

Asia-Pacific Advanced Network Consortium (APAN)

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1. Objective

Advanced Networking for Asia-Pacific

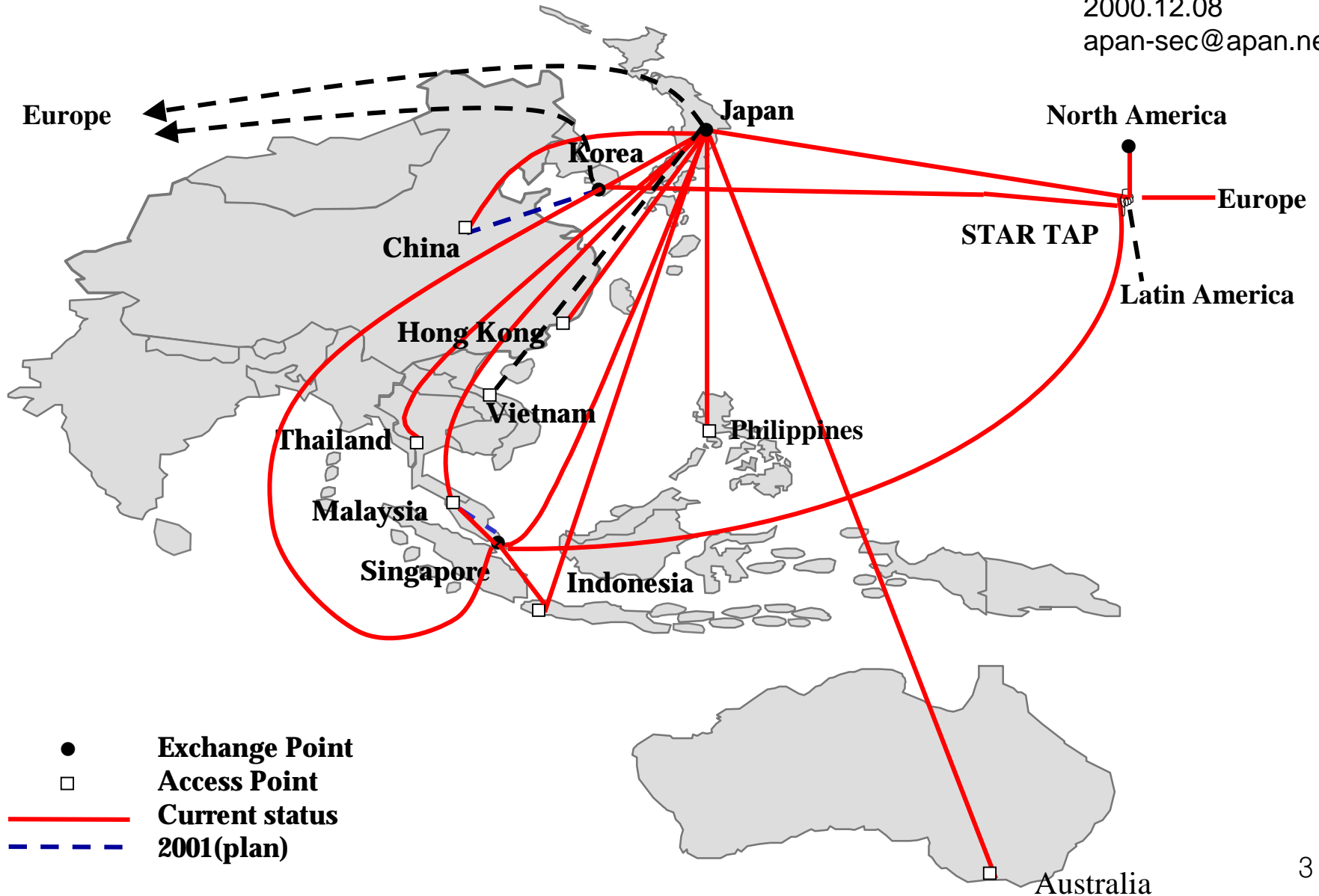
Research & Development for Advanced Applications and Services

Advanced Networking Environment for Research Community
International Collaboration

2. APAN Network Topology

2000.12.08

apan-sec@apan.net





3. Activities

Application	User Community	
Middle ware	Video, Archive, QoS, ...	
Network	Advanced Internet	Commodity Internet

(Int'l Link, Domestic Network, Campus Network)



3.1 High Speed Networking

Exchange Point(XP) Improvement

GigaPoP Development



3.2 Intercontinental Link

High speed connections

Performance tuning

delay/throughput

caching/replication



3.3 Continental Connectivity

Exchange Point(XP) Interconnection

Connectivity Program

APII, AI3, ...



3.4 Technology & Engineering Collaboration

Network Engineering - Operation

Measurement, Multicasting, IPv6, QoS,

Network Technology - R&D

IPv6, Measurement, Multicast, QoS, Satellite

Middleware Technology - R&D

Content Distribution, Multimedia, Security, Television



3.5 Virtual User Community Development

Agriculture

BioInformatics

Digital Library

Education

Environment Monitoring

Grid

Manufacturing

Medical Informatics



3.6 Human Resource Development

2 Meetings Per Year

Workshop/ Conference

Working Group Meetings

Committee Meetings



2001. 3. 20

4. Schedule

1996. 3.28	Tsukuba	Ad hoc Meeting(during APEC Symposium)
1996. 5-1997.5		Preliminary Meetings, Workshops & Visits
1997. 6.2-3	Tokyo	First APAN Meetings
10.20-21	Singapore	Second APAN Meetings
1998. 3.2-5	Tsukuba	Third APAN Meetings
7.1-3	Seoul	Fourth APAN Meetings
1999. 2.19-21	Osaka	Fifth APAN Meetings
9.21-24	Canberra	Sixth APAN Meetings
2000. 2.15-17	Tsukuba	Seventh APAN Meetings
8.22-25	Beijing	Eighth APAN Meetings
2001. 2.1- 2	Honolulu	Ninth APAN Meetings
8.20-22	Penang	Tenth APAN Meetings
2002. 1/2	Bangkok	Eleventh APAN Meetings



5. Finance

- Link: paid by link owners
- Exchange/Access Points : supported by relevant organizations
- Meetings : supported by host organizations

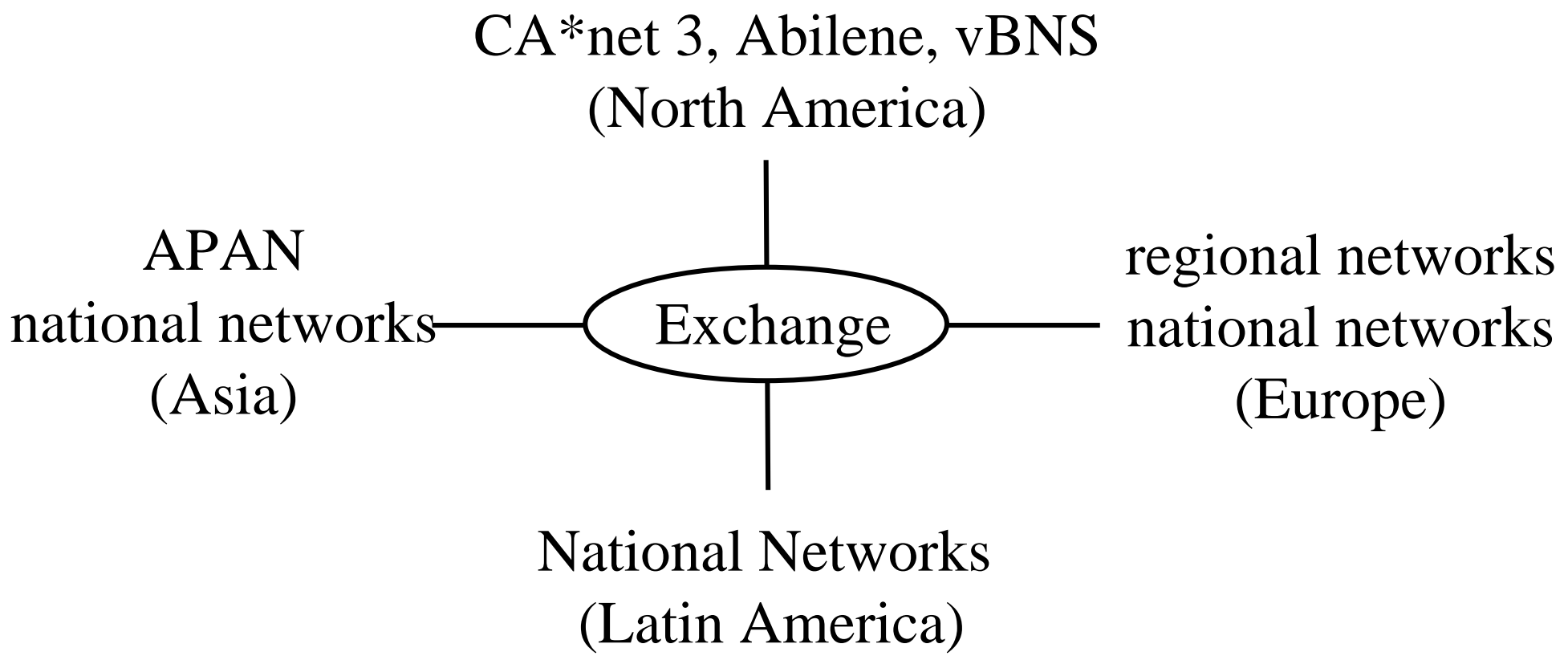


6. Members

- Primary Member : Network with Intra-continental high performance link
- Associate Member : Network without Intra-continental high performance link
- Liaison Member : Regional Advanced Network
- Affiliate Member : User Organizations



7. Global Advanced Research Networks





Appendix A: Bibliography

AI3

www.ai3.net

APAN

www.apan.net

CA*Net3

www.canarie.ca/c3

DANTE(TEN-155)

www.dante.net

Internet2

www.internet2.edu

STAR TAP

www.startap.net

vBNS

www.vbns.net

Abilene

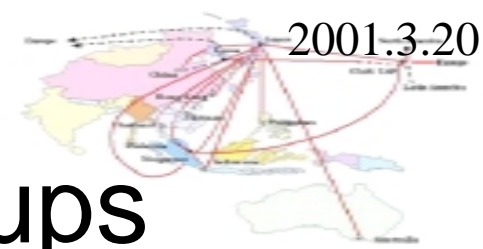
www.ucaid.edu/abilene

Appendix B : APAN Link Information

2001. 1.15

apan-sec

<i>Countries</i>	<i>Network</i>	<i>Bandwidth(Mbps)</i>	<i>Availability</i>	<i>AUP</i>
JP-AU	RWCP-ACSys	1.5	Now	Research & Education
JP-CN	AI3(CSTNET)	1.5	2000	Research & Education
	SINET(CERNET)	1.5	2000	Research & Education
JP-HK	AI3(HKUST)	1.5	Now	Research & Education
JP-ID	AI3(ITB)	1.5	Now	Research & Education
JP-KR	APII	8	Now	APII Project
JP-MY	AI3(USM)	1.5	2000	Research & Education
JP-LK	AI3(UC)	1.5	2001	Research & Education
JP-PH	MAFFIN(PHNET)	0.75	Now	Research & Education
	AI3(SICU)	1.5	2001	Research & Education
JP-SG	APII	2	Now	APII Project
	AI3	1.5	2000	Research & Education
JP-TH	AI3(AIT)	1.5	Now	Research & Education
	SINET(NECTEC)	2	Now	Research & Education
JP-VN	AI3(IIT)	1.5	2000	Research & Education
JP-US	IMNet-HPIIS	73	Now	High Performance Research
KR-SG	APII	2	Now	APII Project
KR-US	Kornet	2	Now	Cache
	Pubnet	20	Now	Non-commercial
MY-SG	TEMAN (SingaREN)	2	Now	Research
SG-US	SingaREN	14	Now	Research & Education



Appendix C: Working Groups

Technology

Cache

IPv6

Measurement

Multimedia

Satellite Internet

Television

QoS

Network Storage & Content Dist.

User Community

Agriculture

BioInformatics

Digital Library

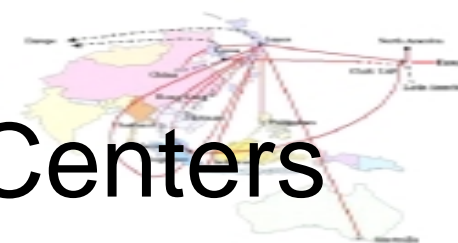
Earth Monitoring

Education

Grid

Medical Informatics

Global Design & Manufacturing



Appendix D: Committees and Centers

APAN Member Committee

Network Operation Center

Tokyo XP

Seoul XP

Singapore XP

Engineering Teams

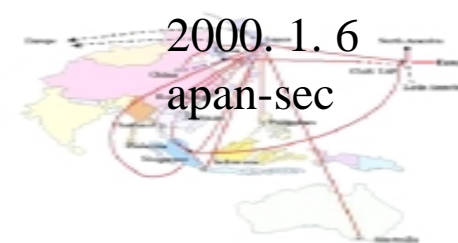
IPv6

Measurement

Multicast

QoS

Resource Allocation Committee



Appendix E: Members

Primary Member

- Australia: ACSys
- Japan: APAN-JP Consortium
APII/CRL, IMNet/JST, KDD, MAFFIN/MAFF
RWCP/ETL, SINET/NACISIS
AI3/WIDE
- Korea: APAN-KR Consortium
- Malaysia : TEMAN
- Singapore: SINGAREN
- USA: Indiana University/HPIIS
- China: APAN-CN Consortium
CERNET, CSTNET

Liaison Member

- Canada: CANARIE
- Europe: DANTE
- USA : Internet 2

Associate Member

- Thailand : (NECTEC)

Affiliate Member

- CIGRA



Appendix F: APAN Organization and People

APAN Committee Chair

Kilnam Chon (kr)

Deputy Chair

Shigeki Goto(jp)

APAN Secretariat Director

Yong Jin Park(kr)

Network Operation Center Director
(Network Engineering Director)

Kazunori Konishi (jp)

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User Community Area Chair

Markus Buchhorn(au)

Deputy Chair

Jianping Wu(cn)

Deputy Chair

Akria Mizushima(jp)

Technology Area Chair

Shigeki Goto (jp)

Deputy Chair

Chul-Hee Kang (kr)



Appendix G : Major R&E Networks in Asia-Pacific

2001. 3. 20

Australia	AARNET2	: www.aarnet.edu.au/network
China	CERNET	: www.edu.cn/cernet
	CSTNET	: www.cstnet.net.cn
	HARNET	: www.hku.hk/harnet
Hong Kong		
Indonesia	IPTEKNET	: www.iptek-net.go.id
India	ERNET	: www.doe.ernet.in
Japan	IMNET	: www.imnet.ad.jp
	JGN	: www.jgn.tao.go.jp
	SINET	: www.nacsis.ac.jp
	WIDE	: www.wide.ad.jp
	Korea	KREN
KOREN		: www.koren21.net
KREONET		: www.kreonet.re.kr
Malaysia	TEMAN	: www.tmi.net.my
Philippines	PHNET	: www.ph.net
Singapore	SINGAREN	: www.singaren.net.sg
Taiwan	TANET	: www.ntu.edu.tw/TANet
Thailand	NECTEC	: www.nectec.or.th
Vietnam	IOIT	: www.ioit.ac.vn