

# Universal Service / Access

*Good Practices & Lessons learned from India*

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# India: At a glance

◆ Population	1.03 Billion
◆ Size (in Million Sq Km)	3.28
◆ Rural population	72%
◆ No. of Villages	607491



# India: Current Telecom Scenario

(As on 31-3-2002)

■ Teledensity	4.4%
■ Rural Teledensity	1.2%
■ No. of Fixed DELs	38.4 Million
■ Number of Cellular Subscribers	6.4 Million
■ Number of Rural DELs	9.02 Million
■ Number of Telephone Exchanges	35,066
■ Number of Rural Telephone Exchanges	26,948
■ Villages having Village Public Telephone	4,83,427
	(79.5% (VPT) of total villages)

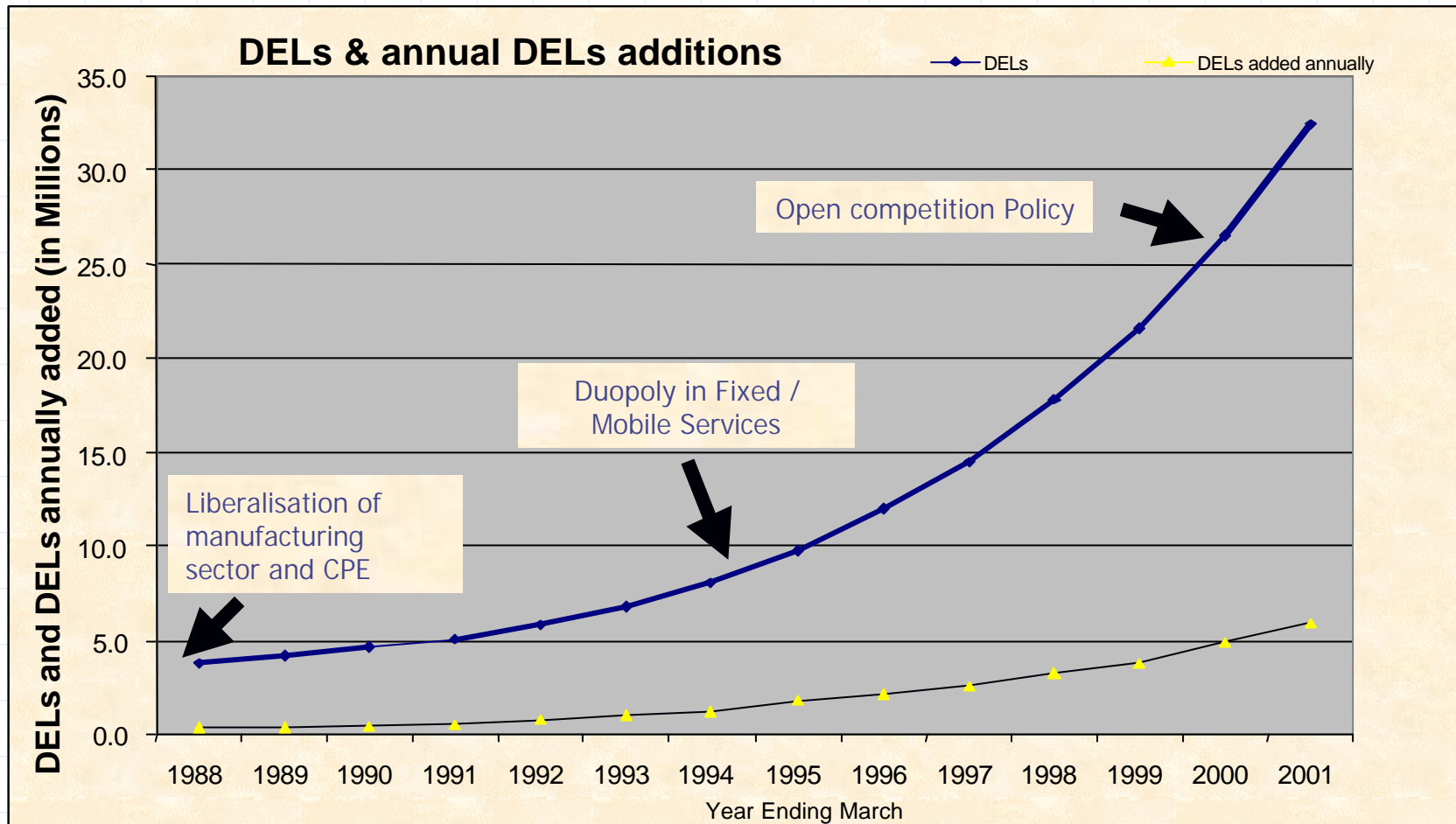


## Liberalisation of Telecom Services

- All telecom services have been opened for private sector participation
- Unlimited competition in Basic Telephony, National Long Distance, International Long Distance Services, VSAT, Internet Services etc. allowed
- Due to spectrum limitation only four cellular operators including government owned incumbent operator allowed
- Licensing for basic and cellular services on regional basis

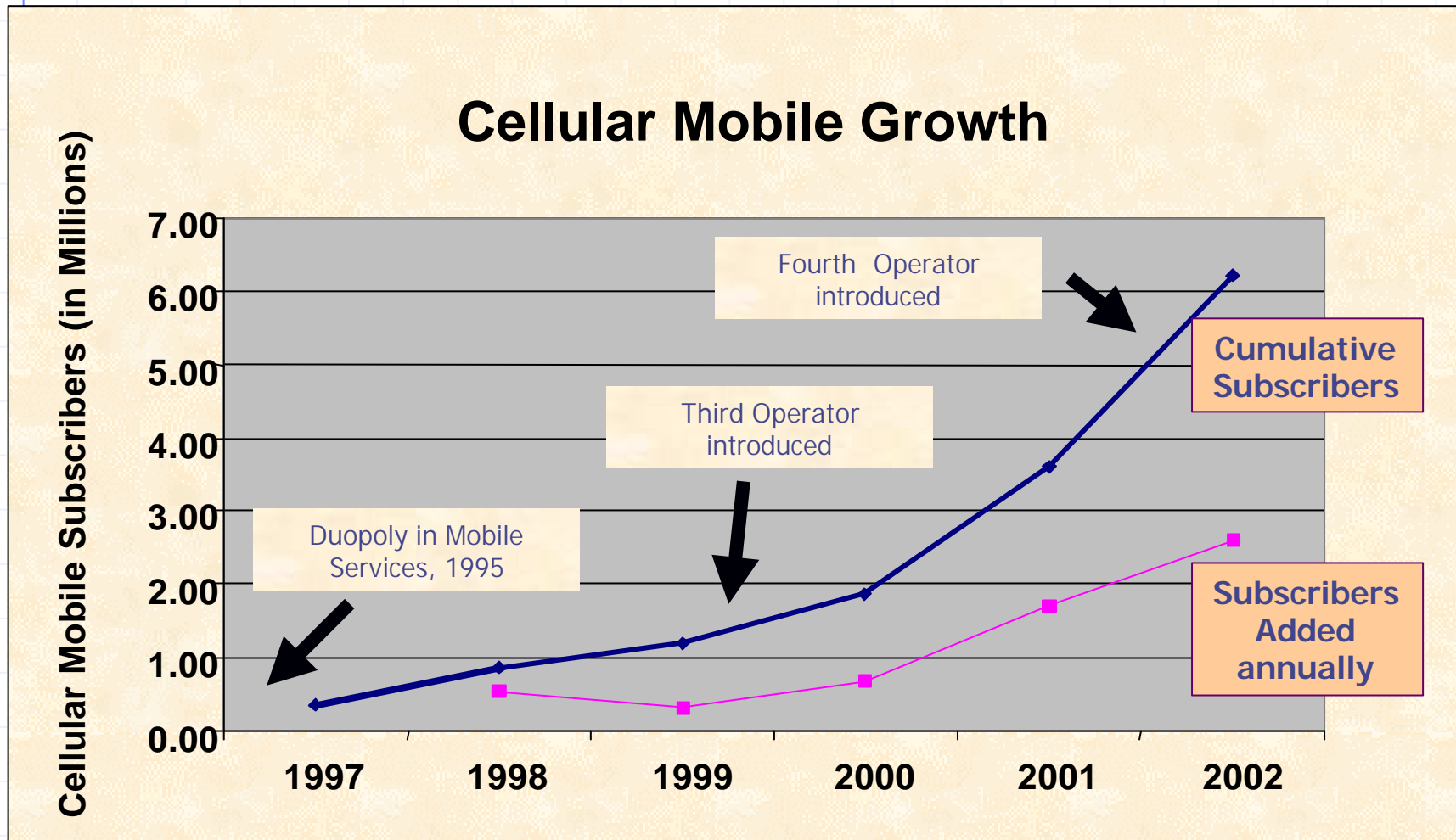


# Market: Fixed Services Growth





# Growth of Cellular Mobile





## Universal Service : International Practices

- Scope of Universal Service varies among various countries and covers from Public Payphone to broadband access
- Universal Service Funding practices also vary
  - Cross subsidy between Services
  - Access Deficit Charge
  - Roll out Obligations in License
  - Universal Service Fund (Industry or Govt. funded)
    - ❖ Proxy Model
    - ❖ Bidding Approach
  - Incumbent's Liability
  - Normated Amount



# Policy Initiatives for Rural Communications

- Government of India has taken initiatives for improvement in Rural Telecom Services right from 1980 onwards
- Till recently USO objectives in India fulfilled primarily by incumbent operator
- Licenses also include some rollout obligations
- Not Only Policy but technological development, for example
  - 40% of telephone lines and 91% of rural telephone lines are C-DOT make (indigenous technology)
- Major and detailed revised policy thrust in New Telecom Policy 1999 (NTP'99) announced by the Government of India





## USO Objectives in NTP'99

- Provide voice and low speed data services to all villages in the country by the year 2002
- Achieve Internet Access to all District Head quarters (Already Achieved)
- Achieve telephone on demand in urban and rural areas by 2002
- Provision of reliable transmission system to all exchanges by the year 2002
- Achieve Teledensity of 7 by the year 2005 and 15 by the year 2010. Teledensity of 4 in rural areas by the year 2010



# Universal Service Funding

- NTP'99 laid down the mechanism of universal service fund (USF) to be created through Universal Service Levy which would be a percentage of revenue earned by all the operators under various licenses



# Important Considerations for USO in India

- **Large Scope**
  - **Area covered**
  - **Different type of terrains**
  - **Large no. of people not provided with telecom services**
  - **Need to ensure that IT benefits reaches to the masses – “Bridging the Digital Divide”**



## Important Considerations for USO in India (Cont'd)

- Affordability
  - Incentives for Telecom Service Providers
  - Reduction in cost
  - Better utilisation of available resources
- Boosting demand / revenue
  - Increase attractiveness so as to increase revenue
  - Diversified content developments because of multiple languages and different suitable applications



## Important Considerations for USO in India (Cont'd)

- USO is a dynamic process
  - Presently it covers telephony, PTIC and HPTIC
  - Scope needs dynamic upgradation for 'Bridging the Digital Divide'
  - Rural population should not be deprived of developments in telecom and IT;



## Guidelines for Implementation of Universal Service Support

- Government of India issued above guidelines in March 2002 based upon TRAI's recommendations
- Setting up Universal Service Fund (USF) with a percentage of Revenue contribution as Universal Service Levy by all telecom service providers except pure value added service providers.
- Date of implementation of USF support (1-4-2002)
- USF presently to be administered by Deptt. Of Telecom (DOT), Government of India
- USO subsidy through a bidding process



## Guidelines for Implementation of Universal Service Support (Cont'd)

- USF support to public access telephones or community telephones and individual telephones in high cost rural/remote areas
- Replacement of old VPTs installed on Multi Access Radio Relay (MARR) technology
- Provision of additional rural community phone in villages exceeding population of 2000
- Upgradation of VPTs to Public Telecom and Info Centres (PTICs) within 5 kms of every village and at least in all villages with rural post offices to provide data transmission facilities by the year 2004;
- Installation of 5400 high speed PTICs for Tele-education and Tele-Medicine purpose by the year 2004,



# Experiences & Lessons

1. Multi-pronged approach combining various policies:
  - a) Licensing Policy
  - b) Funding Policy
  - c) Technology Development Policy
  - d) Tariff Policy
  - e) Diversified content developments for different applications in different languages
  
2. Achieving USO not possible only by including it in the License conditions





## Experiences & Lessons (Cont'd)

3. Implementation should be based on clear economic principles, so that USO becomes commercially viable in the short run and till it has to be subsidized the source and extent of subsidy should be clearly identified
4. Services constituting USO (regarding USO content) will need to be clearly defined.
5. Need to meet not only the basic minimum requirement of connectivity (access) but also to create conditions to reduce the digital divide.



## Experiences & Lessons (Cont'd)

6. Periodic review of both the USO content and requirements of USO funds would be necessary
7. USO at all times should remain clearly defined.
8. A time frame for implementation should be provided
9. Where necessary, USO should be implemented in phases and the services to be covered under the programme should be clearly prioritized



## Experiences & Lessons (Cont'd)

10. Solution has to be multi-technology solution, depending on the cost and applicability;
11. Indigenous technology helps in reduction of the cost and achieving adaptability to local conditions resulting in increased reliability and sustained interest of users



## Experiences & Lessons (Cont'd)

12. Implementation through an independent agency
  - Participation of all stakeholders including the Govt., the regulator and the operators
13. Tariff Policies to be supportive of USO programs
14. Need to focus on increasing the utility and acceptability of the service to the society e.g. content development for wide scale coverage of e-services, such as e-learning, e-governance and e-commerce



# Conclusions

- ◆ For India USO is a very large and crucial issue.
- ◆ Universality of USO is the main concern in Indian conditions because the program covers 3/4<sup>th</sup> of the country's population, which is also a sizeable portion of the world's population
- ◆ Multipronged approach to tackle this issue includes initiatives in terms of several policy initiatives.
- ◆ Ultimate objective is to convert 'Universal Service Obligations' to Universal service Opportunity'



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