

# GSR 2008 Discussion Paper

Comments are welcome and should be sent by 13 April 2008 to [GSR08@itu.int](mailto:GSR08@itu.int)



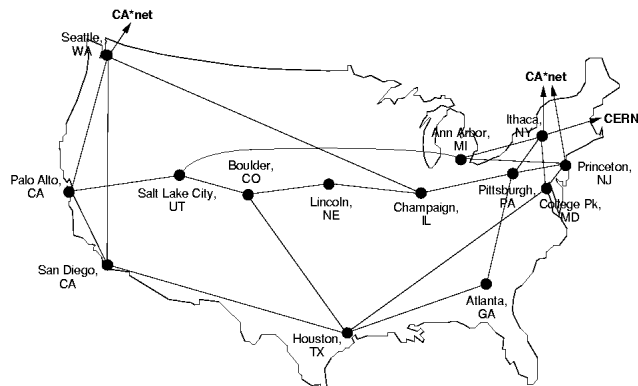
## GSR 08: Session 6 End-User Sharing

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# What is End-User Sharing?



NSFNET T1 Network 1991



- End-user sharing: In *usual* operation the end-user is aware of or indeed the application is predicated on sharing something with other end-users.



# Today's End-User Sharing

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# Phone Sharing

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## *Taxonomy of Sharing*

- Unmanned phone box
- Village Network Operator (VNO)
- Public Call Office (PCO)
- Village Phone Operator (VPO)
- VoIP telecentre services



# Phone Sharing

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- Most people today (still) gain phone access via some form of sharing.
- A common *national* sharing rate can be four users per subscriber.



# Phone Sharing (PCO/STD/ISD)

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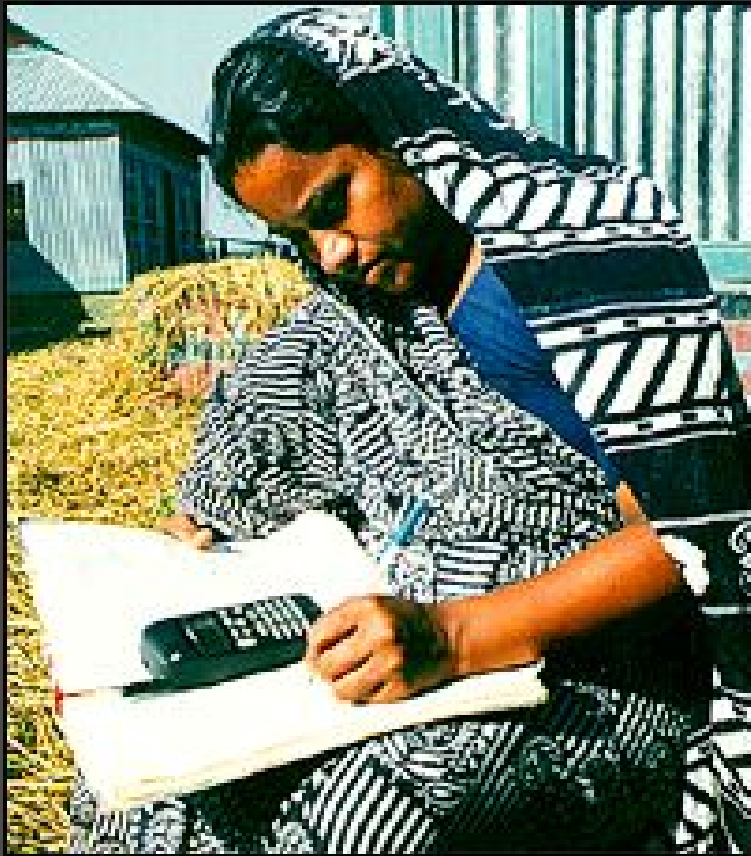


- India's PCO/STD/ISD
  - Millions of facilities nation wide
  - In 92% of villages
  - Key to success: 80/20 revenue sharing



# Phone Sharing (Grameen Phone)

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- Bangladesh's Grameen Phone
  - Pro-poor: entrepreneur average net income of \$624
  - Pro-poor: use among poor 50% higher than non-poor



# Going Beyond Voice

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Sharing text, data, incoming voice,  
location, money, handsets ....





# Going Beyond Voice

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- VPO's experience significant levels of incoming SMS messages destined for others (South Africa study shows eight-to-one).



# Going Beyond Voice


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**Receive prices  
by SMS**

of agricultural  
products in  
West Africa by  
sending your  
request to :

+233 2464 99999

for a list of all available  
codes, visit  
[www.tradenet.biz/codes](http://www.tradenet.biz/codes)



The image shows a woman in traditional West African attire holding a mobile phone. In the background, there are two computer monitors displaying agricultural market data. One monitor shows 'SELL MAW 45KG 35NGN' and the other shows 'OFFER TO SELL: maize (white) 45kg: 35NGN Contact: Okoro'.

- Agricultural information services
  - E.g. Manobi (Senegal), SHEMP (Zambia), Tradenet (pan-Africa)
  - Provide farm prices, trading options, input sourcing....
  - Removes the middleman



# Going Beyond Voice

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- M-commerce
  - E.g. GCash (Philippines), M-PESA (Kenya), WIZZIT (South Africa)
  - Provide for unbanked, savings, funds transfer, remittances, PoS purchases....



# Going Beyond Voice

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- Advanced (*mobile 2.0*) sharing
  - E.g. Dodgeball, Jaiku, Twitter, FireEagle, SLAM, Myspace, Orkut, Facebook ....
  - Share location-based services, picture and other rich media sharing, social networking....





# The Role for Regulators

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- Low-barriers to entry for entrepreneurial sharing
- Revenue sharing terms critical
- Entrepreneur training significant
- Think well beyond outgoing voice
  - Incoming voice, text, data, money, location...
- Sharing always comes with security & privacy issues



# Computer Sharing

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- Telecentres provide common means of sharing: Equipment, network, expertise, community.
- Broad range based on: Location, service bundle, organizational model.



# Computer Sharing (*Infocentros*)

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- Coordinated by Chilean regulator (SUBTEL)
- Provide “a public community facility with ICT capabilities and communication to access and/or generate content and services relevant to the community in which it is located”
- **Over 700 centers, 1 million users, 4000 computers**



# Computer Sharing (*Telecentros*)

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- Compartel program of Colombia
- Privately run facilities with computers, phones, etc
- Over 1,500 centers





# Going Beyond Telecentres

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- Single display groupware
- Multiple inputs single output
- E.g. mutli-mouse system
- Can enhance learning outcomes, cooperation, and retention



# Going Beyond Telecentres

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- Co-present groupware
- Both multiple input and output devices
- E.g. split-screen system targets SME's
- Just emerging



# Going Beyond Telecentres

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- Advanced (internet 2.0) sharing
- Sharing rich media, live streams, social networks, and more
- E.g. YouTube, MySpace, digg, del.icio.us, moodle, flickr, wikipedia, blogspot....



# The Role for Regulators

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- Low-barriers to entry for entrepreneurial sharing
- Entrepreneur training significant
- Think well beyond telecentre
  - Innovations to support sharing for pedagogy, community, assistive needs
- Sharing always comes with security & privacy issues





# Conclusions: End-User Sharing Can...

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- Reduce costs
- Increase access
- Enhance collaboration and communication
- Provide assistance for people with special needs
- Support novel applications and innovative services
- Improve learning outcomes



# Conclusions: And Regulators Should...

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- Ensure market is complimented and not constrained by end-user sharing
- Protect consumers with minimal service levels
- Guard data privacy and security
- Deliver on universal service aspirations by leveraging shared resources
- Enable human and infrastructure capacity building



International Telecommunication Union

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**Thank you!**

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