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Achieving Universal Service in South Africa: What Next for Regulation?

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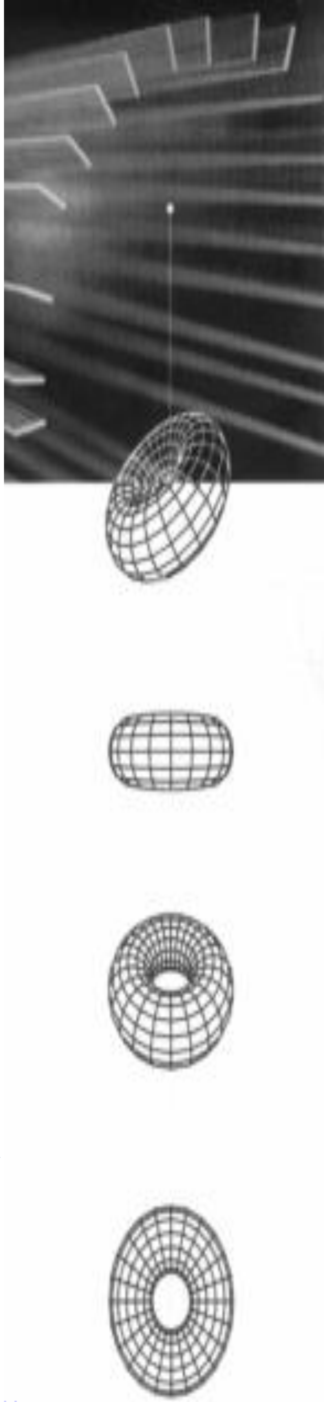
Universal Access & RSA

- Global focus on ubiquitous broadband / NGN
  - Next-generation digital divide threatens?
- RSA: unique status for universal access & service
  - Transition from *apartheid* to democracy
  - Accompanied by ICT sector reform
- RDP (1994) identifies *apartheid* digital divide
  - Estimates teledensity - 60% ‘whites’ vs <1% ‘blacks’
- RSA vision: “universal affordable access for all”
  - Balanced with role of ICTs for economic growth
- Animates subsequent policy
  - RDP (1994) → Green Paper (1995) → White Paper (1996) → Telecomms Act (1996)
  - Slightly downgraded in Electronic Comms Act (2005)

RSA's Universal Access Interventions

- Four main areas of intervention
- Following global best practice
  - USOs - universal service obligations imposed on licensees
  - USF - universal access fund (now USAF)
- Breaking new ground
  - USA - dedicated agency for universal service & access issues (now USAASA)
  - USALs - under-serviced-area licences, geographically restricted, areas of low teledensity (later PUSANOs)

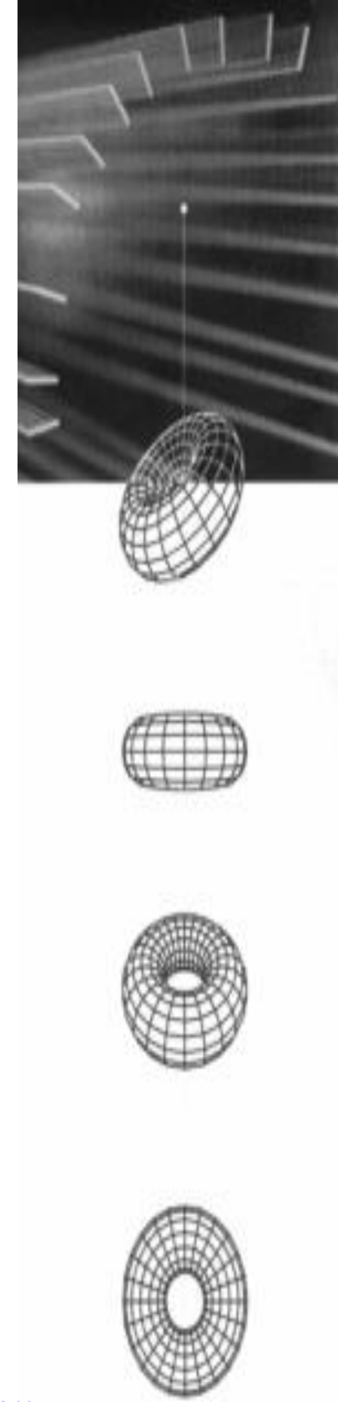


Universal Service Obligations

Table 1: Universal Service Obligations Imposed on Licensed Operators in SA

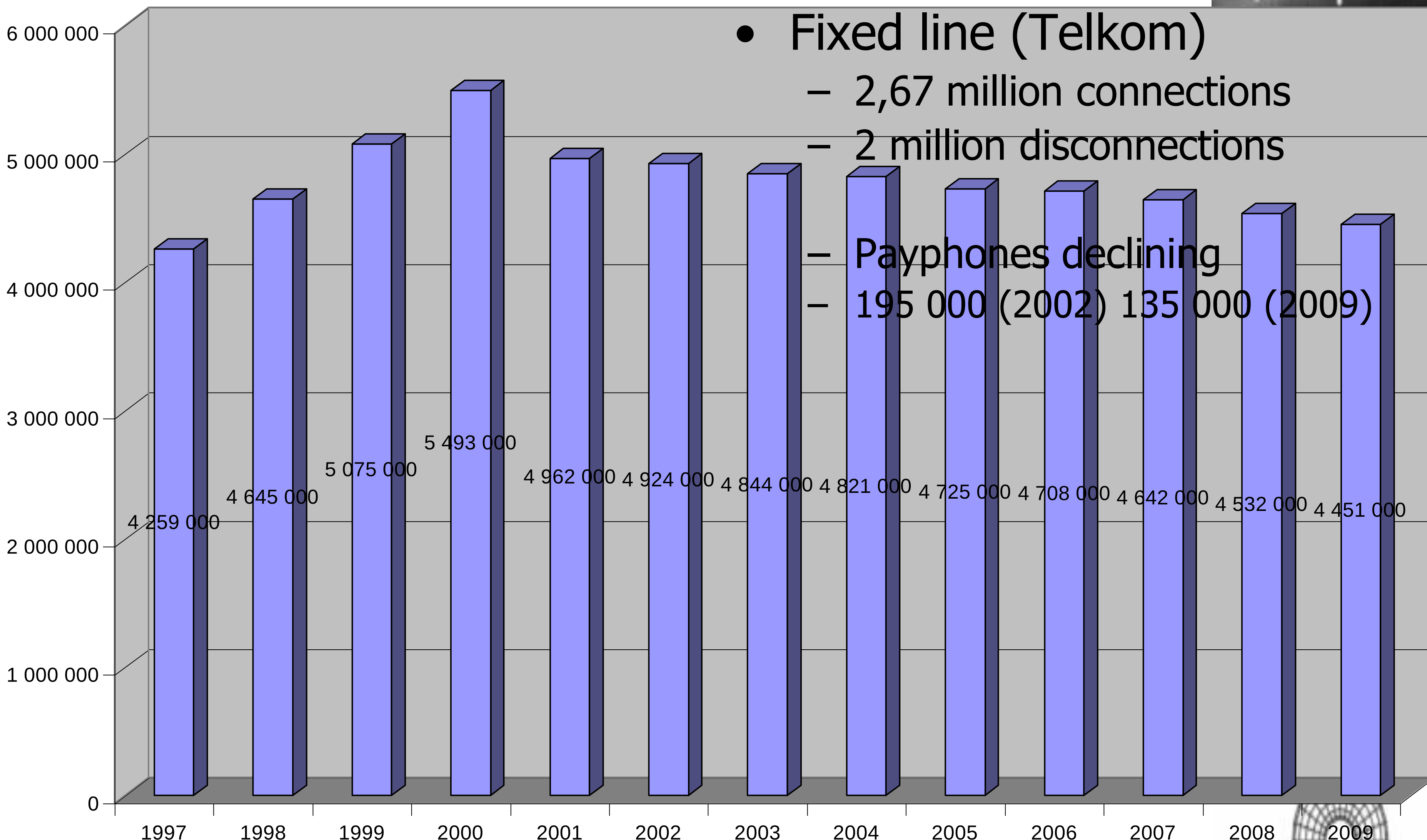
Operator	Access lines	Coverage	Payphones / community access points
Telkom (PSTS)	2 690 000 over 5 years - 1 676 000 in under-serviced areas - 20 246 to hospitals, libraries, local authorities, schools - 3 204 to under-serviced area villages	N/A	120 000 public payphones over 5 years
Vodacom (Mobile)	N/A	60% of population within 2 years 70% of population within 4 years Timetable for specified coverage areas	22 000 community service telephones in 70 specified areas over 5 years
MTN (Mobile)	N/A	60% of population within 2 years 70% of population within 4 years Timetable for specified coverage areas	7 500 community service telephones over 5 years
Cell C (Mobile)	N/A	40% of area within 1 year (roaming) 8% of area within 5 years (own network) 80% of population within 1 year (roaming) 60% of population within 5 years (own network)	52 000 community service telephones in under-serviced areas (with less than 10% fixed teledensity)
NeoTel (PSTS)	N/A	60% of population in defined metropoles within 5 years 80% of population within 10 years Subject to "confidential" "Rollout Timetable"	Establish and maintain "high speed Internet connectivity" to: - 2 500 public schools / education institutions - 2 500 public rural clinics Subject to approved implementation plan

Compiled from: RSA, 1997; ICASA, 2001; ICASA, 2002a; ICASA, 2002b; ICASA, 2006



Telkom’s USOs Assessed

- Fixed line (Telkom)
  - 2,67 million connections
  - 2 million disconnections
  - Payphones declining
  - 195 000 (2002) 135 000 (2009)



Meanwhile Mobile Flourished

- Mobile (MTN, Vodacom, Cell C)
  - Community Service Telephones (CSTs)?
  - 200 000 +

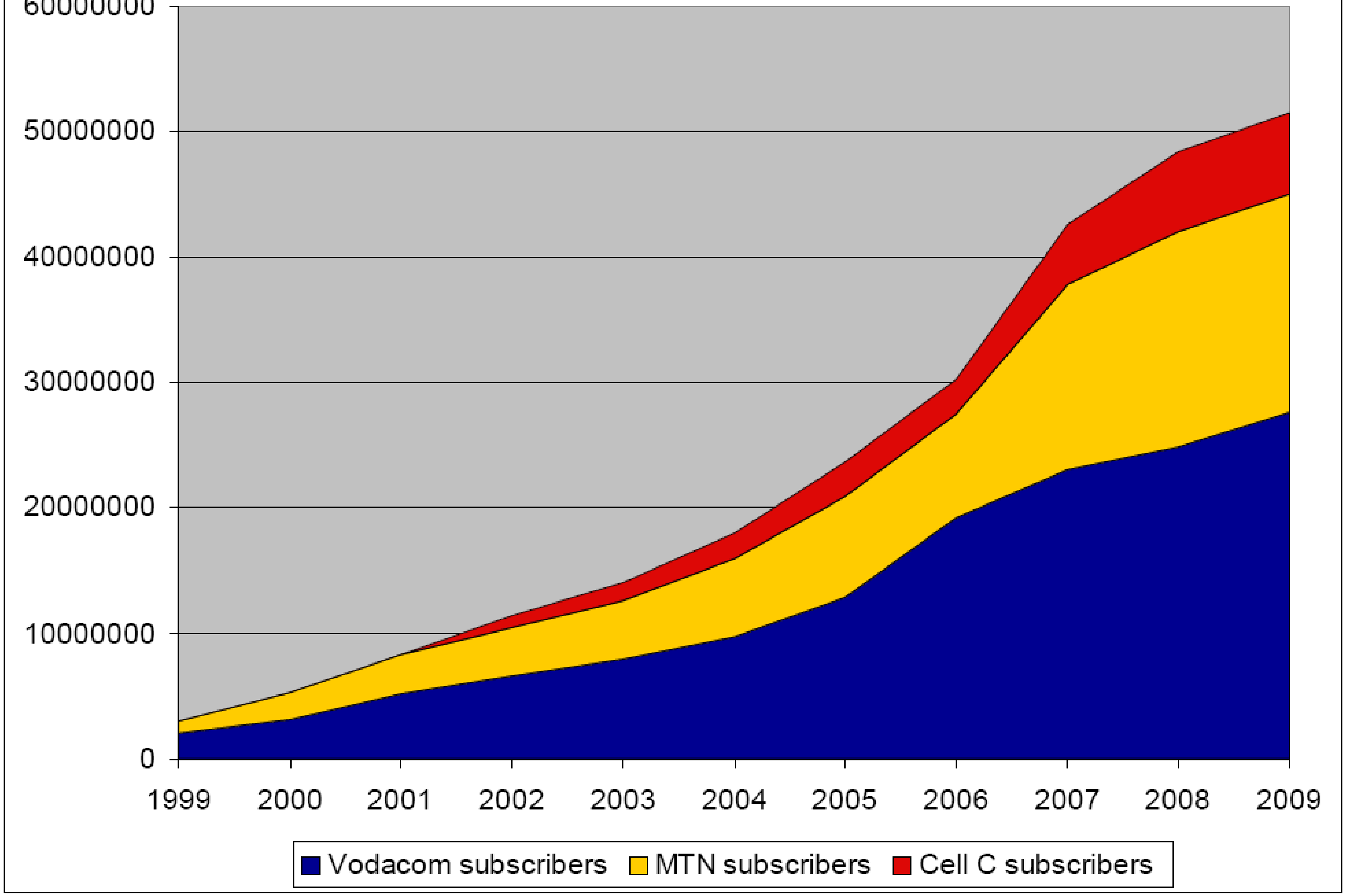
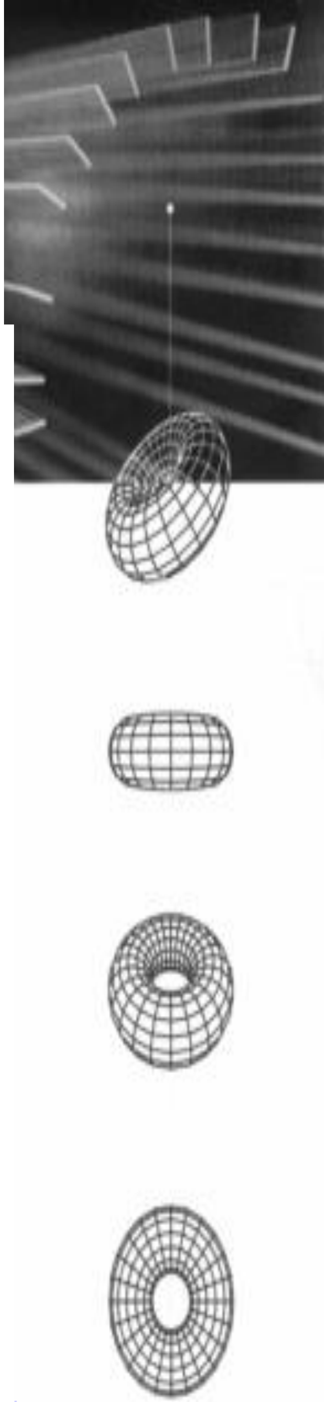


Figure 3: SA: Mobile Subscribers (1999-2009)[9]



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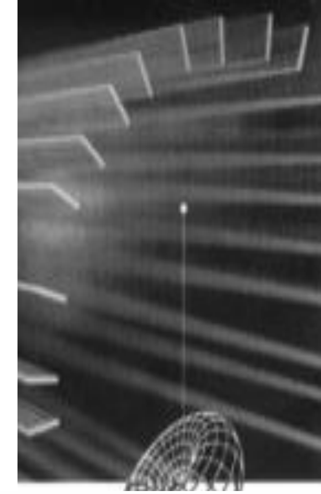
Universal Service (and Access) **Agency** (of South Africa)



- Unique & ground-breaking institution
  - Replicated in Pakistan, Ghana, Nigeria…
- Weakly defined mandate
  - "promote… encourage… foster… stimulate…"
- "bizarre regulatory space"
  - Minister ←→ USA(ASA) ←→ ICASA
- Poor management & governance track record
- Implementation failures

USA UNIVERSAL SERVICE AGENCY

usaasa Universal Service and Access Agency of South Africa

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Universal Service Fund

- Currently 0,2% of revenue levy on all licensees
- Payment of subsidies & extension of PSTS
  - Under Ministerial direction (was ICASA before 2001)
- No financial statements & massive unspent surplus ($55m +)
- Telecentres initially (high failure rate)
  - → now community access centres, cyberlabs, community digital hubs

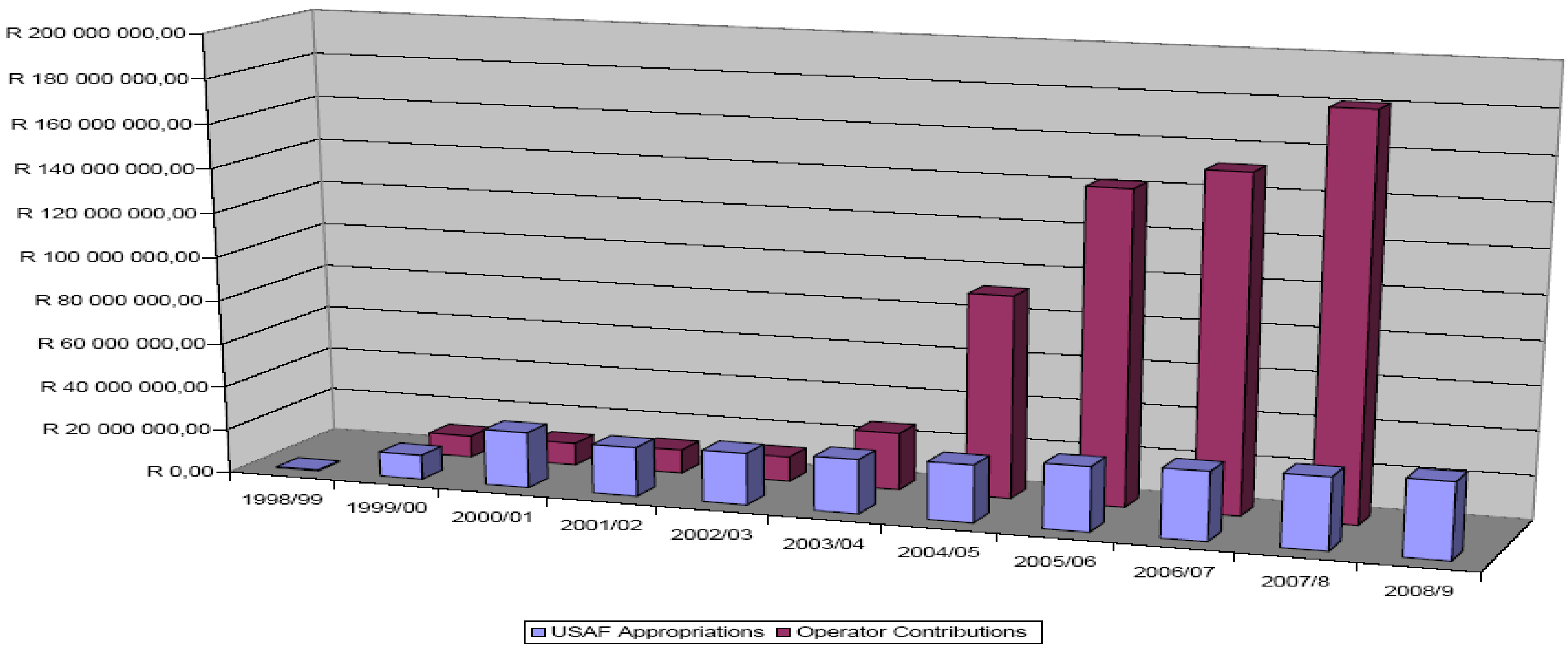
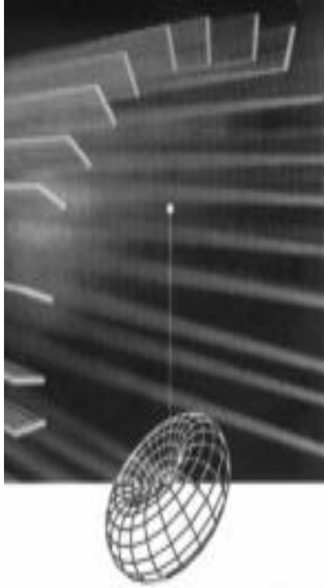


Figure 4: Universal Service Fund: Income & Expenditure (1998-2009)[16]

Under-serviced Area Licences



- (2001) 27 areas with <5% (fixed line, 1996) teledensity
  - But mobile had already overtaken fixed
- Small business, historically disadvantaged groups
  - Created structural constraints
- VoIP, fixed-mobile
  - Undermined by liberalisation
- R15 million from USF
  - Insufficient capital
- 7 licensed (2004) +7 (2007)
- (2007) USALs
  → PUSANOs (scrapped)
- (2008) none operational, only 3 potentially viable

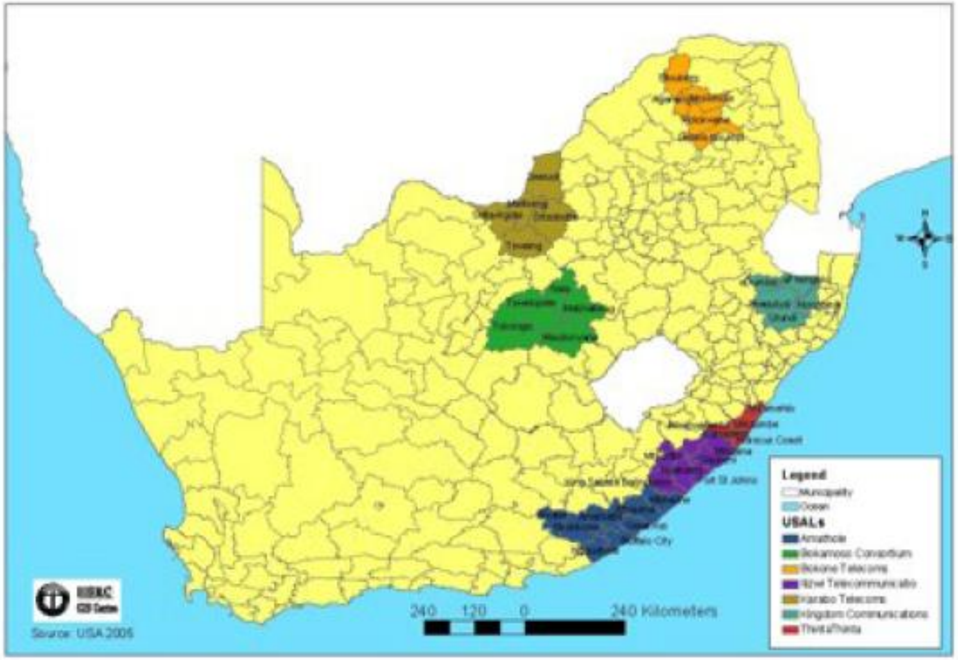


Figure 1: First 7 Under-serviced Area Licensees[7]

Does RSA have Universal Service in Telephony?

- Possibly?
  - 51 million subscribers, 49 million people
  - But mobile figures clearly overstate - 32%?
  - Possibly 75% - 80% of population are users
- Contribution of policy?
  - USOs? USF?
  - USAASA? USALs?

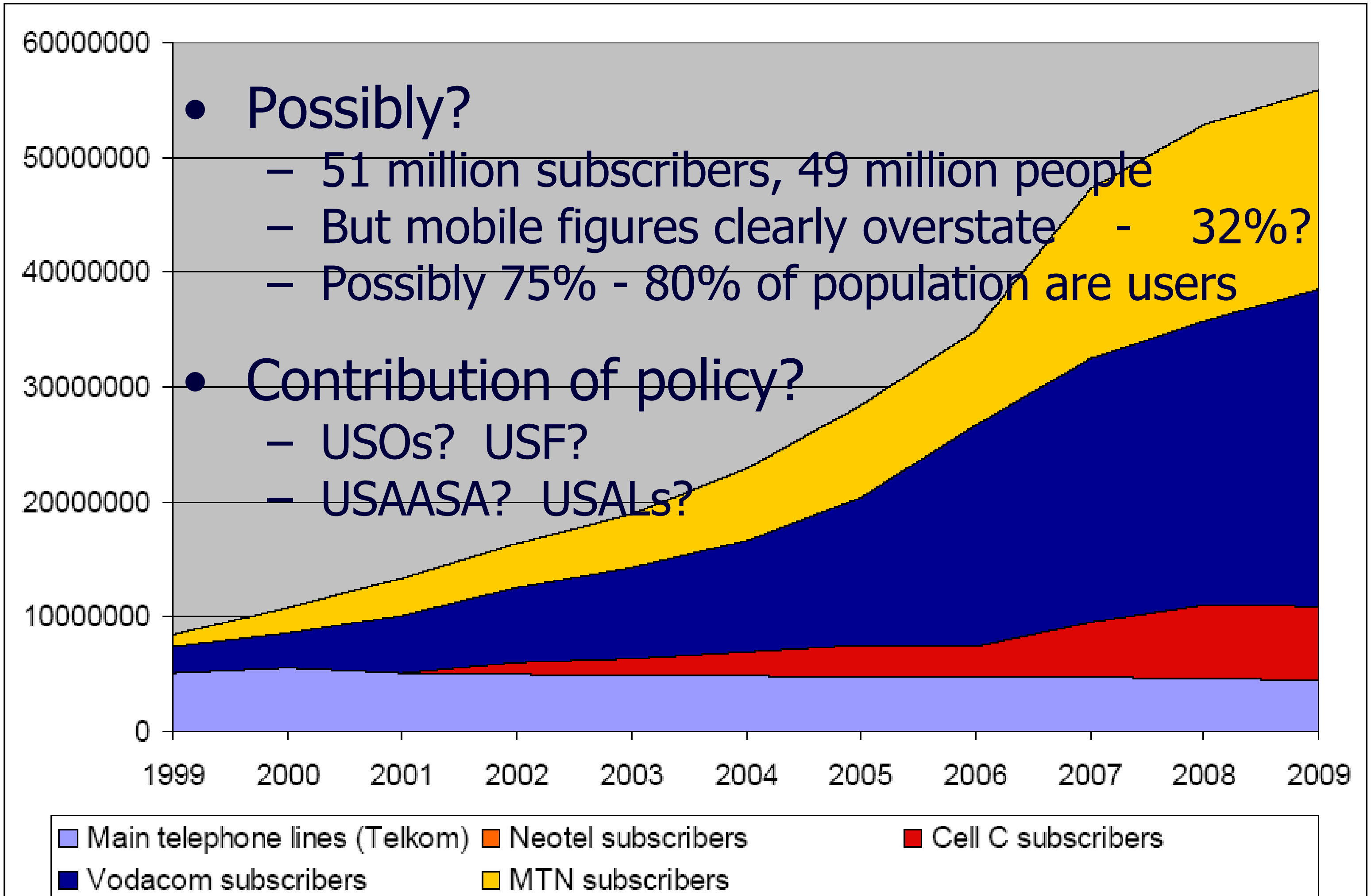
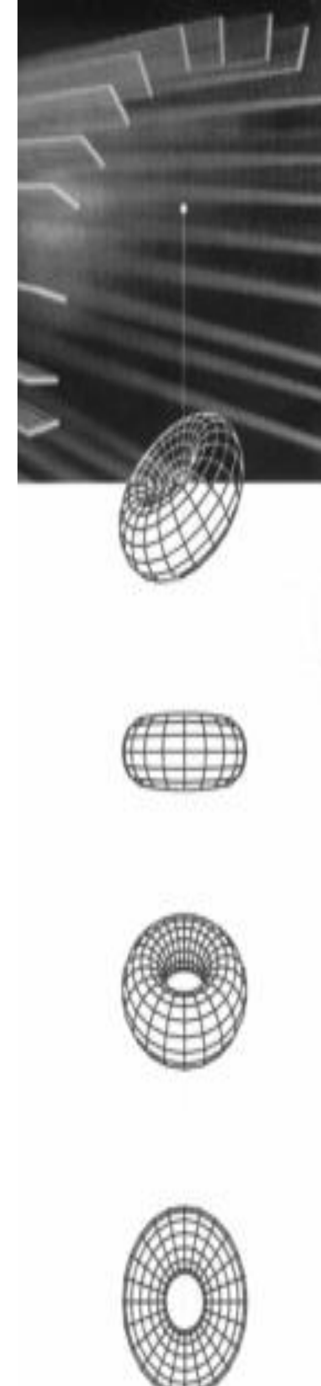


Figure 5: South Africa's Telephony Rollout (1999-2009)[20]



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Universal Access Gap

Where does one position:

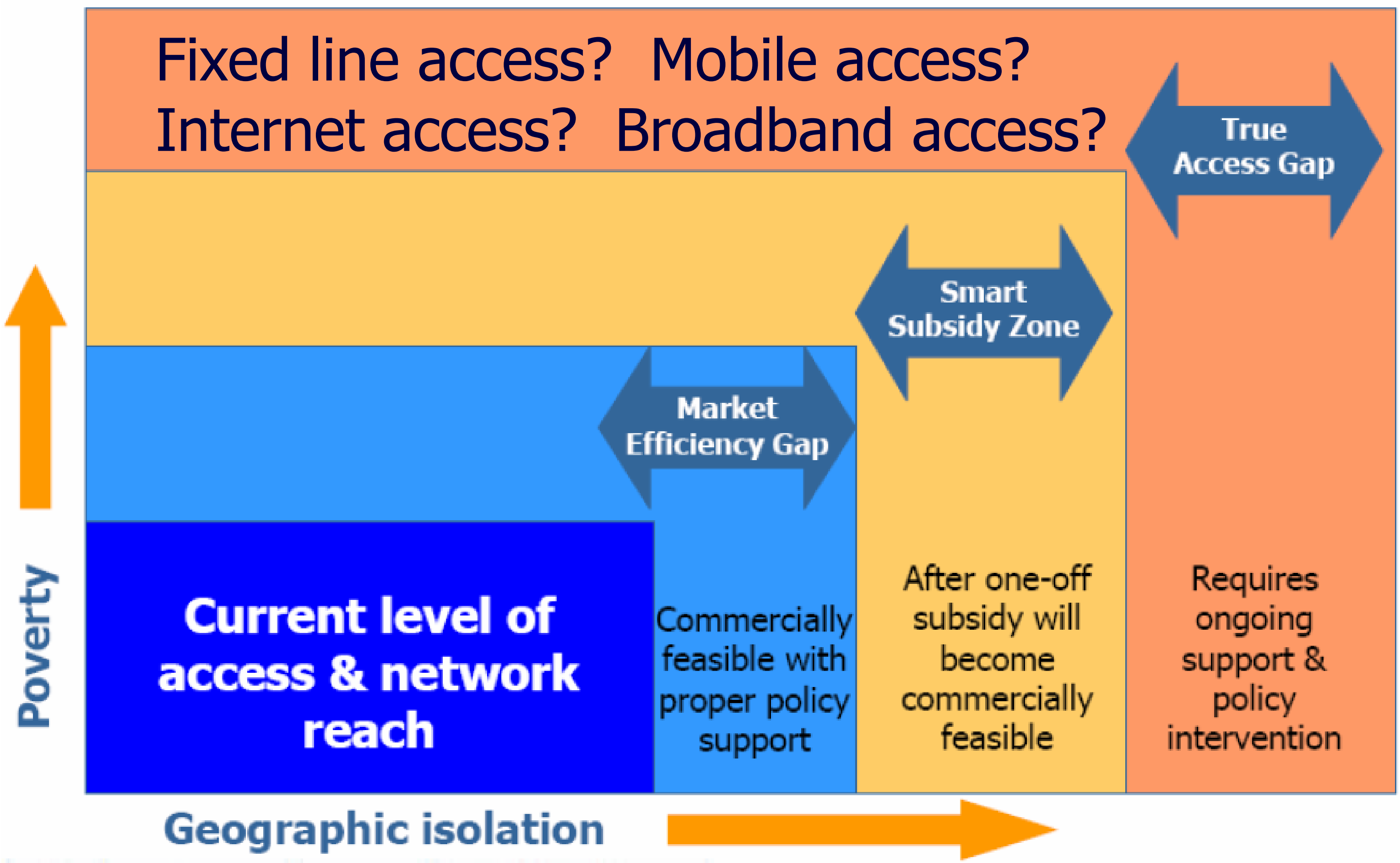

Figure 6: Typology of Universal Access and Service Interventions[25]

Derived from: Navas-Sabater, Dymond & Juntunen, 2002; Dymond & Oestman, 2003; Stern, Townsend & Monedero, 2006; Infodev, 2009.

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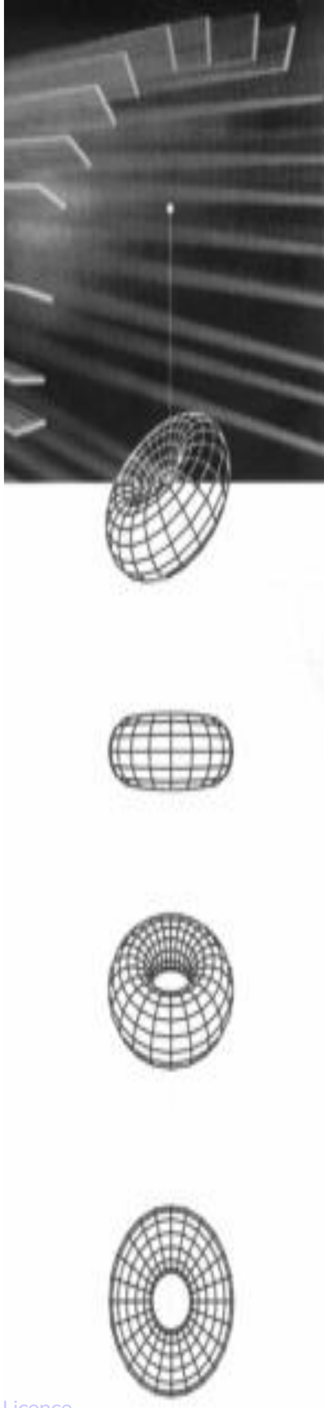
Universal Access: from Mobile to Internet & Broadband…

- 5 million Internet users (+15% pa)
- 2 million broadband users, mostly 3G (+75% pa)
- Universal Internet access probably via mobile (3G) broadband
- Market interventions (market efficiency gap)
  - Bandwidth (more undersea cables, plethora of new licensees)
  - Regulatory interventions (LLU?)
- Policy formulation
  - National Broadband Policy, GP e-governance
- Rollout USOs problematic (inflexible, not technology neutral)
- Simpler institutional structure needed (USAASA)
- Experimental models remain high risk
- USAF still seems most likely option
  - Quantify funding deficit (USD 165m pa? USF levy 0,2%?)
  - Vastly improved management & governance (ICASA? Board?)
  - Least subsidy auctions
  - Role of govt vs private sector (crowding out?)
  - Infrastructure open access models



Thank you…

…questions????

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