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APAN Singapore 1997

Asia-Pacific Advanced Network
(APAN)

1997.10.21

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<http://www.apan.net>

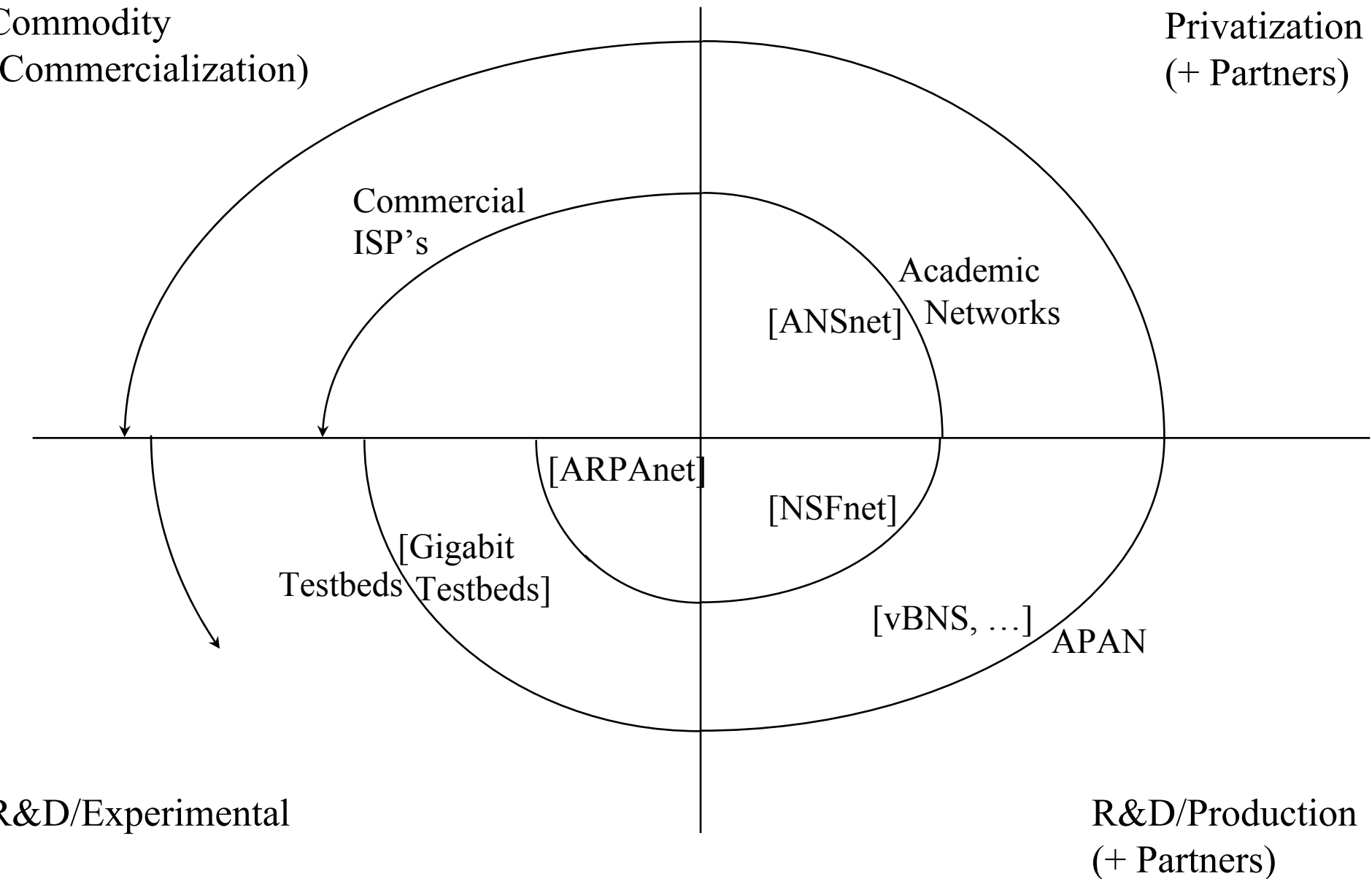
“The Internet will almost certainly have a stronger impact than PC ... a reasonable guess might put it ahead of the telephone and television but behind the printing press.”

The Economist, 1 July 1995

“ The Internet is not the same thing as the Information Super highway, but it’s the closest we are likely to get, this side of the millennium”

Dr. Pekka Tarjanne, Director of ITU

0. Network Evolution : Spiral



1. Objective

Advanced Networking for Asia-Pacific

Research & Development for Advanced Applications and Services

Advanced Networking Environment for Research Community

International Collaboration

2. Scope

Asia-Pacific High Speed Networking

Intercontinental Bridges

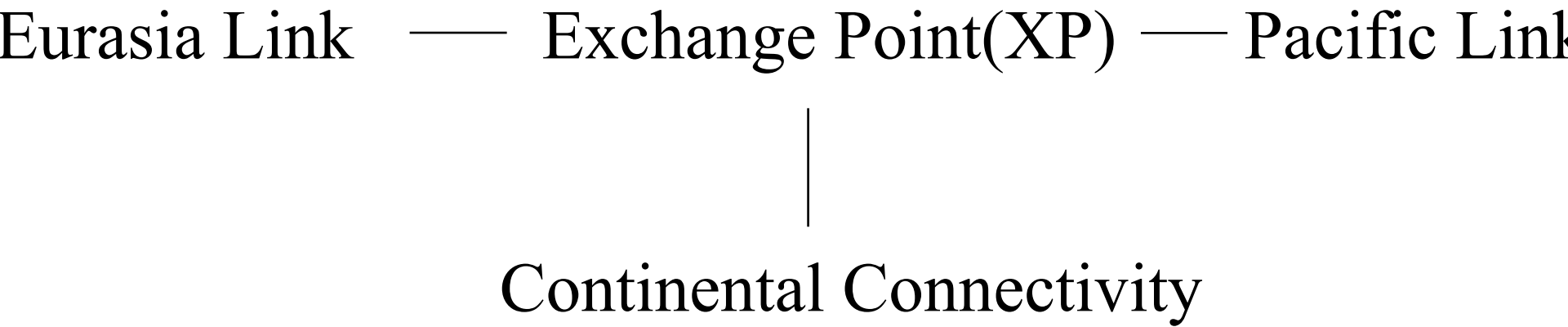
Continental Connectivity

Application/Technology Development Collaboration

Human Resource Development

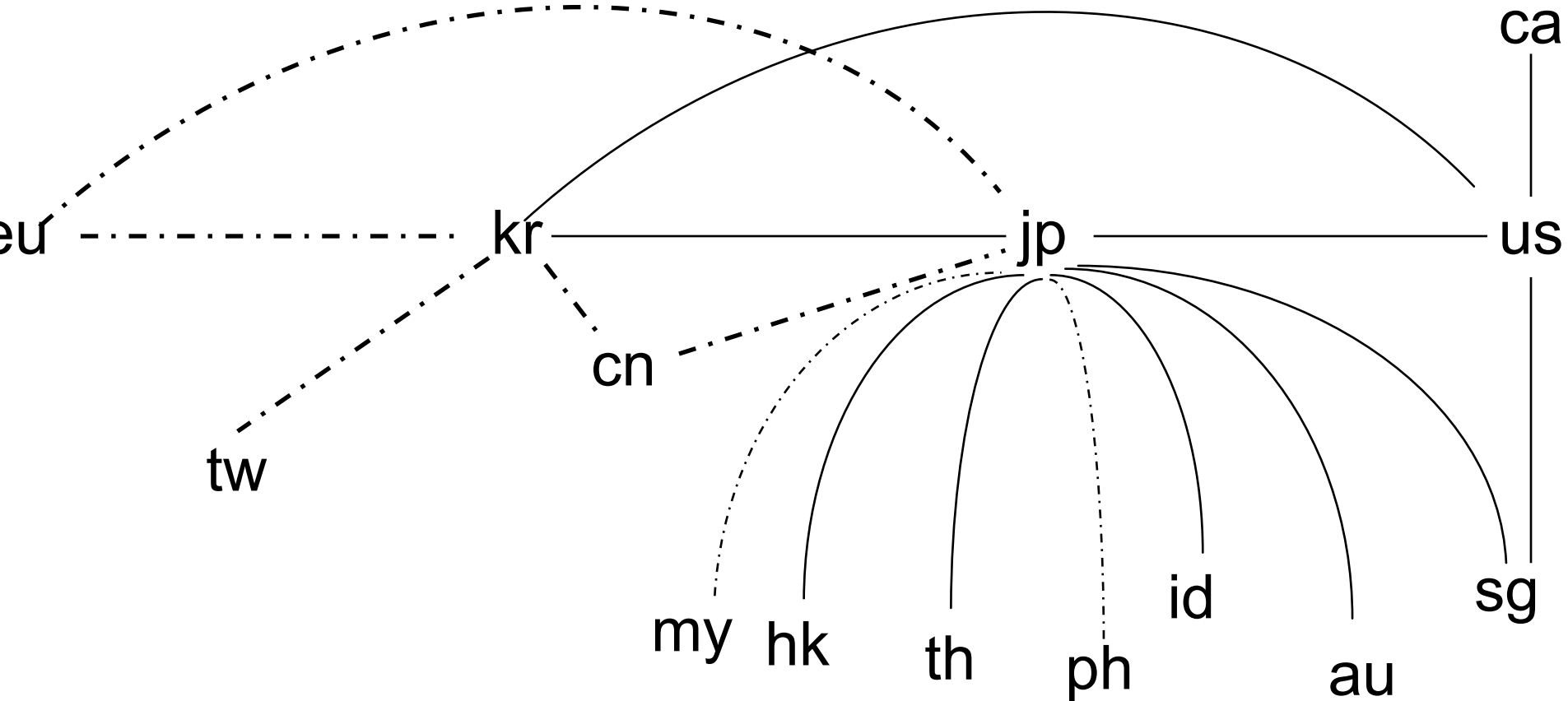
Virtual Community Development

3. Topology



Appendix B: APAN Network Topology

1997.7.15



— 1997
- · - · - 1998~1999(planned)

eu Europe

kr Korea

jp Japan

us USA

ca Canada

tw Taiwan

cn China

my Malaysia

hk Hong Kong

th Thailand

ph Philippines

id Indonesia

au Australia

sg Singapore

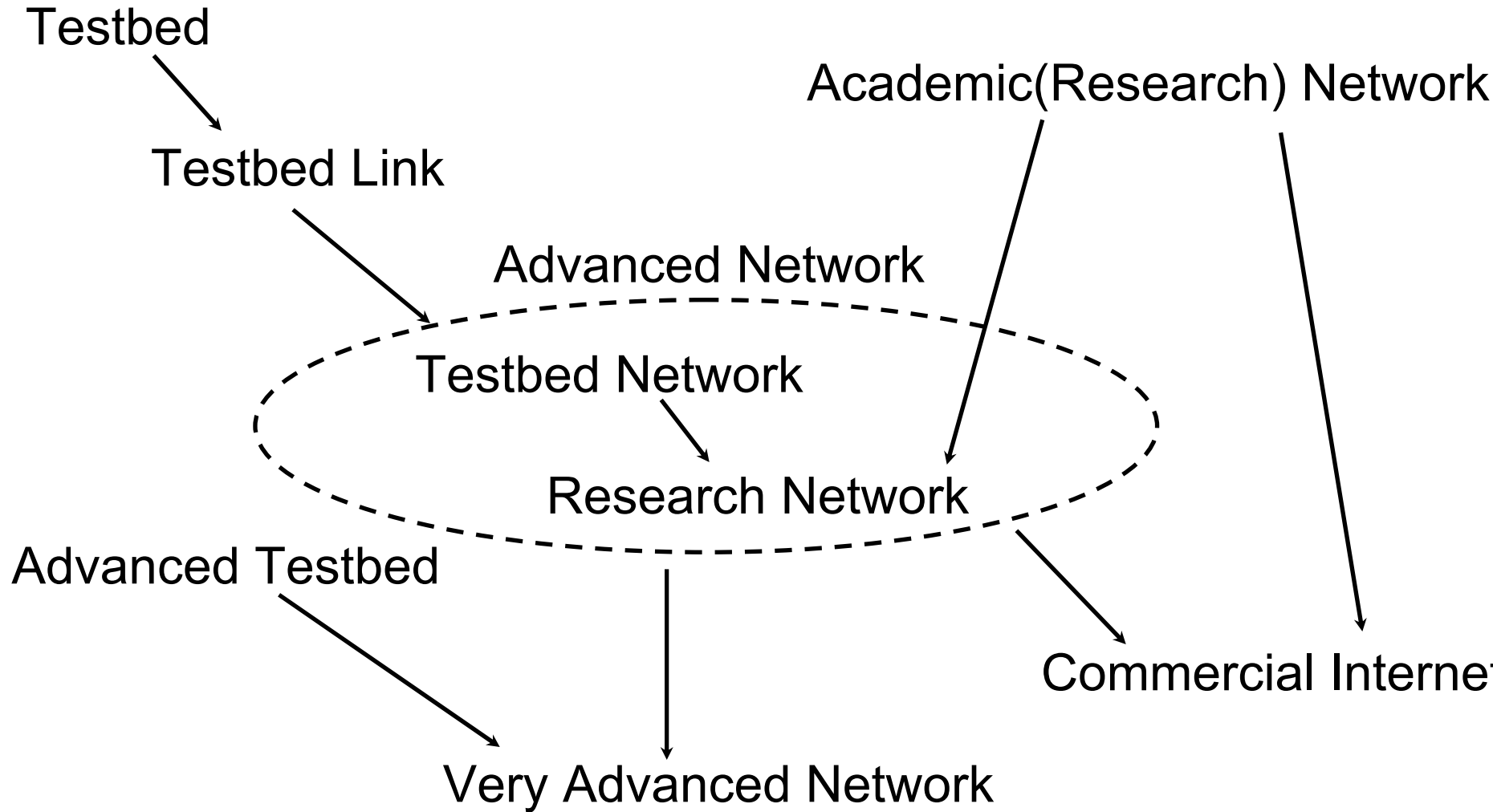
Appendix B1 : APAN Link Information

	Bandwidth(Mbps)	Expected Date	Remark
JP-US	5	Now	IMNet(T3/E3 in 1997.4Q)
JP-AU	1	1997.3Q	RWCP/ACSys
JP-HK	1.5	Now	AI3/HKUST
JP-ID	1.5	Now	AI3/ITB
JP-KR	45	1998.1Q	KDD/KT
	2	1997.4Q	APII
JP-PH	0.25	1998.1Q	MAFFIN/RRI
JP-SG	0.25	Now	RWCP/SREN(E1 in 1997.4Q)
	1.5/2	1997.3Q	APII/SREN
	1.5/2	1998.1Q	AI3/SREN
JP-TH	1.5	Now	AI3/AIT
	2	Now	SINET/NECTEC
KR-US	Sharing	Now	KT(Cache, Mbone, Backup)
SG-US	15	1997.3Q	SREN

4. Usage

Interconnection of Testbed and Advanced Networks
Networking for Research Community

Appendix E: Relationship between APAN, Testbed and the Internet



5. Bandwidth

Phase 0: 1996

Preparation

Phase 1: 1997 - 1999

45 Mbps or more for primary links

Phase 2: 2000 - 2002

Higher speeds (OC3, OC12, ...)

Appendix D: Sample Bandwidth Allocation

For 45 Mbps

Internet	5 Mbps
Caching Project	6 Mbps
Mbone Project	2 Mbps
IPv6	< 1 Mbps
RSVP	1 Mbps
Various Projects	30 Mbps(To be reserved)

6. Activities

High Speed Networking

Intercontinental Link

Continental Connectivity

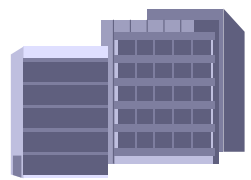
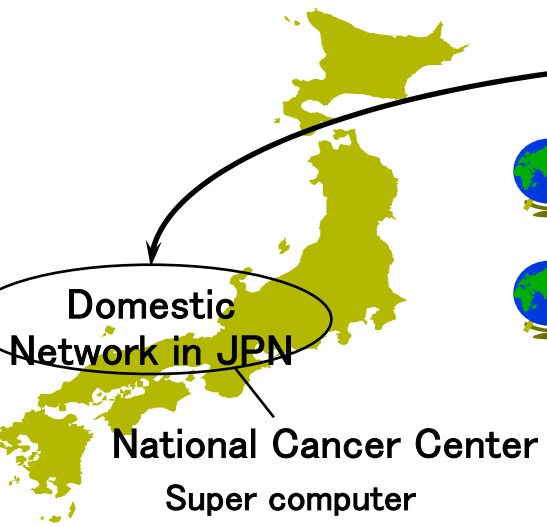
Research & Development Collaboration

Virtual Community Development

Human Resource Development

Application (Tele-medicine)

APAN



Medical Information Server



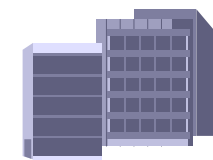
Consultation in Japanese



Consultation from abroad



Super Computers for Medical applications
Exchange information and technology

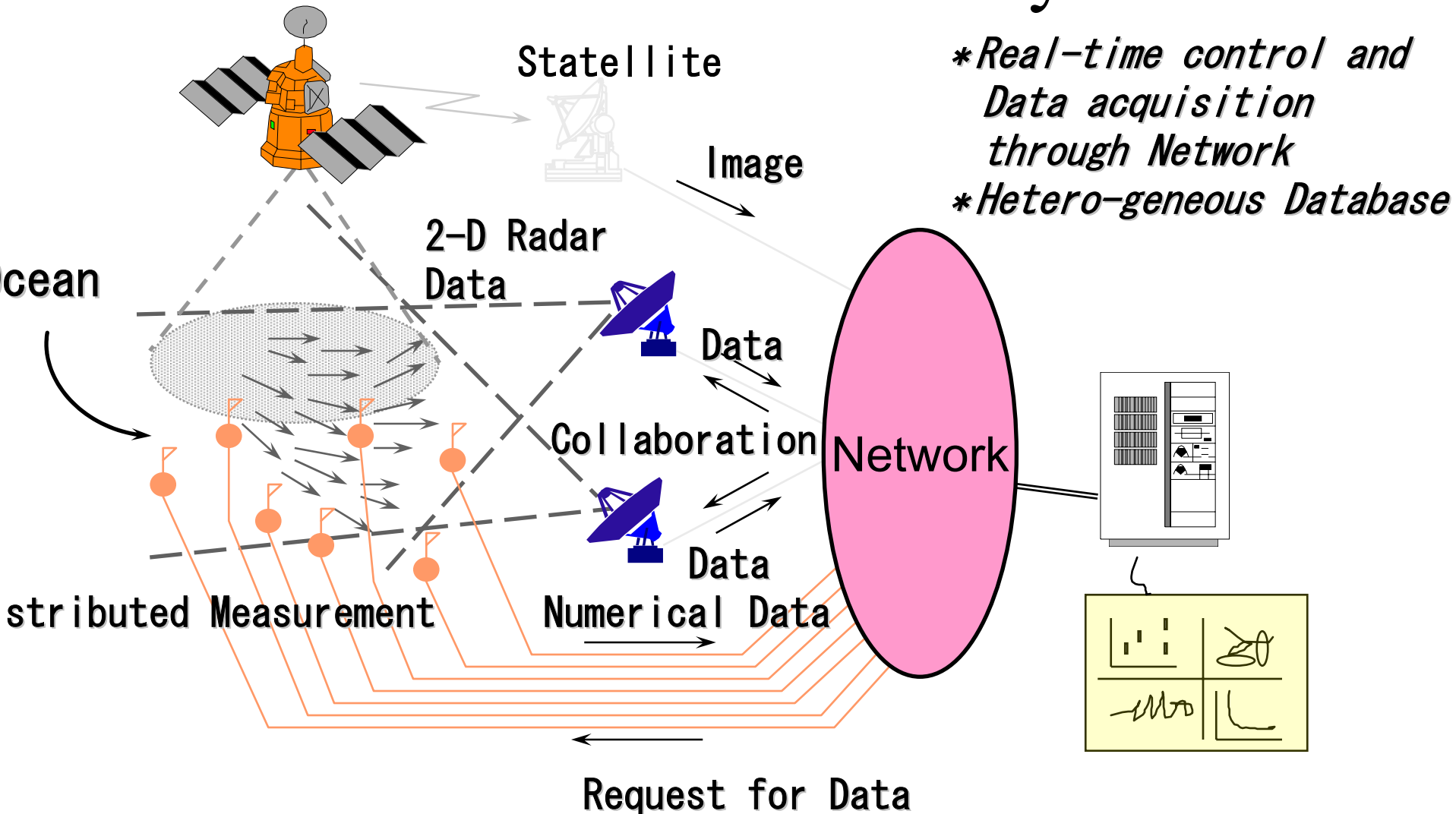


Database for cases



Monitoring communicable diseases

Earth Observation Environmental Study



6.1 High Speed Networking

Exchange Point(XP) Improvement

Exchange Point(XP) Interconnect

6.2 Intercontinental Link

High speed connections

Performance tuning

delay/throughput

caching/replication

6.3 Continental Connectivity

Connectivity Program

Links at various bandwidths

Exchange Point(XP) Interconnection

6.4 Research & Development Collaboration

Network Technology

Application

6.5 Virtual Community Development

Agriculture

BioInformatics

Education

Energy

Environment

Information Tech. & Telecom.

Medical Informatics

Science

Weather

(more)

6.6 Human Resource Development

Seminar

Workshop

Symposium

7. Schedule

1996.	3.28	Tsukuba	Ad hoc Meeting(during APEC Symposium)
	5.23-24	Tokyo	Preliminary Meeting
	6.21-22	Seoul	General Meeting
	7.26-27	Tokyo	General Meeting
	8.23-24	Seoul	Working Group Meetings
	11.8-9	Tokyo	Workshop and General Meeting
1997.	1.23	Seoul	Workshop on Healthcare
	3.12	Tokyo	Technology WG Meetings
	3.13-21		North American Network Visits
	6.2-3	Tokyo	APAN Committee & WG Meetings
	7.19-20	San Francisco	NSF Proposal Drafting
	8.14-19		European Network Visits and Technology WG Meeting
	10.20-21	Singapore	APAN Committee & WG Meetings and Workshop
1998.	2.23-25	(Japan)	APAN Committee & WG Meetings and Symposium
	6	Maui	APAN Committee & WG Meetings
	12	Australia	APAN Committee & WG Meetings
1999.	6/8	(Korea)	APAN Committee & WG Meetings

8. Finance

Link: paid by link owners
Membership Fees: for overhead activities

9. Members

Primary Members: Link owners

Associate Members: Government, Users group, Industry

Liaison: International organization, Others

Appendix A: Bibliography

APAN	www.apan.net
APNG	www.apng.org
CA*Net2	www.canarie.ca/c2
DANTE(TEN-34)	www.dante.net
GIBN	www.ncsa.niuc.edu/General/GIBN
Internet2	www.internet2.edu
Next Generation Internet	www.ngi.gov , www.cra.org/Policy/NGI www.ccic.gov
STAR TAP	www.startap.net
vBNS	www.vbns.net

Appendix C: Working Groups

Application

BioInformatics

Education

Engineering

Environment

Medical Informatics

Science

Technology

Cache

IPv6

MBone

Measurement

Network Design

RSVP

Security

Appendix F: Members

Primary Members

Australia: ACSys

Japan: APAN-JP Consortium

APII/CRL

IMNet/STA

KDD

MAFFIN/MAFF

RWCP/ETL

SINET/NACISIS

WIDE/AI3

Korea: APAN-KR Consortium/KT

APII

Singapore: SINGAREN

USA: (AT&T)

Liaison Members

USA: Indiana University(vBNS)

Appendix G: APAN Organization and People

APAN Committee Chair	Kilnam Chon (kr)
Deputy Chair	Shigeki Goto (jp)
APAN Secretariat Director	Kazunori Konishi (jp)
Network Operation Center Director	Kazunori Konishi (jp)
Deputy Director	Chan-Hyun Youn (kr)
Application Working Group Co-Chair	Robin Stanton (au)
	Tan Tin Wee (sg)
Technology Working Group Chair	Shigeki Goto (jp)
Deputy Chair	Dae-Young Kim(kr)