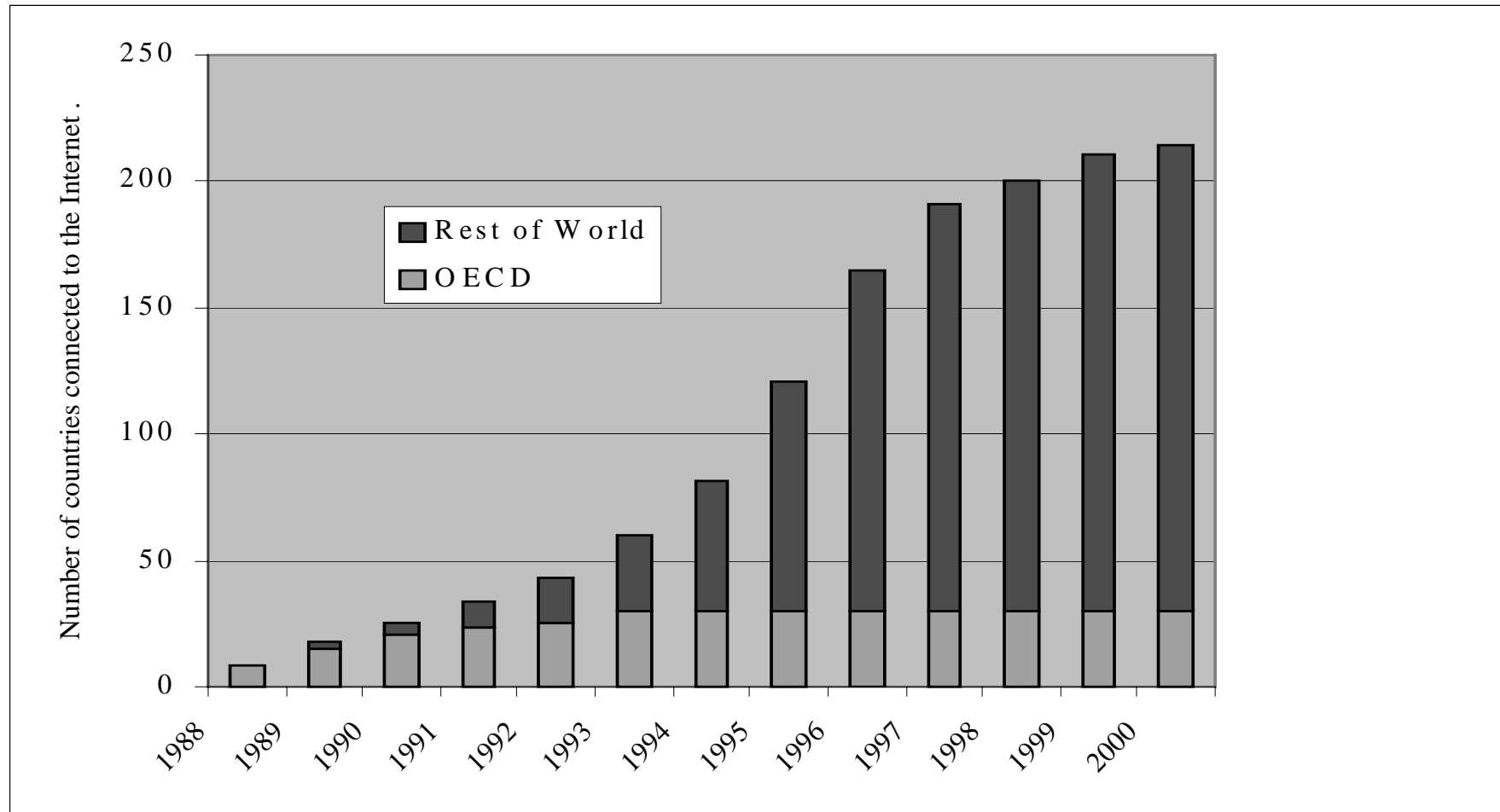
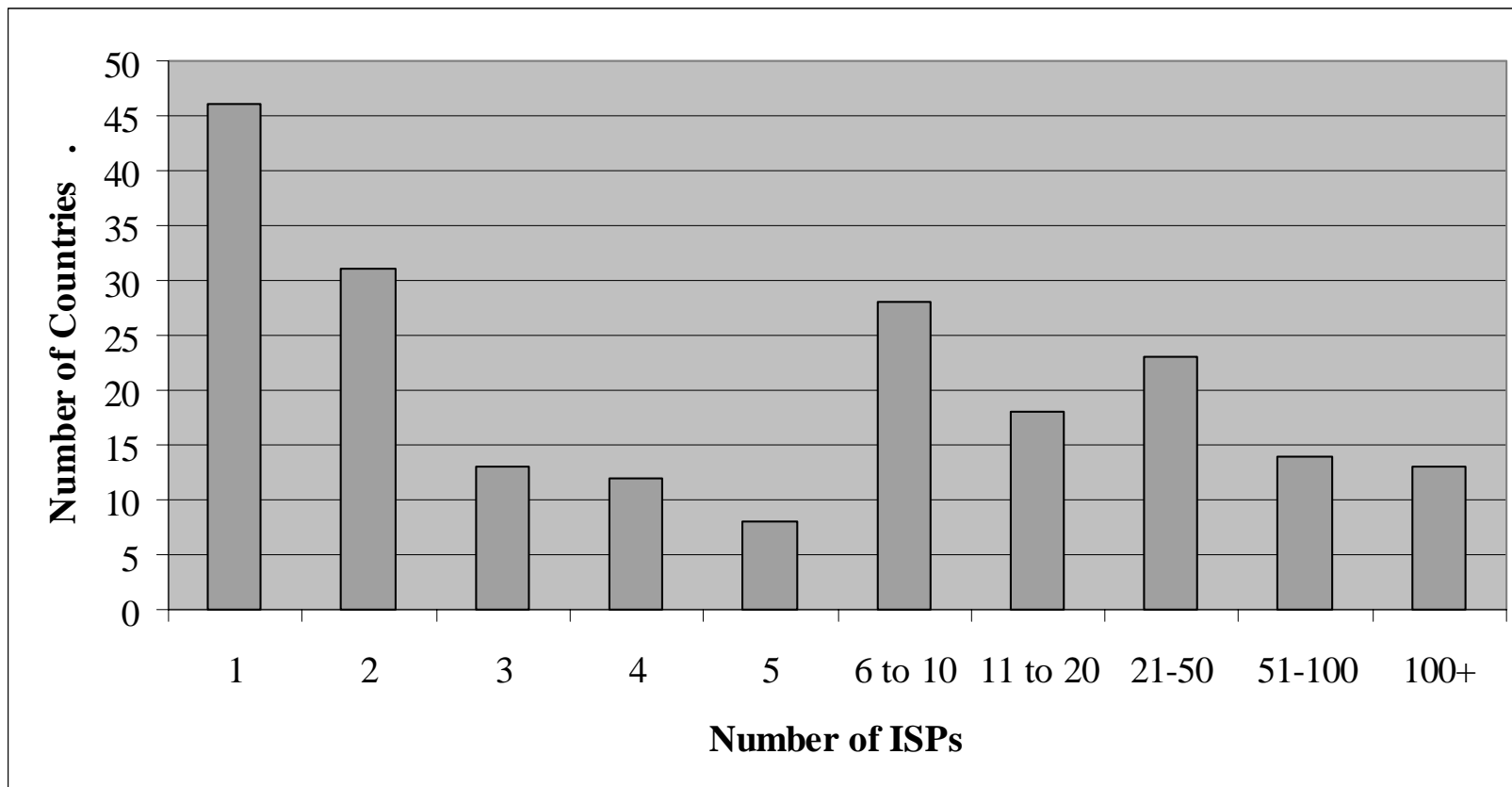

OECD Workshop on Internet Traffic Exchange 7-8 June, 2001

First Internet Connection - Half the world's countries have connected since the closure of NSFnet.

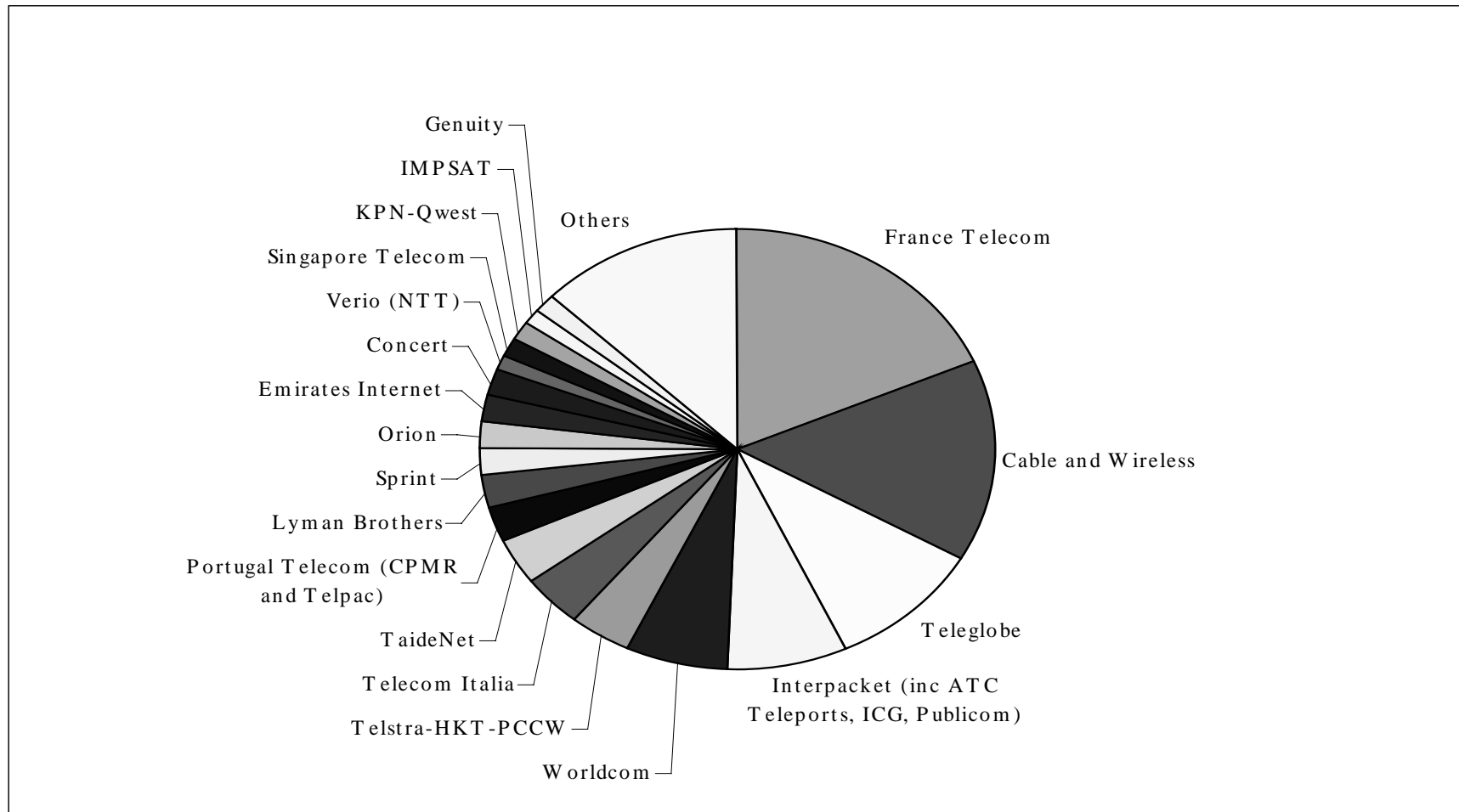


50% of the world's countries have less than 5 ISPs



Share of backbone connections to countries with less than 5 ISPs

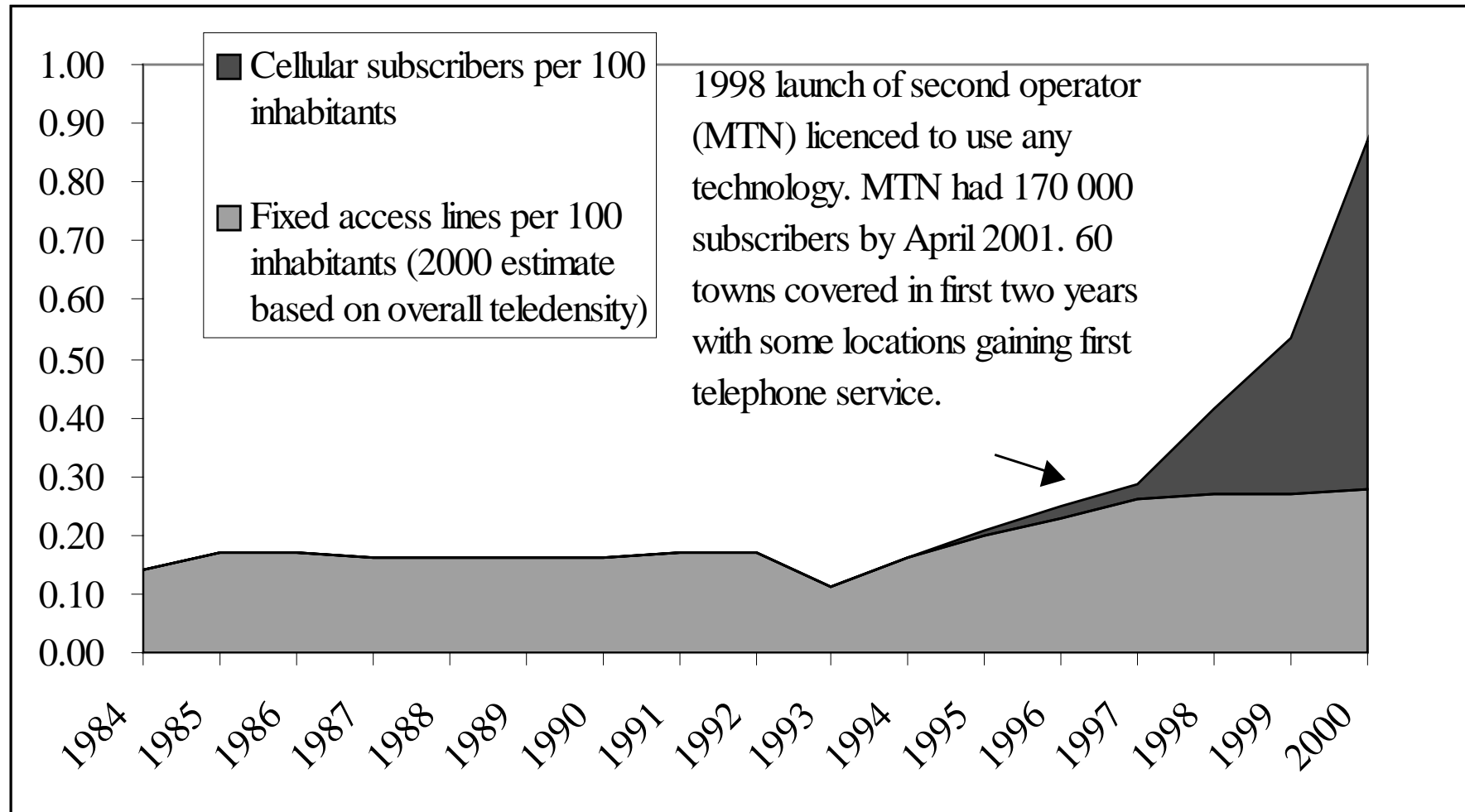
(source: OECD based on Netcraft)



Tycom Global Network - The Indian ISP Dishnet has contracted Tycom to build end to end capability to US



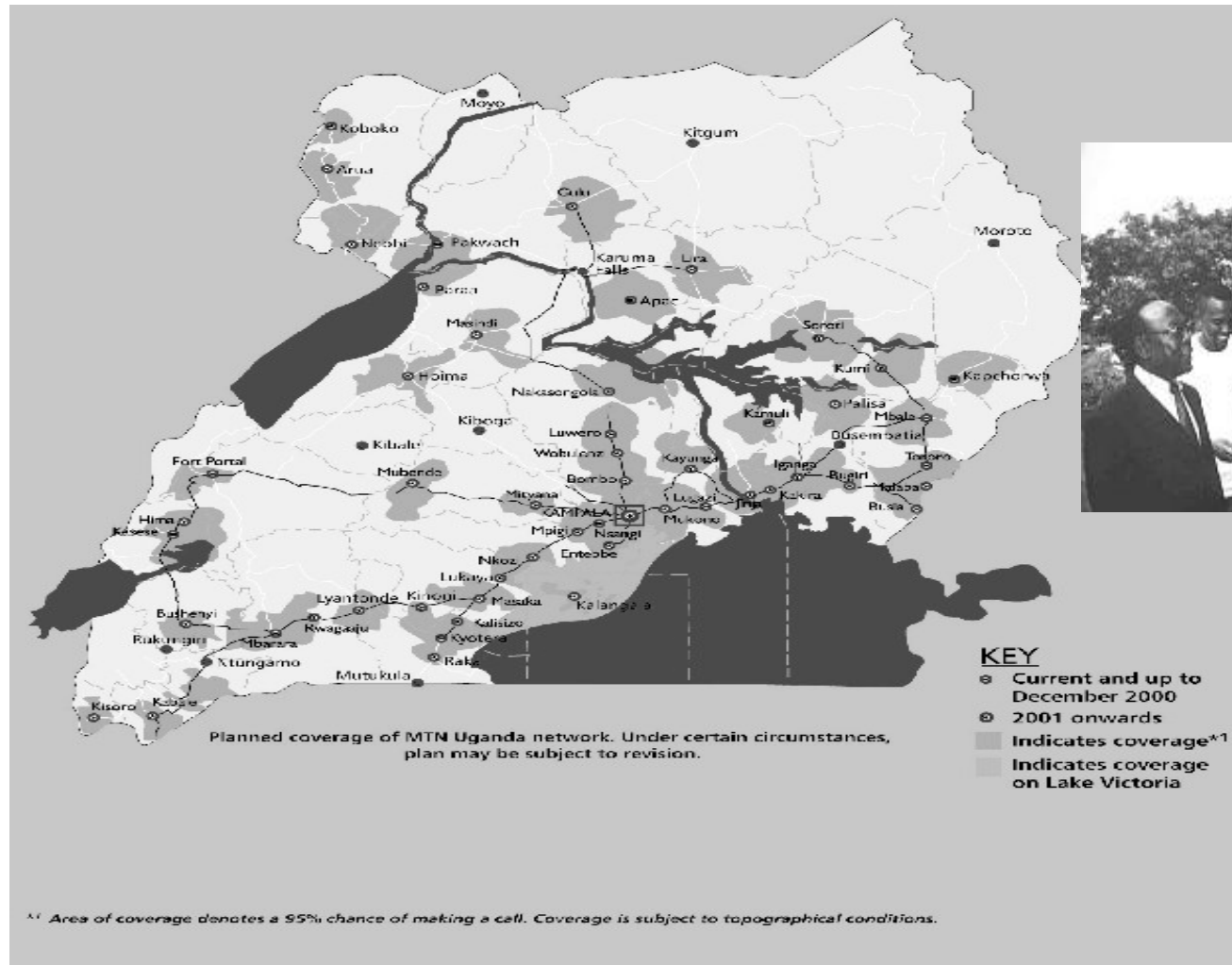
Competition can drive growth in developing countries - Ugandan ITU case study



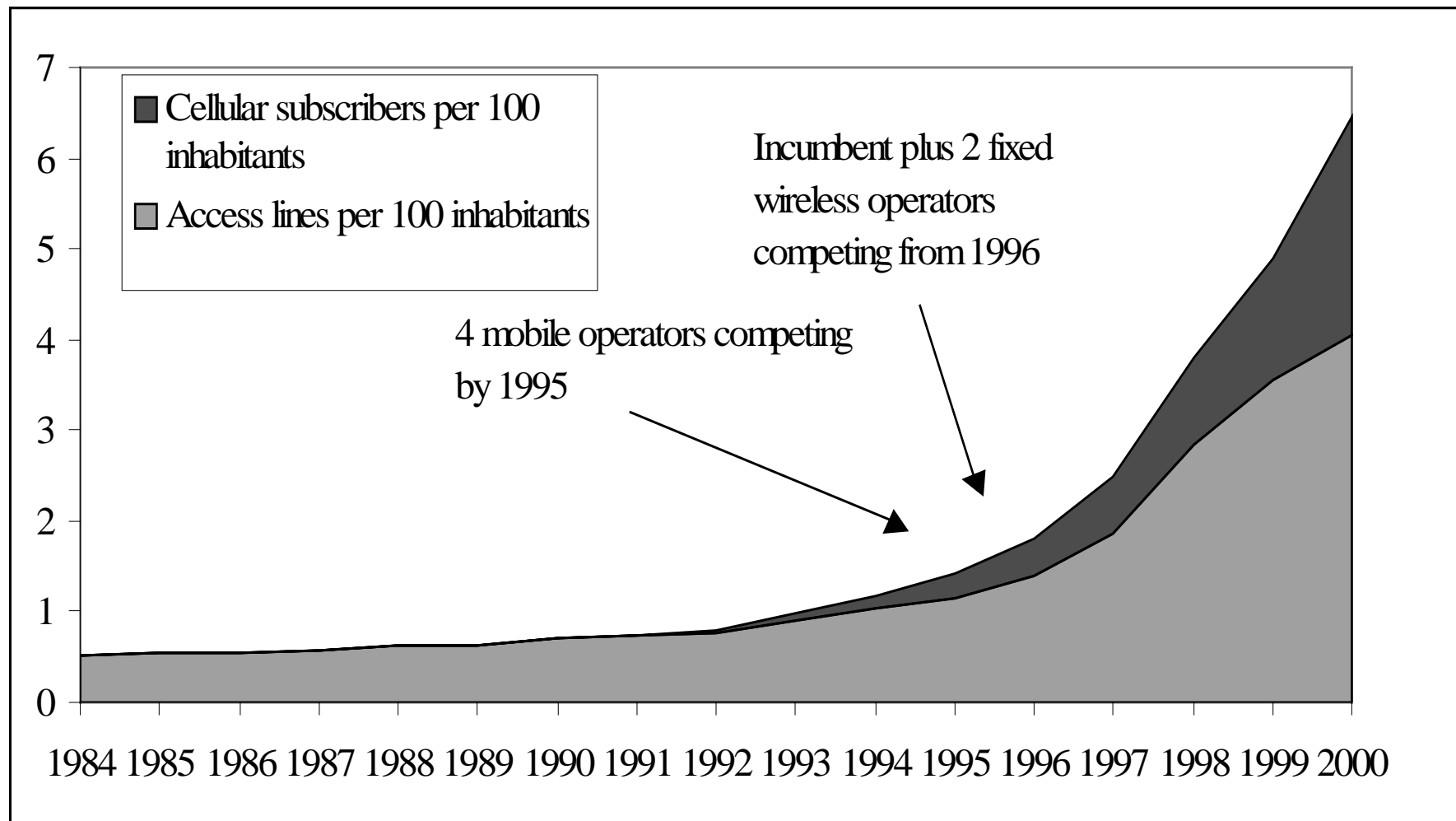
MTN Coverage

<http://www.mtn.co.ug/coverage1.htm>

http://www.mtn.co.ug/30_01_ssese_islands_goes.htm



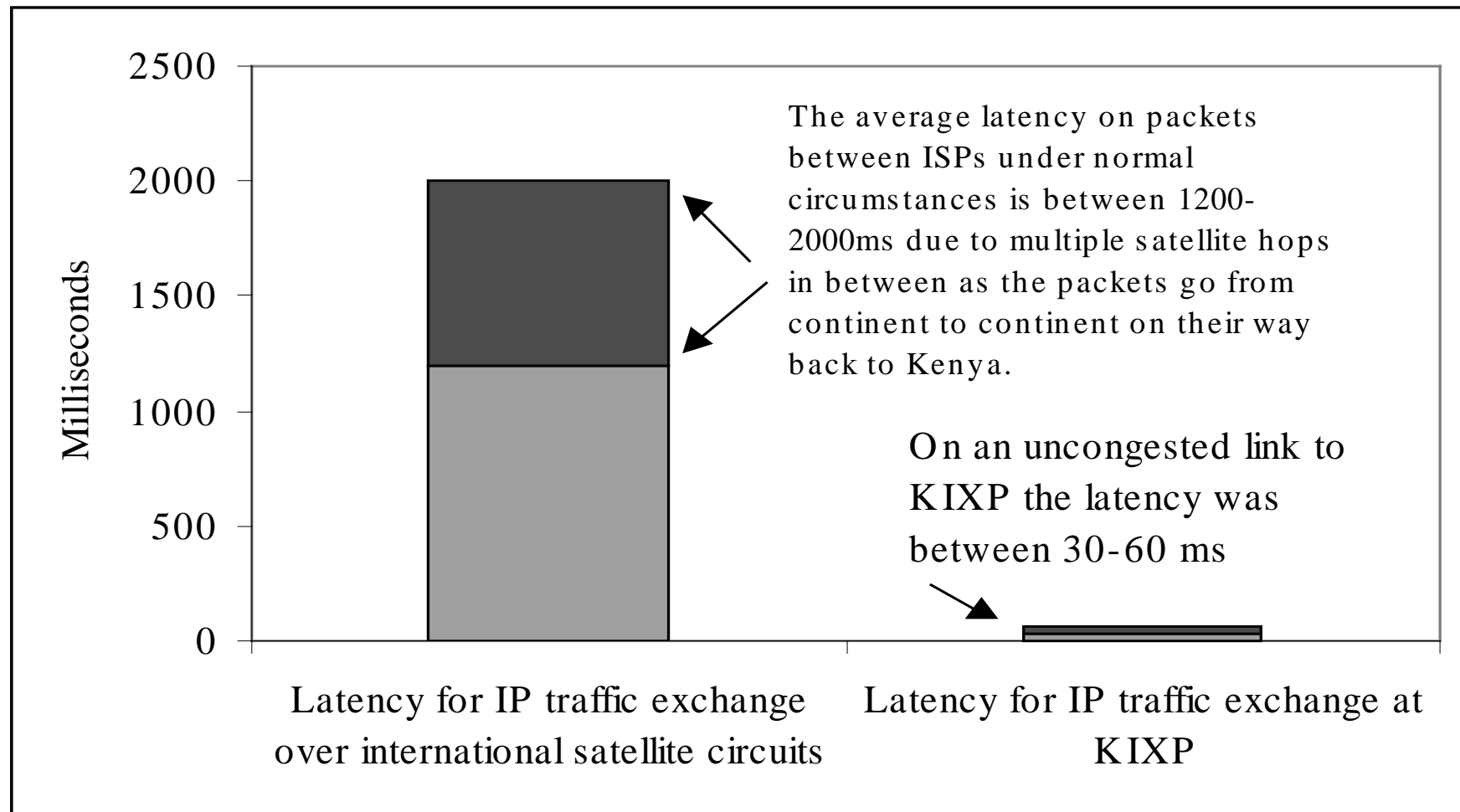
Competition can drive growth in developing countries - Sri Lanka



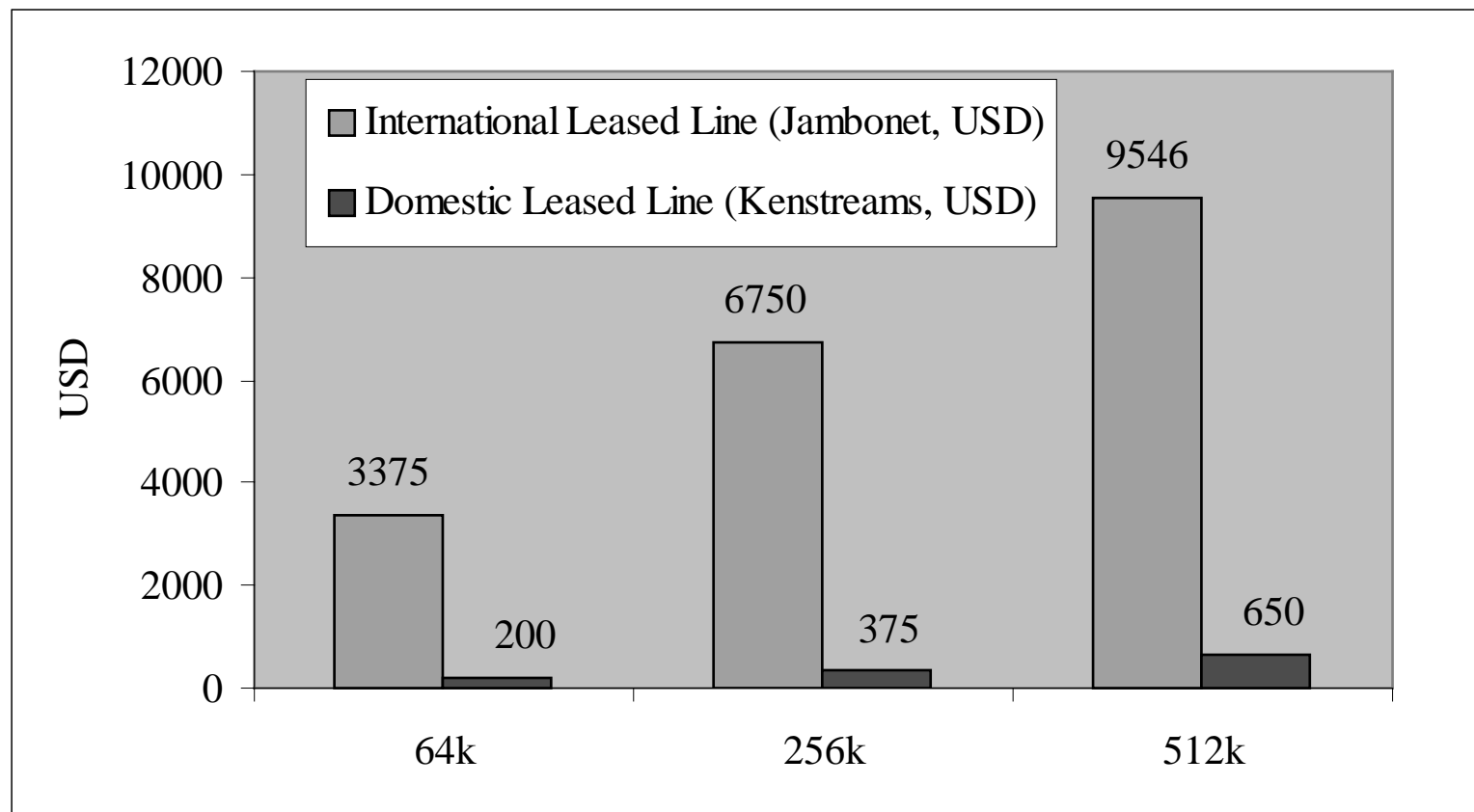
Bangladesh: a contrast!

- New entrants, such as Grameen Telecom are providing village telephone service in rural areas and making a profit.
- They receive no share of the settlements they generate for incoming calls (this is retained by the incumbent monopolist - BTTB).
- Refer: TDG report at:
<http://www.telecommons.com/villagephone/contents.html>
 - and <http://www.grameen.org/OECD>
- BTTB monopoly view after Indian study tour:
 - » http://www.bttb.net/Report_India_Visit.pdf
- BTTB conclude international bandwidth not important to develop software and services over the Internet
- BTTB say that if provided it will be used to bypass international settlements and import western services and content.
- BTTB say that a Bangladesh IXP can't be developed because government has not budgeted funds.
- BTTB position - classic behavior of a (state owned) monopolist
 - » retain monopoly rents!
 - » dictate to customers what they need/should have!
 - » limit capacity available to competitors!
 - » (not have commercial flexibility to act in commercial interest)

Quality of service and exchange of domestic Kenyan IP traffic



Difference between international and domestic leased line prices in Kenya, December 2000



Domestic reform needed to drive Internet growth

- Development Barrier in Kenya - No domestic IP traffic exchange (low quality, high international bandwidth costs).
- Domestic traffic makes up 80% of total IP traffic
- KIXP launched by Kenyan ISPs November 2000 (improves quality, lowers costs) www.kixp.net
- Incumbent monopolist fears losing international leased line revenue.
- KIXP closed by Kenyan Regulator - December 2000 (www.accesskenya.com/tespok.htm)

If ISPs can flourish so will the Internet

(source: OECD based on Netcraft)

