



# The Internet in South East Asia (Asean 2001)



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Session

User & Usage of the Internet

**BRIDGING DIVIDE THRU COOPERATIVE**

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*Cooperative on Community Telecentre -Indonesia - Bangkok - Asean Internet 2001*



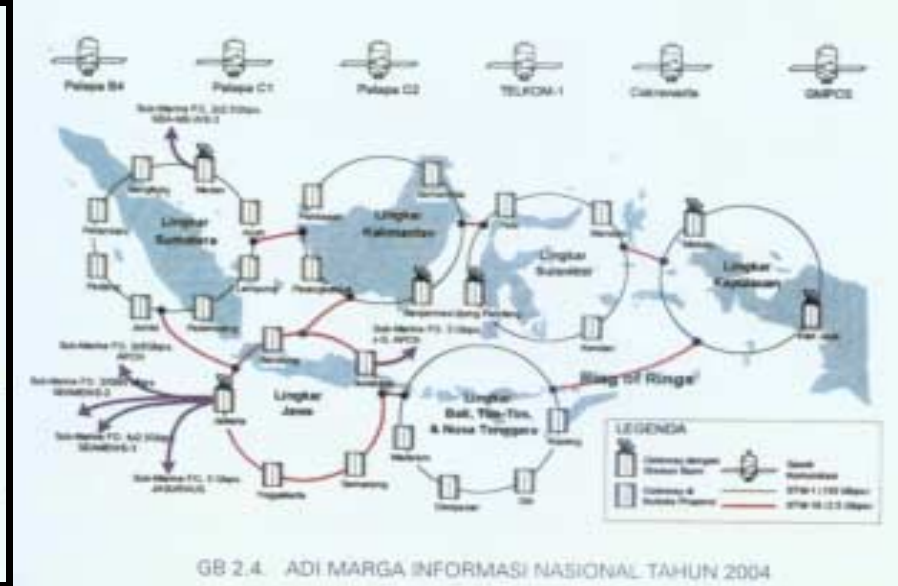
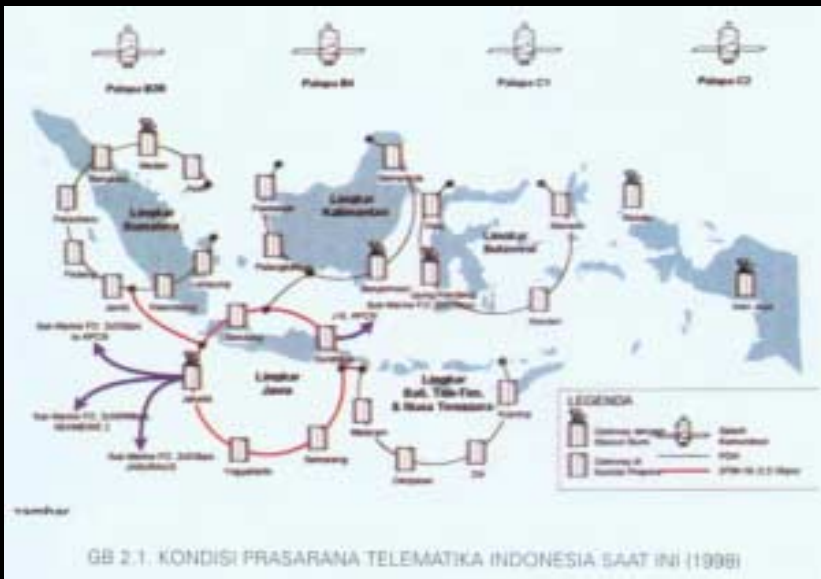
## Demography: Indonesia (Strength)



Size: Largest Archipelago ( 9.8 km sqr) ,  
13,000 islands , 80% is sea spans longer  
than Australia continents,three timezone  
Populations: Forth largest . More than  
210 million people with 100 langguages.  
Civilization: Diverse & Unique & history  
preserve. Ranging from tribe with no  
proper clothes,shoes(like stone age era).



# Ring of Ring: Satelit/Sea Cable Telecommunication Backbone





## Demography 2: Indonesia (cont.)



Civilization: Majority agriculture people in rural area, industrial area in the city.

Sign of Information revolution in city with PC, Telephone, TV and Warnet (microcosm), even to the next stage of Internet broadband, VSAT, Satelit, Fiberoptics/Cable TV (telecosm).

50% live in Jawa island, 50% live in city.





## Case 1: Tembagapura ( City of Copper in Irian Jaya



Mid of untouchable forest and next to the peak of Jaya Wijaya Mountain ( covered with snow) in the heart of the bird shape island lies a mountain full of gold, copper. A city with VSAT, fiberoptics, 1,500 PC, cableTV, ISDN next to the tribe... some still live with no shoes, no clothes and animals.



## Challenge & Weakness (SWOT)



2 millions wired society ,  
2 millions of PC, 6 millions  
of telephone, 5.x millions  
of HP.

Number seems OK...  
compared  
with Asean  
countries.....

**But.....**





## Challenge 2: Divides issues

Consider populations of 210 millions, then we have a... Big **Digital Divide** Problems...

All kind of divides... from poverty , digital, educational and vision divide...

Never ending crisis since 1997 left 140 billion of foreign debts, Income percapita drops from its peak of US\$ 1,110 to US\$ 570. Many big corporates went bankrupt.

Rank 109<sup>th</sup> of 174 countries in internet density.



## Institutional Frameworks: Private Sector-Gov: collaboration



What can the Private Sector(SME) do to bridging these DIVIDE& survive , while Gov. has too many problems to solve(political , safety nets, security) ?

Since the crisis, we have 2,500 warnet (internet kiosk/cybercafe) end of year 2000 with average 8 PC , total 20,000 screen to public, majority are SME, either college graduate or unemployed from banking/retail sector during crisis.

Growing at rate about more than 30%.





## Institutional Framework 2: Virtual organization/collaborations



Collaborations thru mailing list: [asosiasi-warnet@yahoogroups.com](mailto:asosiasi-warnet@yahoogroups.com),  
[komitel@yahoogroups.com](mailto:komitel@yahoogroups.com)

Mailing List(ML) is the strength of our virtual organization (warnet industry/market) , strategic to gov digital divide , 42% internet access thru warnet.

Technical , Regulatory, Conflic/Pressure group, Management , Training, New product,procurement

**"Virtual is the Organization, Real is the Struggle"**



## Institutional Framework (IF) 3: Association and Cooperative



Birth of Association in May 2000 to facilitate collaboration warnet & high school at DG Higher Education.

School has no fund for PC, Gov only startup fund.

Follow up with the birth of Cooperative KOMITEL to facilitate business like collaboration Sept 2001

Pressure Group: Case Raid of thousand warnet in China. Case Raid of warnet in remote municipal city North Sumatra by unofficial gov official.



## I F4: Power of Cooperative Sharing Resources/Bandwidth



MOU with Open University (has no campus, 300K students) providing virtual campus in villages, remote island to bridge educational divide(<http://www.ut.ac.id>)

MOU with IBM/Lotus: Discounted Software price affordable by majority SME warnet. ( under negotiation MOU with Microsoft). Training with Linux/ IT vendors

Participating with Gov roadshow & socialization National IT Framework (NITF) to regional gov. offices to facilitate gov-private coop for Egov. in future, (onli-ne public services and community empowerment.)



## Policy & Regulatory Framework ( PRF ): NonConductive environment



Policy still not favour small telecom player ie: warnet & ISP not consider as partner/arm's length

Indonesia first in launching satellite (good vision) for communication in rural area & uniting regions, unfortunately Untransparency regulations & Monopolistic telecom in rural, domestic fixed line long distance -> slow or no progress. 3% telephone density. Cause problem for warnet/ISP in rural area (expensive & regulated)



## PRF 2: Cases Telecom Regulatory Policy: Non condusive



Regulation on 2.4 Ghz Outdoor Wireless LAN prevent private sector built infrastructure in rural and where incumbant fail to perform.

VOIP & Calling Card cannot be used by ISP for providing cheap internet tech to public. Video C.

NAP & Landing Right issue monopolized (only recently open to small big investor) causing expensive bandwidth (no price elasticity -no demand& supplyhighly regulated/too few players)





## PRF3: Telephone Tariff & Cross Subsidy, Structure & Cyberlaw



Protest regulator for increasing dial up tariff for the sake of expansion of infrastructure:

Incumbant already made lots of profit and report said inefficiency in management.

Small warnet pay \$200-300 monthly (dial up, excluding ISP cost), with no special bulk discount.

Incumbant venture in warnet, ISP, cause problems in tariff cross subsidy. (no industry structure/policy)

Draft of Cyberlaw for future MCC (ecommerce)



## Financial Framework(FF): Rural Area Development(USO)

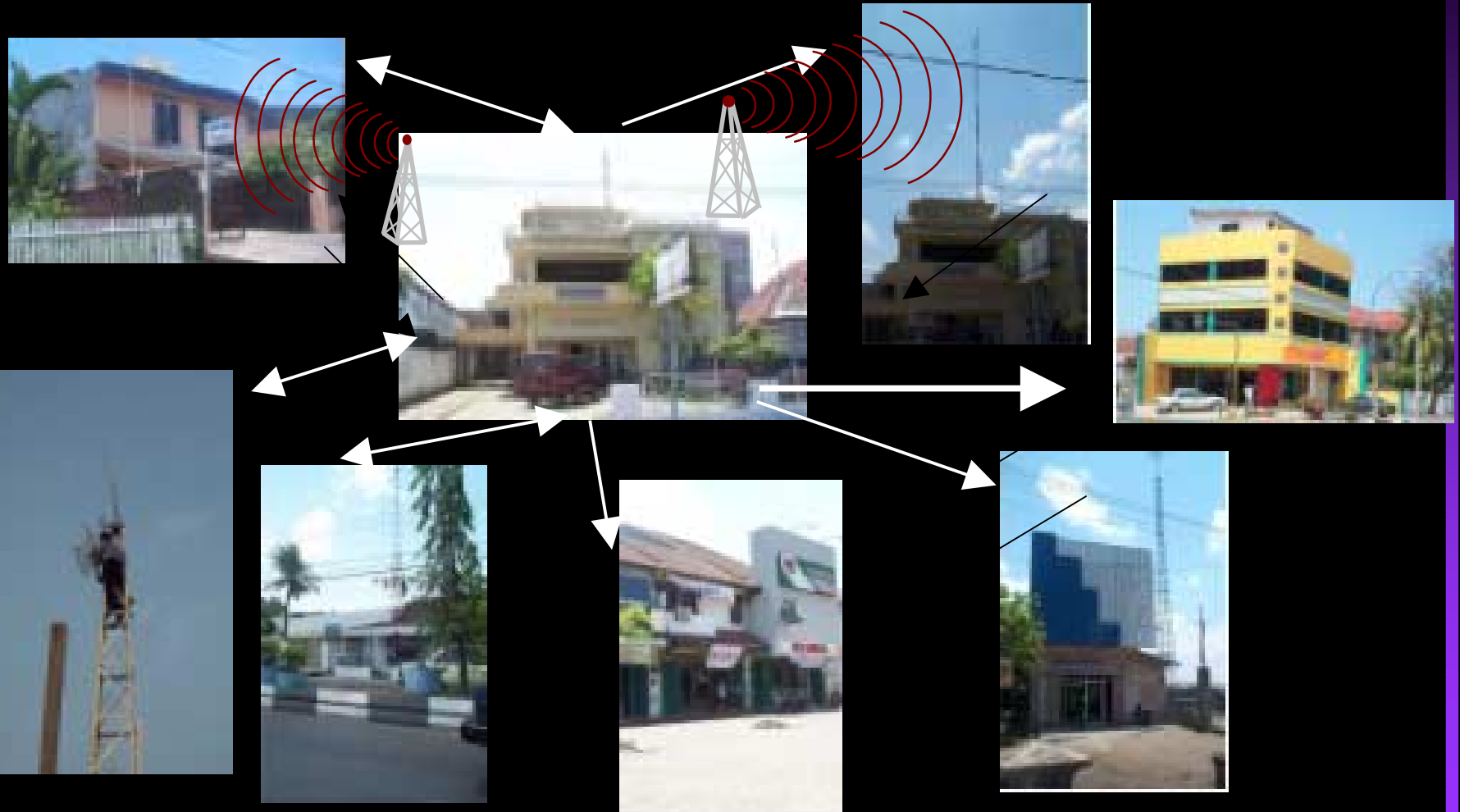


In Makassar , East of Indonesia (island of Sulawesi) ,  
warnet forms collaboration in sharing bandwidth.  
Installing VSAT & distributing 2MB pure internet  
backbone to 30 warnet (300 PC) in the city of  
Makassar using wireless 2.4Ghz WAN radius of 15  
km.

Model of broadband city in rural area 100%  
developed by private cooperation.



# Broadband Network WirelessLAN in Makassar



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## Internet access Tariff (Warnet) & Hype by new big players



Low barrier of entry to startup warnet (no license), hype warnet just like dotcom hype, brought foreign capital, incumbant also venture in warnet.

Achieving economic of scale, coop among warnet is needed thru Cooperative Komitel to survive against any cross subsidy in future by big players



# Mission & Vision: MCC ( Multi-purpose Community Centre)



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# Strategy: Collaboration & Bridging Divide thru Cooperative



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## Recommendation & Conclusion

Gov. policy & regulation conducive for startup and favour SME Warnet & Cooperative

Gov policy and supports collaboration and cooperative business model

Financial supports bank & venture capital

Fiscal and other incentives(USO) for warnet in rural area, warnet for education coop to bridge digital divide.