Asia Universal Service Fund: A Proposal

by
Toshihiko Hayashi
Professor of Economics, University of the Air
Chairman, Stanford Japan Center
hayashi@u-air.ac.jp
http://hayashiland.com

Global Information Society

- Technology
  - From ICT revolution to ubiquitous computing
  - Transmission speed from megabits, gigabits to googabits per second

- A great migration toward the digital continent
Network Social Infrastructure

Applications

Platform

Network Architecture

Architecture

Accessibility
- Choice of technology
  - wired
  - wireless
  - keitai (mobile)
- Investment

Affordability
- Government subsidy
- Regulated tariff
- Facility-based competition
- Universal service fund
Platform

Accessibility
- Development
- Standards
- Security, privacy, decency
- Harmonization of tax, settlement, regulation, intellectual property

Affordability
- Nexus technology
- Nexus institution
- “Lock-in” effect avoided

Applications

Accessibility
- Computer literacy
- Deregulation
- Cultural impediments
- Cyber society convention

Affordability
- Competitive industry
- Fair-use copyright
Increasing Accessibility

- Evolving notion of universal service
  - Physical connectivity
  - Active participation

- Digital empowerment
  - Transfer of property rights: a revolution
  - Economic, political and social inclusion

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Increasing Accessibility

- Competition and viable infrastructure development: a trade-off?

- Facility-based competition
- Auctioning frequency band
- Old public utility dilemma
Increasing Accessibility

- Global universal service fund needed
  - Expand the basic concept of universal service fund in US and Japan
  - Affordable accessibility
  - Platform standards
  - Information literacy

Affordability

- Choice of infrastructure
  - Wired technology
  - Wireless infrastructure

- Pricing strategy
  - Internet subsidy
  - Strategic introduction price, or predatory pricing
Affordability

- Government subsidy and WTO principle
  - Cost incentive, subsidy on investment and R&D
  - Flying geese or leap-frog
  - Infants that grow too fast

- Affordability for whom?
  - 20% of population; a rule of thumb
  - Make room for those who refuse to ride on

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### Internet Penetration in Asia

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Internet Users</th>
<th>Penetration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Asia</td>
<td>3,607,499,800</td>
<td>256,454,536</td>
<td>7.1</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>2,782,647,687</td>
<td>543,585,962</td>
<td>19.5</td>
</tr>
<tr>
<td>World Total</td>
<td>6,390,147,487</td>
<td>800,040,498</td>
<td>12.5</td>
</tr>
</tbody>
</table>

http://www.internetworldstats.com  September 2004
Asian Countries and Regions

Universal Service Fund: US Version

To provide access to telecommunications services to all Americans at reasonable rates:

- Rural or high cost areas
- Low-income consumers
- Rural health care facilities
- Schools and libraries
Universal Service Fund: U.S. Version

- Managed by Universal Service Administrative Company
- Contributions collected from 2,500 service providers at 9.2% of long distance revenues.
- High cost support is received by companies and passed over to consumers.
- Low income support must be applied by customers.

Universal Service Fund: Japanese Version

- Ministerial ordinance was promulgated in June 2004.
- Universal service carrier, NTT-West and NTT-East, are eligible for disbursement.
- Access carriers are billed for contributions.
- Covers only the local access and local telephone services in high cost areas.
- Will be administered by Telecom Carriers Association.
Asia Universal Service Fund:
A Proposal

- Towards digital empowerment of Asia.
- Promote ICT deployment in high cost area and low income area.
- Treaty for basic ICT cooperation.

Service providers and telecom carriers are billed.
- Build accessible and affordable internet connection.
- Cross border subsidies and dues.
- Administered by “Asia Universal Service Administrative Corporation”.
For more discussion, please see

Toshihiko Hayashi,
“Fostering globally accessible and affordable ICTs”,
Downloadable from the web site
http://hayashiland.com/article.html

Thank you.