Draft Minutes
CCIRN Annual Meeting
June 24-25, 1995
USA

I. PARTICIPANTS

Shoichiro Asano, Japan
Estela Noemi Barone, Argentina
Michael Behringer, UK
Hans-Werner Braun, US
Ivan Moura Campos, Brazil
Michelle Chiang, Singapore
Kilnam Chon, Korea
Regina Colbert, US
John Dyer, UK
Demi Getschko, Brazil
Shigeki Goto, Japan
Saul Hahn, Mexico
Haruhia Ishida, Japan
Tomaz Kalin, Netherlands
Tarek Mohamed Kamel, Egypt
Yukio Karita, Japan
Peter Kirstein, UK
Mike Lawrie, South Africa
Huk Jaim Lim, Singapore
David MacNeil, Canada
Amodio Jorge Marcelo, Argentina
Tracie Monk, US
Shin Nakamura, Japan
Kees Neggers, Netherlands
Shem Ochuodho, Kenya
Iyabo Odusote, Nigeria
Khaled Sellami, Tunisia
Jose Soriano, Peru
Vincent Taylor, Canada
Stefano Trumpy, Italy
Florencio I. Utreras, Chile
Walter Wiebe, US
Jim Williams, US
Chen Shyang Yih, Republic of China (Taiwan)

II. SUMMARY OF ACTION ITEMS

ACTION ITEM # 1. *The African delegates will develop a position paper (Communique) for distribution at forums such as the OAU. CCIRN will draft a letter supporting this position paper. (Tarek Mohamed Kamel, Mike Lawrie, Shem Ochuodho, Iyabo Odusote, and Khaled Sellami to prepare paper. Tracie Monk to draft CCIRN endorsement letter.)*

ACTION ITEM # 2. *Information coordinators will be designated for each continent. They will be responsible for gathering information/issues consistent with the CCIRN charter and if possible, establishing a server site for posting continental information/pointers to other information sources.*

- *Saul Hahn - Latin America*
- *Tracie Monk - North America*
- *Kilnam Chon - Asia/Pacific*
- *Mike Lawrie - South Africa*
- *Tarek Kamel/Khaled Sellami - North Africa*
- *Shem Ochuodho/Iyabo Odusote - Central Africa*
- *Tomaz Kalin - Europe (Terena)*

ACTION ITEM # 3. *Working groups will be established which can identify and encourage on-going work and cooperation on issues of importance to CCIRN. Discussions associated with these working groups will form the core of the agenda for the next CCIRN meeting. Tentative working groups are:*

- *PEOPLE*
- *METRICS / NETWORK MANAGEMENT*
- *SECURITY*
- *TRANSFER OF RESEARCH RESULTS*
- *SERVICE MODELS*
- *BANDWIDTH SHARING*

ACTION ITEM # 4. *Country updates will be made available electronically (via CCIRN-related servers) and contributed to the INET program. This will allow a larger audience to participate in these discussions. (Information coordinators listed in Action ItemÀ À#2 will follow-up.)*

ACTION ITEM # 5. *A 3-4 page scoping paper will be developed describing how CCIRN could contribute to a program for promoting Global Information Systems Integration. (Walter Wiebe & Hans-Werner Braun)*

ACTION ITEM # 6. *A short paper will be developed summarizing how to present discussions of the GII at the ministerial level, emphasizing the implications of and requirements for and investments in the GII. (Ivan Moura Campos)*

ACTION ITEM # 7. *The "Membership" section of the CCIRN charter will be updated to reflect the expanded CCIRN membership, including Latin America and African participants and the consolidation of certain institutions, e.g. RARE. (Kilnam Chon)*

ACTION ITEM # 8. *Discussions concerning the G-7 activities and Global Interoperability for Broadband*

Networks will be continued via e-mail. (Shoichiro Asano, Kilnam Chon, & Stefano Trumpy)

ACTION ITEM # 9. *Add the APII Project to the agenda for the next meeting. (Kilnam Chon & W. Wiebe)*

The North America CCIRN will host the next meeting of the CCIRN; a one-day meeting, June 29, 1996, in Montreal. This is the Saturday after INET '96 in June 24-28, 1996.

III. PROCEEDINGS

1. Opening

Kilnam Chon, Asia/Pacific Co-Chair opened the meeting by welcoming returning and new CCIRN members and discussing the agenda.

2. Minutes of Last Meeting

The minutes from the last meeting were discussed. A question arose about the action item concerning IETF funding. This subject is currently under consideration by IETF, ISOC, and the various U.S. funding agencies. The minutes were approved as written.

3. Regional Updates & Plans

a. Asia/Pacific

Kilnam Chon provided an update on the activities in Asia, including a summary of the Asia-Pacific Networking Group (APNG). The Chair position in the APNG will be transferred from Chon to Prof. Ishida at the conclusion of this year's meeting (following INET '95). The APNG meets two times a year (during INET & in Asia Pacific). The focus is on exchanges and coordination, and it has seven working groups (apng-commercial; apng-education; apng-internationalization; bof-map; bof-information infrastructure; apng-developing country; and bof-china)

Activities of the Pacific Neighborhood Consortium (PNC) (which focuses on database sharing and meets annually); PEACENET (which provides satellite-based networking for the Pacific islands); and APEC's Information Infrastructure Project(APII) were discussed.

Dr. Goto described the history and functions of the Asia/Pacific NIC. APNIC is responsible for allocation of addresses, but it is not a central facility. The work is distributed across several country NICs (JPNIC, KRNIC...) Australia has their own addresses (before APNIC's and AUNIC's IANA allocation in April 1994. Once Australia uses all of their available addresses, requests for new addresses will be handled by the APNIC.

Haruhia Ishida described the status of Internet in Japan. Currently there are nearly 20 links between Japan and the U.S. ranging from 64 Kbps to 6 Mbps. During the first half of 1995 numerous Asian Internet connections were established, including those to Indonesia (64 kbps), Singapore (192-256 kbps frame relay), Australia, Thailand (2 Mbps) and China (64 kbps). He also described the "100 school project" connecting about 100 primary, secondary and high schools using university backbones. Currently there are between 1-2 million Internet users in Japan.

Prof. Asano described Japan's SINET. In September 1994 ATM was introduced; by October 1995, there will be OC3 and DS3 service available for major trunks. In March 1996, there will be new ATM systems for 29 NOCs. He also discussed the AUP for use on the NSF-sponsored connections.

Michelle Chiang described the plans for privatizing portions of Technet. Technet has had two primary responsibilities. Its ISP functions are being privatized under the name Pacific Internet PTE Ltd. Its remaining R&D functions will continue to receive funding from National Science and Technology Board (NSTB).

Pacific Internet will be in full commercial operation in late August/September 1995. It will seek out overseas partnerships and promote development of a regional network by offering access to overseas organizations. There will also be a local marketing drive to expand its domestic users; as well as the creation of a proposed cyber cafe. Pacific Internet is a consortium of Sembawang Media Pte ltd; Sing Inter'l Media Pte Ltd.; Sing Technologies Computer Systems & Services Ltd. The Technical Authority of Singapore (TAS) plans to "sell" ISP licenses (one time registration fee plus annual operation fee). There will be three ISP in Singapore Singnet, Technet, and a third successful bidder.

b) Europe

Micheal Behringer delivered a report on the activities of DANTE. DANTE's international network service, EuropaNET, is the primary backbone network for the European research community as well as providing intercontinental connectivity and routing support. Information on DANTE can be obtained on the WWW through the URL: http://www.dante.net.

In March 1995, the EuroCAIRN Committee gave its approval for DANTE to develop a blueprint for the setting up of the next generation backbone in Europe, starting at 34 Mbps. Based on these results, DANTE formulated a proposal for the 'Interconnection of National Research and University networks at 34-155 Mbps' combined Telematics/ESPRIT Call for Papers by the EC's DGIII and XIII as part of the Fourth Framework Programme. Eighteen European countries are participating in this "TEN-34" proposal. Behringer also outlined issues of concern to the European community, including: 1) U.S. is not cosharing lines (with the exception of cofunding of E-lines by NSF); 2) the costs of high bandwidth into Europe; and 3) congestion at MAE-East -- fat pipe into a thin funnel. He also discussed the PNO problem, with PNOs unwilling to make existing capacity (fibre) available. The profitability of voice links is the big problem, however, this might be alleviated somewhat in when the PNO monopoly disappears in 1998.

Kees Neggers explained that during July, 34 Mbps lines will begin operation, but that the cost will be at 12-15 times the price of 2 Mbps lines. The European Commission is very supportive of the EuroCAIRN study, and has expressed this support in communications with the PNOs.

The 34 Mbps Trans European Network (TEN) was established in March 1995 by the TEN-34 Consortium. The funding is based on the premise that 4x2 Mbps should be sufficient. Some PNOs are complying. Nationally there are several 34 mbps networks operating, as well as pilot ATM networks. The real problem is the intra-European connection.

Tomas Kalin described the establishment of Terena in 1994. Several projects are planned, including the integration of WWW functionality. It is also moving toward usage based charging scheme.

Stefano Trumpy emphasized the importance of bringing various ministries and PNOs together to discuss issues and reach a some consensus. He discussed the Regional Informatics Network for Africa (RINAF) project which was conceived by the Intergovernmental Informatics Program (IIP) of UNESCO and financed by a grant of the Italian Government and by a contribution from the Republic of Korea. The project implementation phase was started in the second half of 1992 and is planned to last till the end of 1996.

John Dyer UK delivered a presentation on SuperJANET. SuperJANET is the UK Academic Community broadband multi-service network. It is comprised of an ATM element running at speeds up to 155 Mbps and an SMDS element running over Mbps fiber optic links. The SuperJANET network reaches over 50 sites and is connected to the existing JANET network.

The usage of the network falls into one of three categories:

- Constant bit rate (cbr) video traffic.
- IP applications traffic generating variable bit rate (vbr) traffic for transport over the ATM network.
- Direct ATM applications traffic and ATM research traffic.

c) North America

Walter Wiebe described the IETF's INAPARCH BOF session held at the December 1994 meeting and the status of the new commercial architecture. The domestic NSFnet backbone was decommissioned April 30,1995 and replaced by a fully privatized "commodity Internet". The three Network Service Providers or NSPs (as well as other providers) interconnect at the three priority Network Access Points (NAPs). The three priority NAPs are to provide a neutral, AUP-free meeting point for NSPs to exchange routing and traffic. The NAPs, as well as the MAE facilities on the East and West coasts and the two Federal Internet Exchanges (FIXen) are all operational.

NSF-sponsored regional providers will receive declining levels of funding until funding is eliminated in 1999. At that time, they are expected to be self-sustaining. All regionals are required by NSF to connect to, at a minimum, the three priority NAPs. Service providers selected by the regionals are to provide interregional connectivity to/from the U.S. R&E community.

In July, the Federal Networking Council (FNC) will meet to develop a long-term strategy for Federal connectivity in the post-NSFnet era.

David MacNeil described the CAnet network architecture and the $2.5M project to develop a 100 Mbps virtual broadband (production) network. The national ATM backbone will be a telephone company supplied network based on a single provider. The ATM backbone is a follow-on to the ATM Test Network. The Test Network is similar to NSF's vBNS. CAnet, however, is AUP-free.

Tracie Monk described the status of some of the U.S. activities, including the National Science Foundation's (NSF's) International Connections Program (ICP); NSF's vBNS; the Federal Internet Umbrella Security Plan (FIUSP); and the Africa Internet Forum (AIF). Under the proposed ICP, NSF will rachet-up international connections from the current T1/E1 levels to the 34-45 Mbps range, with the possibility of SONET/SDH capacities of 155 Mbps and higher in the future. Requirements will "likely" exist for connections to NSF-sponsored NAPs; routing, addressing and scheduling; public information dissemination; joint use (e.g., implementing a general purpose infrastructure); and possibly for security and privacy concerns. No AUP is planned for the ICP.

NSF's very high speed Backbone Network Service (vBNS) was initiated April 1, 1995 following a fixed-price award to MCI. The vBNS is NOT A FASTER NSFNET BACKBONE. It is an experimental network intended for meritorious high-bandwidth applications, and will grow over time from its current 155 Mbps level 622 Mbps to a 2.5 gigabyte network. Currently the vBNS is connected at the NSF-supported NAPs and at the supercomputer centers.

Monk also described the FIUSP which is a task under the National Performance Review. The FNC plans to issue the policy portion, Part I of the plan, during the summer of 1995. Part II, which examines the Internet security architecture, is to be completed in the Fall of 1995.

The AIF was discussed. AIF is a forum for bilateral and multilateral donors to join forces and leverage their efforts promoting Internet connectivity in Africa (two FNC members -- NASA and the Agency for International Development -- participate as members). The common goal of AIF is to provide "strategic collaborations among independent donors towards development of sustainable Internet communications infrastructure in Africa via information sharing and focussed project implementations."

Hans-Werner Braun provided an overview of the new commercial architecture, and summarized issues currently facing U.S. agencies relating to: 1) new projects, 2) interagency connections, and 3) international interconnections. He also described the difficulties existing with collecting traffic measurements under the new architecture, including questions about what types of are required, e.g., utilization vs. traffic profiling, and the need for resource consumption accounting. Currently, Federal agencies are assessing the need to collect traffic measurements at strategic locations, e.g., federal internet eXchanges (FIXen), the network access points (NAPs), and the two MAE facilities. A machine (256 mhz Alpha) has recently been installed at FIX-West to collect traffic data. Braun suggested taking similar measurements at other key international sites. (CCIRN members who are interested in metrics and a possible statistics collection workshop should contact Braun directly.)

Braun also described the Super Computer '95 conference scheduled for San Diego in December 1995 and the approximately 60 information highway (broadband) demonstration projects which are planned. (See URL: http://www.nlanr.net for more information.)

d) Latin America

Saul Hahn delivered a general overview of connectivity in Latin America and of the "Hemisphere-Wide Inter-University Scientific and Technological Information Network" (RedHUCyT is the Spanish acronym). RedHUCyT's main objective is to connect the member countries to Internet, by integrating an electronic network for the exchange of specialized information among different academic and scientific institutions.

He also described the Summit of the Americas Plan of Action (Miami, December 9-11, 1994) at which the governments of the Americas formally recognized that "a country's information infrastructure is an essential component of political, economic, social and cultural development." Summit members assumed various follow-up responsibilities related to the development of the information infrastructure for major universities, libraries,

hospitals and government agencies.

Most existing Latin American connectivity is through U.S., but this will change with new intra South American lines. Argentina and Chile represent the countries with most recent connections. Mexico and Brazil demonstrate the most significant growth in internet usage. He also provided an overview of JAMNet (Jamaica's satellite-based network), and discussed plans for the Trans-Caribbean System. The Eastern Caribbean islands are linked via fiber, with Cable and Wireless providing the lines. Costa Rica (CRNet) has a 128 kbs satellite link to NSFNet in Florida, with Nicaragua and Panama connected to CRNet via microwave. Both countries have encountered problems with low speed of microwave links (14.4 kps). The current microwave links are being upgraded to digital microwave links (128 Mbps) using PanAmerican Satellite (PAS-1).

Florencio I. Utreras described developments in Chile's Internet market. The REUNA network has a 512 Kbps connection to SURANet in the U.S. REUNA's market is approximately 40% university-research, 15% government, 45% commercial. There are two private groups offering Internet connectivity for research-only use: Cerro Tololo with at 256 Kbps to NASA and La Silla with a 64 Kbps connection to ESO in German. Forthcoming service providers include Mundo Internet with 512 Kbps to AT&T and IBM Global Network with 256 Kbps service to IBM Global Network's facilities in White Plains.

Estelle Barone described the Permanent Forum for research networks in Latin America and the Caribbean which was started in 1991 in Rio de Janeiro, Brazil. The last meeting was in Buenos Aires, hosted by the Secretaria de Ciencia y Tecnologia - Red Cientifica y Tecnologica -RECyT. More than 50 representatives from 23 countries participated in the meeting. There are two working groups (policy and technical). The focus of the group is on promoting technical assistance in network management and information services; developing plans for training (end users and technical support); facilitating the interrelationship between projects; and on other projects of interest for the region. The next meeting will be held in Columbia this Fall.

Amodio Jorge Marcelo described events in Argentina since the privatization of the telcos in 1990. In June 1995, there were more than 100 connected IP networks (200 registered); 3500 IP hosts; growing by 10-20% per month; and more than 12 GBytes/month in international traffic across the 512 kbps satellite link to SURANet. Approximately 66% of Argentina's Internet sites are government-funded, but there has been significant growth in commercial usage since the new international link was established in April 1994. The link to SURANet is AUP-free.

Current activities include: 1) replacing the international satellite link with a 2 Mbps digital fiber link over UNISUR for IP traffic (July 1995); 2) establishing regional connections with Brazil and Uruguay; 3) connecting of regionals and end user to a national IP backbone provided by Startel S.A.; 4) proceeding with deployment of education/government IP networks; incorporating commercial sites and individual access; 5) establishing an ISOC chapter; and 6) holding training seminars and workshops.

Ivan Moura Campos described the Brazilian Congress' recent landmark ruling against monopolistic practices by the local PTT. This required a 3/5 vote in favor of a constitutional amendment. Under this ruling, the telcos can only sell connectivity, not services. All this happened in last 12 weeks. Currently there is only non-commercial internet services in Brazil, with approximately 12,000 hosts. Connectivity is at the 64 Kbps level and below, with about 500 universities and colleges connected.

In September 1995, the Ministry for Science &Technology will begin development of a 2 Mbps research network, with backbone access open to all users. (According to participants, Europe's and Canada's networks developed in a similar fashion.) The backbone will provide reasonably- priced connectivity through the country. Network services will include: databases (e.g., meteorology, events and spectacles, public libraries); specialized information (e.g., electronic newspapers and financial market information); and specialized services (e.g., education and point- of-sales transactions). An access kit for pc users and training/education materials on data networks are currently being prepared. A human resource development program is also being formulated.

Jose Soriano described the status of Internet in the Andean Region. On June 11, 1995 the Constitucion del

Consorcio de Redes Andinas (CRA) was signed setting forth the goals and principals for the development of Internet in the countries of Bolivia (BOLNET), Chile (REUNA), Colombia (InterRed), Ecuador (Ecuanex), Peru (Red Cientifica Peruana), and Venezuela (REACCIUN). He discussed the critical important of interconnecting national networks in Latin America -- especially given the transition to the new commercial architecture. Redundancy and feasibility will be secured through mixed connections (optic fiber, satellite, micro waves) following the national (PTT) supplier's specifications. In an effort to make the subregional (Andean) backbone a reality, Peru is working with Chile to buy a T1 connection to U.S. Other key initiatives include efforts to develop language interfaces and to improve the usefulness of networked information to the Andean users.

e. Africa

Tarek Kamel and Khaled Sellami described networking activities in Northern Africa. The data communications infrastructure is a major challenge for the Arab region. Egypt currently has full internet connectivity through its 64 Kbps line to France. This will soon be upgraded to 128 kbps. Syria has e-mail connectivity via a X.25 line (Syriapac) to RITSIC in Cairo. Jordan has e-mail connectivity via a slip line to RITSEC (full Internet connectivity under establishment). Kuwait has full Internet connectivity with at the 64 Kpbs level.

Tunisia has been connected to the Internet since 1990, and now has a 19.2 Kbps line to France, with approximately 50% of all traffic financed by private groups and users. Algeria is connected directly to Italy, and Morocco is connected to France via a dial up UUCP connection to Fnet-France.

The objectives of the Regional Arab Information Technology network (RAIT) were described, including supporting the acceleration of the software industry in the Arab region; maximizing the utilization of the technical resources available; helping exchange experience among professionals in IT; and following the state-of-the art international development in software related fields.

For those countries that do not have internet connectivity, Egypt is offering slip connection services under Egypt Net (X.25). The problems and issues of the Internet in the Arab Region range from financial to political; cultural; and technical. Technical issues include: upgrading the infrastructure; network security; and Arabization. Cultural issues include: language barriers and the open environment (legal issues of what is locally permitted). Plans and future needs include: developing an AUP; upgrading the infrastructure; establishing a new accounting policy and natural language interfaces; accelerate the development of value added services; and encouraging professional development

Mike Lawrie described the work of Uninet (South Africa's scientific and academic research network). Uninet is connected to NSFNet through a 256 Kbps satellite link, with access to the hub sites generally available at 64 Kbps. Traffic (USA to South Africa) is loaded to 100% capacity. Funding continues to constrain Uninet's growth with a 2 Mbps backbone and 2 Mbps link to the U.S. requiring a factor of four budget increase (to $4 million), with 75% of total funds being required solely to fund the international connection.

Commercial Internet began in late 1993 in South Africa, with three services currently operating through their own international circuits. Their operation is complicated by existing PTT regulations which technically forbid internetworking in South Africa due to the telcom's monopolies on communications traffic. The government network, while large in size, is limited to mostly police and military users.

A green paper on recommendations for new telcom regulations is being developed; to be followed by a white paper; and ultimately, possible legislation. The SAT-2 fiber link to Portugal (only 9% of which is being used) could, if made available by Telkom SA, greatly expand connectivity. Also lots of dark fiber exists throughout South Africa, however, TELKOM is not making it available for internet use.

Currently, Uninet has several links into the interior of Africa, as do some other groups. The farthest link is to Ghana. South Africa is registering DNSs for several African countries, including Botswana, Mozambique, and Swaziland. Questions about who has the right to register DNS' is an issue from several countries' perspective, with no near-term resolution expected.

Shem Ochuodho described the current status of internet activities in East Africa. There are basic problems related to getting a dial-tone and the variability of electricity flow. The cost of sending a fax is prohibitive -- roughly 25% of a university professor's monthly salary. There are significant restriction on modems -- high tariffs which require up to 11 months for approval. RINAF has an initiative in 13 African countries (and a gopher describing these initiatives), and there are several other organizational initiatives. Content on the networks is critical (versus just the infrastructure).

While these external groups are providing some useful contributions, overall its inadequate with relatively poor coordination between initiatives and little attention to local initiatives (i.e., strengthening existing service providers). The level of government involvement is critical to their success -- governments must be fully informed with strong participation.

Areas where external groups support can positively influence the development of internetworking in Africa include: 1) influencing PTTs and governments to adopt more proactive policies; 2) assisting to alleviate the revenue loss / compensation concern of PTTs (would be helpful have information on cases were revenues were actually increased); 3) tieing donor aid projects with network component; 4) encouraging freedom of communications information; 5) encouraging the release of airwaves (currently viewed as instruments of propaganda with licensing of vSATs is very difficult even though cost is $2-3K versus leased line of $7K); 6) encouraging foreign investment.

The next steps include: 1) creating an Association of Network Providers; 2) continued regional/national efforts, e.g. Nigeria's September workshop; 3) continuing efforts within RASCOM, RANAFTEL, PATU and other telco-related organizations; 4) explore possibilities under AFRICA One (AT&T) and similar initiatives; and 5) identify new avenues where assistance by ISOC, CCIRN, and other international organizations can help.

Iyabo Odusote described initiatives of the World Bank, RINAF, and others in West Africa. The fact that all of these initiatives are operating independent of each other lessens their overall impact. Conditions in Nigeria and West Africa are similar to those described in East Africa with poor/unreliable local telephone networks and very expensive international leased circuits (i.e., $250K for a 64 Kbps line). There is also minimal support from the local governments. Project plans include sensitization workshop (March & September) and alliance of national groups. Recently the first license was issued for a private vSAT connection.

Odusote concluded that a joint effort both the research and the commercial sectors is required in order to accumulate sufficient funding). In addition, there should be more focussed funding and coordination between international funding agencies.

Participants discussed the role of the Organization for African Unity (OAU) as a potential umbrella organization for development of Africa (in July, African Heads of State will meet in Adis Ababa which also hosts the OAU secretariat). The group discussed the importance of having the GII on the agenda of meetings such as this.

Saul Hahn distributed excerpts from an Organization for American States (OAS) paper on Summit of the Americas and suggested that the information infrastructure principles adopted at this summit would also be applicable in the African context. Participants also discussed the importance of a body like the CCIRN making statements or suggestions regarding the critical importance of furthering networking in Africa and other developing regions. The possibility of Africans developing a position paper which can be supported by CCIRN and other key international organizations was discussed.

4. GII and G7 Status

Stefano Trumpy describe the status of the G7 Global Information Infrastructure (GII) Project: Global Interoperability for Broadband Networks (GIBN). The major objectives of the GIBN are to: 1) provide interconnect technology testbeds for Global interoperability testing of new technologies, services and applications and 2) interconnect national/continental research and university networks, supporting global research collaboration and access to information.

This effort is intended to provide a framework for the international cooperation in initiatives ranging from developing an inventory of information spread across networks; to global interoperability for broadband networks; to projects devoted to applications (cross-cultural education, galleries / museums, environment, telemedicine, interconnection of governments, monitoring/surveillance and control; etc.). The emphasis of these efforts is on GLOBAL and INTEROPERABILITY of broadband networks (including multimedia applications).

The implementation & timing aspects of these efforts were discussed. From this point through December 1995, there will be a focus on completing planning and support for the implementation of initial linkages. From January - June 1996, the GIBN will support the deployment of applications and additional links. There will be a review of directions and follow-up from July 1996-June 1997, with an assessment of project results and recommendations from July-December 1997.

The rationale for EC participation in this initiative includes: broadening the scope of the G7 cooperation; providing a window for non-G7 European countries; and ensuring coordination with ongoing European initiatives, e.g., 34 Mbps interconnect with national hosts.

Kees Neggers explained that per a decision last week by the European Commission the emphasis will be on TESTBEDS versus TELEMATICS -- this is in part in response to concerns about commercial usage over the high speed links. The focus is on specific test/pilot applications at the 34 Mbps level, with general connectivity is not being provided. Canada, the UK, Germany, and Japan are co-coordinators of this effort. Participants suggested that the U.S. contact person should probably be Steve Goldstein at the National Science Foundation (NSF). Prof. Asano discussed Japan's role in these G7 activities.

Participants agreed that there should be more discussion concerning the G7 activities via e-mail, and that this should probably be a discussion item for the next meeting.

5. Scope and Charter of CCIRN

The North American CCIRN will host the next meeting. Participants discussed splitting the meeting into two parts, integrating country status reports into the INET program and focusing on CCIRN issues at the actual CCIRN meeting. It was agreed that next year's meeting should be a one-day event coming after the INET (which is scheduled for June 24-28, 1996).

Issues which might be addressed by e-mail leading up to and during next year's meeting include: developing a common understanding of service models, agreements on gathering statistics and other metrics issues, policies on information security (such as an international CERT), agreements on bandwidth utilization or sharing, and human resource issues. There should also be an increased emphasis on the evolution of the GII.

Participants agreed that the CCIRN's focus should continue to be on fulfilling items a.-d. from the existing

Terms of Reference for CCIRN. Regarding the issue of whether to open the CCIRN to general participation, several members suggested that membership should remain limited if CCIRN is to be result oriented.

Participants acknowledged the importance of encouraging dialogue among CCIRN participants throughout the course of the year, and suggested that country activities and issues should be routinely discussed via e-mail. Information sharing will be facilitated by the continent coordinators and the linkages to appropriate URLs.

Participants agreed that the membership section of the CCIRN charter should be updated to reflect addition of new members / continents and the consolidation of certain networks, i.e., RARE. While most continents have a single point of contact who acts as a co-chair of the CCIRN, African delegates explained that this approach will not scale in Africa due to the diversity of the countries. As a result, it was suggested that the continent be divided into regions (north, south, and central), and the contact person rotates between these regional contact persons.

The possibility of the CCIRN or other party making recommendations to the governments of Africa to recognize the importance of intra-African communications was discussed. Delegates agreed that it would be appropriate for the CCIRN to endorse an existing intra-African initiative.

6. ISOC Chapters

Harushiso Ishida reviewed the status of ISOC international chapters and procedures for establishing new chapters. There are six international chapters currently; eight with charters/bylaws under discussion; and eighteen additional groups discussing the possibility of forming a chapter. More on how to form a new chapter can be found at URL: http://www.isoc.org.

7. Closing

The participants reviewed the action items emerging from the meeting and agreed the issues would be further defined and discussed via e-mail throughout the year. These issues will form the basis for the one-day CCIRN meeting to be held in Montreal on Saturday, June 29, 1995.

Last modified on August 11, 1995

Questions or Systems problems should be reported to mailto:%20FNC_Webmaster@arpa.mil

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