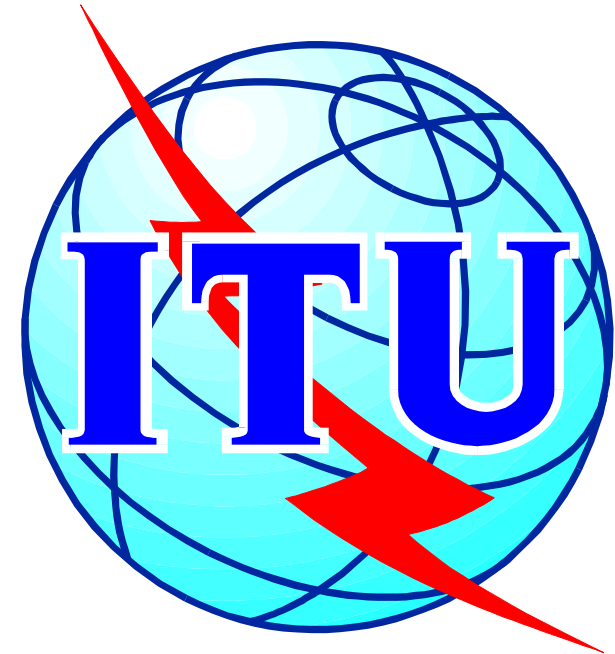
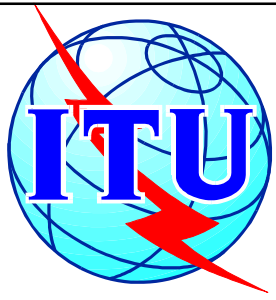


Mobile Overtakes Fixed: What happens next?

Dr Tim Kelly
Co-ordinator, Strategies &
Policy Unit (SPU),
International
Telecommunication Union,
18 July 2000





Agenda

- **Mobile Overtakes Fixed**

- ⇒ **Long-term trends**

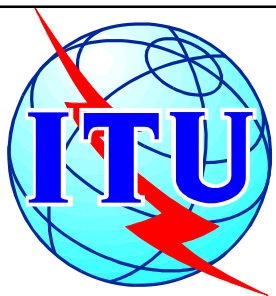
- ⇒ **Recent trends**

- ⇒ **Individual examples**

- **What happens next?**

- ⇒ **Implications for Universal Service/Universal Access**

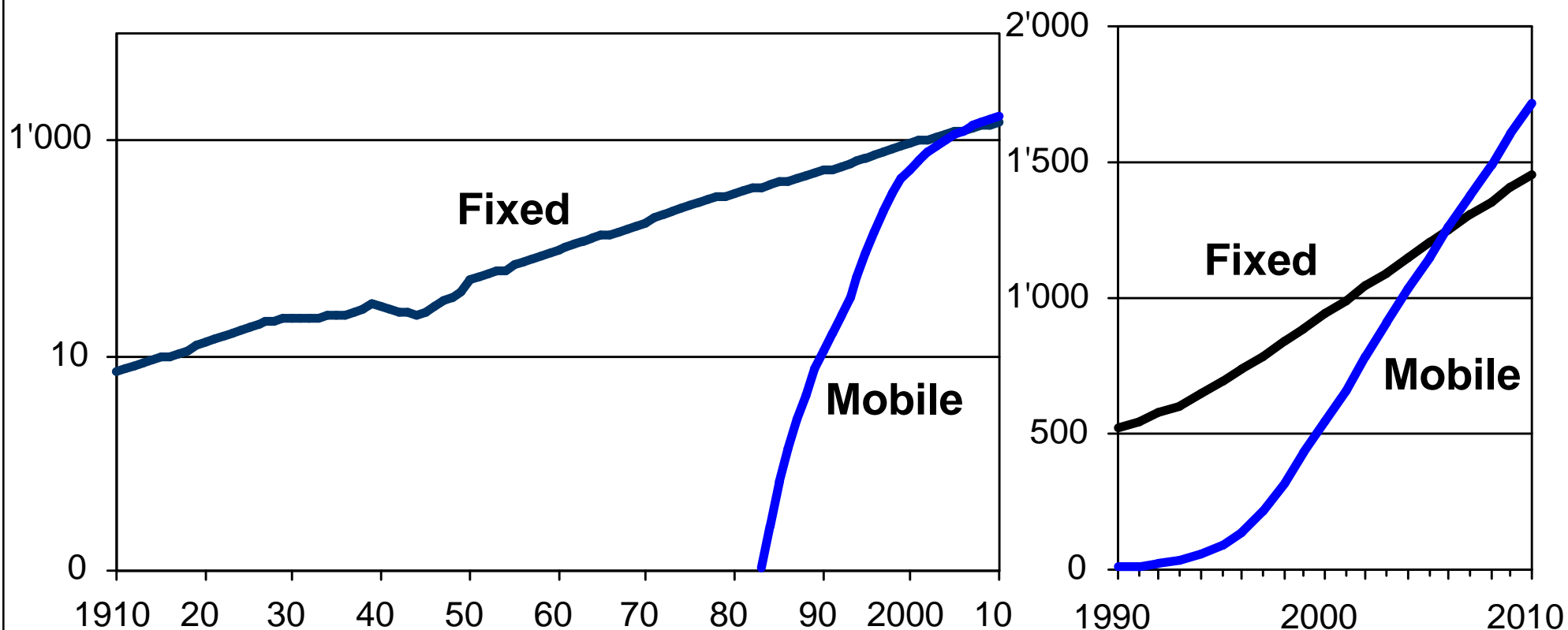
- ⇒ **Implications for IP world**



100 years of telephones

Log scale: 1910-2010

Normal scale: 1990-2010

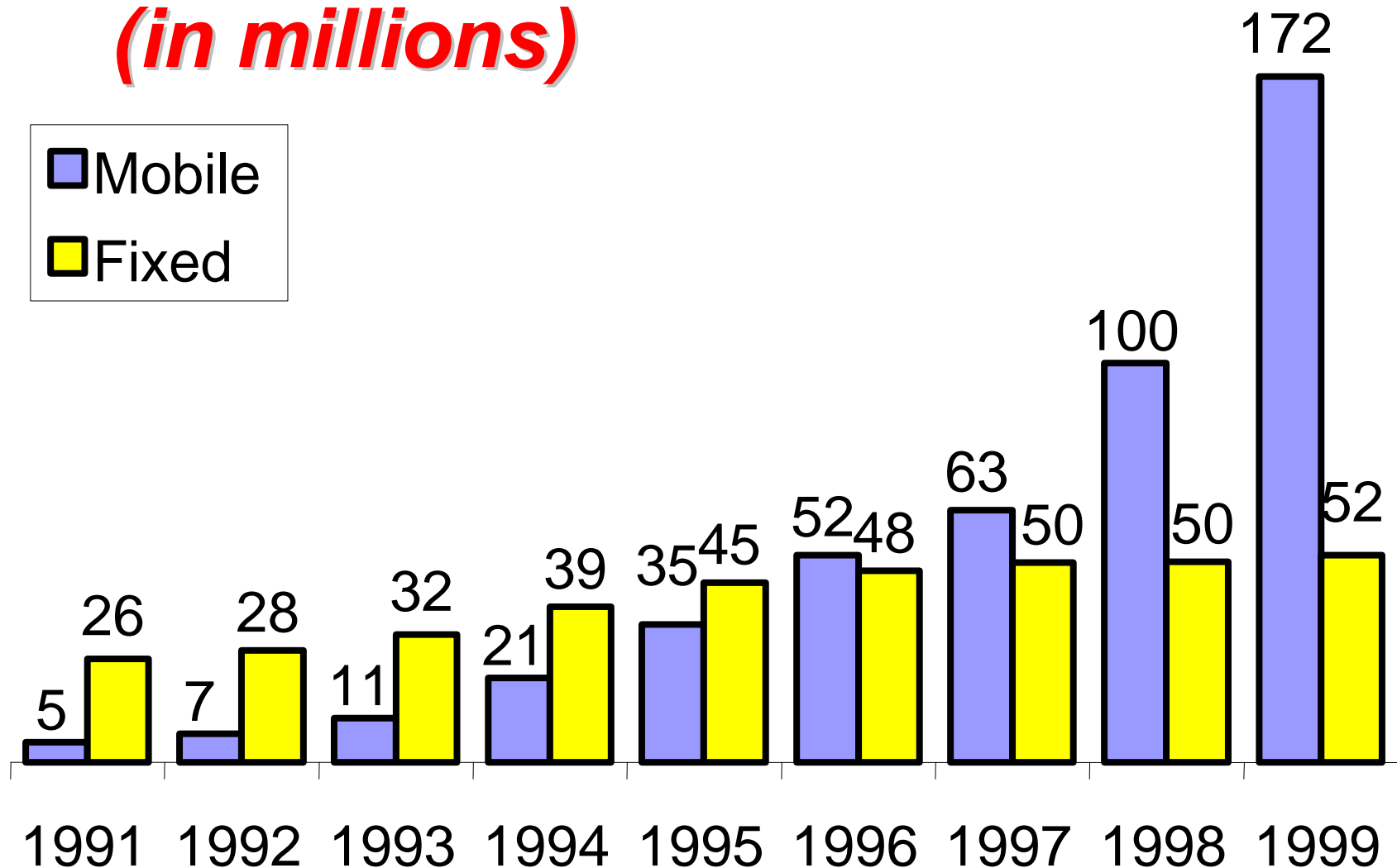


Source: ITU, "World Telecommunication Development Report: Mobile Cellular" 1999.



Recent trends:

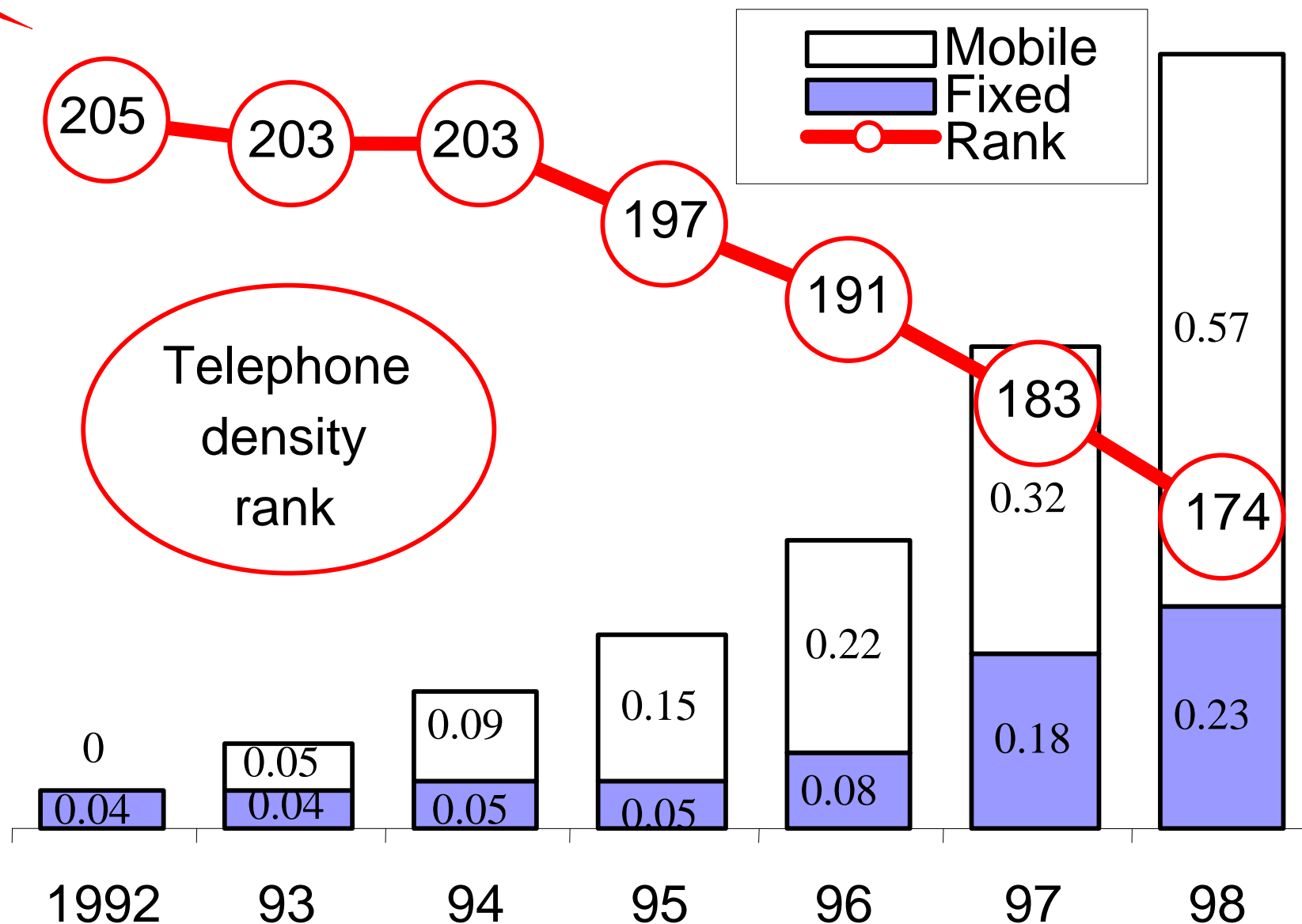
Number of new connections added per year to the global network (in millions)



Source: ITU, "World Telecommunication Development Report: Mobile Cellular" 1999.



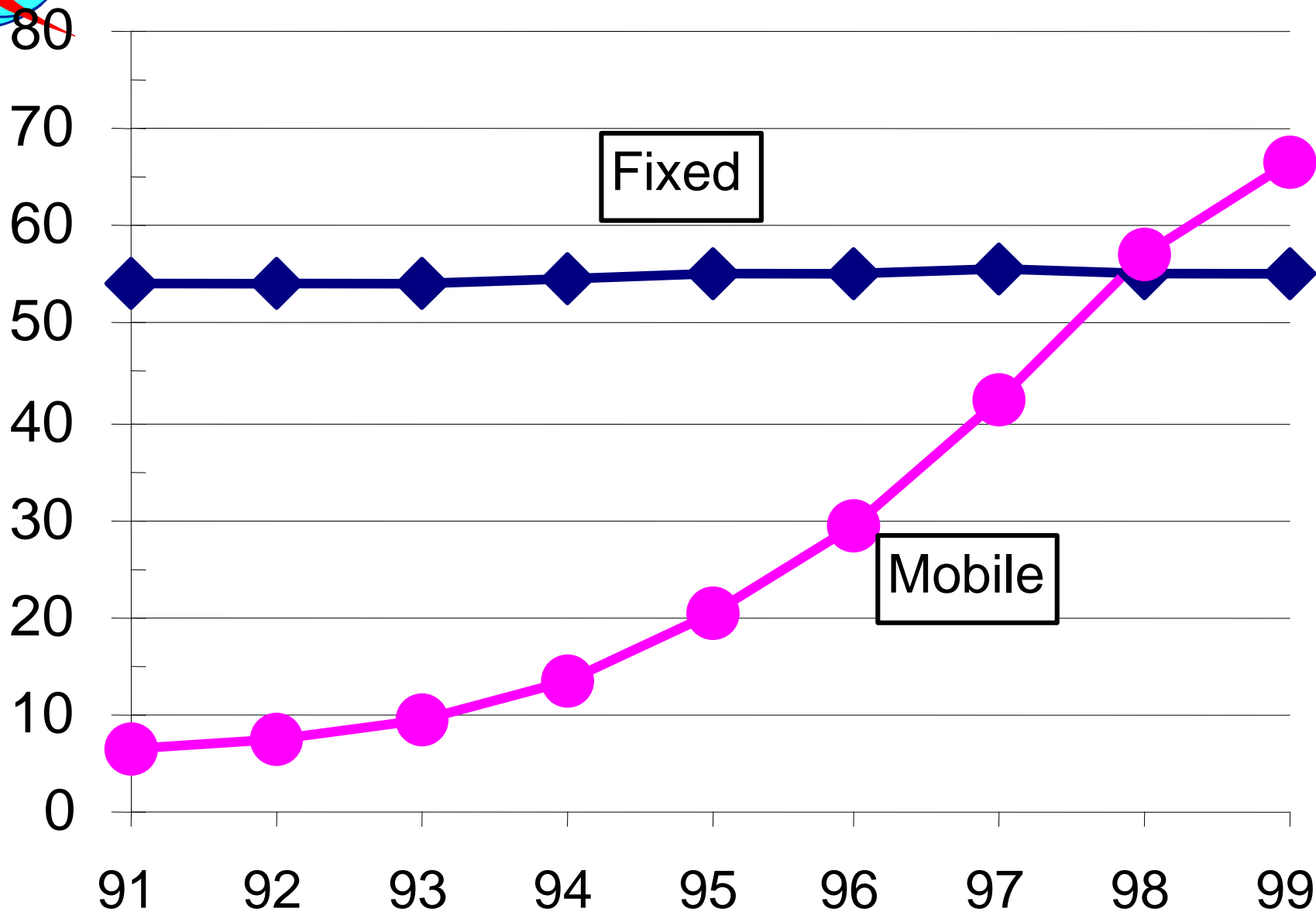
Example 1: Cambodia



Source: ITU, "World Telecommunication Development Report: Mobile Cellular" 1999.



Example 2: Finland

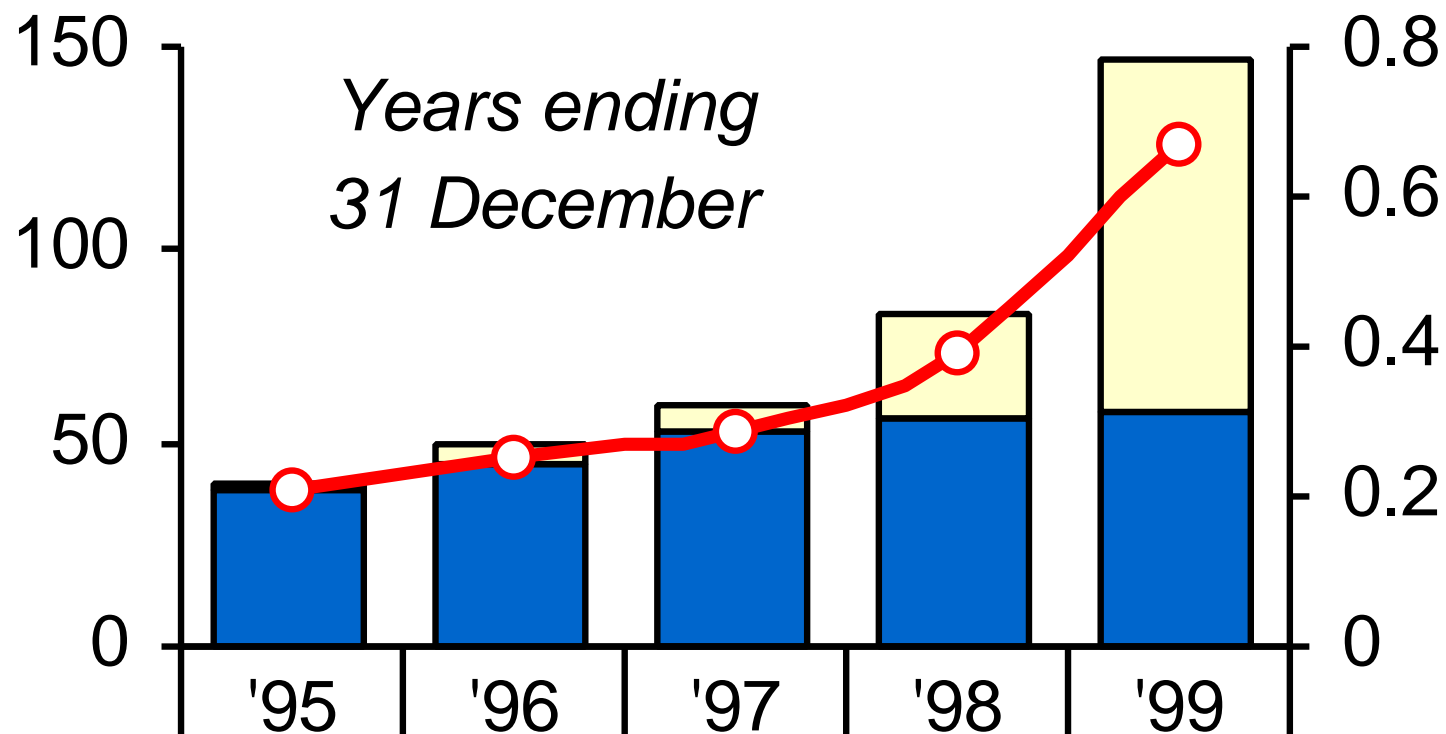





Source: ITU, "Mobile/Fixed Interconnect: Finland case study"

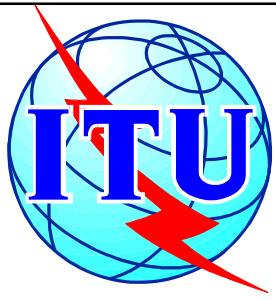


Example 3: Uganda

Telephone subscribers, Uganda, (000s)



 Mobile	2	4	7	26	87
 Fixed	39	46	54	57	59
 Penetration	0.21	0.25	0.29	0.39	0.67



What happens next?

Universal service/access

- **Traditional universal service**

- ⇒ **Availability, Accessibility, Affordability [of fixed-line service]**
- ⇒ **Funding via [hidden] tariff subsidies or [transparent] universal services fund/agency**

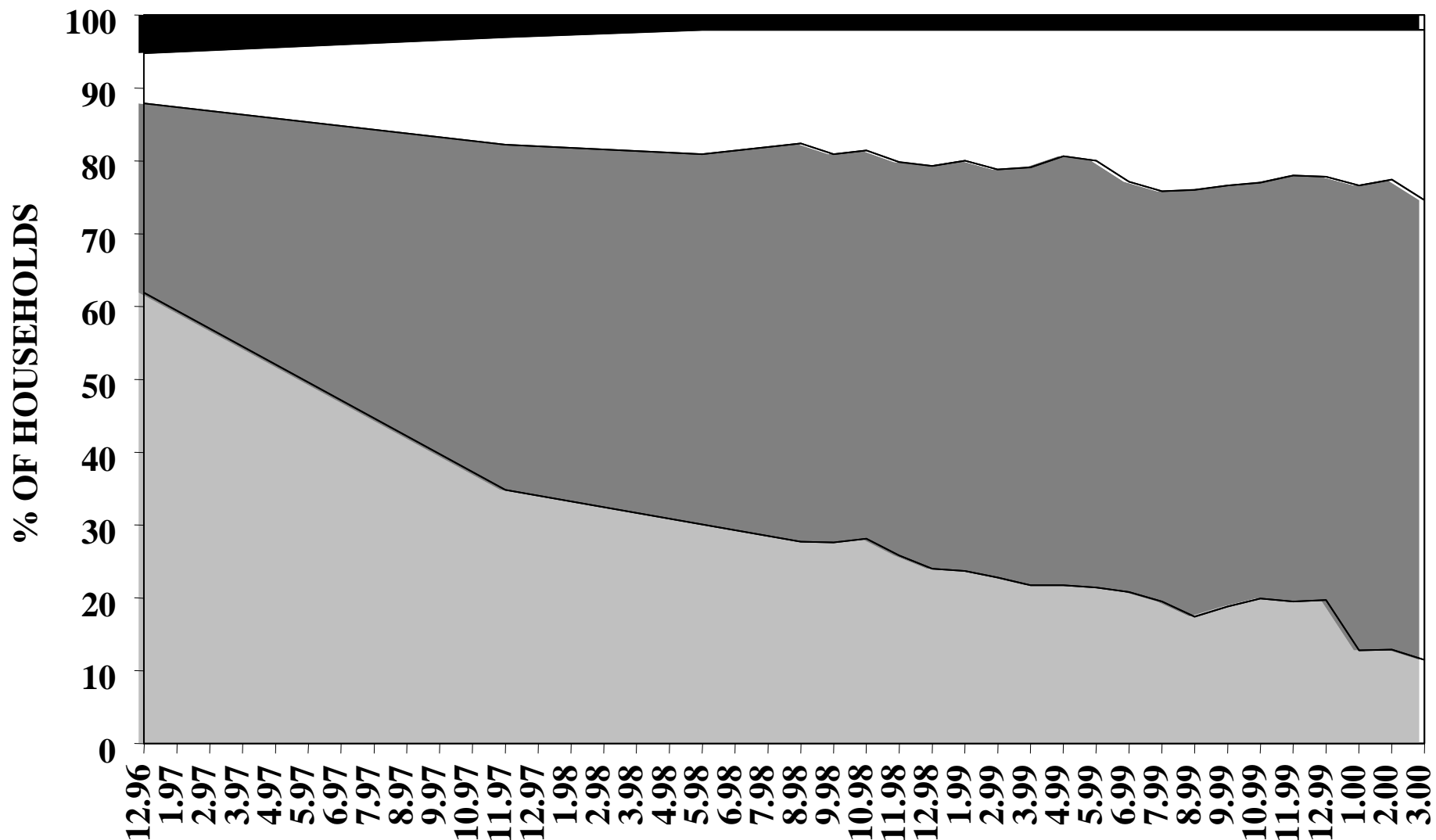
- **“Post-Mobile” universal service**

- ⇒ **Mobile may well be cheapest & most effective way of reaching the “unphoned”**
- ⇒ **Pre-paid is becoming dominant paradigm for low-cost access**
- ⇒ **Geographical coverage is key issue**
- ⇒ **Persistence of subsidy-based funding mechanisms may hinder market development**

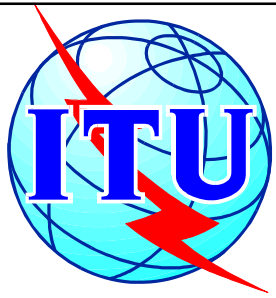


Access in Finland

■ fixed only ■ both □ mobile only ■ no telephone



Source: ITU, "Mobile/Fixed Interconnect: Finland case study"



What happens next?

Implications for IP world

- **Traditional Internet**

- ⇒ **Access from dial-up and leased line connections**
- ⇒ **Content providers receive no direct compensation from carriage providers**

- **“Post Mobile” Internet**

- ⇒ **3G mobile licences are proving very valuable (around US\$40 billion bid for UK licences)**
- ⇒ **Future Internet devices may be:**
- ⇒ **Access from 3G mobile-ready devices, purchased off-the shelf, which automatically log-on to nearest mobile ISP**
- ⇒ **[Some] Content providers receive share of per-minute access charges**
- ⇒ **Location-specific services**