Asia Universal Service Fund : A Proposal

by

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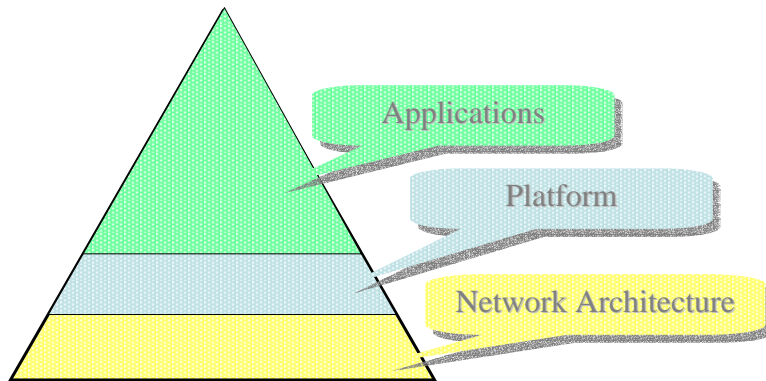hayashi@u-air.ac.jp
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Global Information Society

■ Technology

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

■ A great migration toward the digital continent

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Network Social Infrastructure

Applications

Platform

Network Architecture

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Architecture

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

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

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Platform

Accessibility

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

Affordability

- Nexus technology
- Nexus institution
- "Lock-in" effect avoided

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Applications

Accessibility

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

Affordability

- Competitive industry
- Fair-use copyright

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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

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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

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Affordability

- Choice of infrastructure
  - Wired technology
  - Wireless infrastructure

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

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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
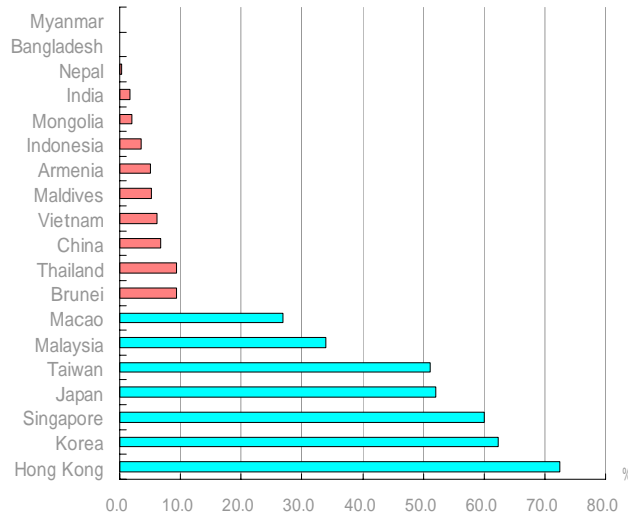 - Make room for those who refuse to ride on

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Internet Penetration in Asia

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

http://www.internetworldstats.com   September 2004

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Asian Countries and Regions

Myanmar
Bangladesh
Nepal
India
Mongolia
Indonesia
Armenia
Maldives
Vietnam
China
Thailand
Brunei
Macao
Malaysia
Taiwan
Japan
Singapore
Korea
Hong Kong

%

0.0 10.0 20.0 30.0 40.0 50.0 60.0 70.0 80.0

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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

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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.

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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.

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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.

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Asia Universal Service Fund : A Proposal

- 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".

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For more discussion, please see

Toshihiko Hayashi,

"Fostering globally accessible and   affordable
  ICTs",

International Telecommunication Union, 2003.

Downloadable from the web site

http://hayashiland.com/article.html

Thank you.

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