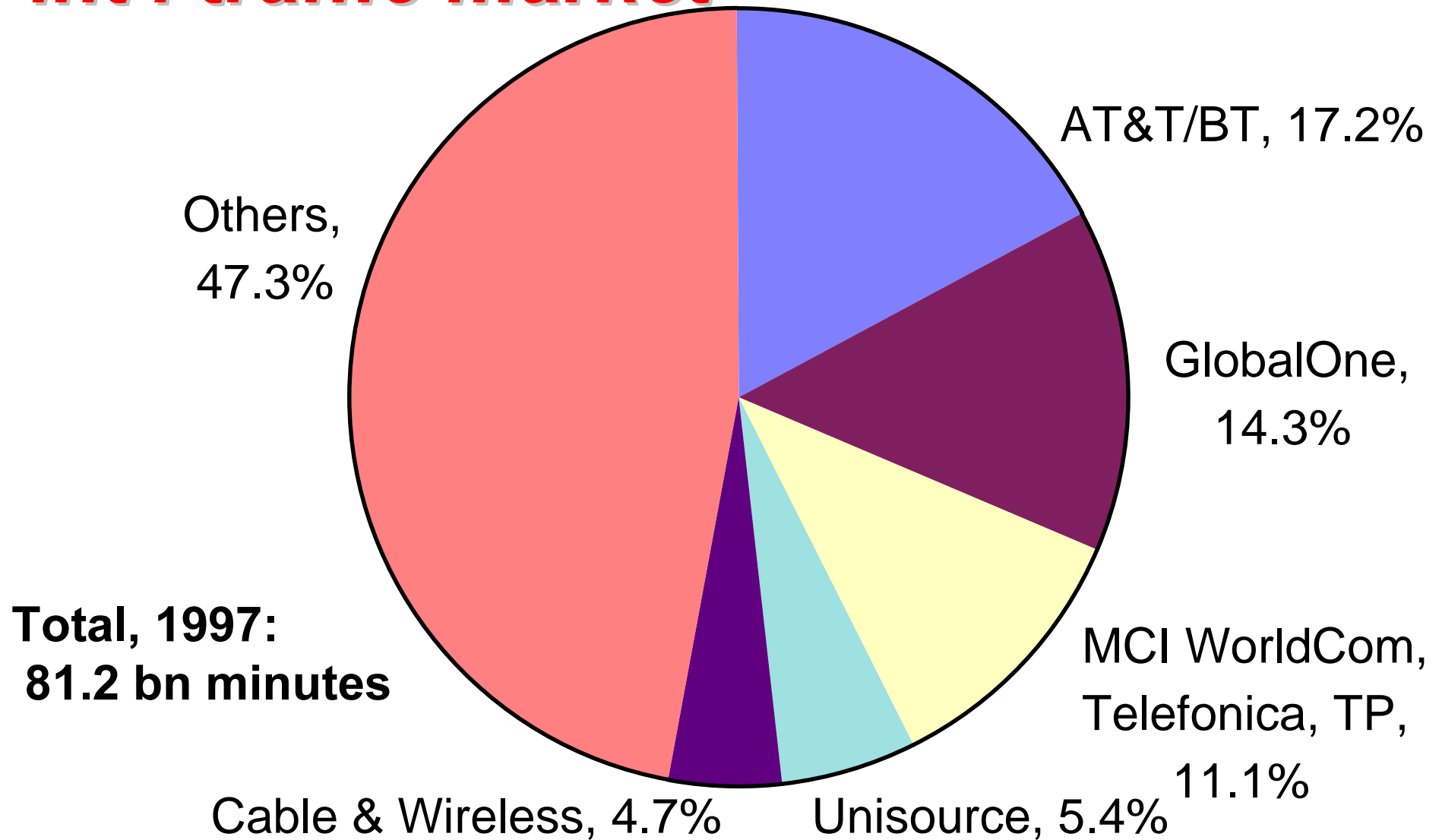
**% change in traffic    % change in int'l rev.**



*Note:* Based on 1998 international outgoing traffic and revenue from international operations. For Sprint, MCI WorldCom and AT&T, data relates to 1997. The definition of international revenue (gross, net or retail) is that used by each individual operator.

*Source:* ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# **Emerging global alliances, shares of int'l traffic market**



*Note: Traffic shares relate to minutes of outgoing traffic from members of each alliance.*

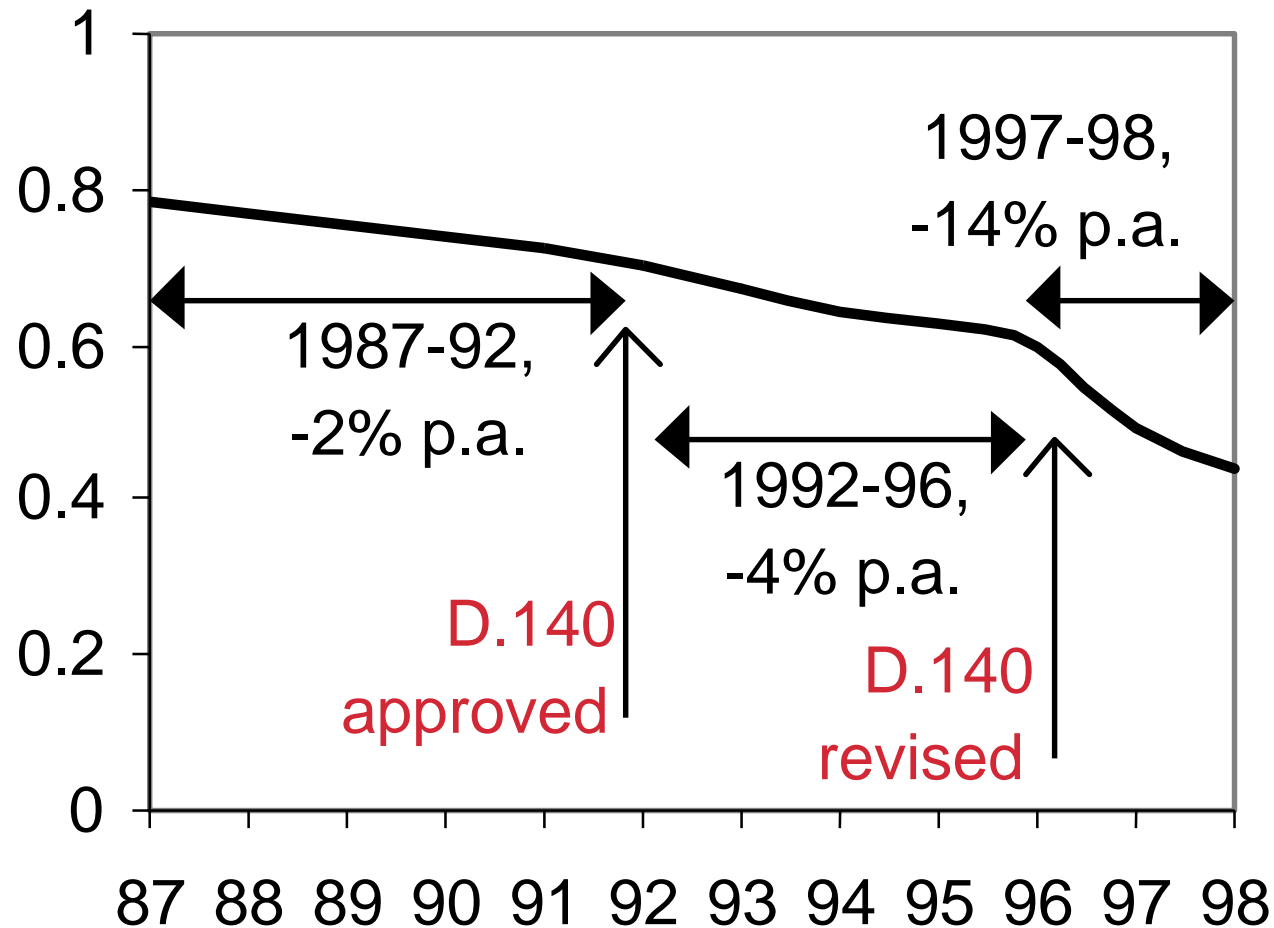
*Source: ITU/TeleGeography Inc. "Direction of Traffic, 1999: Trading Telecom Minutes"*



***Emerging global alliances:  
Recent developments***

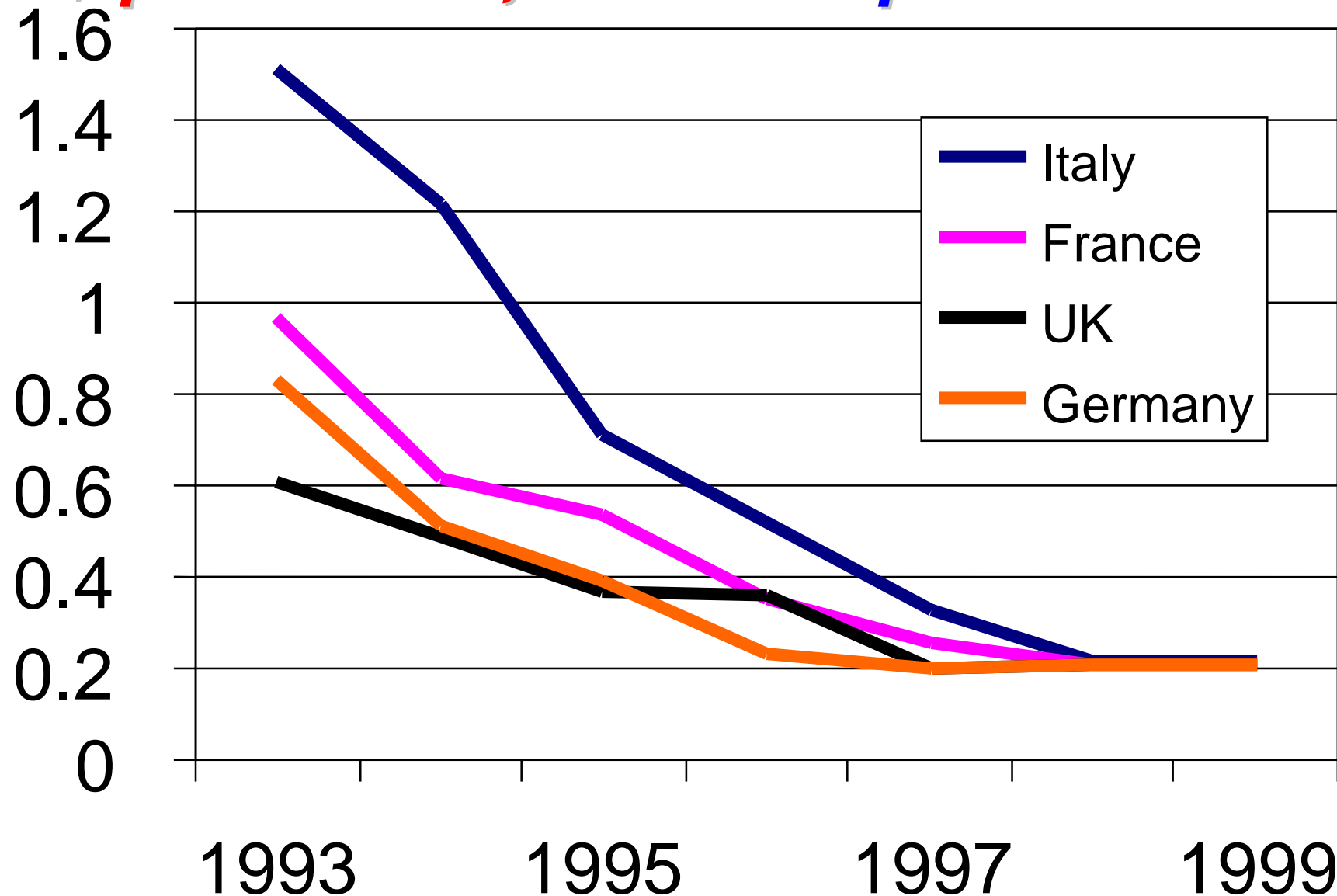
- **WorldCom merges with MCI, bids for Sprint**
- **Following collapse of BT/MCI merger, BT & AT&T join forces in “Concert”**
- **AT&T and Telefonica withdraw from Unisource**
- **GlobalOne on point of collapse following purchase of Sprint by WorldCom**
- **Deutsche Telekom’s bid for Telecom Italia fails; Olivetti’s succeeds**
- **Cable & Wireless re-positioning itself as supplier of data services**
- **Telia and TeleNor merge**

# Global average settlement rates, US\$ per minute

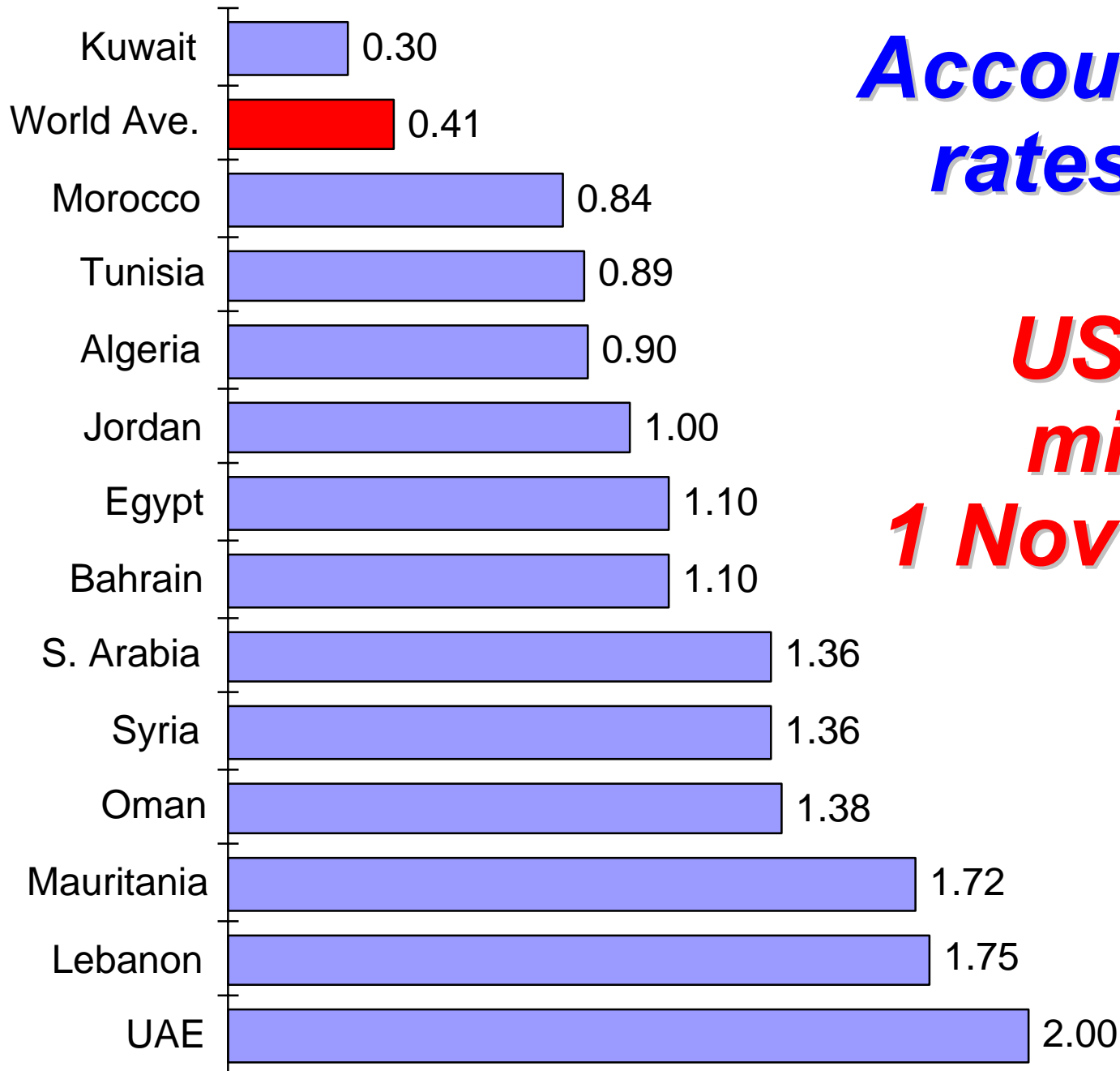


Source: ITU/TeleGeography Inc. "Direction of Traffic 1999: Trading Telecom Minutes".

# Convergence: Accounting rate to US in US\$ per minute, four European countries



Source: FCC. Data for year-end except 1999 = September 1999

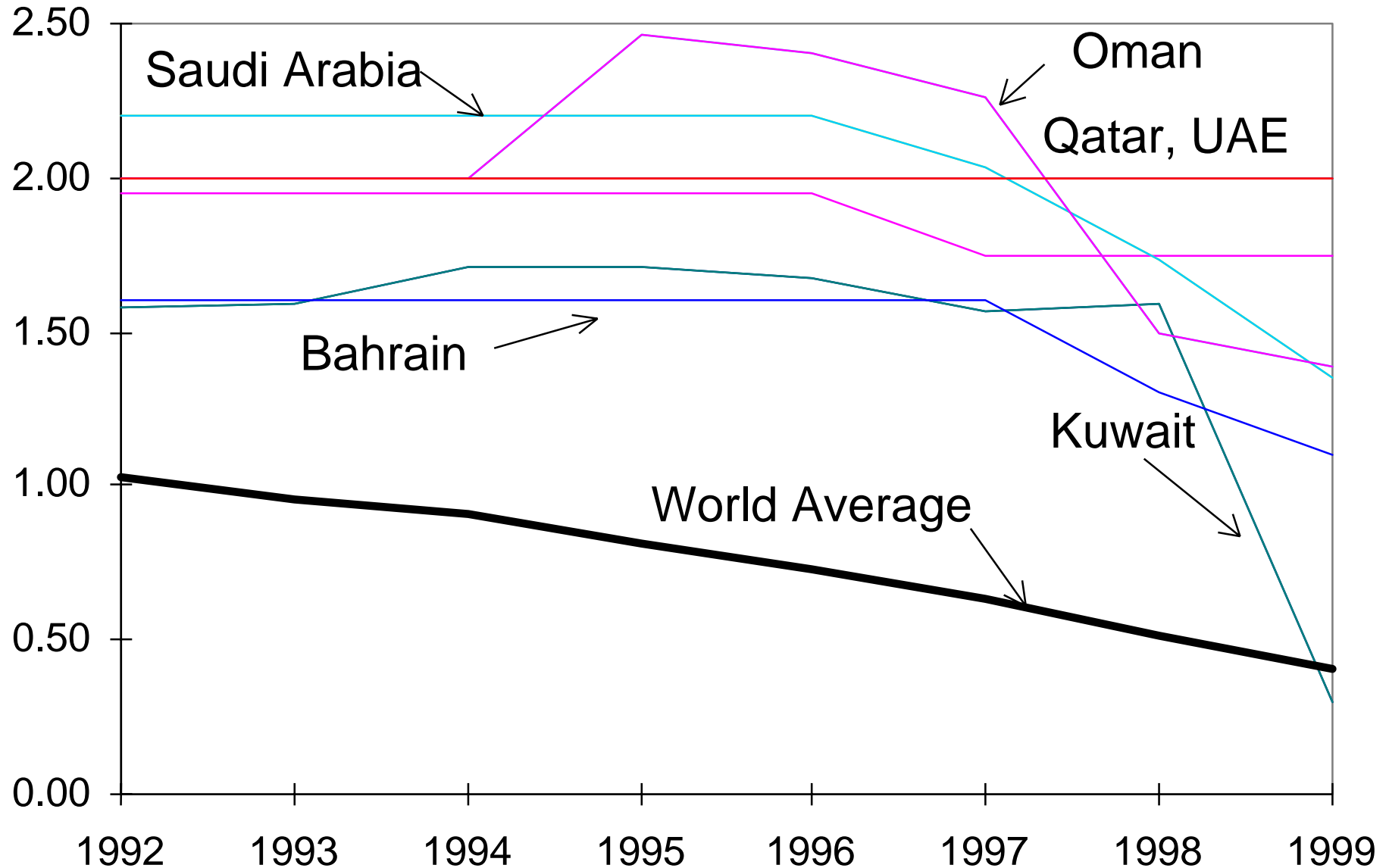


**Accounting  
rates with  
USA,  
US\$ per  
minute,  
1 Nov 1999**

Source: FCC (Ken Stanley).

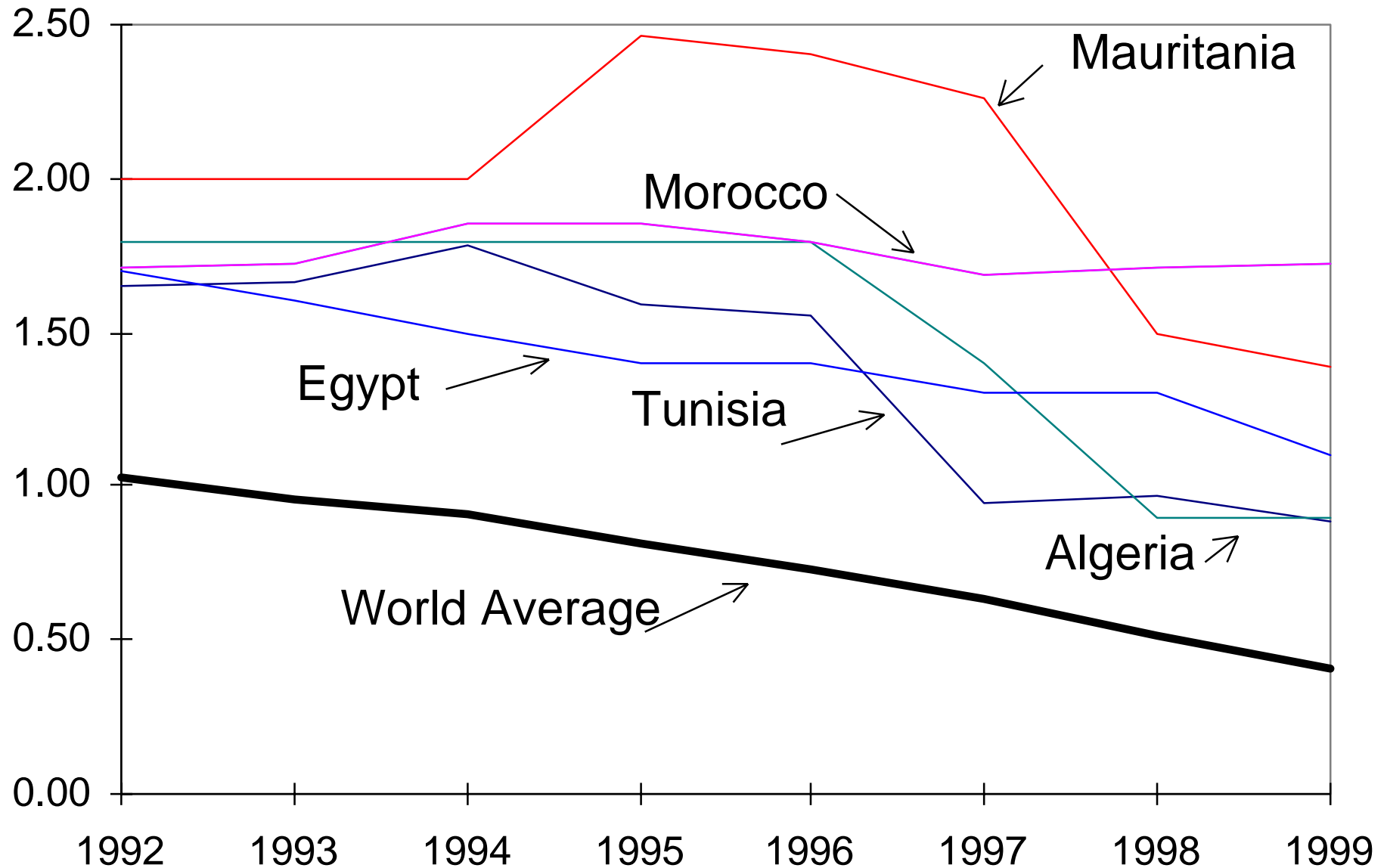


# Trends in accounting rates, **US\$ per min**



Source: FCC (Ken Stanley). "1999" is 1 November 1999 data.

# Trends in accounting rates, **US\$ per min**



Source: FCC (Ken Stanley). "1999" is 1 November 1999 data.

## ***Two alternative scenarios:***

### ***ITU Focus Group targets, by teledensity (T), to be achieved by 2001 (2004)***

<b>T &lt; 1</b>	<b>1&lt;T&lt;5</b>	<b>5&lt;T&lt;10</b>	<b>10&lt;T&lt;20</b>	<b>20&lt;T&lt;35</b>	<b>35&lt;T&lt;50</b>	<b>T&gt;50</b>
\$0.45	\$0.35	\$0.29	\$0.23	\$0.16	\$0.12	\$0.06

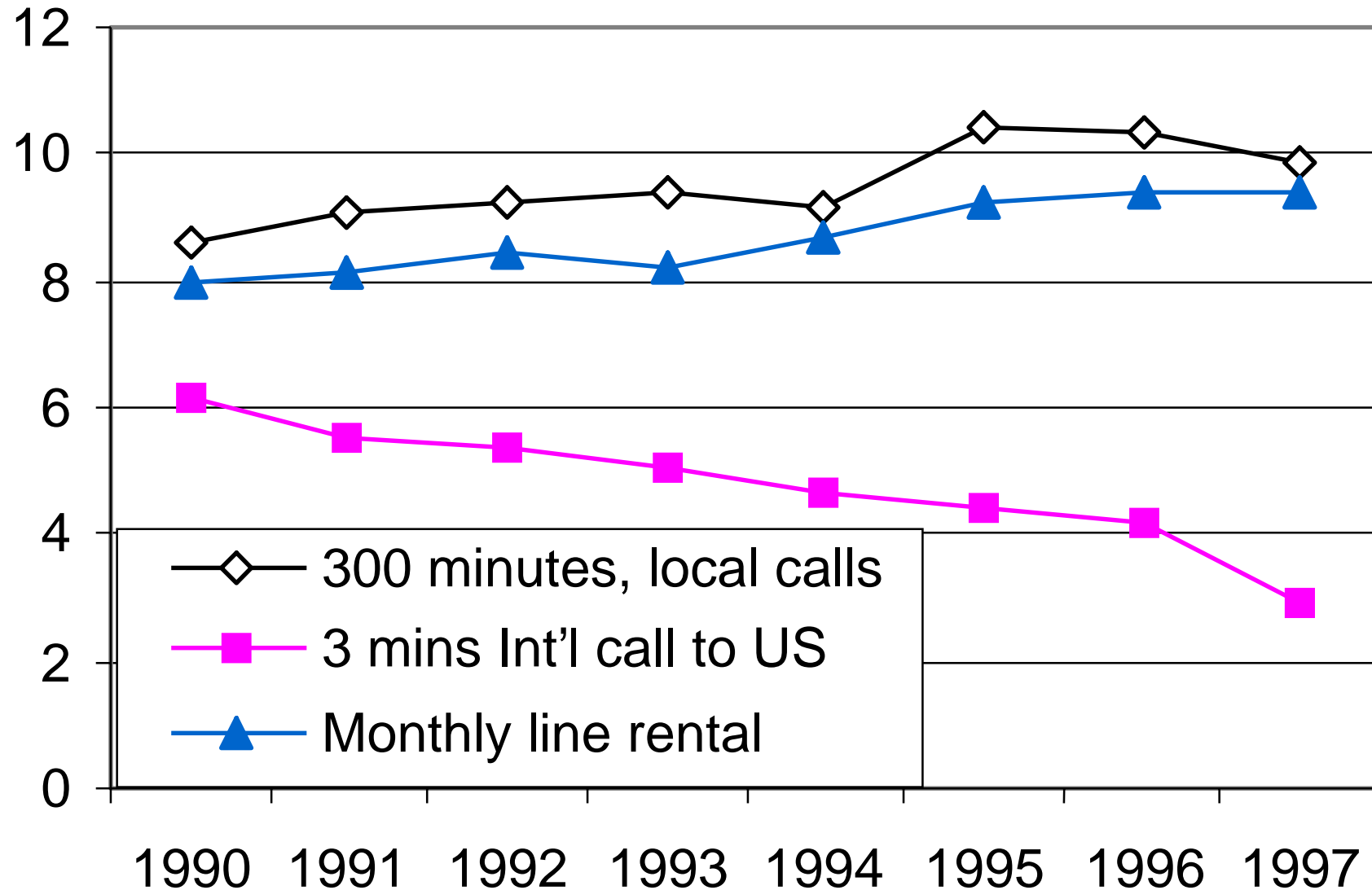
### ***FCC Benchmarks, by income group***

<b>Low income, T&lt;1</b>	<b>Low income</b>	<b>Low-mid income</b>	<b>Upper- mid income</b>	<b>High income</b>
\$0.23	\$0.23	\$0.19	\$0.19	\$0.15
2002	2001	2000	1999	1998

Source: ITU Focus Group Report, FCC.

# Tariff rebalancing trends, in US\$

## Average of 39 major economies



Source: ITU World Telecommunication Indicators Database.



## ***International traffic trends: Conclusions***

- **Voice traffic continuing to grow, but the main action is now elsewhere**
- **Mobile and the Internet will be the major demand drivers for the future**
- **Competitive markets will be the norm, monopolistic markets the exception in the future, in most regions of the world**
- **Alliances will continue to be formed, but partnerships are still unstable**
- **Settlement rates in most countries of the region are well above indicative target rates**