

**ASIA-PACIFIC ECONOMIC COOPERATION
Telecommunications and Information Working Group**

**TWENTY FIFTH MEETING
(TEL 25)**

CHAIR'S REPORT

**11 – 15 March 2002,
Hanoi, Viet Nam**

**TWENTY-FIFTH MEETING of the APEC WORKING GROUP ON TELECOMMUNICATIONS
AND INFORMATION**

CHAIR'S REPORT

INTRODUCTION

The twenty-fifth meeting of the Asia Pacific Economic Co-operation (APEC) Working Group on Telecommunications and Information (TEL) was held in Hanoi, Socialist Republic of Vietnam, from 11 – 15 March 2002. Nineteen economies of the APEC region were represented, including Australia; Brunei; Canada; People's Republic of China, Hong Kong China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; USA and Vietnam. Also attending were the Director (Program) of the APEC Secretariat, Observers from the Pacific Economic Co-operation Council (PECC); and representatives of five Guests (GTAC, ITU, AOEMA, INTUG and Macao, China).

Mr Richard Thwaites of Australia chaired the meeting.

A. OPENING OF TEL 25

The 25th Meeting of the APEC Telecommunications and Information Working Group was officially opened on the morning of 13 March by His Excellency Dr Mai Liem Truc, Secretary General of the Department General of Posts and Telecommunications, who welcomed delegates to Hanoi.

In his opening speech, Dr Truc proposed that the TEL conduct its meeting with two goals in mind: firstly, considering how to deliver practical results of its work to member economies; and secondly, how to address member economies' needs for universal access to information and communication services and human capacity building in Information Technologies. In delivering practical results to members, Dr Truc exhorted the TEL to focus on defining and promoting best practice models for development. In relation to the need for universal access and human capacity building, Dr Truc emphasised the importance of partnerships between government, business and the community.

In his opening remarks, the TEL Chair thanked His Excellency Dr Truc and the hosts of the meeting, the Department General of Posts and Telecommunications, for their generous hospitality.

The Chair then welcomed Macao, China as a Guest to the TEL for the first time at this meeting. He noted the workshops on important issues such as e-Commerce Legal Structures, the Digital Divide, Regulatory Structures and Convergence, and e-Security. A key activity of this TEL is the preparation for the next Ministerial meeting, to be held in Shanghai in May 2002. In preparation for TELMIN 5, the focus at this TEL should be on implementation and results. The Chair noted that TEL has achieved good high-level policies and agreements in principle, but is now approaching the time when we need to report to Ministers on what we have done, in order that they might assess our achievements and give instruction on our forward work program.

B. REVIEW AND ADOPTION OF AGENDA

The Agenda for the meeting is at Annex A of this document.

The TEL was preceded by a number of workshops, seminars and Task Force Meetings. The program of all the associated meetings of the TEL is contained in Annex B.

C. APEC SECRETARIAT REPORT

The Chair invited the Director (Program), APEC Secretariat, Mr Chutintorn Gongsakdi to report on APEC issues relevant to the TEL. Document PLEN/01 refers.

In his report, the Director (Program) noted that APEC is now ten years old, and as such now needs to be seen to deliver tangible benefits for the community.

He went on to outline the theme (“Expanding the Benefits of Cooperation for Economic Growth and Development – Implementing the Vision”) and priorities adopted by host economy Mexico in 2002, which are (in brief):

- Promote the implementation of appropriate trade, investment and financial policies that foster

growth and take advantage of the new economy;

Continue building capacity to reap the benefits of development, placing special emphasis on promotion of small and medium enterprises and micro enterprises;

Continue making APEC a relevant forum for people by fostering greater participation from youth and women, by stepping up efforts to communicate the benefits of globalisation; and by improving the functioning of APEC.

Three key elements arising out of the 2001 Leaders meeting in Shanghai were the Leaders' Statement on Counter Terrorism, the Shanghai Accord, and the e-APEC Strategy. Mr Gongsakdi noted that the TEL already places high emphasis on e-security matters, which have now become a high priority for Leaders and Ministers. TEL will be required to report to the next Leaders' Meeting on steps undertaken to implement the Leaders' Statement on Counter Terrorism.

The Shanghai Accord seeks to broaden the APEC vision of free trade and investment by 2010/2020. The Osaka Action Agenda will provide the blueprint to work towards APEC's 2010/2020 goals. The TEL is tasked with reviewing the Osaka Action Agenda (OAA) agenda to reflect changes in the global economy since Osaka, in particular in light of developments in the new economy. The Committee on Trade and Investment (CTI) will coordinate revision of Part One of the OAA, on liberalisation. The review of Part Two, on economic and technical cooperation, will be coordinated by the Ecotech Steering Committee.

The TEL will also be required to report on aspects of our work program which work towards the implementation of the e-APEC Strategy. The report will be used by APEC as an outreach strategy, outlining APEC's top initiatives and achievements for the broader community. The report may also be presented to relevant sectoral groups.

At Shanghai, Leaders also agreed on a Pathfinder Approach. Noting that the first goal for free trade and investment amongst APEC member economies should be reached in 2010, it is acknowledged that in some areas progress is not occurring fast enough. Leaders therefore have agreed to adopt a Pathfinder Approach, under which those economies that are ready to implement cooperative arrangements consistent with the Bogor Goals can move ahead now, while others may implement later. In practice this means that member economies can agree in principal to cooperative arrangements but are free to move at their own pace.

Mr Gongsakdi then reported on outcomes of the Joint Fora meeting held in Mexico City in March 2002. APEC has grown enormously in ten years and there is now a need to improve the functioning of internal procedures. To this end, Senior Trade and Foreign Affairs Officials are this year experimenting with the role of the Joint Fora meeting and examining the role of the APEC Secretariat. There is consideration whether to establish a professional secretariat or merely to strengthen current arrangements. A proposal is currently under consideration as to how the Secretariat can reduce the burden on Fora such as TEL by reporting directly on non-policy and routine items.

The APEC Secretariat is currently recruiting a new communications team that will provide support to Fora. This will provide an opportunity to better promote the work and achievements of TEL.

Mr Gongsakdi then reported that new projects which seek funding and implementation in 2002 must be received by the Budget and Management Committee by 18 March 2002 for consideration at its meeting on April 10 and 11 2002. He noted that, as TEL met only in the week prior to the BMC deadline, it is appropriate

that an extension of one week be sought from the BMC. He also noted that, at the request of the Human Resources Development Steering Group, Mr Geoffrey Woodhead from the APEC Secretariat will conduct a project development workshop at this TEL meeting

Finally, Mr Gongsakdi stressed that he is always at the service of the TEL for assistance with project proposals, and it is best to approach the Secretariat for assistance early in the development of a project.

The Chair thanked Mr Gongsakdi for his report, and noted that not many TEL projects go to the Budget and Management Committee because so many are now self funded. If the TEL does put forward good projects for APEC funding, there is a good chance that they will be supported. The Chair urged delegates to speak early with the Director (Program), to each other, and to potential project partners, when developing a proposal.

With regard to APEC reporting arrangements, the Chair noted that the Office of the Chair undertakes the majority of TEL reports to APEC fora. The Office of the Chair is maintaining an up-to-date database of TEL projects urged members to try to respond quickly to requests from the Office of the Chair for information.

The Chair then reported that he had been unable to attend the Joint Fora meeting held in Mexico. Ricardo Rodriguez, Head of Delegation for Mexico, had represented the TEL on behalf of the Deputy Chair. Mr Rodriguez presented a report on his representation of the TEL at the Joint Fora Meeting, held in Mexico City on March 1 2002.

Document PLEN/10 refers.

By the end of April 2002, member economies and relevant fora will be requested to provide comment on a US draft e-APEC Strategy Matrix.

Mexico will host a High Level meeting on micro enterprises on July 18 and 19 2002. The aim of the High Level Meeting is to promote micro enterprises in the APEC region and to learn from member economies' expertise in micro enterprises. This will form one of the key issues for the Leaders Meeting. TEL can contribute to this meeting in by sharing our experience of the use of telecommunications and ICTs in micro-enterprises.

The Economic Infrastructure Working Group noted that the TEL could report on several topics relevant to its work – in particular regulatory structures and identification of bottlenecks to investment infrastructure.

In considering management issues, several Fora showed interest in using the TEL database to assist with their reporting responsibilities.

The Chair thanked the Head of the Mexican Delegation for representing the TEL at the Joint Fora Meeting.

The Chair then asked the Business Facilitation Steering Group to focus on the issue of micro enterprises as raised by Mexico. He noted that this is both a development issue and a business facilitation issue. The BFSG Convenor responded that there are many projects currently being undertaken in BFSG which are relevant to the topic of micro-enterprises.

The Chair noted also that each economy will be requested through their Trade Ministry to make a response on

the e-APEC Strategy Matrix, and that the TEL will also be asked for input to the Matrix. The Chair's Office will be able to put together a response from the database of TEL projects and activities. The Chair's Office will let Points of Contact know that a response will be submitted and can circulate it if any would like to see it. He did not propose to circulate every report that the Chair's office provides to other APEC fora as much of the content is the same.

D. Matrix of TEL Activities based on the Cancun Declaration.

Document PLEN/12 refers.

The Chair drew the attention of the meeting to the Matrix of TEL activities, which was developed at TEL 23 as a means of tracking TEL activities and projects in response to the Cancun Declaration. He asked Steering Groups and Task Groups to consider the Matrix when reviewing their activities prior to TELMIN 5. The revised Matrix needs to be available as a draft for SOM I as a draft and then as a final report from the TEL to SOM II in Shanghai.

The Head of Delegation from the United States sought clarification as to what period the TEL is trying to capture in the Matrix.

The Chair clarified that it relates to activities undertaken since TELMIN 4 at Cancun, noting activities that have been completed in that time and including a status report on ongoing activities. Any new initiatives that arise out of TELMIN 5 don't need to be included in this Matrix. The document will form part of the input to the evaluation process for Ministers and Senior Officials at TELMIN 5.

The Chair then drew the TEL's attention to the Internet Issues Taskgroup report. The IITG has a requirement to report to SOM 1 on internet issues. In addition, Steering Groups also need to consider Internet Issues in their work. The Acting Chair of the IITG, Mr Rodriguez, requested that Steering Groups report on Internet Issues in their reports to SOM I.

E. PECC-APEC Dialogue

The Chair noted that the PECC/APEC dialogue was the opportunity for private sector and academic involvement in TEL's work.

Ms Fauziah Dato Talib, Executive Director, Indah Sejahtera Development and Services (ISDS), member of the Brunei National Committee chaired the Dialogue for PECC. Its theme was "Universal Service Obligations: Opportunities for the Private Sector".

Dr Liz Williams, member of AUSPECC, encouraged comment and feedback from TEL members on the issues raised in the Dialogue, which will be pursued further at TEL 26. A report on the PECC/APEC dialogue can be found at PLEN/25.

Following the PECC/APEC dialogue, Korea provided an update on the High Level Symposium on e-government, to be held in Seoul in July 2002. The aim of Symposium is to share experience of e-government amongst APEC economies. Korea encouraged TEL members to send high level delegations at the economy level. At the working group level, TEL can support the Symposium by sending a delegation and providing

input into drafting groups to take advantage of TEL's existing range of expertise.

F. Steering Group Meetings and Reports

1. Business Facilitation Steering Group Meeting (BFSG)

The BFSG Convenor Mr Makiguchi introduced his report. Document PLEN/33 refers. A full copy of the report can be found at Annexe C of this document.

He drew attention to Issues for the Promotion of e-Government, under Item (3) of the report. The BFSG had endorsed the four actions for promotion of e-Government as outlined. Mr Makiguchi sought further endorsement from the Plenary for these initiatives. The Plenary endorsed the actions.

The BFSG Convenor then reported on discussion in the BFSG on the planned High Level Symposium on e-Government, and the relationship between the Symposium, which is an initiative of Senior Officials, and the TEL. The Symposium will take place in Seoul, Republic of Korea, from 2 – 5 July 2002. The BFSG agreed that the TEL should contribute to the Symposium by designating (a) representative/s to participate in the Symposium and in drafting groups for the Strategy Report. The Convenor then sought nominations from the Plenary, noting that such a representative would have a liaison role, and would not be able to make commitments on behalf of the TEL.

The Head of Delegation for Korea summarised the background to the e-Government Symposium. Korea is seeking TEL involvement because TEL has achieved the best stocktaking and analysis on e-government, and is the sole channel for discussion on e-government matters. In addition, the discussion resulting from the Symposium will provide good input into TEL's work on e-government. However, how TEL should be represented in drafting groups remains a problem.

The TEL Chair noted that this issue arises twice in the context of the BFSG report. In item 7(a), it was reported that the Asia Oceania Electronic Marketplace Association (AOEMA) "was asked to attend the High Level Meeting on Micro-Enterprises on behalf of TEL."

Discussion ensued as to the extent and nature of TEL representation in such meetings. A drafting group was formed, which proposed the following wording:

"TEL has accomplished much valuable work on e-government and is a leading forum within APEC on e-government.

TEL (as a group) will contribute this work to the Symposium and Strategy Report by having TEL representation in the Symposium and in the drafting group of the Strategy Report.

Both Deputy Convenors of the BFSG will participate in the drafting group of the Strategy Report and one will participate in the Symposium."

The Plenary accepted this wording as basis for TEL support for the e-Government Symposium.

The Head of Delegation for the USA suggested that similar clarification required for TEL representation in the High Level Meeting on Micro-Enterprises.

He suggested that the wording in the BFSG report under item 7(a) be replaced with the following wording, to reflect the decision of Plenary on this matter:

“AOEMA was asked to bring the work of TEL to the High Level Symposium on Micro Enterprises, and report to TEL on the Symposium.”

Finally, the BFSG Convenor sought approval from Plenary for two project proposals –

- (1) E-Commerce Strategies for Rural SME's in APEC (Phillipines and AOEMA); and
- (2) Publication of Electronic Authentication Resources (Australia/eSTG).

Both proposals were **APPROVED**.

The Convenor then sought approval of the meeting for the Chair of the **e-Security Task Group**, Mr Orłowski, to present his report, which is an Annexe to the BFSG report.

The eSTG Chair referred the meeting to Attachment A of his report, the eSTG current and Future Responses the eAPEC Strategy. He sought endorsement of the document from the meeting, as the responses outlined have impact on Steering Groups, as well as the eSTG. The report has been endorsed by the BFSG. The document was accepted by the Plenary without comment.

Mr Orłowski then reported that a report on Economy Implementations of United Nations General Assembly Resolution 55/63 *Combating the Criminal Misuse of Information Technologies* had been prepared for the Leaders meeting in October 2001. However due to time constraints the report could not be considered by SOM and therefore by the Leaders Meeting. The report is now being prepared for consideration by Ministers at TELMIN 5. He sought input to the Report from economies prior to TELMIN 5. Only six responses have been received to date.

Mr Orłowski then drew attention to Attachment B of his report, Recommendations to Ministers contained in the Report on Economy Implementations of the Ten Measures included in UNGA Resolution 55/63. He sought the meeting's endorsement of these recommendations, which had already been endorsed by BFSG. The recommendations were endorsed by Plenary without comment.

The eSTG Chair then reported on the proposal from China for TEL to create new Steering Group on Information Communication Networks and Security. This matter has been referred from BFSG to the Plenary for consideration as a plenary matter. The TEL Chair sought comment from the meeting, whilst reminding delegates that the next TEL milestone is a Ministerial meeting, at which TEL's future direction and Information Security issues are both high priorities. He noted that this issue perhaps needs to be referred to TELMINSOM II, and asked China to comment on the proposal. (A copy of the proposal can be found at Attachment C of the BFSG report.)

The Head of Delegation for China responded, noting that e-security and network security are very important to TEL's work, and are a key theme for TELMIN 5. In China's view there is now a need for such a group.

The Head of Delegation for the USA noted that the proposal has some merit, and that the existing Task Group does not have terms of reference. China's proposal includes terms of reference for a group on e-security. As the Draft Ministerial Statement includes reference to a continuing review of TEL's structure, it seems proper to wait for Ministers' response to e-security issues at TELMIN 5 before making a decision on this matter. If the TEL then receives a mandate from Ministers to ensure that our structure is appropriate to respond on issues of e-security, further discussion can proceed at TEL 26.

The TEL Chair proposed that the meeting fully endorse upgrading the importance of TEL work on e-Security. A report on this issue will be made to Senior Officials, and a review of the TEL structure will proceed after TELMIN 5. He noted that TEL is not currently in a position to adopt the terms of reference in China's report.

The Head of Delegation for Japan expressed support for the Chair's statement. As no objections were raised, the meeting endorsed this position.

The eSTG Chair then reported the Task Group's forthcoming activities. A two-day workshop on training to combat cyber terrorism and crime, to be hosted and funded by USA, will take place following TEL 26.

In addition, a two-day meeting between representatives of the European Electronic Signatures Standards Initiative and the TEL eSTG is proposed to take place prior to TEL 26. The meeting will be funded by EESSI. Mr Orłowski sought clarification from the Director, Program, APEC Secretariat, regarding participation by other groups in APEC joint activities.

Mr Gongsakdi replied that the TEL would need to seek approval from the APEC Executive Director for participation by external groups in APEC joint activities Mr Orłowski then sought members' concerns on the proposal for the joint meeting, but none were expressed.

Finally, the eSTG Chair reported that the funding proposal for publication of electronic authentication resources will be re-submitted for urgent consideration by the Budget and Management Committee at its April 2002 meeting. He reminded the meeting that this proposal had been approved at TEL 23 and at the July 2002 BMC, but could not be funded at that time due to insufficient funds.

The Plenary adopted the BFSG report, including the eSTG report.

2. Development Cooperation Steering Group Meeting (DCSG)

The DCSG Convenor Dr Tubtiang reported on the outcomes of the DCSG meeting. Document PLEN/29 refers. A full copy of the report can be found at Annexe D of this document.

After briefly outlining highlights of discussion in the meeting, Dr Tubtiang sought Plenary approval of the final Digital Divide Blueprint for Action (Annexe D of the DCSG report refers) and three new project proposals.

He invited the DCSG Deputy Convenor Ms Diane Steinour of the USA to speak to the Digital Divide Blueprint for Action. She noted that the DCSG had been working on this document for approximately two years. The Report's Executive Summary outlines the conclusions of this work. In particular, she drew the meeting's attention to the characteristics of successful policies to bridge the digital divide, outlined on page D

2 of the Blueprint. Finally, the Deputy Convenor sought endorsement from the Plenary for the last section of the Blueprint, Monitoring Internet Access (Annexe D-III), to be presented to TEL SOM and thence to Ministers for their consideration at TELMIN 5. This section contains statistics on Internet access in APEC member economies from 1999 to the present day. Ms Steinour also sought the assistance of TEL members with correction of any errors that might remain in the document.

The TEL Chair noted that the Digital Divide Blueprint for Action is a very comprehensive document with many parts. It is a matter for the TEL Senior Officials Meeting to consider how much and in what form this work is taken forward to Ministers at TELMIN 5. Chair then sought comments from the meeting.

The Plenary meeting endorsed the document, whilst entrusting the DCSG Deputy Convenor to make any factual changes that might be brought to her attention by TEL members. The Head of Delegation of the USA noted that the Blueprint should be updated in conjunction with the TEL Chair's report. When the Chair's Report is ready for posting on the TEL website, the Digital Divide Blueprint for Action should be separated from the DCSG Report and be posted separately on the website. The meeting agreed to this course of action.

The DCSG Convenor then sought endorsement from the Plenary for three project proposals that were approved by the DCSG.

(1) IP-Based Wireless Local Loop (WLL) for Bridging Digital Divide in Rural Areas. (Document DCSG/23 refers) The project is self-funded by Japan and will commence in May 2002. The TEL Chair sought clarification as to what would be required of member economies if the project was approved by Plenary. The DCSG Convenor explained that members who wish to participate on a voluntary basis in case study activities associated with the project should contact the Project Overseers, Japan.

The Plenary **APPROVED** the proposal without further comment.

(2) APII IPv6 R&D Testbed Project. (Document DCSG/18 refers). Self-funded by Japan, this project was **APPROVED** by Plenary without comment

(3) Flow-based Internet Traffic Measurement and Analysis. (Document DCSG/20 refers).

The DCSG Convenor noted that this project was approved in principle by the DCSG, pending agreement being reached on the final language of the text of the proposal. The TEL Chair sought to clarify whether disagreement still existed as to the text of the proposal. The Head of Delegation for Korea stated that agreement had been reached between all parties. The Chair thanked the parties concerned, noting that this incident was an example of the APEC way of working to consensus among members.

The Project was then **APPROVED** by the Plenary.

The DCSG Convenor requested priority for this project when ranking projects for consideration by the BMC.

Finally, the Convenor drew the attention of the Plenary to the Matrix of TEL activities at Annexe E of the DCSG report. The Plenary accepted this document as input from the DCSG to the updated TEL Matrix of Activities.

The Plenary adopted the DCSG report, including the Digital Divide Blueprint for Action.

3. Human Resource Development Steering Group Meeting (HRDSG)

Dr Chung, the HRDSG Convenor, provided a summary report of the HRDSG meeting. Document PLEN/30 refers. A full copy of the report can be found at Annexe E of this document.

Responding to the request by the Chair to review and update the TEL Matrix of Activities, Dr Chung reported that the meeting had undertaken a review of HRDSG projects and activities, which are outlined in the report.

The HRDSG approved one project proposal, from Canada, for a workshop on Overview of IPv6: Bridging the Digital Divide, to be conducted prior to TEL 27 in 2003. The proposal seeks APEC Central Funds of less than \$20,000. The Head of Delegation for the USA drew the attention of the meeting to the report of the Development Cooperation Steering Group, which makes also reference to approval of a self-funded project proposal on IPv6. Whilst projects on new technologies are welcomed, he noted the cost of the HRDSG proposal vs the DCSG proposal.

The Plenary meeting APPROVED the project proposal for a workshop on Overview of Ipv6: Bridging the Digital Divide.

The Convenor then reported that the Chair of the Human Resource Development Working Group, Dr Lee, had made a presentation to the HRDSG on a proposal for “Human Capacity Building for Workforce in the Field of Information Communications Technology and the Facilitation of Human Resources Exchanges.” (Item 7.3 of the HRDSG Report refers). Dr Chung reported that discussion between the HRDSG and the Chair of the HRDWG had proved productive.

The TEL Chair noted that the Chair of the HRDWG, Dr Lee, was present at the Plenary meeting. Mr Thwaites noted the need for the TEL to make links in our work program with other working groups. The issue in this case is how the TEL Human Resource Development work can best benefit from and contribute to the work undertaken by the HRDWG. The TEL Chair proposed that TEL remain in consultation with Dr Lee concerning the development of this proposal and seek further information after the proposal is considered in the HRDWG. In this way TEL is supporting collaboration across APEC programs. He asked Dr Lee if this course of action is acceptable. Dr Lee expressed his appreciation to the Chair, and thanks to the HRDSG members for their deliberations, noting this had been a good opportunity for collaboration between the TEL and the HRDWG. He looked forward to the opportunity for further collaboration both above and across Fora.

4. Liberalisation Steering Group Meeting (LSG)

The LSG Convenor Ms Kathy Fisher spoke to her report. Document PLEN/27 refers. A full copy of the report can be found at Annexe F of this document.

A workshop was held on 12 March 2002 for the Regulatory Structures Project. Further discussions on future actions arising out of the work undertaken in this project will be held at TEL 26. The Regulatory Structures workshop was held in conjunction with a second Regulators Roundtable meeting. The next Roundtable meeting will be held at TEL 27. The Head of Delegation from Singapore, as Project Overseer for the Regulators’ Roundtable requested that economies that economies suggest topics for the next meeting by April

14, 2002.

Ten economies are participating in Phase I procedures for the TEL Mutual Recognition Arrangements, and four more economies are expected to join Phase I by the end of 2002. Five economies are participating in Phase II procedures.

The Interconnection Resources Project has been successfully completed and all project outputs are available online. As it was recognised that some economies may have a problem downloading the resources, Australia as the Project Overseer agreed to make the resources available on a CD. The APEC Secretariat has released a Request for Proposal for the next stage of this project, the Interconnection Training Project. Suggestions for a venue for the training workshop for this project are welcomed from member economies.

The Convenor then outlined two project proposals in support of the MRA management system, which have been endorsed by the MRA Joint Committee and the LSG. The MRA Management System Data Load Facilitation Project is seeking central funding in the amount of US \$20,000 for data load facilitation. Document MRAJC/03 refers. In addition, the LSG is seeking central funding in the amount of US \$ 20,000 for the MRA Management System Outreach Program. Document MRAJC/02 refers. Both proposals are seeking urgent funding consideration from the Budget and Management Committee at its April 2002 meeting. The Plenary meeting **APPROVED** both the MRA project proposals for urgent consideration by the BMC.

The Convenor then reported that the Liberalisation Steering Group has approved a further project proposal, involving a stocktake of progress toward the key elements of a fully liberalised telecommunications sector in the APEC region. The project is seeking TILF funding for implementation in 2003. The proposal, entitled a Review of a Reference List of Elements of a Fully Liberalised Telecommunications Sector, was **APPROVED** by the Plenary meeting for consideration for TILF funding.

A proposal for a workshop to be held at TEL 26 to support APEC TEL members in the WTO process was also supported by the LSG. The initiative also calls for voluntary reporting to the LSG by members on the contributions made to the GATS process. to hold workshop at TEL 26 on WTO/GATS process. Singapore will take the lead in preparation for the workshop, with the assistance of Australia, USA, Hong Kong, China, Canada, and Japan.

Finally, the Convenor drew attention to the updated Collective Action Plan of the Liberalisation Steering Group, adopted at this meeting. The Collective Action Plan is attached to the LSG report to Plenary at Annex C.

The meeting adopted the LSG Report.

5. Internet Issues Task Group

The Acting Chair of the Internet Issues Task Group, Mr Rodriguez, introduced his report. PLEN/31 refers. A full copy of the report can be found at Annexe G of this document.

Mr Rodriguez provided an overview of the work of the IITG since its inception at TEL 22. In summary, a number of economies are of the view that Asia Pacific developing economies are still facing inequitable charging arrangements, however other economies do not agree that the current charging arrangements hinder

the development of the Internet in the region.

China has proposed further work on new international settlement models for Internet services, and Korea has proposed a research and development project to develop a measurement system for analysing international and domestic Internet traffic.

The TEL Chair noted that the terms of reference for the IITG include the requirement to report to Ministers at TELMIN 5 on a number of matters. He noted that this report did not contain any direct recommendations. In addition, it refers to work on Internet Issues undertaken in the Steering Groups. As a matter of procedure, the meeting should decide whether this report is provided to the second Senior Officials Meeting, or is adopted as a report to the TEL.

The Chair sought acceptance of the report, subject to revision of any editorial amendments that had been raised by the Plenary.

The IITG Report was adopted.

G. Discussion/Approval of New Project Proposals/Priority Setting

New Project Proposals

The following project proposals were approved by the Plenary of the TEL.

| Steering Group | Subject | Amount | Funding Source | Status |
|-----------------|----------------------------------------------------------|-------------|-----------------------|---------------------|
| LSG | Stocktake (Aus) | \$120,075 | TILF | Approved Plenary |
| (MRA TF) | MRA Dataloading (Aus) | \$US 20,000 | Central Fund April | Approved Plenary |
| (MRA TF) | MRA management outreach (Aus) | \$US 20,000 | Central Fund April | Approved Plenary |
| HRDSG | IPv6 Overview (Ca) | US\$17,000 | Central Fund April | Approved Plenary |
| DCSG | IP based WLL (Jp) | self funded | self funded | Approved Plenary |
| | IP v6 test bed (Jp) | self funded | self funded | Approved Plenary |
| | Flow based internet traffic and analysis (Kr) | US\$115,000 | Central Fund | Approved Plenary |
| BFSG | EC Strategies for Rural SMEs in APEC (Philippines/AOEMA) | US\$19,000 | Central Fund July | Approved Plenary |

| | | | | |
|--------|---------------------------------------------------------------|-------------|--------------------|------------------|
| | Protecting Yourself in Today's Internet Society (Japan/AOEMA) | Self funded | Self funded | Approved Plenary |
| (eSTG) | Publication of electronic authentication resources. | US\$10,00 | Central Fund April | Approved Plenary |

The following three projects, in order of priority, were identified for urgent consideration by the Budget and Management Committee at its April 2002 meeting:

- (1) Publication of Electronic Authentication Resources
- (2) MRA Management System Launch Outreach Program
- (3) MRA Management System Data Load Facilitation

The Chair noted that two proposals are concerned with Ipv6. The proposal from Japan, approved by the DCSG, is self-funded, whilst the proposal from Canada, approved by the HRDSG, is seeking funding from the APEC Central fund at the August BMC meeting. Both have a start date of March 2003. The Chair asked the DCSG and HRDSG Convenors to elaborate on each proposal, to satisfy the meeting that there is no overlap between the two.

The HRDSG Convenor explained that the intention is that the project will be complementary. The proposal from Canada is for a workshop, to be held prior to TEL 27 in 2003, which aims to assist policy makers and regulators to understand the implications of new technological developments. The DCSG Convenor then explained that the proposal from Japan is a research proposal, with different target participants. The target audience for this project is engineers.

With this explanation, both project proposals were approved by the meeting for consideration for funding by the BMC.

The Chair noted that ranking of proposals for consideration at the July BMC meeting will be conducted intersessionally through the Chair's office.

The Director, Program, APEC Secretariat noted that the closing date for submission of urgent proposals for consideration at the April BMC meeting was Monday April 18th 2002. As the TEL has only just met, he considered it justifiable to seek a one-week extension for submission of the three TEL projects identified by the Plenary and recommended that the Chair's office request an extension from the Director, Finance, APEC Secretariat.

Mr Gongsakdi also noted that there is an opportunity for further project proposals to be developed as a result of the outcomes of TELMIN 5.

Time at TEL 26 for the following seminars/workshops was also requested:

| Steering Group | Subject | Time requested | Status |
|----------------|---------------------------------|---------------------|----------|
| LSG | MRA Exec Committee | ½ day before TEL | Approved |
| | MRA Task Force | 1 day after the TEL | Approved |
| | WTO Workshop | 1 day | Approved |
| BFSG | eSTG Counter Terrorism Workshop | 2 days | Approved |
| | ESSI/APEC joint meeting | 2 days | Approved |
| | eSTG meeting | 1 day | Approved |

H. Presentations by Economies of their Recent Regulatory and Policy Developments/ Brief Voluntary Statements by Observers and Guests.

The Chair invited TEL's newest participant, Macao, China, to give a presentation of recent telecommunications developments in their economy. Macao, China's representative thanked the TEL for the opportunity to participate as a Guest. Document PLEN/23 refers.

Each member economy presented their Regulatory Update. A full set of the reports can be found at www.apectelwg.org and www.apectel25.org.vn.

The Chair stressed that the Regulatory Update reports are valuable and can be used as a regular review of the status of policy and regulatory developments in our region. He encouraged economies to participate in this agenda item and submit the review for consideration by the TEL. Chair encouraged delegates to keep and refer to complete set of Regulatory Updates, which remain a valuable part of the TEL work program.

The Chair then invited Observers and Guests to present their Voluntary Statements.

Pacific Economic Cooperation Council

The PECC Delegate noted that a report had already been presented to Plenary on the APEC/PECC Dialogue. She reported briefly on PECC activities over the past few months, including the 14th General Meeting.

Asia-Oceania Electronic Marketplace Association

The AOEMA delegate thanked the TEL for recently renewing the Association's Guest status for the next two years. He noted that AOEMA takes the role and responsibility of TEL Guest very seriously. He also noted that it is pleasing to see that SMEs and Microenterprises are a focus for the APEC year in 2002.

International Telecommunications Users Group

Document PLEN/28 refers.

International Telecommunications Union

The Delegate representing the ITU Centre of Excellence (CoE) noted that the ITU has also accepted the invitation to renew involvement as a Guest of TEL until the end of 2004. He noted that the ITU CoE finds involvement in the TEL very beneficial and looks forward to future involvement.

J. Discussion of Future Meetings – TEL 26

The Chair called on the Head of Delegation from the Russian Federation to report on planning for the next TEL.

TEL 26 will be held in Moscow from 19th to 23rd August 2002, and will be hosted by the Ministry for Telecommunications and Informatization. The date for this meeting is earlier than usual to accommodate TEL delegates who will be involved in preparation activities for the International Telecommunications Union Plenipotentiary Meeting in early September. Approximately 300 – 350 participants are expected. A TEL 26 website will be developed.

The Chair thanked the Russian Federation for the kind invitation and noted that the TEL is looking forward to strong input and participation from Russian Federation members at the meeting.

K. Other Business

On behalf of the TEL, the Chair expressed his thanks to all the members of the TEL 25 Secretariat for their efforts in hosting a most successful meeting. The meeting facilities and arrangements had all been of the highest standard. The Head of Delegation for Vietnam, Mr Hung, expressed his warmest appreciation to TEL delegates for coming to Hanoi and hoped that all arrangements were to their satisfaction. Delegates expressed their appreciation with acclamation.

L. Review and Adoption of Chair's Report

The Chair informed the meeting that a first draft of the Chair's report would be circulated electronically to all TEL points of contact. This draft would include a consolidated update of the TEL Matrix of Activities.

The Chair then declared the meeting closed.

ANNEXE A

PLENARY AGENDA

- A. Opening Ceremony
- B. Review and Adoption of Agenda
- C. APEC Secretariat Report

Chair

Director, Program, APEC Secretariat

- D. PECC-APEC Dialogue
- E. Steering Group and Task Group Meetings and Reports
 - 1. Business Facilitation Steering Group Meeting (BFSG)
 - 2. Development Co-operation Steering Group Meeting (DCSG)
 - 3. Human Resource Development Steering Group Meeting (HRDSG)
 - 4. Liberalisation Steering Group Meeting (LSG)
- 5. Internet Issues Task Group (IITG)

Steering Group and Task Group Convenors

- F. Discussion/Approval of New Project Proposals/Priority Setting

Chair

- G. Presentations by Economies of their Recent Regulatory and Policy Developments

- H. TEL SOM Report

Chair, TEL SOM I.

- I. Brief Voluntary Statements by Observers and Guests

- J. Discussion of Future Meetings – TEL 26

- K. Other Business

- L. Process for review and Adoption of Chair's Report

ANNEXE B

WORKSHOPS AND SEMINARS HELD IN CONJUNCTION WITH THE 25TH MEETING OF THE APEC TELECOMMUNICATIONS AND INFORMATION WORKING GROUP

Monday 11th March

eSecurity Task Group
Mutual Recognition Arrangement Task Group
Internet Issues Task Group

Tuesday 12th March

Digital Divide Workshop
Convergence Roundtable and Regulatory Structures Workshop

Thursday 14th March Mutual Recognition Arrangement Joint Committee

Business Facilitation Steering Group Meeting (TEL25)

14 March 2002, Hanoi Vietnam

A. BFSG Report to Plenary

1) Adoption of Agenda

Convenor, Mr Eiji Makiguchi, welcomed participants. He briefly discussed the context of the meeting and the work for the BFSG. He thanked government of Vietnam for the excellent facilities. He introduced new deputy convenors Mr. Y.S. Lee from Korea and Dr. Frank March from New Zealand.

The Convenor introduced the agenda (TELWG25/BFSG/00) and made some suggestions on the order of work. New project proposal from AOEMA should be listed as 3-k. A document has been submitted to the BFGS from China on the establishment of a new group for security. This will not be discussed in BFSG as it is a plenary issue and so will be moved to the plenary session tomorrow as part of the BFSG report. The document number is TELWG25/BFSG/15.

The amended agenda was adopted.

2) Discussion in Related APEC Fora

a) e-Security Task Group (e-Security Task Group Chair)

TELWG25/BFSG/18

Mr. Steve Orlowski reported on the outcome of the ESTG meeting. (see Annex)

ESTG has left a 30 day window for economies to respond to the Report on Economy Implementations of the ten measurements included in United Nations General Assembly Resolution 55/63 *Combating the Criminal Misuse of Information Technologies..* This window will allow all economies to respond, only six economies have reported to date.

Approvals were requested as follows;

- Adopt Attachment A to the ESTG report;
- Adopt recommendation in Attachment B to the ESTG report
- Agree to conduct three activities in association with TEL26
 - 2 day workshop proposed by USA to provide training to assist APEC economies with their efforts against cyber terrorism and cyber crime,
 - 2 day high level meeting between ESSII and APEC,
 - 1 day eSTG task group meeting.

The report was adopted with minor amendments.

b) E-Commerce Law Project (Australia / Vietnam)

Australia reported on the E-Commerce Law workshop held in Hanoi on 8th and 9th of March. The workshop covered legal aspects of e-Commerce transactions across borders. It was presented by Dr. Melissa De Zwart and Professor Elizabeth Lanyon and two presentations from Vietnam. A report being

produced for the TEL SOM. The Convenor expressed thanks and said that feedback from participants showed it was an excellent workshop and they were looking forward to more cooperation.

c) **ECSG (Secretariat)**

TELWG25/BFSG/18 (this was given the same number as the ESTG report)

Mr. Gongsakdi (Sam) reported on the outcome of the ECSG5 meeting in February in conjunction with SOM I in Mexico. Highlights of the meeting were consumer protection, privacy and the procedures for a review of the 1998 APEC Blueprint for Action on E-Commerce. The next ECSG meeting will hold a workshop on e-Government.

d) **e-APEC strategy (Secretariat)**

TELWG25/BFSG/19 Report of eAPEC Task Force Chair to the SOM. Highlights from this report were presented to the group by the Secretariat.

It was noted that both ECSG and eAPEC Task Force are ad hoc bodies and their mandate will expire in March 2003 and December 2002 respectively. This is relevant to the question of the sustainability of e-APEC work.

e) **PECC-APEC Dialogue**

The BFSG noted its appreciation of the presentations given to the Plenary at the PECC-APEC dialog.

3) **Policy Discussion and Project Reports**

a) **e-Government**

- **GBDe's Activities and Recommendations (GBDe / Japan)**

(TELWG25/BFSG/07) The Convener introduced Mr. Akihiko Ichikawa, the Sherpa of the e-Government Group of GBDe, noting that the opinion of the private sector was helpful for our discussions. Mr. Ichikawa discussed GBDe's recommendations to governments and ideas about private sector support. More information about GBDe is at <http://www.gbde.org>

Indonesia commented that some of the issues highlighted were of less significance for developing Economies.

- **Issues for the Promotion of e-Government (Convenor)**

TELWG25/BFSG/05 The Convenor summarized the document and presented four actions for consideration:

- In order to create the common base for further promotion of e-Government in the APEC region, TEL *decides* to initiate stocktaking on each Member Economy's current activities.
- TEL *will submit* the stocktaking of e-Government to TELMIN5 and ask the Ministers for the mandate on the following two years of activities in the field.
- TEL *will continue* to cultivate the discussion on various aspects of policy coordination for e-Government in the region, such as technology, legislation, user merits and others.
- TEL *will consider* developing a means for seeking feedback from businesses and citizens as users of e-Government as well as relations with the relevant fora's activities and events.

In response to a question from Hong Kong, China, the Convenor suggested that returns from the stocktake would need to be available in mid April to allow feedback and report to TELMIN5.

Korea informed the group that there will be a comprehensive stocktaking exercise in the leadup to the e-government symposium and offered to take on the task of the stocktake. Hong Kong, China expressed a desire to have just one return for the two events. Australia noted that a manageable amount of information should be returned and suggested including checkboxes in the design of the questionnaire. The Convenor agreed that a large response is not required. The questionnaire will be reformatted with this in mind. Indonesia suggested that some quantitative information such as the number of Ministries on line could be sought. The Convenor welcomed the comments and asked representatives of Economies to send comments about the questionnaire to him as soon as possible so that it can be finalised.

Following further discussion the BFSG agreed to the recommended actions as worded above.

- **E-Commerce in Government (Korea)**

TELWG25/BFSG/06 Dr. Min-Soo Kim asked member Economies to complete a detailed survey of e-commerce in government. The results are expected to be reported to the High Level Symposium on e-government in July. It was noted that this would be one of the contributions of TEL to the symposium. Any follow up actions would be determined on the basis of the results of the stocktake. It was noted that 'e-commerce' here is focused on e-procurement and e-payment.

The proposal was supported by BFSG

- **Integrated e-Government for Local Governments (Indonesia)**

TELWG25/BFSG/22 Mr Anung Asmoso presented a proposal for a self-funded pilot project in Indonesia. The BFSG noted the project and looked forward to future reports from the project.

b) E-Commerce Good Practice in the APEC region (AOEMA)

Mr. Michael Baker noted that at TEL 24 AOEMA presented a report on EC Good Practice in the APEC region as well as a report on current perceived barriers to EC implementation as described by research from international organizations.

This work can now be found on the AOEMA web site at www.aoema.org. This is a resource for APEC, its member economies and industry in the region. Economies are asked to contribute to the site in order to develop the information further.

c) E-Commerce Awareness Seminars (AOEMA/Japan)

Mr Baker updated the progress of electronic commerce awareness seminars introducing document / TELWG25/BFSG/08. The purpose of the seminars under this initiative since TEL12 is to ensure that small businesses in the region understand the impact that electronic commerce will have on them in the near future. The most recent meetings were held in Philippines and Vietnam. The next seminars will be in China and Indonesia.

The Convenor noted that these seminars are very helpful for the developing economies.

d) Electronic Commerce Capacity Building Project (Thailand)

TELWG25/BFSG/02 Ms. Saisomorn Naklada presented the project that includes a survey report on an e-business productivity study, a workshop to be held in June in Bangkok, and production of a video for use in further seminars. Thailand asked member Economies to nominate or recommend speakers for the

workshop by the end of March so that applications for funding can be completed.

e) Post-INGECEP /CyberNet (Japan)

TELWG25/BFSG/14 Mr Yoshikazu Kobayashi noted that the final report of the INGECEP project was presented at TEL 24. As mentioned in that report, the phase 3 pilot was continued to demonstrate the effectiveness of the B2B2C model. This presentation reported the findings of phase 3 of the project. The project will be commercialized after April 2002.

The Convener thanked Japan for the work on this project.

f) B2B Agent Project (Korea)

TELWG25/BFSG/03 Ms. Stacy Kang of Korea outlined the project development from TEL 22. The project was begun as a logical extension of the INGECEP project initiated by Japan. The project will have a duration of 3 years including this year. The participants today are Korea, Chinese Taipei, Singapore and Australia. Korea and Chinese Taipei had discussed the detailed collaboration model. Marketplaces from all economies were invited to join the project and government representatives were asked to encourage marketplaces to become involved. Thailand indicated that it would like to participate in the project.

The Convenor thanked Korea for their effort and looks forward to future reports

g) Protecting Yourself in Today's Internet Society (AOEMA)

TELWG25/BFSG/13 Mr. Yuichi Tosaki presented this new project proposal to update and publish in english an existing Japanese booklet which explains how people can protect themselves on the Internet today. In answer to a question from the USA, Mr Tosaki commented that local information resources would be included in the booklet. Many economies supported the project and indicated an interest in being involved.

The Convenor thanked the group and agreed with AOEMA's suggestion that the project is accepted as a self funded project.

h) SME Multilingual International Trade Project (AOEMA)

TELWG25/BFSG /09 Mr. Yuichi Tosaki reported on the final phase of the project. During the project a significant body of information was gathered on the needs of translation for International Trade. Member economies were encouraged to examine the report for information. Korea thanked AOEMA for the project and indicated its willingness to participate.

Convenor thanked AOEMA for its work.

i) TEL web site (Korea)

TELWG25/BFSG/11. Ms Christine Paik presented draft guidelines for sponsorship of the APEC TEL website. AOEMA suggested that all member Economies should take the responsibility of promoting the sponsorship opportunities. Hong Kong asked who would be the contracting parties: APEC or Korea. Ms Paik replied that it is intended to be the sponsor and the Korean Government but the Oversight Committee would oversee all sponsorship arrangements.

Hong Kong, China commented that different rules apply to different economies and this will have to be kept in mind in accepting advertising content. Korea accepted the point and suggested that sponsorship requests would be referred to the relevant economy. New Zealand suggested that a detailed and unambiguous set of rules be circulated. Korea intends to refine the proposal and after approval by the Oversight Committee, it would be circulated in the next few weeks to Economies for comment and then

brought back to TEL26.

In response to a question from the Convener, Ms Paik stated that finance was secure for the immediate future but that no new features could be added.

j) APEC Legal Guide (Australia)

Australia suggested that it is time to bring this project to a conclusion in light of the time that has passed, the availability of alternative sources of information, and the consideration of sponsorship opportunities, for example, on the TEL web site. This was agreed.

k) New Project - EC Strategies for Rural SME's in APEC (Philippines/AOEMA)

TELWG25/BFSG/21. Mr. Michael Baker presented a new project proposal to study e-commerce strategies which use existing narrow band technologies appropriate to rural micro enterprises in developing economies. In response to a question from Viet Nam, Mr. Baker stated that all economies are invited to become involved.

BFSG approved the project to go forward for 2003 APEC funding.

4) Input to TELMIN5: Matrix of BFSG Activities (Convener)

TELWG25/BFSG/16 The Convener noted that the TEL Plenary had a whole of TEL matrix presented (TELWG25/PLEN/12) which supercedes the BFSG matrix. Members are asked to review the plenary document. The Convener asked that the BFSG matrix form the basis for discussion of further work and member are asked to review it accordingly.

5) Planned APEC High Level Symposium on e-Government (Korea)

Korea presented TELWG25/BFSG/12. There was some discussion of the relationship between the Symposium and TEL. The Symposium will be held on July 2-5 2002 in Seoul, Korea. The BFSG agreed that:

“Links with TEL

- TEL encourages the member Economies to dispatch high level delegations to the Symposium and to participate in the drafting groups for the preparation of the Strategy Report.
- TEL has accomplished much valuable work on e-government and is a leading forum within APEC on e-government. TEL (as a group) will contribute this work to the symposium and the Strategy Report by having TEL representation in the Symposium and in the drafting group of the Strategy Report. Both Deputy Convenors of the BFSG will participate in the drafting group of the Strategy Report and one will participate in the Symposium.”

6) Information Items

a) ASEM E-Commerce Seminar (Deputy Convener-Korea)

The Deputy Convener (Korea) informed BFSG of ASEM E-Commerce Seminar held in October 2001. He mentioned that E-Commerce activities in ASEM were taking place under the TFAP (Trade Facilitation Action Plan) and that Finland and Korea are acting as co-facilitators for E-Commerce. At the 1st TFAP meeting which followed the Seminar, user confidence, cyber security, and intellectual property rights were chosen as high priority items.

b) Study of User Requirements for the Integration of E-commerce Systems in the APEC

Region (Australia)

Mr. Colin Oliver reported TELWG25/BFSG/04 and circulated the CD-ROM version of the final report. The TEL chair has promoted this work and the EC Best Practice report of AOEMA to many other APEC fora as part of cross-fertilization within APEC.

7) Other Business**a) High Level Meeting on Micro-enterprises**

The High Level Meeting on Micro-enterprises is to be held on July 18 and 19 in Mexico. BFSG has been asked to put forward something for the workshop. The Convenor proposed that, given that many of the SME works are undertaken by AOEMA, that AOEMA was asked to bring the work of TEL to the attention of High Level Meeting and report to TEL. AOEMA agreed to this suggestion.

b) Printing of the eSTG issues paper

BFSG was asked to reapprove the publication of the issues paper in order to allow a proposal to go forward for immediate funding.

BFSG supported the proposal.

c) Internet Issues Task Group

A statement from BFSG is required for the Task Group report. A statement was produced and examined by BFSG and, after some minor wording changes, it was accepted.

d) Current and Future Work Areas

TELWG25/BFSG/23 The Deputy Convenor (Korea) presented the paper and suggested that BFSG utilize the paper in charting its future course.

The Convenor thanked the Deputy Convenor (Korea) for the work and suggested that it should be considered between meetings. Hong Kong, China suggested that the scope is too broad and there needs to be some prioritization. The Deputy Convenor (Korea) agreed and at the same time noted that when considering the mandate of TEL to realize the APIS, much work was still needed to be done and that the paper provided some broad direction.

8) BFSG Report to the TEL

The Convenor explained the process of drafting the report to TEL.

The Convenor thanked all the participants and closed the meeting.

Annex**BUSINESS FACILITATION STEERING GROUP****eSECURITY TASK GROUP****MONDAY 11 MARCH 2002
MINUTES**

SECURITY OF INFORMATION INFRASTRUCTURE AND NETWORKS

Report to Ministers on the implementation of UNGA 55/63 (Document ESTG/03)

The Chair tabled a draft of the Report on Economy Implementations of United Nations General Assembly Resolution 55/63 *Combating the Criminal Misuse of Information Technologies*. He noted that responses had been received from Australia, Japan, New Zealand, Chinese Taipei, Thailand and the United States. The Report contains a number of recommendations to Ministers that will also be reflected in the TEL MIN statement.

He also noted that as agreed by TEL 24 a Preliminary Report to Leaders had been prepared prior to their October 2001 Meeting. However as there had not been sufficient time for prior consideration by SOM the Preliminary Report had not gone forward.

Canada advised that it would provide a response within 30 days. It was agreed that economies would be able to provide factual economy input up to 11 April. It was suggested that where economies could not provide detailed responses to the questionnaire, they could provide a general response outlining the approaches they are taking in combating the criminal misuse of information technologies. The US encouraged members to prepare such comments to avoid ministerial embarrassment

In response to an email from Canada and some changes suggested at the meeting a revised set of recommendations agreed at the meeting is at Attachment B.

Leaders' Declaration on Terrorism – cyber aspects

The Chair noted that at their 21 October 2001 meeting APEC Economic Leaders adopted a statement on counter-terrorism that condemned terrorist attacks and deemed it imperative to strengthen international cooperation at all levels in combating terrorism in a comprehensive manner, especially taking into account the importance of relevant UN resolutions. As part of this statement, Leaders called for strengthening of APEC activities in the area of critical sector protection, including telecommunications.

The work of the eSTG will need to be directed towards meeting this requirement and also the IT security aspects of the eAPEC strategy endorsed by Leaders at the same time. The Chair noted that this issue will be discussed at Agenda Items 10 at which time input to the Telecommunications and Information Ministerial Statement for TELMIN will be discussed.

Revision of OECD Guidelines for the Security of Information Systems

The United States provided an update on the work of the OECD Working Party on Information Security and Privacy in reviewing its *Guidelines for the Security of Information Systems*. The review is being undertaken to reflect changes in international information systems and to clearly identify the roles and responsibilities of all parties in the securing of information systems. The current timetable is for the review to be completed in September 2002.

It was agreed that the eSTG continue monitor the OECD work.

Trends and Threats of Cybersecurity and Cybercrime (Document ESTG/11)

Mr Richard Downing United States Department of Justice presented an overview of United States efforts to protect national information infrastructures. These infrastructures are subject to both physical and cyber attacks. In October 2001, the United States Congress enacted the USA PATRIOT Act that will substantially assist in protecting the United States information infrastructure. It involves

Increases in penalties for attacks on information infrastructures;

Modernisation of the legal tools that allow government agencies to obtain evidence of such attacks; and Improvements in the ability of government agencies to share information about threats to and attacks on information infrastructures.

The President has established an Office of Homeland Security and a Homeland Security Council. A President's Critical Infrastructure Protection Board has also been established. The Special Advisor to the President for Cyberspace Security will chair the Board.

The United States has developed a Partnership for Critical Infrastructure Security program involving partnerships between individual Federal agencies and their critical infrastructure industry sector. This partnership involves over 70 companies.

The United States will continue to work with international groups and individual countries where international cooperation is necessary or mutually beneficial.

Use of standards, policies and criteria for the security of information infrastructure, networks and systems (Documents ESTG/09 and ESTG/19)

Mr Takashi Kume of METI, Japan, outlined the role and functions of the Information Technology Promotion Agency's Security Center. He identified the Guidelines that had been prepared which involved a wide range of standards. He also provided statistics on the number of reported security incidents and viruses. He further provided information on Japan's IT security evaluation and certification/validation scheme. The schemes are voluntary and can be at the government or national level. Hong Kong, China noted that not many products are presently certified at the higher level and Japan is trying to make more products available as certified products.

New Zealand introduced a proposal to develop a compendium of IT security standards and best practice guidelines. Standards New Zealand would manage the project to revise their existing Handbook 6653 that can be used as an APEC document. Standards New Zealand would release copy to APEC, whilst retaining copyright over NZMP 6653 documents as sold from Standards New Zealand. New Zealand would self-fund the project. The timeline would be such that the document would be complete within 3-4 months of commencement. This would enable final ratification by the members of APEC TEL at TEL 26.

The project was agreed. Australia, Canada, Indonesia and Thailand indicated they would participate in the project while Japan and the United States indicated they would consult within their economies to identify possible contributors. Japan indicated that it would be better to concentrate on international standards. It was also agreed that the development of a website version of the document be investigated once the compendium had been produced.

Development of IT security training material project (Document ESTG/18)

The United States advised that the project prototype has been tested and revised and key portions have been translated into other languages. Outputs will be demonstrated at the next meeting. A report will also be made at the HRDSG. The site can be accessed at <http://securityv.isu.edu> .

Building A Secure Community With Public Key Infrastructure Technology - A Case Study of iVEST (Document ESTG/15)

Mr. Ng Kang Siong, on behalf of PECC, presented on the use of PKI in protection information. He highlighted the role of PKI in providing user authentication, encryption and digital signatures. A single digital certificate can be used in unlimited applications. He provided an example of how governments can support the deployment of PKI solutions.

Survey of existing IT security skills development/certification (Documents ESTG/06 and 07)

Mr Takashi Kume of METI outlined how Japan was addressing the problem of skills requirements for IT security. He identified the skill sets required and outlined Japan's IT qualifications framework. He noted that standardization of IT qualifications systems would involve mutual recognition of qualification systems between foreign countries that have similar systems and the transfer of knowledge of qualification systems to other countries that need it.

The Chair pointed out that at TEL 23 the United States had provided information on the International Information Systems Security Certifications Consortium scheme. (ISC)² grants the "Certified Information Systems Security Professional" designation to information systems security professionals. CISSP candidates are required to pass a rigorous CISSP examination and subscribe to the (ISC)² Code of Ethics. The Chair proposed that economies be invited to provide details of any IT security skills accreditation schemes in their economy. This information would be consolidated into a report for TEL 26. This was agreed.

Asia Regional CERT meeting (Document ESTG/04)

Japan advised that it would be hosting a meeting of Asia Pacific regional CERTS 24-26 March 2002. The primary objective of the meeting is the exchange of information between Asia Pacific Computer Security Incident Response Teams (CSIRT) and security. In specific,

- the sharing of security information within the Asia Pacific region;
- the joint handling of wide ranging security issues in the Asia Pacific region;
- the release of information from the Asia Pacific region; and
- aiding the establishment of CSIRT's in countries in the Asia Pacific region.

eAPEC - mapping of eSTG work against the eAPEC Strategy (security) (Document ESTG/02)

The Chair tabled a matrix mapping current and possible future eSTG activities against the goals and activities set out in the eAPEC strategy adopted by Economic Leaders. The meeting agreed a final version of the matrix at Attachment A. It also agreed that the matrix form the basis for the eSTG input for consideration by TELMIN 5. It was agreed that the proposed workplan addressed both the eAPEC Strategy and the cybersecurity aspects of the Leaders' Statement on Terrorism.

The Chair noted that there had been no progress on the development of the website of CIP resources but suggested that this item remain on the workplan and be developed by TEL 26.

Economy updates

A Current Status of Anti-Hacking & Computer Virus Activities in Korea (Document ESTG/10)

Mr Daeyong Byun CERT CC Korea presented an outline of the current status of anti-hacking and computer virus activities in Korea. He presented statistics showing a significant increase in hacking incidents in 2001 although there was a drop in the number of new viruses reported. He outlined the processes used by CERT CC and their plans for information protection during the World Cup of Football. He suggested areas for cooperation for mutual response to security incidents involving foreign countries.

Chair mentioned that the role of the private sector in eSecurity should not be overlooked. Chair will include this in the updated recommendation to Ministers in the UNGA Implementation report.

The Current Status of Vietnam's e-Security in e-Commerce (Document ESTG/08)

Mr Vu Xuan Bach, Vietnam Internet Network Information Centre presented an outline of Vietnam's approach to e-Security in e-Commerce. He pointed out that e-security is an important factor for the sustainable development of e-commerce and that e-security in Vietnam does not currently meet the demand of the

expected proliferation of e-commerce in the years to come. The Government of Vietnam proposes to implement advanced technology on e-security to create a favourable environment for e-commerce. It also plans to revise and amend e-commerce related articles in the civil, criminal and trade law and to provide training in e-security.

Australia

Australia advise that the regulatory update to plenary has more detailed information on electronic security. The E-Security coordination group chaired by NOIE has been very active. Awareness raising within business and government has been a priority. The first Business/Government task force on infrastructure protection has been formed

Brunei

Brunei advised that its focus is on the development of e-government. IT Policy and security will form the core of the e-government strategy. A national security response team is to be formed.

Canada

Canada advised that it is a signatory to the Council of Europe Convention on Cybercrime.

It reported three legislative initiatives on security:

C36 Relating to terrorism and national security concerns

C42 giving emergency powers to administrations

C44 disclose airline passenger information to US

China

China introduced a proposal for an APEC TEL group to address information, communication and network security (Attachment C).

Hong Kong, China

Hong Kong, China advised that an interdepartmental working group has been set up to address computer crime. The group has made recommendations on legislation. More information on the initiative is available on the government web site.

Indonesia

Indonesia advised that eSecurity is part of the national information framework. The government has drafted a digital signature act. More work is progressing on bringing electronic transactions into the legal framework.

Japan

In addition to the information already presented Japan advised that it has signed Council of Europe Convention on Cybercrime.

New Zealand

New Zealand advised that its Centre for Critical Infrastructure Protection will be on line in April. A Secure Data Vault project is about to go into pilot. More information available on web site <http://www.security.govt.nz>.

Philippines

The Philippines advised that hacking is prohibited under the E-Commerce Act which was issued in 2000. Implementing Rules and Regulations of said Act were also issued in the same year. The E-commerce Act is being reviewed with the end in view of preparing supplementary rules and regulations and if necessary

amendment to said Act.

Singapore

There is already an act in place to make computer crime illegal. Recently there has been improvement in incident response capabilities The Technology Crime Division is handling this
A Competency Centre conducts IT Training as well as public awareness seminars. The centre tests competency as well.

Chinese Taipei

Chinese Taipei advised that its Digital Signature Act was approved last year. It is a member of the Asia PKI forum. Chinese Taipei is also experimenting with cross boarder PKI in cooperation with Japan, China and other member Economies of Asia PKI Forum.

Thailand

Thailand advised that new electronic transaction and signature laws come into force in April. Other laws are in draft format. Thailand is the chair of eASEAN working group. This group would be happy to coordinate with eSTG
IT security standards and coordination are organised by NECTEC and others. The final draft of interoperability guidelines will be released. Thailand would be happy to work with New Zealand on the security standard information project.

Vietnam

Vietnam advised several legal developments. A Government Decree on E-Services had been issued creating criminal offences with regards to computer crime. It is reviewing existing criminal law in respect of cybercrime and evidence related to protecting infrastructure. It is considering the development of an eCommerce law.

USA

The United States advised that additional material was included in their economy update for TEL Plenary.

Macao, China

The Chair welcomed the delegation from Macao, China. The delegation thanked APEC for the opportunity to attend this valuable meeting.

New Project Proposals

United States (Document ESTG/12)

The United States introduced a proposal to organize and host a two-day seminar in conjunction with TEL 26 that will provide training to assist APEC economies with their efforts against cyber terrorism and cyber crime. This seminar will also provide guidance on related critical infrastructure protection and network security issues that must be addressed when dealing with cyber terrorism and cyber crime. The seminar will respond to the Leaders' statement and support ongoing TEL efforts in addressing cyber terrorism and criminal misuse of information systems.

It was noted that the details will need to be discussed with the hosts for TEL 26.

The meeting endorsed the proposal in principle and will forward it to BFSG and TEL for consideration.

ELECTRONIC AUTHENTICATION

Liaison with PKI Forum

The Chair asked the APEC Secretariat to advise on the outcome of the proposal that the eSTG take out formal observer status at the PKI Forum. The Secretariat advised that SOM had considered the proposal but had not been able to reach consensus. The Chair advised that informal arrangements had been made to allow discussions and the exchange of information on PKI interoperability between eSTG and the PKI Forum.

European Trust Status List project/certificate trust lists (Document ESTG/16)

Mr Richard Wilsher representing the European Electronic Signatures Standards Initiative provided information on the initiative and its relationship with the implementation of the European Union Directive on A Community Framework for Electronic Signatures. The project aims at international harmonisation of certificate policies and other relevant standards.

Mr Wilsher also provided information on the report harmonised trust status information. The final Technical report on this subject has now been approved. He provided information on the proposed structured trust status list. The next step will be to establish a Task Force to:

- Refine some requirements
- Develop a TSL Implementation Standard
- Prepare Guidance for verification
- Conduct some Prototyping

eSTG was invited to participate in the next step. Mr Wilsher proposed an exchange of information between EESSI and eSTG and invited eSTG member to attend a multi-national workshop in Europe later this year. The Chair pointed out the synergies between the EESSI and eSTG work. He also noted that any approaches developed between the two groups together with the existing relationship with the PKI Forum would cover most of the economies/countries using PKI. This would facilitate global interoperability.

The Chair suggested that it may be possible to hold the proposed multi national workshop at about the time of TEL 26 to allow eSTG members to attend. It was agreed that the Chair liaise with EESSI and the TEL 26 organisers to pursue this option.

The meeting endorsed the proposal in principle and will forward it to BFGS and TEL for consideration.

United Kingdom tScheme – a voluntary accreditation scheme for PKI (Document ESTG/14)

Mr Wilsher provided information on the United Kingdom tScheme which is an industry-led self regulatory initiative for the approval of trust services. Criteria are based on industry best practice and an independent external assessment process is used. The scheme has the potential for mutual recognition with other schemes, cooperation in developing / establishing peer schemes and joint development of approval profiles and assessment methods.

Achieving PKI Interoperability - An Experiment between Japan, Korea and Singapore (Document ESTG/05)

Mr. Moonbo Shim, Korea Information Security Agency outlined an experiment between Japan, Korea and Singapore on achieving interoperability between nationally certified CAs. The experiment involves modelling CA-CA cross certification/recognition and validation processes using e-procurement and e-bidding applications.

All experiments to date have been successful however some certificate profile differences were noted. Results of the experiments, a final report and a recommended technical profile will be presented to the Asia PKI

Forum Interoperability Working Group

The Chair requested that Korea keep eSTG informed on progress on the experiment.

PKI Interoperability Expert Group

Canada advised that there had been no activity on this matter since TEL 24. It noted that the previous work involved a mapping of certification authority accreditation schemes at a high level. It suggested that the next stage should be to examine the accreditation criteria to identify any potential impediments to cross border interoperability. The Chair advised that in 2000 a comparison had been made of the accreditation criteria for the Australian government scheme - Gatekeeper – and Singapore's Controller of CAs licensing criteria. A number of problems had been identified. A broader survey of schemes across APEC would possibly identify other problems and identify future work required.

It was agreed that the PKI Interoperability Expert Group conduct such a survey and report to TEL 26.

The Chair noted that the OECD had adopted the CA-CA mapping methodology for a similar survey among OECD member countries.

The Chair noted there had been no progress on the PKI Interoperability project involving the use of certificate trust lists. He suggested that this would be a good project to undertake in conjunction with the PKI Forum and EESSI.

Privacy and PKI

Australia reported that in December 2001 the Federal Privacy Commissioner launched guidelines to Commonwealth agencies on their use of Public Key Technology and digital certificates with individual clients of agencies. The guidelines are designed in part to avoid the development of a universal online identifier of citizens. A copy of the Guidelines is available at http://www.privacy.gov.au/news/media/01_14.html.

The Chair noted that the ECSG is addressing privacy issues in general and undertook to bring the Guidelines to its attention. The Task Group noted the existence of the Guidelines.

eCommerce Law Workshop

Australia reported that it and Vietnam had cosponsored an e-Commerce Legal Infrastructure Workshop on March 8 and 9 – just prior to APEC TEL25. Members of the ECSG were invited to attend as well as APEC TEL delegates. AusAID, the Australia Government's overseas aid program provided funding and in kind support was also received from Australia and Vietnam.

The focus of the workshop was on the needs of less developed economies focusing on an e-commerce legal framework to support e-commerce trading opportunities. The workshop should equip participants with the knowledge to develop relevant e-commerce legal policies within their respective economies.

Melissa DeZwart and Elizabeth Lanyon from the Centre for Law in the Digital Economy (CLiDE) – Monash Law – Monash University presented the workshop. The workshop was very highly regarded and considered a success. Australia thanked Vietnam for its assistance in organising the workshop.

Vietnam advised it felt the workshop was very beneficial. It thanked Australia for its role in organising the workshop.

A report will be published on the outcome of this workshop, which will include a discussion on future directions. This report should be available when Senior Officials Meet in China this year prior to TELMIN 5.

eAPEC – mapping of eSTG work against strategy (transactions and authentication) (Document ESTG 2)

The Chair tabled a matrix mapping current and possible future eSTG activities against the goals and activities set out in the eAPEC strategy adopted by Economic Leaders. The meeting agreed a final version of the matrix

at Attachment A. It also agreed that the matrix form the basis for the eSTG input for consideration by TELMIN 5.

The chair mentioned the work that is being done on education, pointing to the E-Commerce law workshop and the Workshop in Thailand on Electronic Commerce Policy and Regional Cooperation. Thailand spoke to this conference.

Australia volunteered to produce a catalogue of eCommerce law and PKI promotional/informational resources in the region.

Economy updates

Mutual PKI Recognition.

Mr Sing Tsang, Hong Kong, China provided an update of progress on the Pan Asian eCommerce Alliance which involves organisations in China; Hong Kong, China; Japan; Korea; Singapore and Chinese Taipei. The Alliance provides mutual recognition of PKIs of member organisations. The Pan Asian Certificate Policy Authority sets criteria for Alliance CA/CPS recognition.

The Alliance Policy Authority was established in January 2001 and an Alliance Certificate Policy in Nov 2001. It has recognised CAs in Hong Kong, China and Chinese Taipei. It is planned to recognize other CAs in the next few months. It is expected to pilot secure cross border transactions in April/May 2002.

Australia

Australia advised that six organisations had received Gatekeeper accreditation and twelve more awaiting accreditation. It was considering the options for a council to replace the current National Electronic Authentication Council and Government Public Key Advisory Committee.

A guide for authentication technologies is being produced which includes privacy aspects. A copy will be made available to eSTG.

Brunei

Brunei advised that it plans to establish a Government CA to support its eGovernment initiative.

Canada

Canada advised that it had established an Authentication Principles Working Group. This is an inter-industry group with some academic involvement. The group is adopting a technology neutral approach. As Canada is not adopting an authentication licensing scheme it is looking for a marketplace solution. Details of the website and password were provided to delegates.

Hong Kong, China

Hong Kong, China advised that Hong Kong Post signed an agreement with a Canadian Company for a mobile PKI. Several applications have been rolled out including wireless banking.

Japan

Japan advised that it and Singapore had signed a free trade agreement last year that included PKI recognition. Accredited CA's can be recognised in the other country without going through the process of accreditation again. The agreement has been sent to the Diet for approval

Korea

Korea advised that it has established both government and national PKIs. A wireless PKI service has been

unveiled.

New Zealand

New Zealand advised that an eGovernment framework has been established. This involves a significant element of eSecurity and PKI.

The government PKI uses both a “passport” certificate and a “business card” certificate. The latter focuses more on the organisation than the individual. The New Zealand Government has published its requirement on certification. Details can be accessed at <http://www.e.govt.nz>.

Philippines

The Philippines advised that the E-commerce Act of 2000 is being reviewed for possible issuance of supplementary rules and regulations and if necessary amendment to said Act. It also advised that the Philippines Long Distance Telephone Company (PLDT) has set up a PKI facility.

Singapore

Singapore advised that it is reviewing its Electronic Transactions Act and looking at digital signature provisions. JS-CPA concluded agreement for fast track certification. Two CAs have been accredited.

Chinese Taipei

Chinese Taipei advised that it is working on PKI interoperability. The on-going e-government project of Chinese Taipei was started in 1997. The establishment of government CA was completed and now the commercial PKI as well as the cross-border PKI structure is being planned.

Thailand

Thailand advised that the Act covering accreditation of CA's comes into force in April. A committee is being formed for licensing of CAs. No CAs have been accredited as yet. At least two are awaiting accreditation.

United States

The United States advised that it is continuing to pursue a federal government PKI. Details are at <http://gits-sec.treas.gov>.

Vietnam

Vietnam advised that it is researching PKI but there are no initiatives at this time.

Macao, China

Macao, China advised that the government post office will establish a CA this year.

Next meeting

It was agreed to seek a one day task group meeting as part of TEL 26.

Attachment A

eSTG CURRENT AND FUTURE RESPONSES TO eAPEC STRATEGY

| Goals | Actions | Current responses | Future responses |
|--------------|----------------|--------------------------|-------------------------|
|--------------|----------------|--------------------------|-------------------------|

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Information Security Ensure safety and security of information networks and transactions Foster confidence through market driven solutions to electronic security needs</p> | <p>Make further progress on training modules and workshops Enhance cooperation and coordination among APEC economies Encourage capacity building on infosec Promote user choice of encryption products and services Educate users in their responsibilities to ensure security</p> | <p>Training modules in conjunction with HRDSG Workshops/meetings at TEL meetings UNGA55/63 report to address cooperation and coordination Website to facilitate distribution of information Awareness raising to encourage capacity building and encourage user responsibility</p> | <p>Analysis of current policies on user choice of encryption products and services Identification of IT security standards and best practice guides Adoption/endorsement of revised OECD Guidelines on Information Security Possible dedicated workshop on information security Examination of certification schemes for IT security professionals</p> |
| <p>Online Transaction Laws Ensure a coherent and transparent legal and regulatory framework Promote confidence among users to engage in on-line transactions</p> | <p>Draw on work of international organisations Undertake training programs to assist in development of appropriate laws and regulations Ensure active in the development of conventions</p> | <p>Liaison links with: UNCITRAL OECD PKI Forum Asia PKI Forum EESSI UNCITRAL Model Law on Electronic Commerce adopted</p> | <p>Monitor UNCITRAL work on possible Model Law for Electronic Contracts Catalogue of promotional/information material</p> |
| <p>Authentication Ensure users have authentication methods that meet business and legal and regulatory requirements</p> | <p>Determine attributes of minimalist framework for legal effect (technology neutral) Finalize work to ensure legal effect Demonstrate value of user choice Encourage work with business to ensure overly specific regulatory approaches do not impede cross jurisdictional transactions</p> | <p>Most Economies implementing UNCITRAL model but different interpretations ESTG working on means of bridging the differences Electronic Authentication Issues Paper CA Accreditation Schemes mapping exercise Pilot tests</p> | <p>Examination of PKI Accreditation/ Assessment/ Licensing criteria In member economies Cooperation with EESSI and PKI Forum on certificate trust lists/ trust status information PKI Privacy Guidelines Catalogue of PKI promotional/information material</p> |

| | | |
|---------------------------------------------------------------------------------------------------------------------------|--|--|
| Encourage cooperation with business to identify market structures that may include CA licensing and accreditation schemes | | |
| Support continuing legal and policy work endorsed in Cancun Declaration of TELMIN 4 (developed by ESTG) | | |

Attachment B

RECOMMENDATIONS TO MINISTERS CONTAINED IN

**REPORT ON ECONOMY IMPLEMENTATIONS OF THE TEN MEASURES INCLUDED IN
UNITED NATIONS GENERAL ASSEMBLY RESOLUTION 55/63
*COMBATING THE CRIMINAL MISUSE OF INFORMATION TECHNOLOGIES***

- That Ministers note the Leaders' commitment to the protection of both critical infrastructures and information infrastructures and networks;
- That Ministers agree to implement the ten measures included in United Nations General Assembly Resolution 55/63 Combating the Criminal Misuse of Information taking into account international initiatives in this area;
- That Ministers note the importance of law enforcement cooperation in combating the criminal misuse of information technologies;
- That Ministers note the role of the private sector in protecting information infrastructures and networks and encourage the development of government private sector partnerships;
- That Ministers direct officials to develop a compendium of IT security standards and best practice guides to assist in the protection of information infrastructures;
- That Ministers note the work of the OECD in revising its Guidelines for the Security of Information Systems and encourages economies to utilise the revised Guidelines once they are finalised;
- That Ministers direct officials to develop awareness raising and training material on IT security;
- That Ministers direct officials to examine certification schemes for IT security professionals; and
- That Ministers note the importance of encryption to security as well as authentication and direct officials to undertake a study of encryption policy in Economies

Attachment C

Proposal for establishing a group on information communication and network security

P.R.CHINA

1. Background

With the fast development of Internet, many kinds of application based on Internet, such as online banking, online stock trading, e-business, e-government and e-customs appeared, and kept on growing rapidly. As those applications related to a APEC member's political and economic security, it is of great importance and necessity to prevent the critical information infrastructure from being compromised.

Meanwhile, the attacks on network present diverse characteristics and new trends. For example, the CodeRed II intergrated with traditional viruses, Trojan, Worm and Hacking activity can automatically search for infected targets to spread out on Internet, instead of traditional means as Email, storage media, file download and etc. The emerging attacking activities will not only damage the hosts system, but also affect the communication network, keeping it from running normally.

Theoretically speaking, as far as one affected computer keeping active, all other computers on Internet are potential targets and threatened. Therefore, the best approach to solve such problems is that all the concerned parties take collective measures consistently. While keeping their own information systems away from being attacked, it is very important to make sure that their computers will not be puppet hosts to affect other information systems furthermore.

2. Proposal and its goal

As reasoned above, we propose to establish a group on information communication and network security within APEC TEL which is tasked to achieve the goal as described in e-APEC strategy, namely:

- | To ensure the safety and security of information networks and transactions by those who use the internet; and
- | To foster confidence in information infrastructure and networks through market-driven solutions to electronic security needs.

3 Terms of reference:

- | To enhance regional cooperation on information system security;
- | To take jointly measures consistently to deal with large-scale cross-community network security incidents;
- | To discuss legal issues and industry regulations related to information security and emergency response.
- | To exchange information between economies regarding the problems that they face in combating the criminal misuse of information technologies;
- | To protect the integrity of computer systems and networks under the legal systems of economies;
- | To prohibit and penalize unauthorised access, interception and impairment of a computer system or network;
- | To promote the public awareness of potential security risks and ways to combat them.

ANNEXE D

The Report of The Development Cooperation Steering Group for TEL25

1. OPENING

The Development Co-operation Steering Group (DCSG) meeting was held on March 13 -14, 2002. There were 51 participants attending the meeting (see Annex A). The Convenor (Dr. Anon Tubtiang, Thailand) welcomed all the participants to the meeting, extended his appreciation to Vietnam for its gracious hospitality and finally welcomed Ms. Diane Steinour (USA) as the Deputy Convenor.

2. REVIEW AND ADOPTION OF AGENDA

The meeting reviewed the draft agenda of DCSG meeting, and agreed to revise it as shown in Annex B.

3. DISCUSSION SESSION

3.1 Digital Divide Activities

3.1.1 Digital Divide Workshop: Meeting the Needs of Under-Served Areas

The USA, as coordinators, reported on the success of the workshop. The workshop featured speakers from 6 economies and approximately 60 participants that provided lively comments. Vietnam, as the host country, led off the discussion of economy case studies. USA, Japan, and Chinese Taipei provided overviews of technologies designed to meet the needs of under-served communities and populations. Thailand presented information on its experiences in reaching out to rural communities, while AOEMA gave a case study of Philippines' successful experiences to meet Internet access demand at the local level. The USA, mindful of APEC's mandate to remain gender-aware, reviewed the status of women and girls in the region and their attempts to gain Internet access. The main conclusions of the workshop: That under-served areas and needs can indeed be served through a combination of technology deployment, supportive policy environments, and programs; and that meeting such under-served needs is crucial for macro-economic growth and improved quality of life. The full report on the workshop is attached at Annex C.

3.1.2 Updating the Digital Divide Blueprint for Action (telwg25/dcsg/08 - Convenor)

Thailand, as coordinator, introduced DCSG08, the draft Digital Divide Blueprint for Action. The DCSG has been working on the draft since TELMIN4. Following a virtual team drafting exercise between TEL24 and TEL25, the DCSG provided updates on its three main sections: an executive summary, a matrix of relevant activities, and a series of charts to track the number of Internet subscribers as well as access to Information and Communications Technologies (ICTs) by each economy. The DCSG successfully concluded the Blueprint (See Annex D), and asks that the Plenary bring the document forward to the TEL Senior Officials Meeting for Ministers at TELMIN5. The DCSG also agreed to add an agenda item to review the content and status of relevant activities at future TEL Meetings.

3.1.2.1 Continue Monitoring of Internet Access (telwg25/dcsg/14 - Deputy Convenor)

As part of the Digital Divide Blueprint exercise, the USA coordinated the updating of online statistics previously submitted to SOM II and SOM III in 2001. The USA requested that this activity proceed as a separate activity under DCSG auspices. Mindful of Leaders' call to triple Internet access in the region by 2005, and to pursue universal Internet access (at the individual or the community level) by 2010, the DCSG agreed to continue monitoring the status of Internet access. Also, mindful of the APEC mandate to track gender-specific data, the DCSG has begun to collect information regarding the online status of women and girls.

3.2 Internet Issues (IITG)

3.2.1 Review of DCSG's Internet Development Activities (telwg25/dcsg/14 - Deputy Convenor)

The Deputy Convenor provided DCSG14, a draft contribution of the DCSG to the TEL discussions within the Internet Issues Task Group (IITG). The document summarizes DCSG reports from TEL 22, 23, and 24 regarding relevant work themes and existing/new activities in support of the TELMIN4 ministerial guidance on Internet development and ICAIS. The DCSG reaffirmed nine work areas and approximately six ongoing or new projects. The DCSG has submitted its detailed review to the IITG for its report to TELSOM/TELMIN5.

4. NEW PROJECTS

4.1 IP-based WLL for Bridging Digital Divide in Rural Area (telwg25/dcsg/23 - Japan)

The self-funded Project of IP-based WLL for Bridging Digital Divide in Rural Area has been incorporated into the APII Technology Center. Japan presented the objective of this survey project: to investigate the possibility of a sustainable high speed community network infrastructure for rural areas in developing countries. Based on consumer wireless LAN equipment, this wireless network will be operated by volunteers. The meeting approved the project, starting from May 1, 2002.

4.2 APII IPv6 R&D Testbed Project (telwg25/dcsg/18 - Japan)

Japan briefed the DCSG regarding the new self-funding project's purpose. This project will establish an APII-IPv6-Testbed for research and development, incubate researchers and engineers of IPv6 Technology and information sharing, give feedback on the next generation Internet (IPv6) technology to APEC TEL WG members, establish the unique IPv6 technology in the Asia Pacific area and accelerate the transition from IPv4 to IPv6 until 2005. The project was endorsed by the meeting. Canada and Thailand strongly supported and will cooperate in this project. Japan and Canada will discuss arrangements for proposed workshops to be held once/twice a year.

4.3 Flow-based Internet Traffic Measurement and Analysis (telwg25/dcsg/20-Korea)

Korea introduced to DCSG a new research project that responds to the Cancun Declaration from TELMIN 4. The objectives of the project are to apply a new measurement and analysis system to Internet links, and to accumulate and disseminate the results of traffic measurement and analysis. The DCSG approved this project in principle and is developing final language to submit to Plenary.

5. CURRENT PROJECT REPORTS

Information service and knowledge transfer:**5.1 APII Cooperation Center (telwg25/dcsg/10 - Korea)**

Korea reported on the progress of the APII Cooperation Center. Projects undertaken as APEC projects include “APII Test-bed” in the Development Cooperation Steering Group, “Distance Learning Project on Telecommunications Technology” in the Human Resources Development Steering Group, and the “APEC TEL Website Maintenance” projects” in the Business Facilitation Steering Group. Other projects include “Human Resource Development Programs”, e.g., training programs aimed at closing the digital divide. More detailed information can be found in the APII Cooperation brochures and at URL address: <http://www.apiicc.org>.

5.2 APII Technology Center (telwg25/dcsg/ 17 - Japan)

Japan noted that the APII Technology Center currently tried to change the contents and practical experiments to high level IPv6 technology. APII Technology Center is now focusing on the programs as follows: listings of Internet resources in Asia (APII-TC), Uni-Directional Link-Routing (UDLR) and Internet based device control protocol; NADIA project etc.

5.3 Development and Financial Resources Catalogue (telwg25/dcsg/05 - USA)

The USA reviewed progress on the catalogue, designed to provide information sources on governmental agencies and private actors that promote the development of telecommunications and Internet infrastructure, equipment deployment, and/or policy information designed to create digital opportunities. The USA requests updates at every TEL. Japan and New Zealand have provided additional information, with Australia, Canada, Chinese Taipei and the USA confirming the present information. The new updates will be posted to the TEL website following TEL25.

5.4 Spectrum Policy and Management Database (telwg25/dcsg/ 03 - USA)

This web-based database, resident on the TEL website, provides information on economies’ policy and licensing environments in support of wireless and satellite technologies. In some cases, the database provides direct links to economies’ online frequency allocation charts. The USA, as coordinator, requests updates at each TEL. Positive responses have arrived from Australia, Canada, Japan, New Zealand, Peru, Chinese Taipei, and USA. The new updates will be posted following TEL25.

5.5 The Cross-country Smart Card-Based Secure Electronic Commerce Project (telwg25/dcsg/07 - Singapore)

Singapore presented the project’s progress report. An overseeing committee composed of Australia, Japan, Korea and Singapore has awarded the project to PrivyLink International Ltd. As the project was awarded in December 2001, the project could only commence in January 2002. The deadline of collection of survey has thus been pushed back to May 2002. The survey was designed and will be distributed to the participating member by the end of March. Privylink will be able to conduct Phase II in the shortened timeline to ensure that the submission of the final report to the APEC Secretariat will be on schedule by December 2002.

5.6 Virtual Environments for Manufacturing and Technology Project (VEMAT) (telwg25/dcsg/06 - Singapore)

This project explores the use of the Virtual Environments for Manufacturing and Training (VEMAT) concept in the teaching and sharing of technology with a larger audience. VEMAT allows expensive resources such as specialized machines to be “shared” over the Internet, thus reducing investment in capital and allowing the set up of resource sharing and training among institutions and their partners. Singapore reported that the web, camera and part of the remote operations module have been completed. At the moment, these modules are undergoing trial tests. The course module and scheduler module are currently being designed and are expected to be completed by the end of 2002.

5.7 Asia Pacific Grid Implementation Project (telwg25/dcsg/13-Korea)

Korea reported the current status of this project. A tentative committee of the project consists of Australia, Canada, China, Japan, and Singapore. Korea introduced the homepage of Asia Pacific grid at URL address: <http://apgrid.apectelwg.org> for new technology information dissemination, consulting, and communications. There will be GFK workshop held in Seoul.

Survey, study and individual research:

5.8 Optimal Topology of Testbeds and Simplified Commercial Networks in APEC Region (telwg/dcsg/12-Korea)

Korea noted that the project timetable is changed due to the delay of the contract process. The contract between MIC (Korea) and the contractor has not been made yet. The budget is also changed by the original amount of US\$ 18,910 was been divided into US\$17,110 for general cost and US\$ 1,800 for travel cost. The change has been approved by the APEC Secretariat. Korea requested one representative from each economy to recommend a person who can provide the information for this project.

Research Cooperation:

5.9 Active Partnerships for Internet Connectivity Project (PECC)

The PECC representative of Australia reported that the PECC reviewed the current structure of the project in January 2002. Mindful of the economic downturn and the need to find ways to improve private sector participation to ensure the success of the project, PECC noted that it seeks to restructure the project’s implementation methods, and will report further on any options.

Test bed service:

5.10 APII Test Bed Project (telwg25/dcsg/09 - Korea)

Korea noted the meeting of current activities of the APII Test Bed Project. The direct link between APII Test Bed Project and Trans-Eurasia Information Network (TEIN) was opened in December 2001. Duration of Korea-Singapore APII Test Bed is extended till 2003, which was scheduled to expire in 2001. Korea, Japan and Singapore reached in-principle agreement to set up a common body on a multilateral basis for future development of APII Test Bed Project.

5.11 APII Test Bed Project for Interconnectivity and Interoperability (telwg25/dcsg/21 - Japan)

Japan reported that as the conclusion of the first step of APII Test Bed project for interconnectivity and interoperability, Japan makes a presentation. Firstly, tight human junctions among APEC members economies was formed. Secondly, the interconnectivity and interoperability for the international ATM was established as a beginning of the international broadband data transport at Singapore for TELMIN 3. Thirdly, this project made impact to other areas such as TRANSPAC from USA and TEIN from Europe. And the last, there were many outputs of producing the new systems and technology such as Digital Video transfer, and UDLR (standardized as RFC 3007) as the result. Japan gave their thanks to every member economy for their help.

5.12 Advanced Satellite Test-Bed Project (telwg25/dcsg/04 - Japan)

Japan has been conducting R&D for an experimental communications satellite called WINDS (Wideband InterNetworking engineering test and Demonstration Satellite, formerly “Gigabit Communications Technology Satellite”). For the progress of the Advanced Satellite Test-Bed project, Japan briefed the DCSG on the status of key technology development for WINDS to the meeting and a forum “the 3rd International Forum on Advanced Satellite Communications.” It was held by the Japan MPHPT during February 19 -20, 2002 in Tsukuba-city Japan. The forum aimed at exchanging views on the significance of and expectation regarding various applications, and also sought to contribute to the drawing up of a specific experiments plan. There was a panel discussion on “International collaboration and application development using WINDS,” regarding how to establish an efficient collaboration experiments system, the panelists mostly agreed to try to interconnect various experimental networks in the Asia-Pacific region and to establish an expert group in each field of application experiments (field-education, telemedicine etc.). The future plan of this project will include the WINDS development and production of a flight module and an international forum annually to animate discussion to contribute further research and development for WINDS.

6. PREPARATIONS FOR TEL SOM

6.1 Review of TEL Matrix of Activities Relevant to DCSG (telwg25/plen/12 - Chair)

The DCSG reviewed and updated document Plenary 12 as well as the Project Status report for the TEL Secretariat. Numerous DCSG projects address the theme and sub-theme areas described in the TEL Matrix. Newly approved projects have been inserted. For item 5 on the Digital Divide, the DCSG also cross-referenced the plenary document with the matrix of activities found in the Digital Divide Blueprint (DCSG08). (See Annex E)

6.2 Submission of Relevant Documents for TELSOM

The DCSG decided that the endorsed Digital Divide Blueprint for Action and the DCSG updates to the TEL Matrix should seek Plenary endorsement. The DCSG hopes that the Blueprint will then be brought forward to the TELSOM.

7. OTHER BUSINESS

7.1 Consideration of Any New Workshops or Project Proposals

Based on discussions at the TEL25 DCSG and digital divide workshops, participants identified a need for further discussion of new technologies in terms that policy makers can understand. While DCSG discussion centered on a transition from IPv4 to IPv6 technology, the Convenor successfully proposed to add a new agenda item to TEL26 regarding next-generation technologies and applications in a more general sense. The idea is to stimulate greater information exchange, primarily to identify the implications of new technologies and applications for policy and regulatory developments in each economy and/or throughout the region. The Convenor proposed that the DCSG invite technical experts to address the DCSG directly during its meeting sessions. The Convenor invited Dr. Shin-ichi Nagakawa of Japan to act as coordinator, with assistance from Canada's Eric Tsang and the Deputy Convenor, to identify prospective topics and experts.

7.2 Information Exchange on Other Multilateral Institutions

7.2.1 The ITU Development Sector's Study Question on Internet Development (tel25/dcsg/02-USA)

The USA drew the DCSG's attention to a very timely and relevant document (DCSG02), the ITU's "Final Report on ITU-D Question 13/1: Promotion of Infrastructure and Use of the Internet in Developing Countries." The ITU made public the document in January 2002, and will review it at the March 2002 World Telecommunications Development Conference. Its purpose is to develop, as a starting point, recommendations to help government officials and other policy-makers to develop telecom regulations and policies that will promote Internet infrastructure development in developing and least developed countries. The report offers guidelines on: Infrastructure for Internet Access; Independent Regulatory Decision Making; Competitive Environment for Telecommunications Services; Telecommunications Licensing System; Interconnection for Telecommunications Services; Universal Access for Telecommunications Services; and Access to Internet Services. The report also presents a technological options review, surveying approximately twelve sample technological options. This technological review also offers analysis of three issues to consider prior to investing in Internet buildout: interoperability, scalability, and operations/maintenance/administration. The report also offers suggestions on how to improve human capacity building, particularly for technical expertise. The report concludes with numerous web links and other related sources of information.

8. CLOSING

The meeting was closed with the Convenor's appreciation to member economies' participation and contributions, especially to Deputy Convenor's.

Attachment A

List of DCSG Participants

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|---------------------------|------------------|--------------------------------------------------------------------------------------|
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Attachment B

Agenda for The Development Cooperation Steering Group APEC TEL WG 25 Meeting

I. OPENING

- Review and adoption of Agenda

II. DISCUSSION SESSION

- Digital Divide Activities
 - Digital Divide Workshop: Meeting the Needs of Under-Served Areas
 - Updating the Digital Divide Blueprint for Action

§ Continued Monitoring of Internet Access (USA)

- Internet Issues (IITG)

§ Review of DCSG's Internet Development Activities (TEL23 DCSG Report to IITG)

III. NEW PROJECTS

- IP-based WLL for Bridging Digital Divide in Rural Area (Japan)
- APII IPv6 R&D Testbed Project (Japan)
- Flow-Based Internet Traffic Measurement and Analysis (Korea)

IV. CURRENT PROJECT REPORTS**Information service and knowledge transfer:**

- APII Cooperation Center (Korea)
- APII Technology Center (Japan)
- Development and Financial Resources Catalogue (USA)
- Spectrum Policy and Management Database (USA)
 - The Cross-country Smart Card-Based Secure Electronic Commerce Project (Singapore)
 - Virtual Environments for Manufacturing and Technology Project (Singapore)
- Asia Pacific Grid Implementation Project (Korea)

Survey, study and individual research:

- Optimal Topology of Test beds (research networks) and Simplified Commercial Networks in APEC Region (Korea)

Research Cooperation:

- Active Partnerships for Internet Connectivity Project (PECC)

Test Bed service:

- APII Test Bed Project (Korea)
- APII Test Bed Project for Interconnectivity and Interoperability (Japan)
- Advance Satellite Test-bed Project (Japan)

V. PREPARATIONS FOR TEL SOM

- Review of TEL Matrix of Activities Relevant to DCSG
- Submission of Relevant Documents to Senior Officials Meeting March 15

VI. OTHER BUSINESS

- Consideration of Any New Workshops or Project Proposals
 - Information Exchange on Other Multilateral Institutions
 - § The ITU Development Sector's Study Question on Internet Development (USA)

Attachment C

APEC TEL 25
Development Cooperation Steering Group (DCSG)
Report on Third DCSG Digital Divide Workshop
 March 12, 2002

Ha Noi, Viet Nam

Report by Moderator

The DCSG held its third Workshop on the Digital Divide under the theme “Meeting the Needs of Under-Served Areas” at APEC TEL 25 March 12, 2002 in Ha Noi, Viet Nam. Joseph Richardson of the USA delegation moderated the workshop. Mr. To Chi Thanh, Chief of Multilateral Cooperation, International Cooperation, Viet Nam Post and Telecommunications, Ha Noi, Viet Nam, presented a keynote address “Reducing the Digital Divide in Viet Nam: Some Solutions and Models.”

The workshop consisted of three sessions. Session One provided a review of technologies for underserved areas. Mr. Keith Bernard, Senior Director, Regulatory Affairs, Hughes Network Systems, Germantown, Maryland, USA, addressed broadband satellite developments. Mr. Tohru Asami, President, Chief Executive Officer, KDDI R&D Labs, Inc., Kamifukuoka-shi, Saitama, Japan addressed possible wireless network solutions for the digital divide. Mr. Shan-Hsin Tsao, President, Telecom Training Institute, Chunghwa Telecom Co., Ltd., Chinese Taipei, addressed development of narrowband and broadband technologies for rural areas.

Session Two covered policy and regulatory needs to support build out to under-served communities. Dr. Somunk Keretho, Director, Electronic Commerce Resource Center, NECTEC/NSTDA, Thailand, presented “IT Strategies for Rural Areas Development: The Case of Thailand.” Mr. Michael Baker, Executive Director, AOEMA – Asia Oceania Electronic Messaging Association, presented AOEMA’s Experiences in the Philippines.

Session Three assessed the economic impact of the introduction of information and communications technologies (ICTs) to under-served areas. Ms Diane Steinour, Office of International Affairs, National Telecommunications & Information Administration, U.S. Department of Commerce, USA, reviewed the Online Status of Women/Girls in the APEC Region.

MAIN CONCLUSION: That under-served areas and needs can indeed be served through a combination of technology deployment, supportive policy environments, and programs. That meeting such under-served needs is crucial for macro-economic growth and improved quality of life.

Highlights:

There are significant new technologies and new applications of existing technologies that can assist in reducing costs and providing services to underserved, remote and geographically challenging areas. If these technologies are to be introduced successfully, a coherent and pro-competitive policy and regulatory environment will be required, not only in telecommunications law and policy, but also in the general business and investment environment. Flexibility will be required to ensure that the application of law and policy to

these new technologies, new entrants, and new environments supports their deployment. For example, in spectrum availability for satellite delivery, and rights of way for wireline based technologies and wireless infrastructures.

Efforts will be required to stimulate demand among these new users by bringing available services together (education, health, agriculture, etc.), creating telecenters, and combining government services with private offerings. Market (commercial establishments) and non-market (post office) opportunities must be considered for hosting services.

Socio-economic groupings, as well as geographic areas, must be recognized and served because of the positive impact service has to the macro-economic benefit of the region. And, economies must remain gender-aware if they are to take advantage of this significant, well-informed work force and potential entrepreneurial class.

The presentations in this workshop are to be posted to the APEC TEL website as part of the TEL 25 Digital Divide Workshop report.

Attachment D

APEC TEL Digital Divide Blueprint for Action

EXECUTIVE SUMMARY

The Leaders' Declaration of Brunei Darussalam, November 2000, highlighted the importance of the information revolution to the global economy and called for a tripling of Internet access in the APEC region by 2005. In their Cancun Declaration, Ministers of Information and Communications Industry, 2000, challenged the TEL to bridge the digital divide. In October 2001 through the e-APEC strategy, Leaders endorsed the additional goal of ensuring that all groups within an Economy have access individually or through community-based services to the Internet by 2010.

In response, the TEL has: 1) developed a Digital Divide Blueprint for Action; 2) initiated the gathering of statistics on Internet access to gauge progress on the Leaders' challenges; 3) conducted an internal stock-take in 2001 on policies employed by Member Economies to bridge the divide; and 4) held three workshops in 2001 and 2002 to address the policies for bridging the divide and the skills shortage. Two reports on these activities were submitted to the SOM, in June and October 2001. The conclusions of this work are:

I. Access: The level of access to the Internet varies among populations at the international, regional, economy and local levels. Income, education, age, gender, disability and rural/urban location are among the factors that determine level of access by economies and the people within an economy.

C Lower prices for access increase Internet uptake by consumers. Competition and liberalization are essential policies to lower the price of access and stimulate supply of products and services to fit the variety of needs of users.

C Underserved area can be served through a combination of technology deployment, supportive policy environments, and programs directed at the needs of underserved population. Meeting such

needs is crucial for macro-economic growth and to improve quality of life.

In looking at programs to increase access for underserved groups, it is important to maintain a commercial focus and undertake actions that will lower prices and create and expand the demand for services among the target group. Government has an important role to play in this demand creation by bringing government programs and services on line.

Based on an informal statistical gathering process to gauge progress on Internet access since 1999, we are pleased to report that the APEC economies are indeed making progress. The internal stocktake described in detail the various governmental initiatives underway to improve access to and use of Internet access.

II. Infrastructure:

C An overall positive economic environment is essential to the expansion and build-out of the infrastructure to support the Internet. The increasing use of the Internet for economic and social purposes, as well as new applications (3G/advanced wireless systems, digital TV, IP telephony, next generation Internet, etc.), mean there is a public policy imperative in all economies to ensure Internet access for all.

III. Human Capacity Development:

Availability of skilled workers is a major concern for all economies. It is difficult to predict future needs. The economic and social environment generally is an important factor in the ability of an economy to develop and retain skilled workers. The current skills shortage affects all segments of the economy. The portability of skills has led to retention problems, upward pressure on salaries and movement, including global movement, of workers. Education and training are major preoccupations of governments and companies, and a life-long requirement for workers. There is no single solution to this problem. The solution will require industry to be a partner.

IV. Characteristics of Successful Policies to Bridge the Divide:

The TEL conducted an internal stocktake on Economies and their policy initiatives that targeted the uptake of Internet and information technology among all sectors of the population and in the business/private sector (small-, medium-, and large-sized enterprises). Approximately fourteen economies provided substantive details. The successful models contained attributes that include a focus on:

- ! **Leadership** – often at economy level but also including local and regional initiatives to create a vision and institutions/structures to address the issues.
- ! **Partnerships** – including among business, education and social institutions, and government
- ! **Policy Coherence** – to ensure that all policies are working together to create the desired economic and social environment.
- ! **Market Focus** – among others, to develop demand that can justify investment required.

- ! **Sustainability** – to ensure continuation of the services beyond the seed money stage.
- ! **Scalability** – to ensure that a program or an initiative can be replicated throughout under-served areas.

V. Continuing Work Guided by the Blueprint:

The TEL notes the importance of further exchange of experience and analysis of specific projects and programs being employed to increase access for all and to ensure the populations have the skills necessary to participate in the global economy. To this end, TEL will:

- C Continue to monitor the access to and use of Internet products and services across the APEC region;
- C Continue projects already identified under the Matrix of Activities in the Digital Divide Blueprint for Action;
- C Continue to monitor and liaise with other international and regional fora and their related digital divide activities, particularly those identified in the External stocktake; and
- C Explore additional work as required, such as:
 - C to explore the policy environments needed to support emerging technologies (wireline and wireless) to meet under-served areas (urban and rural);
 - C to explore the question of consumer confidence and ways to engender trust to improve levels of Internet uptake and greater development of applications, through improving the security of information systems, e.g., authentication, PKI, privacy protections, security standards, information exchange arrangements, and education and awareness; and
 - C to heed Leaders' call to maintain a gender perspective in our work.

APEC TEL Digital Divide Blueprint for Action

At the Fourth Meeting of APEC Ministers responsible for Telecommunications and Information Industry in 2000, Ministers directed the TEL to "continue to place emphasis on bridging the digital divide at the domestic, regional and international levels." They also emphasised the need to engage the business/private sector through co-operation and collaboration.

Specifically, Ministers encouraged joint initiatives aimed at:

- a. Improving network access, especially in underserved urban, rural and remote areas;
- b. Assisting developing economies to reform their policy and regulatory structure to meet new environments;
- c. Reinforcing and enhancing human resource development activities through various measures such as utilising distance learning technologies;
- d. Promulgating knowledge and recognition of the digital divide by holding appropriate fora;

- e. Monitoring the fair and sustainable development of the Internet in the APEC region as an integral part of the Asia-Pacific Information Infrastructure (APII); and
- f. Pursuing explanatory work to define concepts, to measure the extent of domestic, regional and international digital divides, and to assess economic and cultural reasons for divides with a view to develop technology neutral, pragmatic approaches to encourage greater access.

Since then, Leaders in Brunei Darussalam (November 2000) highlighted the importance of the information revolution to the global economy and called for a tripling of Internet access in the APEC region by 2005. Through the e-APEC strategy, Leaders in Shanghai (October 2001) endorsed the additional goal of ensuring that all groups within an Economy have access individually or through community-based services to the Internet by 2010.

Why the Digital Divide is important to APEC TEL

At the request of TELMIN4 Ministers, the TEL now tracks the rate of telephone and Internet penetration (relevant statistics presented at Annex III). Within APEC, 9 economies have teledensity of 40% and above and for most of those economies the figure is closer to 50% and above. The remaining 12 economies have teledensity of 20% and below, with many having less than 5 or 10%. For Internet access, again, 9 economies have penetration rates above 30 percent, while 12 have less than 8 percent (Source: *Response of the TEL to SOM... Concerning Internet Access, Bridging the Digital Divide, and Skills Shortages*, October 2001). This huge divide highlights the need for decisive and effective action on behalf of all TEL members.

A Digital Divide Work Plan for APEC TEL

This cohesive plan of action for the TEL, the APEC TEL Digital Divide Blueprint for Action, is required to focus and co-ordinate the activities of the four steering groups in addressing the issue of the digital divide.

Coordinator: The Development Co-operation Steering Group (DCSG) will be the main coordinator and initiator of work in APEC TEL on the issue of the Digital Divide and monitor the work being undertaken by other regional and international fora on this issue. The reports should be incorporated into the Convenors report of the Steering Group at each TEL meeting. The Deputy Convenors of that group, currently Russia and the USA, should have a watching brief over related activities in other Steering Groups. The DCSG should determine as necessary the Digital Divide contact person for the APEC TEL.

Guide to Type of Activities: As part of the Blueprint, the DCSG should undertake, or monitor in other Steering Groups where appropriate, the following activities which relate to this issue:

1. Initiate projects or activities designed to meet the Ministerial directives at the steering group level and oversee their implementation;
2. Co-ordinate the work done on the issue in the various steering groups;
3. Promote co-operation with other organisations and bodies working on the digital divide issue, in particular other APEC bodies engaged in implementing the e-APEC strategy endorsed by Leaders in 2001 at Shanghai;
4. Encourage private/business sector participation by fostering discussion on the issue; and
5. Record and collate the progress of the work with a view towards presenting a report to TELMIN5 in 2002, and other APEC bodies (e.g. Senior Officials Meetings) as appropriate.

Monitoring of Activities: To assist in these tasks, an internal matrix of APEC TEL Digital Divide Activities (Annex I) and an external stock-take of activities underway in other fora (Annex II) are attached to this document. The listings provided are merely a snapshot of activities underway in some of the major fora. This matrix and external stocktake should be updated by each TEL Steering Group prior to each TEL meeting.

Guiding Philosophy: Key common themes between all the groups, including APEC TEL include the belief that through Information and Communications Technologies (ICT), economic benefits can flow, that the provision of basic access is a crucial first step, and that human resource development is vital to help create more digital opportunities. There is a need to link in or liaise with the other APEC groups and regional/international fora on these matters.

Continuing Work Guided by the Blueprint:

The TEL worked diligently in 2000 and 2001 to pursue explanatory activities and to develop the Blueprint for Action. Going forward in 2002, the TEL notes the importance of further exchange of experience and analysis of specific projects and programs being employed to increase access for all and to ensure the populations have the skills necessary to participate in the global economy. To this end, TEL will:

- C Continue to monitor the access to and use of Internet products and services across the APEC region;
- C Continue projects already identified under the Matrix of Activities;
- C Continue to monitor and liaise with other international and regional fora and their related digital divide activities, particularly those identified in the External stocktake; and
- C Explore additional work as required, such as:
 - C to explore the policy environments needed to support emerging technologies (wireline and wireless) to meet under-served areas (urban and rural);
 - C to explore the question of consumer confidence and ways to engender trust to improve levels of Internet uptake and greater development of applications, through improving the security of information systems, e.g., authentication, PKI, privacy protections, security standards, information exchange arrangements, and education and awareness; and
 - C to heed Leaders' call to maintain a gender perspective in our work.

Matrix of TEL Activities

| TELMIN 4 Initiative | Project(s) | Steering Group/ Economy | Status at TEL25 |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Engaging the Private sector | Active partnerships for internet Access Program | DCSG – PECC | Ongoing |
| | Vendor Training Programme | HRDSG – USA | Ongoing |
| Improving network access, especially in underserved urban, rural and remote areas; | Workshop on Wireless issues to take place at TEL23 | LSG – USA | Completed; Some issues to be reviewed at LSG, and in Digital Divide Workshop at TEL25 |
| | Advanced Satellite Test-bed Project | DCSG – Japan | Ongoing |
| Assisting developing economies to reform their policy and regulatory structure to meet new environments | Regulatory Structures Project | LSG – Australia For Phase I, USA for Phases II, III | Phase II Presentation by contractor |
| Reinforcing and enhancing human resource development activities through various measures such as utilising distance learning technologies | Utilising E-Learning to Bridge the Digital Divide: Public/Private Partnership Efforts in Education | HRDSG – Singapore | Ongoing Approved at TEL25 Ongoing Completed; findings incorporated into Digital Divide Reports |
| | APII Technology Centre | DCSG – Japan | |
| | IP-based WLL for Bridging Digital Divide in Rural Area | DCSG – Japan | |
| | Telecommunication Training Programme | HRDSG | |
| | Distance Learning Pilot Project | HRDSG - Canada | |
| | Distance Learning Strategic Needs Analysis Project | HRDSG - Canada | |
| | Distance Learning Project Based on Basic Telecommunications Technology | HRDSG - Korea | |
| | IT & T manpower shortages seminar at TEL 23 | HRDSG - Hong Kong, China | |

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Promulgating knowledge and recognition of the digital divide by holding appropriate fora | Hold seminars on various aspects of this issue in conjunction with TEL 23, TEL24 and TEL25 | DCSG – USA | 3 seminars completed |
| | Prepare reports on findings to TEL, SOM, and TELMIN5 | DCSG – USA | Interim and Final report to SOM June and October 2001 |
| | Drafting of a Digital Divide Blueprint for Action | DCSG – Convenor | Endorsed at DCSG; Submitted to Plenary |
| | Report on Digital Divide Activities at each TEL Plenary | DCSG | Ongoing |
| | TELMIN5 Theme of “Leveraging Digital Opportunities to promote Common Development” | DCSG – China | DCSG approved |
| Monitoring the fair and sustainable development of the Internet in the APEC region as an integral part of the Asia-Pacific Information Infrastructure (APII) | Future work on the Internet development as discussed at TEL 22 and the formation of a coordinating group which will report to Plenary DCSG review of IITG issues | All Steering Groups will be responsible for various aspects of internet development as set out in the Chair's paper DCSG – Deputy Convenor | Internet Issues Task Group coordinating inputs Submitted report to IITG |
| Pursuing explanatory work to define concepts, to measure the extent of domestic, regional and international digital divides, and to assess economic and cultural reasons for divides with a view to develop technology neutral, pragmatic approaches to encourage greater access | Request for Information on Policies to Reduce the Digital Divide | DCSG – USA | Completed May 2001; Most economies provided reports; summaries submitted in SOM May 2001 report |
| | Study of user requirements for the integration of e-commerce systems in the APEC region | BFSG – Australia | Updated every 6 months; twice submitted to SOM in 2001; Part of Blueprint; endorsed as DCSG agenda item |
| | Statistical benchmarking of economies' Internet access through self-reporting | DCSG – USA | Updated every 6 months; on TEL website |
| | Development and Financial Resources Catalog | | |

External Stocktake 2002

1. APEC – Other Fora

Human Resource Development Working Group (HRDWG):

Symposium on IT enablement for Trainers in the New Millennium
Skills Shortages Training Needs - HRD Strategies of Multinational Enterprises

Transportation Working Group (TPTWG)

"Role of New Technologies and Inter-modal Transportation Management in Facilitating Asia-Pacific Trade"
Symposium for 2Q 2001.

Industry Science and Technology Working Group (ISTWG)

APEC Centre for Technology Foresight
APEC Virtual Centre for Environmental Technology Exchange

Electronic Commerce Steering Group

It is interesting to note that the first paragraph of the Electronic Commerce Blueprint for Action begins with

"Recognising the enormous potential of electronic commerce to expand business opportunities, reduce costs, increase efficiency, improve the quality of life, and facilitate the greater participation of small business in global commerce; "

In the report of the last meeting, held in Bangkok in July 2000, the "Co-Chair identified several broad substantive areas where the ECSG should focus its efforts:

- working toward a seamless environment for e-commerce
- human skills and resources, including assessing needs and capabilities, and
- completing the readiness assessment"

To achieve these goals would go some way to address the fundamental issues.

APEC Senior Officials (SOM)

In September, Chinese Taipei submitted a paper for consideration by Senior Officials at their third meeting (SOM III) entitled "Transforming the Digital Divide into a Digital Opportunity" in which they proposed several projects to address the Digital Divide in APEC.

The projects proposed include tailor-made training/consulting programs and experience sharing of best practices of e-commerce among member economies. Chinese Taipei has proposed that the projects commence in 2001 and that funding be sought from the TILF Fund, private sector sponsorship and individual economy sponsorship.

The initiative consists of work programs in two phases. Phase I was a symposium on information gathering, brainstorming, and networking exercise. The symposium was already successfully conducted in Taipei in late July 2001. The work programs of Phase II were endorsed at the SOM I 2002. While Phase I focused on sharing experience with regard to best practices of e-commerce, Phase II is centered on capacity building at the application level and designed to have tangible and immediate effect on improving e-commerce application. Mexico, Thailand, and Indonesia offered to co-host each of the three training programs beginning from June 2002.

Economic Leaders' Statements

2000

The following initiatives were included in the year 2000 APEC Economic Leaders' statement, "Delivering to the Community":

"We commit to develop and implement a policy framework which will enable the people of urban, provincial and rural communities in every economy to have individual or community-based access to information and services offered via the Internet by 2010. As a first step toward this goal we aim to triple the number of people within the region with individual and community-based access by 2005.

2001

In October 2001, Leaders meeting at Shanghai adopted an e-APEC Strategy. "In spite of the diversity and different developmental stages among the economies we believe that, with the efforts of all the APEC economies, the e-AEC vision will be turned into reality. This will spread the benefits of the New Economy, and revitalize economic development beyond the region." The goals of the strategy include:

- q To create an environment for strengthening market structures and institutions
- q To facilitate an environment for infrastructure investment and technology development, and
- q To enhance human capacity building and promote entrepreneurship.

The e-APEC Strategy includes a section on "Addressing the Digital Divide." The goals are:

- To transform the digital divide into a digital dividend in order for APEC economies to benefit from the opportunities presented by a networked environment; and
- To prepare APEC economies and all of our people to use the information revolution as a passport to the New Economy.

The Action Items for Digital Divide under the e-APEC Strategy are:

- Complete and adopt the TEL's Digital Divide Blueprint for Action to address digital divide issues

identified by Leaders in Brunei [2000];

- Further work to implement Osaka Action Agenda (OAA, 1995) Telecommunication and Information Common Policy Concepts in promoting diversity of content on the Internet, including cultural and linguistic diversity;
- Enhance the construction by economies of appropriate information infrastructure, including access on a community level (e.g. cyber kiosks, telecenters, community technology centers);
- Encourage economies to make greater investment in ICT education;
- Encourage the APEC Knowledge Clearing House initiative to facilitate experience sharing among developed and developing economies;
- Encourage implementation of the outcomes of the UNDP's Digital Opportunity Initiative to assist APEC economies to develop ICT strategies and comprehensive frameworks to use and deploy ICT, including:
 - Adopting policies to facilitate the spread of Internet enabled wireless communications; and
 - Promoting activities to encourage experience-sharing and practical application of ICT experience.
- Promote the APEC-wide adoption of the recommendations in the Asian Development Bank's 2001 strategy "Toward e-Development in Asia and the Pacific" to promote growth and development and reduce the uneven access to the Internet;
- Promote on-going work within APEC to identify policy attributes that support and undergird successful ICT access and rollout environments;
- Capitalize on programs relevant to the region such as the G8, Dot Force, GBDe, and the e-ASEAN initiative to create a knowledge network as a resource for examining digital opportunities and policy positions to link ongoing resources and contacts in APEC economies to expand digital capability and skills; and
- Consider development of a network of Skill Development Centers (SDCs) and programs across the Asia Pacific region, in close collaboration with the business/private sector.

Additionally, Leaders through the e-APEC strategy adopted the following access goal:

- To develop indicators of the levels of access and ensure that all groups within an Economy have access individually or through community-based services to the Internet by 2010. As a first step toward this goal APEC aims to triple the number of people within the region with individual and community-based access by 2005.

2. Other International Fora

Organisation for Economic Co-operation and Development (OECD)

The OECD is increasingly involved in the policy debate on information and communication technologies (ICTs) and infrastructures, electronic commerce and the Internet, as well as their development, applications and impacts.

The Committee for Information, Computer and Communications Policy addresses issues arising from the new "digital economy", the development of the global information infrastructure and the evolution towards a global information society.

Events include a workshop organised by the OECD's Science Technology and Industry committee on "**The Digital Divide: Enhancing Access to Information Communications Technology**", held on 7 December 2000.

Asia Pacific Telecommunity (APT)

At the Asia Pacific Summit on the Information Society, held in Tokyo Japan from 31 October to 2 November 2000, Ministers adopted the "Tokyo Declaration", which emphasised the importance of bridging the Digital Divide. The Ministers declared that they would do their best to '...enable people in the Asia-Pacific region to have access to the Internet by the year 2005 to the extent possible, including access from public facilities such as schools and post offices.'

To specify the "Tokyo Declaration", the "Action Plan" for the Asia Pacific Renaissance through ICT was adopted, which includes a number of Digital Divide initiatives as follows:

- Promotion of ICT access points;
- Implementation of pilot projects to enhance ICT literacy and to diffuse electronic commerce in rural areas;
- Promotion of the development of ICT equipment designed for minority groups; and
- Establishment of co-operation with other international bodies in activities for bridging the Digital Divide, and encouraging private sector participation.

International Telecommunication Union (ITU)

In March 2002, the ITU hosted the World Telecommunications Development Conference, WTDC-02, in Istanbul, Turkey. According to the ITU, the "WTDC-02 shall be a forum for the discussion and consideration of topics, projects, and programs relevant to telecommunication development. In this respect, WTDC-02 shall establish work programs and guidelines for defining telecommunication development questions and priorities. WTDC-02 should fix the objectives and strategies for the balanced worldwide and regional development of telecommunications, giving particular consideration to the expansion and modernization of the networks and services of the developing countries as well as the mobilization of the resources required for this purpose."

In 2003 (10-12 December in Geneva) the United Nations, with the ITU as organizer, will hold the first of two World Summits on the Information Society (the second, 2005 in Tunisia) with the broad themes proposed being:

Building the infrastructure:

- the role of telecommunications, investment and technology in creating the Information Society infrastructure and bridging the "Digital Divide"

Opening the gates

- achieving universal and equitable access to the information society
- meeting the needs of the developing world
- Information as a common public good

Services and applications

- the implications of the Information Society for economic, social and cultural development
- the implications of the Information Society for science

The needs of users

- consumer protection, privacy and security
- relevant content reflecting cultural diversity and the right to communicate
- ethics and the Information Society
- user training
- worker protection and workplace privacy

Developing a framework

- the roles of governments, the private sector and civil society in shaping the Information Society
- Information as a common public good (public domain information)
- Intellectual property rights and legal exceptions
- Freedom of expression
- Telecommunications and Internet access tariff policies

ICTs and Education

- ICTs as a lever for educational changes
- The learning environment: ICTs, teachers, learners and contents
- The need of currently employed workers

Asia-Europe Meeting (ASEM)

The Chairman's Statement from the third Asia-Europe Meeting, held in Seoul Korea from 20 to 21 October 2000, endorsed initiative to address the digital divide. In the Initiative, put forward by Korea, Leaders agreed to address work in the following areas:

- Human resource development
- Continuous education and technology training,
- Provision in both rural and urban centres of high-speed computers with Internet connections
- Establishment of public computer access points; and
- Contributing to existing national, regional and international efforts to bridge the digital gap

Group of Eight (G8)

2000

The Leaders of the eight major industrialised democracies met in Okinawa, Japan in July 2000. In their communiqué, they addressed the digital divide by recognising

"that the process of globalisation and the fast pace at which IT is advancing have engendered various concerns. We need to address such concerns so that we can contribute to greater peace of mind for all. Acting in concert, we will maximise the benefits of IT and ensure that they are spread to those at present with limited access

"In support of these goals, we commit ourselves to pursuing the aims and ambitions set out in the Okinawa Charter on the Global Information Society. We will set up a Digital Opportunities Task Force (DOT Force), which will be asked to report to our next meeting its findings and recommendations on global action to bridge the international information and knowledge divide."

A key component of the G8 strategy is to continue to achieve universal and affordable access to information and communications networks. This can be achieved through fostering market conditions that are conducive to the provision of affordable communications services, exploration of other complementary means, giving priority to improving network access, paying attention to the needs and constraints of the socially under privileged and encouraging development of new, 'user friendly' technologies.

G8 recognises that efforts to bridge the international divide crucially depend on effective collaboration among all stakeholders. With a view to integrating the efforts into a broader international approach, G8 agrees to establish the DOT Force and mandate it to actively facilitate discussions with developing countries, international organisations and other stakeholders to promote international co-operation. The prioritised areas for cooperation identified by G8 are as follows: fostering policy, regulatory and network readiness; improving connectivity, increasing access and lowering cost; building human capacity; and encouraging participation in global e-commerce networks.

Prior to the G8 Kyushu Okinawa Summit, the Government of Japan announced the "Comprehensive Co-operation Package to Address the International Digital Divide," consisting of non-ODA (Official Development Assistance) (OOF: Other Official Flows) and ODA public funding with the view to extending a total of US \$ 15 billion over five years.

2001

According to the DOT Force secretariat, "the DOT Force successfully fulfilled its mandate as set out in the Okinawa Charter on the global Information Society, adopted by Leaders at the G8 Kyushu-Okinawa Summit in July 2000. The DOT Force presented the conclusions of its work in a report and proposed a nine point action plan -- the Genoa Plan of Action -- both of which were fully endorsed by G8 Leaders at their 2001 Genoa Summit. The DOT Force original membership includes stakeholders from G8 and developing country governments, private and not-for-profit sectors, and international organizations.

The current challenge of DOT Force members and new partners is to implement the Genoa Plan of Action. A framework for Implementation is serving as the basis for carrying the work forward. The framework proposes the establishment of Implementation Teams to carry on the necessary planning and operation work in each of nine priority areas of the Genoa Plan of Action. The Framework identifies key concrete initiatives to be developed. Italy and Canada, respectively President of the G8 in 2001 and 2002, have been tasked to facilitate the implementation process. As requested in the Genoa Communiqué, a progress report will be prepared for G8 Leaders' review at the Kananaskis Summit in June 2002.

Association of South East Asian Nations (ASEAN)

e-ASEAN Initiative

Launched by the ASEAN Leaders during the ASEAN Summit in Manila in November 1999, an e-ASEAN Framework Agreement aims to develop a broad-based and comprehensive action plan including physical, legal, logistical, social and economic infrastructure needed to promote an ASEAN e-space, as part of an ASEAN positioning and branding strategy. An e-ASEAN Task Force (a joint private-public task force to provide strategic direction to e-ASEAN) and an e-ASEAN Working Group (a senior level government working group to implement and drive the e-ASEAN initiative) were also set up. Five key areas, each coordinated by a Task Group, are as followed:

- a. **e-Society and Capacity Building:** ASEAN communities are coordinating and developing strategies to narrow the digital divide within ASEAN through capacity building and human resource development. This involves focusing on the facilitation of SME training and education; human resource development through schools, communities and workplaces; and setting up competency centers and incubation centers. A number of other capacity building initiatives are developed, e.g. a feasibility study on narrowing the digital divide, info-sharing seminars on e-Commerce applications, IT Roadshows, and an ASEAN e-readiness study.
- b. **Facilitation of the Growth of e-Commerce:** This Task Group facilitates the development and adoption of e-commerce laws and policies based on international norms that promote trust and confidence of the general population in e-commerce. To date, a Common Reference Framework for e-Commerce Legal Infrastructure has been published to facilitate member states' efforts to enact e-Commerce legislation. Discussions are also underway to develop and establish an ASEAN electronic payment standards and policy framework to facilitate secure regional electronic transactions, payments and settlements.
- c. **Common Marketplace:** This Task Group is working on liberalising trade and promoting investments in ICT products and services. Some progress was made by the technical trade and investment committees dealing with the ASEAN Free Trade Area (AFTA) to bring forward the liberalisation timeframes for a number of ICT products, services and investments by end-2002. Moreover, the ASEAN Telecommunications Ministers signed an ASEAN Sectoral Mutual Recognition Arrangement (MRA) for Telecommunications Equipment in July 2001. To promote transparency and to facilitate ICT trade and investments, e-ASEAN project has been initiated to create an on-line database on member countries' ICT policies and regulations, and trade and investment liberalisation schedules.
- d. **e-Government:** This Task Group is in charge of promoting the use of ICT to improve the provision and delivery of a wide range of Government services and transactions online by ASEAN Governments. An ICT Training Program for Senior ASEAN Government Officials has been held to raise awareness on e-Government development.
- e. **ASEAN Information Infrastructure (AII):** The AII will link up the National Information Infrastructures (NII) of ASEAN countries, as well as with other major ICT efforts in the world. Key initiatives include discussions to develop a Technical Architecture framework to enable interoperability of information infrastructures, systems and applications across ASEAN. Discussions are also ongoing towards optimizing intra-ASEAN Internet traffic within the region through the ASEAN Regional Internet Exchange (ARIX) initiative.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

The UNESCO Development of Communications Programme involves providing communities living in disadvantaged rural and urban areas with the means to participate in development.

The General Information programme of UNESCO concentrates on the 'content' aspects of the Information Society, including information access, training and ethical issues.

United Nations ICT Task Force (UN ICT Task Force)

<http://www.unicttaskforce.org/>

In March 2001, the United Nations Economic and Social Council asked the Secretary-General to establish an Information and Communication Technologies (ICT) Task Force. The UN ICT Task Force addresses the global policy issues underlying the challenge of creating digital opportunities and seeks to coordinate the response of the UN Agencies involved in "ICT for development" related issues. Building on the Genoa Plan of Action, the ICT Task Force complements the implementation work that DOT Force Members and their partners will undertake this year by drawing together the key UN Agencies, and reach out to a broader

audience through its network. Similar to the DOT Force, work at the UN ICT Task Force is being carried out by Working Groups that are responsible for developing action-oriented initiatives.

Attachment D-III

MONITORING INTERNET ACCESS

APEC GOALS: *To triple Internet access between 2000 and 2005*

To ensure all groups within an economy have access to the Internet by 2010

Internet Access in the APEC Region

| Economy | # Users 1999+ | % of Population 1999 | # Users 2000 | % of Population 2000 | # Users 2001 | % of Population 2001 |
|-----------------|------------------|-------------------------|----------------------------------------|-------------------------|-----------------------------|-------------------------|
| World | 304.46 million* | 5%* | 407.1 million* | 7%* | 513.41 million* | 8.5%* |
| APEC | 155.032 million | | 258.22 million | | 335.6 million | |
| Australia | 6 million+ | 31.7%+ | 6.9 million** | 33% Households** | 10.6 million++ | 55.96% ++ Households |
| Brunei | 25,000+ | 7.8%+ | | | | |
| Canada | 11 million+ | 36.1%+ | | 51.3% Households** | 17.05 million++ | 45.7%++ |
| Chile | 625,000+ | 4.2%+ | 1.75 million+ | 11.6%+ | | |
| China | 8.9 million+ | 0.7%+ | 22.5 in 2000** | 2%** | 33.7 million** | 2.66%** |
| Hong Kong China | 1.73 million+ | 25.8%+ | 3.46 million+ | 48.7%++ | 4.18 million++ | 49% Households** |
| Indonesia | 900,000+ | 0.4%+ | 1.9 million (APJII) | 0.71% (APJII) | 4.2 million (APJII) | 1.8% |
| Japan | 27.08 million** | 21.4%+ | 47.08 million** | 37.1%** | 65.97 million subscribers** | 52.2% |
| Korea | 10.86 million+ | 23.2%+ | 19.04 million subscribers (12/00)** | 40.27% (12/00)** | 24.38 million** | 56.6%** |
| Economy | # Users 1999 | % of Population 1999 | # Users 2000 | % of Population 2000 | # Users 2001 | % of Population 2001 |
| Malaysia | 2.5 million+ | 11.5 %+ | 3.7 million+ | 16.98%+ | | |

| | | | | | | |
|------------------|---------------|--------------------|------------------------|-------------------------------|------------------------------------------------------|---------------------------|
| Mexico | 1.82 million+ | 1.9%+ | | | 3.5 million**; 6.7 million have access(6/01)++ | 3.36% (7/01)+ |
| New Zealand | 700,000+ | 18.4%+ | 1.49 million++ | 39.03% ++ | | |
| Papua New Guinea | 2,000+ | 0.04%+ | 135,000+ | 2.74%+ | | |
| Peru | 400,000+ | 1.6%+ | 800,000 ** | 3.2% ** | 2 million ** | 8% ** |
| The Philippines | 500,000+ | 0.7%+ | 2 million+ | 2.46%+ | | |
| Russia | 1.5 million+ | 1.02%+ | | 6.3% (8/00)* (Monitoring.ru) | 4.2 million (8/01, Comcon/Europemedia) | |
| Singapore | 950,000+ | 24.4%+ | 1.85 million (11/00)++ | 44.6% ++ | 2.23 million (12/01)++; 1.918 million subscribers ** | 47.7%;** 50% Households** |
| Chinese Taipei | 4.54 million+ | 20.6%+ | 6.3 million** | 28% ** | 7.82 million (12/01)** | 35% (12/01)** |
| Thailand | 800,000+ | 1.3%+ | 1.2 million+ | 1.96%+ | 3.5 million ** | 5.1% ** |
| USA | 74.1 million+ | 26.2% Households** | 123.6 million (2/00)** | 45.3% 2/00++ | 143 million users** | 54%, 50.5% households** |
| Vietnam | 100,000+ | 0.13%+ | 166,616** | 0.02% | | |

Additional APEC Internet Access Statistics

| Economy | # of PCs per 1000 | Wireless Internet Subscribers | Residential Broadband Subscribers | % of Females Online 2000 | % of Females Online 2001 |
|--------------|---------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------|-----------------------------|
| APEC | | | | 19.477 million | |
| Asia Pacific | | 30 million (12/00, Intermarket Group); 34.4 million mobile Internet users (12/00, Dataquest) | | | |
| Australia | 469.2 (1999)***, 56% households (6/01)** | | 65,000 (2000)+++; 312,000 (9/01)++ | 47% ** | 48% (05/01)++ |
| Brunei | 62.1(1999)*** | | | | |
| Canada | 360.8 (1999)*** | | 1.384 million (DSL & Cable) (2000)++ +; 1.7 million (6/01, Kinetic Strategies) | | 51% (05/01)++ |
| Chile | 66.6 (1999)*** | 10.5% Web-enabled phone penetration (6/01, eMarketer) | 22,000 with BB Internet access (4/01, Dataquest) | | |
| China | 12.2 (1999)***, 12.5 million PCs online (12/01)** | 1.18 million wireless Internet appliance users** | | | 40% of all users (12/01) ** |

| | | | | | |
|-----------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|
| Hong Kong China | 297.6 (1999)***1.25 million users, 61% households (2001)** | 1.2 million (11/01, IDC) | | | 44% (05/01)++ |
| Indonesia | 9.1 (1999)*** | | | | |
| Japan | 286.9 (1999)*** | 48.50 million subscribers(12/01)** | 635,000 (DSL & Cable) (2000)+++; 1.33 million cable modem subscribers (1/02)**; 2.08 million ADSL subscribers (2/02)** | 37% of Internet users (6/00, Media Matrix) | 41.4% (7/01)++ |
| | | | | | |
| Economy | # of PCs per 1000 | Wireless Internet Subscribers | Residential Broadband Subscribers | % of Females Online 2000 | % of Females Online 2001 |
| Korea | 240(2000) ** | 23.874 million (12/01) ** | 7.8 million households (12/01)** | 38.6% ** | 9.6 million users, 50.2% (12/01)** |
| Malaysia | 68.7 (1999)***; 65% computer access, 5% Households** | | | | |
| Mexico | 44.2 (1999)*** | 9.8% Web-enabled phone penetration (6/01, eMarketer) | 15, 000 (DSL & Cable) (2000)+++; 20,000 (4/01, Dataquest) | | 46% (7/01)++ |
| New Zealand | 328 (1999)*** | | 10,334 (DSL & Cable) (2000)+++; | | 47.5% (7/01)++ |
| PNG | | | | | |
| Peru | 38 (2000) + | 1793 (06/01) ** | 3442 cable (06/01) ** | | |
| Philippines | 16.9 (1999)*** | | | | |
| Russia | 37.4 (1999)*** | | | | 40% of all users (8/01, Comcon/ Europedia) |
| Singapore | 436.6 (1999)***; 66% Households (9/01)** | | | | 44% (7/01)++ |
| Chinese Taipei | 327 (3/01)** | | 1.13 million (DSL & Cable); (0.92 million DSL, 0.21 million Cable) (12/01) **. | 50.5% (09/00) | 45.9% (09/01) ** |
| Thailand | 22.7 (1999)*** | | | 49% ** | |
| | | | | | |
| Economy | # of PCs per 1000 | Wireless Internet Subscribers | Residential Broadband Subscribers | % of Females Online 2000 | % of Females Online 2001 |
| USA | 510.5 (1999)***; 60.2 million Households or 56.5% Households; 174 million users, or 66% of population (2001)** | 4.8% of households have internet-enabled cell phones or pagers.(02/02)** | 5.2 million (residential and small business) (7.1 million total) (8/01)**; 1% of all individuals, 20% of all Internet users (2/02)** | | 53.8% ** |
| Vietnam | 8.9 (1999)*** | | | | |

KeySources:
+ = ITU
* = Nua Internet Surveys
++ = Nielsen
** = Economy's information released officially
+++ = OECD Digital Divide 2001 reports
*** = World Bank

CONTRIBUTION OF THE DCSG TO THE MATRIX OF TEL ACTIVITIES

[Based on the Cancun Declaration, TELMIN4]

| Objectives | Task Areas | Current Projects and Activities |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| General Objectives | | |
| <p>1. TEL Self review</p> <ul style="list-style-type: none"> Review the functions, structure and activities of TEL in light of a converged information communications environment, including, where appropriate, widening the scope of its participation and functions | <ul style="list-style-type: none"> Review functions, structure and activities of TEL | |
| <p>2. Business/Private Sector Participation</p> <ul style="list-style-type: none"> Further encourage the participation of the business/private sector in its work | <ul style="list-style-type: none"> Encouraging business/private sector participation | <ul style="list-style-type: none"> Digital Divide Blueprint for Action implementation – DCSG – ongoing |
| <p>3. Outreach to other Organisations</p> <ul style="list-style-type: none"> Foster closer ties with regional and international groups and organisations to contribute to global debate on convergence and infocomm issues | <ul style="list-style-type: none"> Outreach to other groups Encourage global debate on infocomm issues. | <ul style="list-style-type: none"> Digital Divide Workshop – Outreach with OECD, ITU – DCSG – ongoing |
| Access Objectives | | |
| <p>4. Asia Pacific Information Society (APIS)</p> <ul style="list-style-type: none"> Accelerate the realisation of the Asia Pacific Information Society (APIS) by expanding co-operative development projects undertaken by the four pillars of the TEL. | <ul style="list-style-type: none"> Encourage cross-cutting development projects among the 4 steering groups Improve linkages between the activities of the 4 steering groups. | <ul style="list-style-type: none"> APII Co-operation Centre (Korea, DCSG – ongoing) |

5. Digital Divide

- Bridging the digital divide at the domestic, regional and international levels.

- Engaging the private sector in this effort
- Improving network access, especially in underserved urban, rural and remote areas
- Assisting developing economies to reform their policy and regulatory structure to meet new environments
- Reinforcing and enhancing human resource development through measures such as distance learning technologies
- Promulgating awareness of the digital divide by holding appropriate fora

- Monitoring the fair and sustainable development of the Internet in the APEC region

- Pursue explanatory work to define concepts, to measure the extent of domestic, regional and international digital divides, and to assess economic and cultural reasons for divides with a view to develop technology neutral, pragmatic approaches to encourage greater access.

- Encourage private sector participation
- Improve network access especially in rural areas
- Assist developing economies in reforming their policy and regulatory structure
- Reinforcing and enhancing human resource development through measures such as distance learning technologies
- Promulgating awareness of the digital divide by holding appropriate for a
- Monitoring the fair and sustainable development of the Internet in the APEC region
- Further study into defining concepts and measurements on the digital divide
- Study into the economic and cultural causes of the digital divide

- *Digital Divide Blueprint for Action* completion (DCSG – ongoing implementation)

- Active partnerships for internet Access Program (PECC, DCSG – ongoing)
- Advanced Satellite Test-bed Project (Japan, DCSG – ongoing)
- APTI Technology Centre (Japan, DCSG – ongoing)
- IP-based WLL for Bridging Digital Divide in Rural Area (Japan, DCSG – approved at TEL25)
- Virtual Environments for Manufacturing and Training (Singapore, DCSG – ongoing)
- Hold seminars on various aspects of Digital Divide at TEL 23, 24 and 25 (USA, DCSG – completed)
- Prepare reports on findings to TEL, SOM, and TELMIN5 (USA, DCSG – interim and final report to SOM June and October 2001)
- Report on Digital Divide activities at each TEL Plenary (DCSG Convenor – ongoing)
- TELMIN5 Theme of “Leveraging Digital Opportunities to Promote Common Development” (China, DCSG)
- Review of IITG issues (DCSG – ongoing)
- Request for Information on Policies to Reduce the Digital Divide (USA, DCSG – completed May 2001; economy summaries submitted to SOM)
- Statistical benchmarking of economies’ Internet access through self-reporting (USA, DCSG – ongoing)
- Development and Financial Resources Catalogue (USA, DCSG – ongoing)

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| <p>6. Accessibility</p> <ul style="list-style-type: none"> Support additional initiatives to enhance access to schools, hospitals and SMEs to ensure APEC communities people and businesses benefit as a whole | <ul style="list-style-type: none"> Increase access to schools, hospitals and SMEs by way of : <ul style="list-style-type: none"> Infrastructure Human resource development | <ul style="list-style-type: none"> APBioNet-Asia Pacific Advanced Network Project (DCSG – completed) |
| <p>7. Infrastructure Development</p> <ul style="list-style-type: none"> Promote collaboration with the private sector to expand their participation in infrastructure investment to upgrade access to networks, especially in rural and under-served areas Explore refinement of universal access policies Encourage competition in the extension of networks Consider the opportunities and benefits arising from wireless technology in the expansion of both basic telephony and convergent services | <ul style="list-style-type: none"> Promote collaboration with private sector in infrastructure investment Study into refining universal access policies Study on applications of wireless technology | <ul style="list-style-type: none"> Digital Divide Workshop #3 on Meeting Under-Served Needs (DCSG – completed) APII IPv6 R&D Testbed Project (Japan, DCSG – approved at TEL 25) Optimal Topology of Test beds and Simplified Commercial Networks in APEC (Korea, DCSG – ongoing) Digital Divide Workshop #3 on Meeting Under-Served Needs (DCSG – completed) IP-based WLL for Bridging Digital Divide in Rural Area (Japan, DCSG – approved at TEL25) |
| <p>8. Information Sharing</p> <ul style="list-style-type: none"> Encourage information sharing and collaboration on electronic government initiatives, spectrum access issues, Internet services and critical information protection. | <ul style="list-style-type: none"> Create repositories of information Encourage discussion through appropriate fora | <ul style="list-style-type: none"> Spectrum Policy and Management Database (USA, DCSG – ongoing) Development and Financial Resources Catalogue (USA, DCSG – ongoing) APII IPv6 R&D Testbed Project (Japan, DCSG – approved at TEL 25) |

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| <p>9. ICAIS</p> <ul style="list-style-type: none"> • Foster discussion between private/business sector and government parties on appropriate means to assess and reward the value of products and services exchanged in the provision of converged Internet services among APEC economies. • TEL Steering Groups should encourage attention to the development of Internet Systems and business models from the perspectives of liberalisation, business facilitation, development co-operation and human resource development. • Continue to discuss the international development of the Internet, including charging arrangements, noting the initial suggestions in the proposals made by the ICAIS Task Force • The TEL should discuss the kind of arrangements that will support high speed bandwidth connectivity in the APEC region. • The work should address the relationship between charging arrangements and return on investments as it reflects the development of high-speed bandwidth connectivity. It should also consider the application of the APEC Principles of Interconnection to Internet services. • Progress should be recorded at each TEL meeting • TEL should report as a matter of urgency, with appropriate recommendations on these issues to the next TELMIN | | <ul style="list-style-type: none"> • Review of IITG issues (DCSG – ongoing) <p>[Korea proposal on Traffic Measurement (Korea, DCSG – approved in principle at TEL25)]</p> |
| | | |
| EMPOWERMENT OBJECTIVES | | |

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>10. HRD in TEL Projects</p> <ul style="list-style-type: none"> Encourage the development of APEC's human resources in the digital economy, emphasising the encouragement of life long learning and the training of individuals to be info-communications professionals. To give priority to the development of skills to assist APEC members in <ul style="list-style-type: none"> establishing pro-competitive policy and regulatory environments and develop skills standards to support e-commerce Encouraging consideration of skills retention strategies for businesses reliant on information and communications technology. | <ul style="list-style-type: none"> Promote lifelong learning initiatives Promote skills development in the areas of policy and regulation Develop skills standards to support e-commerce. Encouraging the consideration of skills retention strategies. | <ul style="list-style-type: none"> Digital Divide Workshop #1 (USA, DCSG – completed, TEL23) Telework Manual (Japan, DCSG - completed) |
| <p>11. Distance Learning Tools</p> <ul style="list-style-type: none"> Encourage the utilisation of distance learning tools to bridge the development gap. Such efforts should complement the efforts of other international organisations, such as the ITU Centre of Excellence initiative | <ul style="list-style-type: none"> Foster the development and promulgation of distance learning tools Work with other international organisations, especially ITU CoE | |
| Globalisation/Mobilisation | | |
| <p>12. Liberalisation of Telecommunications Markets</p> <ul style="list-style-type: none"> Keep up momentum of market liberalisation keeping in mind any initiatives that might emerge from talks at the WTO Focus on practical co-operative efforts that encourage greater competition in communications services and address non-tariff barriers to trade. Increasing need for effective competition policies to be in place by:- <ul style="list-style-type: none"> Studying the impact of regulatory, | <ul style="list-style-type: none"> Periodic review and examination of market liberalisation processes discourage non-tariff barriers to trade Promote competition through effective competition policies | |

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| <p>policy and technological environments on the delivery of and access to convergent services,</p> <ul style="list-style-type: none"> • Encouraging discussion on promoting diversity in the supply of information and access to it, • Promoting dialogue on possible incentives to improve business sector participation in the supply of communications goods and services, and • Supporting competitive markets in the domestic and international telecommunications and information industries. | <ul style="list-style-type: none"> • study impact of regulatory, policy and technological environments on the delivery of and access to convergent services • Encourage discussion on diversity in the supply of and access to information, • Promote dialogue on possible incentives to improve business sector participation in the supply of communications goods and services | <ul style="list-style-type: none"> • Techno Economic Modelling Project (Australia, DCSG – completed) |
| <p>13. Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment (MRA)</p> <ul style="list-style-type: none"> • Accelerate the pace of implementation of the MRA • Outreach to other regional groupings and organisations interested in developing similar arrangements. | <ul style="list-style-type: none"> • Further work on MRA • Outreach to other regional groupings | |
| <p>14. E-Commerce</p> <ul style="list-style-type: none"> • Ensure that policy and regulatory environments better foster the uptake of e-commerce, facilitate the electronic delivery of services and enhance the development of e-commerce infrastructure. | <ul style="list-style-type: none"> • Encourage dialogue on policy and regulatory aspects of e-commerce • Provide assistance to economies in implementing policies and regulations favourable to e-commerce. | <ul style="list-style-type: none"> • Cross Country Smart Card Based Secure Electronic Commerce Project (Singapore, DCSG – ongoing) |
| <p>15. Electronic Authentication</p> <ul style="list-style-type: none"> • Encourage working level co-operation with the OECD on Electronic Authentication issues. | <ul style="list-style-type: none"> • Build ties with OECD on Electronic Authentication issues | |

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| <p>16. Interconnection</p> <ul style="list-style-type: none"> • Encourage TEL to continue discussions on the APEC Principles of Interconnection on a voluntary basis. • Consult with member economies on the need for further discussion on interconnection and, if appropriate, to continue work in a manner that is collegial and of mutual benefit. | <ul style="list-style-type: none"> • Promote dialogue among members on whether there is a need to continue work on interconnection | <ul style="list-style-type: none"> • APII Test Bed Project for Interconnectivity and Interoperability (Japan, DCSG – completed) • APII IPv6 R&D Testbed Project (Japan, DCSG – approved at TEL25) • APII Testbed Project (Korea, DCSG – ongoing) |
| <p>17. Interoperability</p> <ul style="list-style-type: none"> • More attention to be paid to user requirements for open standards and systems to support interoperability. | <ul style="list-style-type: none"> • To pay attention to work into open standards and systems to support interoperability. | <ul style="list-style-type: none"> • APII Technology Centre (Japan, DCSG – ongoing) • APII Test Bed Project for Interconnectivity and Interoperability (Japan, DCSG – completed) • APII IPv6 R&D Testbed Project (Japan, DCSG – approved at TEL25) |
| <p>Reinventing Policy</p> | | |
| <p>18. Regulatory and Policy Challenges</p> <ul style="list-style-type: none"> • Urge TEL to adopt a co-operative approach to discussing new regulatory and policy challenges presented by issues such as convergence, market liberalisation and the implementation of the WTO Agreement on Basic Telecommunications. • Importance of surveying possible regulatory and policy approaches to accommodate convergence | <ul style="list-style-type: none"> • To promote discussion on new policy and regulatory challenges • To study regulatory and policy approaches to convergence | <ul style="list-style-type: none"> • Techno Economic Modelling Project (Australia, DCSG – completed) |
| <p>19. Policy and Regulatory Dialogue</p> <ul style="list-style-type: none"> • Encourage greater dialogue among policy and regulatory officials and, where appropriate, between officials and business sector. | <ul style="list-style-type: none"> • Encourage dialogue among regulatory and policy officials • Encourage dialogue between officials and business/private sector | |

Human Resources Development Steering Group (HRDSG)

1. OPENING REMARKS

At the start of the HRD Steering Group meeting held on March 14, at the Melia Hotel, Hanoi, Socialist Republic of Viet Nam, the new Convenor of the HRDSG, Dr. Inuk Chung, Senior Research Fellow at KISDI, Korea, made an opening remark and then introduced the new Deputy Convenor, Mr. Shan-Hsin Tsao from Chinese Taipei. The Convenor acknowledged the leadership of the former Convenor Professor Ma Yan and asked the Steering Group members continued support to the Group activities. After preliminary introduction, the draft Agenda was presented for review and adoption.

2. REVIEW AND APPROVAL OF THE AGENDA [telwg25/hrdsg/00 rev] and [Attachment 1]

The draft agenda [telwg25/hrdsg/00 rev] was reviewed and the revised agenda [Attachment 1] was adopted with inclusion of the presentation of (i) information of SOI-Asia project for Bridging Digital Divide in Asia-Pacific Area from Japan in Agenda item 8: Other Business. Later, member economies agreed to include (ii) the presentation of concept of the e-University for e-Government from Professor Ma, on behalf of Professor Obi and (iii) discussion of a project proposal for a Workshop from Canada, Overview of IPv6: Bridging the Digital Divide in Agenda item 8: Other Business, as well.

3. PROGRESS AND STATUS REPORTS ON PROJECTS

3.1. APEC TEL Interconnection Training Project: Australia [hrdsg/01]

Australia made a progress report on this project which will assist APEC member economies to develop effective interconnection arrangements to support the development of the telecommunications services market. Australia briefly described the planned outputs and phases of the project and asked inputs from member economies. Facilitators responsible for managing the project to its conclusion and organizing the training course, engaging speakers, establishing the web site and writing the final report will be engaged starting at the end of March and the web site will be available by the end of April. Training course targeting senior level government officials as well as decision makers from industry will be held during May ~ June 2002. The 'wrap up' report from the course facilitator will be presented to the Project Overseeing Committee and the APEC Secretariat by end of September 2002. Then, Australia sought advice of the HRDSG to identify appropriate venue and time for the training course and in response Thailand expressed interest to host one of the workshop for the project and request to further discuss for this issue. Australia thanked the offer and welcomed the suggestion.

3.2. E-Commerce Skills Standard Project: Australia [hrdsg/02]

This Skill Standards project is to facilitate global need for the skill standards and framework for rapidly expanding technology and business environment for E-commerce. This self-funded project by Australia, with participation from the Philippines, China, and Indonesia and other interested economies, aims to provide a framework and benchmarks to facilitate the uptake of e-commerce. For this, a workshop is planned in May with participants from academics, industry, and government officials. 3 member economies, Thailand, Viet Nam and PNG showed interest for this event and more financial support for the workshop will be welcomed for further participation.

3.3. MRA-HRD Training Design Project and Training Delivery Project: Canada

Canada reported the progress for the two projects designed to follow each other. The first project, MRA-HRD Training design project has been completed and hence submitted the final report to TEL 23. The second project was making some progress in the stage of

tendering of RFP in the very near future.

3.4 APEC Distance Learning Pilot Project: Canada and

3.6 Distance Learning Training Course Project: Canada

Canada mentioned that these projects were the first of any APEC project developed to deliver online training courses. The projects are now completed.

3.5 Distance Learning Strategic Needs Analysis Project : Canada [Final Report]

Canada reported that this project has been completed and was initially scheduled to submit the final report to TEL 24. However, due to unexpected last year's September 11 event, this final report was presented to this TEL 25. The presentation highlighted a number of goals of this project including to analyze the online learning needs and prepare a set of strategies for the HRDSG designed to meet those needs as well as the needs identified by the Ministers at TELMIN4 and to provide the HRDSG with the opportunity to discuss and choose the strategies it feels most appropriate.

In the report Canada expressed that one of the mechanisms used to express a human resource development need is a workshop proposal and drew our attention to the fact that most workshops are generally initiated by Steering Groups, Task Forces, or Sub-groups and not by the HRDSG. Also, findings of the project such as the training methods preferred and the topics that HRDSG should focus on in the future were reported. As for the HRDSG topics that should be focused in the future convergence; interconnection issues; digital divide ranked the top three most supported courses. There were also strategy recommendations in the Final report. Recommendation 1 requires HRDSG to establish a project area priority list in conjunction with the other Steering Groups, Recommendation 2 indicates that HRDSG should conduct regular workshops in proposal writing and the third recommendation encourages HRDSG to establish a project development sub-committee to encourage the development of proposals in project priority areas. The fourth, fifth and sixth recommend HRDSG to seek to establish more two-day regional workshops addressing priority areas, to establish an online learning sub-committee to help telecommunications professionals access courses that already exist and to identify new course development to be supported by the HRDSG and to work closely with the TEL Chair and Steering Group convenors to lend assistance in developing pre-TEL workshops, respectively.

HRDSG thanked Canada for a very comprehensive and thorough report and supported the strategy recommendations. Based on strategy recommendation, Canada, Australia, China, and Thailand would like to join in the project development sub-committee and Hong Kong China, Australia, China, and ITU expressed willingness to serve on the online learning subcommittee. Singapore will also look into possibility to serve one of these subcommittees.

3.7 Centre of Excellence-Asia & Pacific: ITU-D [hrdsg/14]

CoE gave a brief description of the background of the ASP CoE and its Steering Committee and the mission vision of ASP CoE. Some examples of completed and on-going ASP CoE projects were introduced. Examples of project to be implemented in 2002 have also been highlighted. Also there were two (2) possible fund seeking proposals of projects, which sought APEC TEL's joint efforts - Training of Trainers for Case Stud/e-learning and Training on e-government in Association with Universities. However, there were some concerns raised by HRDSG on fund seeking procedures for observers and discussed on ways to putting forward a proposal as a participant with member economy taking the initiative of the proposal.

3.8 APEC Distance Learning Project on Telecommunications Technology: KOREA. [hrdsg/05]

Project proposal for this project asking for APEC fund of US\$19,000 was submitted at the 23rd Meeting held in Canberra, Australia and received approval from BMC in July 2001. The overseer to this project is the APII Cooperation Center and the contractor, the KT HRD Center. The contract for the project was

signed on 11 December 2001 between the APEC Secretariat and the contactor. Korea will deliver high-speed information network technology and IMT-2000 Technology courses. Currently it is in the phase of drawing up the storyboards of all the textbooks by 8 SMEs from Jan. 2002 and April.

3. 9 Human Resource Development Program: KOREA [hrdsg/06]

Korea reported the progress of its three self-sponsoring human resource development programs, “International Telecom Human Resource Training Program”, “APT Study Visit and Training Program”, and “Fellowship Program for Next Generation Telecom Leader”. Korea reported the aim of the programs which include, to exchange experiences on technologies and policies related to mobile telecommunication including CDMA and IMT-2000 and share application method on the newly emerging economic system of e-commerce. Approximately 276 people from APEC member economies participated in the program.

3. 10. Utilizing e-Learning to Bridge the Digital Divide: SINGAPORE

Singapore reported that this was one of a number of presentations made in the previous meeting.

3. 11. Vendor Training Project: USA [hrdsg/08]

The progress report on vendor training material database was submitted with no presentation.

3. 12 New Govt-Univ-Industry Collaboration: JAPAN PECC [hrdsg/03]

Due to Japan PECC’s non-presence in the meeting, Professor Ma Yan made a presentation of this document on behalf of Japan PECC. He also reported that, based on this document, it is currently being developed as a potential project proposal to be submitted in the next TEL meeting.

3. 13 APEC TEL Gender Issues: CANADA and PHILIPPINES

Canada reported that it is a closed project but seeking for broader work is in process.

4. INPUT FOR TELMIN5

4.1 Review of HRDSG Projects and Activities [hrdsg/10]

Based on the information by TELWG Chair’s Office, HRDSG reviewed those projects and activities in the list to check the current status of these. The Convenor suggested this exercise to find out not only the current situation of these projects and activities but also figure out new and possible input to the matrix of TEL activities for TELMIN5. The member economies clearly identified the nature, status of projects in the list and the Convenor will make correction of this documents based on this new information.

4.2 Reviews of Matrix of TEL Activities [Plen/12] and New inputs from HRDSG

With the consent of HRDSG, the Convenor will update the Matrix of TEL Activities, which was made based on the Cancun Declaration in the TELMIN 4, for the upcoming TELMIN5. This revision and update, based on Review of HRDSG Projects and Activities in 4.1, is expected to clearly identify the current projects and activities as well as the degree of implementation of objectives and task areas in the Matrix by the HRDSG.

5. DISCUSSION IF ISSUES RAISED FOR HRDSG WITH OTHER STEERING GROUPS

Professor Ma Yan conveyed the request from IITG for cooperation of HRDSG for his collection of information on internet charge and usage.

Mr. Steve Orlowski, the Point of Contact of the e-Security Task Group, gave a few point of the following documents and asked the cooperation from the HRDSG.

5.1. Critical Information Protection Awareness: Raising and Education Requirements [estg/18]

The purpose of this project is to address the shortage of skills in, and the lack of awareness of, information security among both information and communication technology (ICT) and business professionals through increased education. This is a joint project by the United States and Australia to make available education modules on computer ethics/behavior awareness, literacy, training, and education to the APEC economies for use in programs at the high school through postgraduate levels. Since implementation, there were over 1,500 individual 'hits' on the site that browsed more than the 'surface' pages and 218 individuals have downloaded information from the site.

5.2. What is the Information Technology Engineers Examination? [estg/06]

Information Technology Engineers Examination was established in 1969 to develop software engineers and spread the knowledge and skills of information technology and in 1970 it was designated as a national examination. This examination is used since it was established as the goal of competency development that IT engineers should achieve as well as a measure that can be used to make an objective assessment of knowledge and skills acquired in the area of information technology and the number of applicants for the examination each 800,000 a year and it is on the increase.

Some Asian member economies, especially, Thailand, the Philippines and Korea, are showing an increasing interest in the examination and ESTG has proposed that economies be invited to provide details of any IT security skills accreditation schemes in their economies.

5.3. Human Resource Development in IT Security [estg/07]

Japan reported on the current problems of HRD in IT Security, its required skills and efforts of the Japanese government in this regard. Efforts made by the Japanese government were highlighted including the training of technical personnel with high-level IT security expertise in the U.S. and mutually recognizing the qualification systems between foreign countries that have similar systems.

6. ACTIVITY AND WORKSHOP IN TEL25

6.1 The Project Development Workshop: APEC Secretariat [hdrws/03]

This Workshop, done by the APEC Secretariat on Wednesday, March 13, has been proposed by the HRDSG in TEL 24 as an educational purpose for the TEL members. Mr. Geoffrey Woodhead, Director(Finance) of APEC Secretariat, made a presentation on necessary procedures and major points when to write project proposal, seeking funds from APEC. The Convenor made a point that this Workshop was a very helpful to understand procedures and thus it would be of great help to all TEL members if it would be held on regular basis, as made in strategy recommendation of the Final Report on Distance Learning Strategic Needs Analysis Project.

7. INFORMATION ITEMS

7.1 PTIT with the mission of HRD for Post and telecommunications Sector: Viet Nam [hrdsg/07]

Mr. Mai Khanh Nam from the Post and Telecommunication Institute of Technology(PTIT) of Viet Nam made a presentation on PTIT's functionalities and education and training courses, R&D, and international cooperation aspects. Furthermore, he introduced the distance learning project between Waseda University and PTIT, as well as VNPT's project on distance learning and international cooperation project on graduate and post-graduate education.

7.2 E-learning Implementation as a Strategic Solution to Indonesian Human Resource Development: Case: TELKOM [hrdsg/11]

Indonesia submitted this document for the reference.

7.3 Human Capacity Building for Workforce in the Field of Information Communications Technology and the Facilitation of Human Resources Exchanges:

APEC HRDWG [hrdsg/12] and [hrdsg/13]

The Lead Shepherd of the Human Resource Development Working Group (HRDWG) in APEC, Dr. Jeong-taik Lee, made a presentation on the paper on “Human Capacity Building for Workforce in the Field of Information Communications Technology and the Facilitation of Human Resources Exchanges.” In his presentation, he pointed out the significance of building high qualified and adaptable human capital in the field of ICT and linkage of labor and education markets. Furthermore, he stressed the aspect that APEC leaders and ministers have emphasized the importance of joint fora activities. With this into consideration, he proposed this as a joint project between HRDWG and TELWG, with some other fora, and asked support from the TELWG through the HRDSG.

The member economies in the HRDSG commended his effort to make this proposal and understood the importance of horizontal cooperation between working groups in the APEC. However, despite some merit of this possible joint project, some member economies expressed the concerns for the exact scope and nature of support from the TELWG through the HRDSG to this project and procedural matters for a joint project. After lengthy discussion, the HRDSG came to conclusion that we need more discussion on this proposal for the possible cooperation in the future.

8. OTHER BUSINESS

8.1 Convenorship Arrangements

The Convenor announced that the second Deputy Convenor has been nominated and in the process of response from the designated member economy. Once that nomination is confirmed, it will be announced in due course.

8.2. Information of SOI-Asia project for Bridging Digital Divide in Asia-Pacific Area: Japan [hrdsg/09]

Dr. Shini-ichi Nakagawa from CRL in Japan provided the information of SOI(School On the Internet) -Asia project for bridging digital divide in Asia-Pacific Area. This project, aiming at contributing to higher educational development in Asian countries using the internet and digital technology, has many organizations in Japan and partner universities in Thailand, Myanmar, Indonesia and Malaysia involved. This project tries to provide very cheap widespread environment for the distance learning by using UDAR technology. The member economies commended this as a very useful program.

8.3. Concept of the e-University for e-Government: Professor Ma Yan, on behalf of Professor T. Obi.

Professor Ma Yan from China delivered the basic concept of an “e-University for e-Government.” This concept is closely related to the paper by Professor Obi on “New Govt-Univ-Industry Collaboration[hrdsg/03]. In this e-university concept, courses of face-to-face workshop could be held in local language for better performance. This concept could be developed as project proposal at this moment and would like to develop a proper proposal in the next TEL meeting.

8.4. Project proposal for a Workshop: Overview of IPv6: Bridging the Digital Divide: Canada [Attachment 2]

Canada proposed the project proposal on overview of IPv6: Bridging the digital Divide to raise awareness of issues Ipv6 by conducting a pre-TEL seminar at TEL27. Canada pointed out that current IPv4 has its limitation and does not have enough number of IP addresses for the internet access. This lack of access will threaten all other efforts to bridge the digital divide. Thus, it is essential that policy makers, regulators, and decision makers in APEC economies are familiar with the issues for this transitional situation. This proposal would like to conduct a seminar for the APEC delegates and other interested parties. With the support of Japan, Chinese Taipei, Thailand, Canada seeks the APEC Central Funds of under \$20, 000.

The HRDSG supports this idea and endorsed this project proposal to the Plenary session for consideration.

9. HRD Report to the TEL: Summary of Priorities and Recommendations

The HRDSG discussed the agenda items and proposed projects in the meeting and decided to make the following project a recommendation to the Plenary for the APEC fund:

- Project Proposal from Canada on Overview of IPv6: Bridging the Digital Divide.

Attachment A

ATTENDANCE LIST FOR HRDSG AT APEC TEL 25

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|------------------|-------------------|--------------------------------------------------------------------------------|
| Libby Quinn | Australia | libby.quinn@noie.gov.au |
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Attachment B

**Revised Draft Agenda for
Human Resource Development Steering Group
APEC TEL WG 25 Meeting**

**Thursday 14, March 2002
9:00am-6:00pm
Function Room 6
Hanoi Melia Hotel**

1. Opening Remarks**2. Reviews and Approval of the Agenda** [telwg25/hrdsg/00 rev.]**3. Progress and Status Reports on Projects**

- 3.4. APEC TEL Interconnection Training Project: Australia [**hrdsg/01**]
- 3.5. E-Commerce Skills Standard Project: Australia [**hrdsg/02**]
- 3.6. MRA-HRD Training Design Project: Canada
- 3.7. APEC Distance Learning Pilot Project: Canada
- 3.8. Distance Learning Strategic Needs Analysis Project: Canada [**Final Report**]
- 3.9. Distance Learning Training Course Project: Canada
- 3.10. Centre of Excellence-Asia & Pacific: ITU-D [**hrdsg/14**]
- 3.11. APEC Distance Learning Project on Telecommunications Technology: Korea [**hrdsg/05**]
- 3.12. Human Resource Development Program: Korea [**hrdsg/06**]
- 3.13. Utilizing E-Learning to Bridge the Digital Divide: Singapore
- 3.14. Vendor Training Project: USA [**hrdsg/08**]

3.15. New Govt-Univ-Industry Collaboration: TEL-PECC Dialogue:
Japan PECC [hrdsg/03]

3.16. APEC TEL Gender Issues: Canada and Philippines

4. Input for TELMIN5

4.1 Review of HRDSG Projects and Activities [hrdsg/10]

4.2 Reviews of Matrix of TEL Activities [Plen/12] and New inputs from HRDSG

5. Discussion of Issues Raised for HRDSG with other Steering Groups

5.1 Critical Information Protection Awareness: Raising and Education Requirements [estg/18]

5.2 What is the Information Technology Engineers Examination? [estg/06]

5.3 Human Resource Development in IT Security [estg/07]

6. Activity and Workshop in TEL25

6.1 The Project Development Workshop: APEC Secretariat [hdrws/03]

7. Informational Items

7.1 PTIT with the mission of HRD for Post and telecommunications Sector: Viet Nam [hrdsg/07]

7.2 E-learning implementation as a Strategic solution to Indonesian HRD: Indonesia [hrdsg/11]

7.3 Human Capacity Building for Workforce in the Field of Information

Communications Technology and the Facilitation of Human Resources Exchanges:

APEC HRDWG [hrdsg/12] and [hrdsg/13]

8. Other Business

8.1 Convenorship Arrangements

8.2 Information of SOI-Asia Project for Bridging Digital Divide in Asia-Pacific Area: Japan [hrdsg/09]

8.3 Concept of the e-University for e-Government: Professor T. Obi

8.4 Project proposal for a Workshop: Overview of Ipv6: Bridging the Digital Divide: Canada [Annex 2]

9. HRD Report to the TEL: Summary of Priorities and Recommendations

Attachment C

**APEC TEL 25th Working Group
March 11 – 15, 2002; Ha Noi – Viet Nam**

Project Proposal to HRDSG by Canada

Overview of IPv6 : Bridging the Digital Divide

Proposal:

Canada, in conjunction with Japan, Chinese Taipei, and Thailand, would like to propose a project to raise awareness of the issues emerging from the development of the latest version of the Internet Protocol version 6 (IPv6) by conducting a seminar/symposium for APEC delegates and other interested parties. The current standard, IPv4, limits the number of IP addresses available globally. As the demand for new IP addresses grows due to new users and new devices, the threat exists that many users will be unable to obtain IP addresses for Internet access. This lack of access will threaten all other efforts to bridge the digital divide.

It is essential that policy makers, regulators, and decision makers in APEC economies are familiar with the issues relating to the need to move from IPv4 to IPv6 including transition, operation, financial impact, applications, security, and quality of service issues. This seminar/symposium will address these issues so that economies will continue to have access to the Internet in the face of increasing demands for IP addresses.

Project Scope:

This seminar/symposium will bring world-renowned experts in the new IPv6 standard to the March 2003 TEL to address the above issues during a pre-TEL session. The aim of the project is to make sure that the target audience has the information necessary to make appropriate decisions and policies in order to move from IPv4 to IPv6. In many economies this transition will not be trivial. This seminar/symposium is meant to complement other proposed initiatives focusing on the research, technical and developmental aspects of IPv6 implementation. This proposal is in keeping with recent Leader and Ministerial documents calling for action plans to address the digital divide issues.

**APEC TEL 25th Working Group
March 11 – 15, 2002; Ha Noi – Viet Nam**

Project Proposal

Project Seeking APEC funding – Operational Account
Telecommunications and Information Working Group (HRDSG)

Title of Project: Overview of IPv6: Bridging the Digital Divide

Proposing APEC Member: Canada

Co-sponsoring APEC Members: Japan, Chinese Taipei, Thailand

Project Overseer: Ms. Vicki Schouten, Industry Canada

Amount being sought from APEC Central funds: US\$17,000

Type of Project: seminar/symposium

Start date: March 2003 **End date:** May 2003

Project Purpose:

The purpose of this project is to make sure that APEC policy makers, regulators, and decision makers have the information necessary to make appropriate decisions and policies to address the move from Internet Protocol version 4 to Internet Protocol version 6.

Project Design:

This seminar/symposium will bring world-renowned experts in the new IPv6 standard to the March 2003 TEL during a pre-TEL session. The speakers will focus on the following issues: IPv6 transition, operation, financial impact, applications, security, and quality of service.

Budget:

| Items | | | APEC Funding | Self Funding |
|-------|--|--|--------------|--------------|
|-------|--|--|--------------|--------------|

| Direct Labour | No. of Hrs | Rate | | |
|----------------------|------------|------|--|--|
|----------------------|------------|------|--|--|

| | | | | |
|-----------------|--------|------|-------|--|
| Project Manager | 10 hrs | \$75 | \$750 | |
|-----------------|--------|------|-------|--|

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|------------------------|--------|------|---------|--|
| Curriculum Development | 50 hrs | \$75 | \$3,750 | |
|------------------------|--------|------|---------|--|

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|-------------------|--------|------|---------|--|
| Event facilitator | 20 hrs | \$75 | \$1,500 | |
|-------------------|--------|------|---------|--|

Travel

| | | | | |
|----------|------------------|-------|---------|--|
| Per Diem | 3 people x 1 day | \$400 | \$1,200 | |
|----------|------------------|-------|---------|--|

| | | | | |
|---------|----------|---------|---------|--|
| Airfare | 3 people | \$3,000 | \$9,000 | |
|---------|----------|---------|---------|--|

| | | | | |
|------------------|----------|-------|-------|--|
| Travel Insurance | 3 People | \$150 | \$450 | |
|------------------|----------|-------|-------|--|

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|--------|-----|-----|-------|--|
| CD-ROM | 350 | \$1 | \$350 | |
|--------|-----|-----|-------|--|

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|--------------|--|--|-----------------|--|
| Total | | | \$17,000 | |
|--------------|--|--|-----------------|--|

**Matrix of TEL Activities – TEL 25 Update
By HRDSG**

| Objectives | Task Areas | Current Projects and Activities |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Objectives | | |
| 1. TEL Self review <ul style="list-style-type: none"> • Review the functions, structure and activities of TEL in light of a converged information communications environment, including, where appropriate, widening the scope of its participation and functions | <ul style="list-style-type: none"> • Review functions, structure and activities of TEL | <ul style="list-style-type: none"> • TEL Review (TEL 22); Change of name of working group. |
| 2. Business/Private Sector Participation <ul style="list-style-type: none"> • Further encourage the participation of the business/private sector in its work | <ul style="list-style-type: none"> • Encouraging business/private sector participation | <ul style="list-style-type: none"> • Guest Status guidelines • PECC-APEC dialogue(HRDSG) • Public Outreach programme (New Zealand) • TEL Chair's paper on private/public sector outreach (to be tabled at TEL 23) |
| 3. Outreach to other Organisations <ul style="list-style-type: none"> • Foster closer ties with regional and international groups and organisations to contribute to global debate on convergence and infocomm issues | <ul style="list-style-type: none"> • Outreach to other groups • Encourage global debate on infocomm issues. | <ul style="list-style-type: none"> • MRA Co-operation with CITES (MRA Task Force, TEL Chair) • (TEL Chair Review - Speaking engagements at international fora) • PKI cooperation |
| Access Objectives | | |
| 4. Asia Pacific Information Society (APIS) <ul style="list-style-type: none"> • Accelerate the realisation of the Asia Pacific Information Society (APIS) by expanding co-operative development projects undertaken by the four pillars of the TEL. | <ul style="list-style-type: none"> • Encourage cross-cutting development projects among the 4 steering groups • Improve linkages between the activities of the 4 steering groups. | <ul style="list-style-type: none"> • APII Cooperation Center (Korea, DCSG – ongoing) • TEL Review Document (TEL 22) |

5. Digital Divide

- | | | |
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| <ul style="list-style-type: none"> • Bridging the digital divide at the domestic, regional and international levels. • Engaging the private sector in this effort <ul style="list-style-type: none"> • Improving network access, especially in underserved urban, rural and remote areas • Assisting developing economies to reform their policy and regulatory structure to meet new environments • Reinforcing and enhancing human resource development through measures such as distance learning technologies • Promulgating awareness of the digital divide by holding appropriate fora <ul style="list-style-type: none"> • Monitoring the fair and sustainable development of the Internet in the APEC region • Pursue explanatory work to define concepts, to measure the extent of domestic, regional and international digital divides, and to assess economic and cultural reasons for divides with a view to develop technology neutral, pragmatic | <ul style="list-style-type: none"> • Encourage private sector participation • Improve network access especially in rural areas • Assist developing economies in reforming their policy and regulatory structure • Reinforcing and enhancing human resource development through measures such as distance learning technologies • Promulgating awareness of the digital divide by holding appropriate fora • Monitoring the fair and sustainable development of the Internet in the APEC region • Further study into defining concepts and measurements on the digital divide • Study into the economic and cultural | <ul style="list-style-type: none"> • Vendor Training Project (US, HRDSG - Ongoing) • APEC TEL Blueprint on the Digital Divide • Guide to Regulatory Environments in (US, BFGS - ongoing) • Regulatory Structures Project (Australia, LSG – commencement) • Utilising E-Learning to Bridge the Digital Divide: Public/Private Partnership Efforts in Education (Singapore & Cisco Systems, HRDSG, completed) <ul style="list-style-type: none"> • APII Technology Centre (Japan, DCSG – ongoing) satellite links • APEC TEL Interconnection Training Project (Australia, HRDSG – ongoing) • Development and Financial Resources Catalogue (US, DCSG – available, ongoing) • APEC Distance Learning Pilot/Training Courses Projects (Canada, HRDSG – completed) • Distance Learning Strategic Needs Analysis Project (Canada, HRDSG – completed) • Distance Learning Project Based on Basic Telecommunications Technology (Korea, HRDSG – completed) • APEC Distance Learning Project on Telecommunications Technology (Korea, HRDSG – ongoing) • HRD Personnel Exchange Programme (Korea & Thailand, HRDSG – completed) • Human Resource Development Program(Korea, HRDSG-ongoing) • APEC TEL Blueprint on Digital Divide • Digital Divide Overview: US and Global Developments (US, DCSG – TEL21) information sharing by US on digital divide trends in the US and the world. • APEC TEL Blueprint on the Digital Divide |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

approaches to encourage greater access.

causes of the digital divide

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <p>6. Accessibility</p> <ul style="list-style-type: none"> • Support additional initiatives to enhance access to schools, hospitals and SMEs to ensure APEC communities people and businesses benefit as a whole | <ul style="list-style-type: none"> • Increase access to schools, hospitals and SMEs by way of : <ul style="list-style-type: none"> • Infrastructure • Human resource development | <ul style="list-style-type: none"> • APBioNet-Asia Pacific Advanced Network Project (DCSG – ongoing) |
| <p>7. Infrastructure Development</p> <ul style="list-style-type: none"> • Promote collaboration with the private sector to expand their participation in infrastructure investment to upgrade access to networks, especially in rural and under-served areas • Explore refinement of universal access policies • Encourage competition in the extension of networks • Consider the opportunities and benefits arising from wireless technology in the expansion of both basic telephony and convergent services | <ul style="list-style-type: none"> • Promote collaboration with private sector in infrastructure investment • Study into refining universal access policies • Study on applications of wireless technology | <ul style="list-style-type: none"> • Wireless Issue Paper and seminar held in conjunction with TEL 23 |

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>8. Information Sharing</p> <ul style="list-style-type: none"> • Encourage information sharing and collaboration on electronic government initiatives, spectrum access issues, Internet services and critical information protection. | <ul style="list-style-type: none"> • Create repositories of information • Encourage discussion through appropriate fora | <ul style="list-style-type: none"> • Spectrum Policy and Management Database (US, DCSG – completed 1997) • TEL Training Project (Australia, HRDSG – completed) • Guide to Regulatory Environments in APEC (US, BFSG – ongoing) – data compilation • APEC Legal Guide (AOEMA, BFSG – completed 2000) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

9. ICAIS

- Foster discussion between private/business sector and government parties on appropriate means to assess and reward the value of products and services exchanged in the provision of converged Internet services among APEC economies.
- TEL Steering Groups should encourage attention to the development of Internet Systems and business models from the perspectives of liberalisation, business facilitation, development co-operation and human resource development.
- Continue to discuss the international development of the Internet, including charging arrangements, noting the initial suggestions in the proposals made by the ICAIS Task Force
- The TEL should discuss the kind of arrangements that will support high-speed bandwidth connectivity in the APEC region.
- The work should address the relationship between charging arrangements and return on investments as it reflects the development of high-speed bandwidth connectivity. It should also consider the application of the APEC Principles of Interconnection to Internet services.
- Progress should be recorded at each TEL meeting
- TEL should report as a matter of urgency, with appropriate recommendations on these issues to the next TELMIN

EMPOWERMENT OBJECTIVES

10. HRD in TEL Projects

- Encourage the development of APEC's human resources in the digital economy, emphasising the encouragement of life long learning and the training of individuals to be info-communications professionals.

- To give priority to the development of skills to assist APEC members in

- establishing pro-competitive policy and regulatory environments and

- develop skills standards to support e-commerce

- Encouraging consideration of skills retention strategies for businesses reliant on information and communications technology.

- Promote lifelong learning initiatives

- Promote skills development in the areas of policy and regulation

- Develop skills standards to support e-commerce.

- Encouraging the consideration of skills retention strategies.

- Human Resource Development Program (Korea, HRDSG-ongoing)
- HRD Personnel Exchange Programme (Korea & Thailand, HRDSG – completed)
- HRD Training Programme on Broadband Technologies and Multimedia Applications (Singapore, HRDSG – completed)
- E-Commerce Skills Standards Project (Australia, HRDSG – ongoing)
- Symposium on Collaborative Strategies for Multimedia Web Skills Development (Singapore, HRDSG – completed)
- Telework Manual (Japan, DCSG - completed)
- MRA-HRD Training Design Project and Training Delivery Project (Canada, HRDSG – ongoing)
- APEC TEL Interconnection Training Project (Australia, HRDSG – ongoing)

- Brain Drain Issues in Developing countries (PRC, Hong Kong, ITU-CoE, HRDSG – web-based forum, completed)

11. Distance Learning Tools

- Encourage the utilisation of distance learning tools to bridge the development gap.

- Such efforts should complement the efforts

- Foster the development and promulgation of distance learning tools

- Work with other international

- APEC Distance Learning Pilot/Training Courses Projects (Canada, HRDSG – completed)
- Distance Learning Strategic Need Analysis Project (Canada, HRDSG- completed)
- APEC Distance Learning Project on Telecommunications Technology (Korea, HRDSG – completed)
- APEC Distance Learning Project on Telecommunications Technology (Korea, HRDSG – ongoing)
- Report of Research and Development of Distance Learning System of Human Resources Development in Asia and Pacific Area (HRDSG – completed)
- Human Resource Development Program (HRDSG, Korea)
- ITU CoE involvement at LSG and HRDSG meetings (ongoing)

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| of other international organisations, such as the ITU Centre of Excellence initiative | organisations, especially ITU CoE | |
| Globalisation/Mobilisation | | |
| <p>12. Liberalisation of Telecommunications Markets</p> <ul style="list-style-type: none"> • Keep up momentum of market liberalisation keeping in mind any initiatives that might emerge from talks at the WTO • Focus on practical co-operative efforts that encourage greater competition in communications services and address non-tariff barriers to trade. • Increasing need for effective competition policies to be in place by:- <ul style="list-style-type: none"> • Studying the impact of regulatory, policy and technological environments on the delivery of and access to convergent services, • Encouraging discussion on promoting diversity in the supply of information and access to it, • Promoting dialogue on possible incentives to improve business sector participation in the supply of communications goods and services, and • Supporting competitive markets in the domestic and international telecommunications and information industries. | <ul style="list-style-type: none"> • Periodic review and examination of market liberalisation processes • discourage non-tariff barriers to trade • Promote competition through effective competition policies • study impact of regulatory, policy and technological environments on the delivery of and access to convergent services • Encourage discussion on diversity in the supply of and access to information, • Promote dialogue on possible incentives to improve business sector participation in the supply of communications goods and services | <ul style="list-style-type: none"> • WTO Task Force (Chinese Taipei, LSG – study completed 1999, possibility of future seminars) • LSG Collective Action Plan (LSG – reviewed at every TEL) • Carrier Liability (Hong Kong, BFSG – 1999) information paper • Convergence Roundtable (Singapore, Hong Kong & ITU CoE, LSG – TEL 23) • Techno Economic Modelling Project (Australia, DCSG – ongoing) |

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| <p>14. Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment (MRA)</p> <ul style="list-style-type: none"> Accelerate the pace of implementation of the MRA Outreach to other regional groupings and organisations interested in developing similar arrangements. | <ul style="list-style-type: none"> Further work on MRA Outreach to other regional groupings | <ul style="list-style-type: none"> MRA Task Force (LSG – ongoing) MRA Support Project (Australia, LSG – ongoing) MRA Management System (Australia, LSG – ongoing) Technical Expert Group on MRA (Korea, LSG – ongoing) MRA-HRD Training Design Project (Canada, HRDSG-Completed) MRA-HRD Training Delivery Project (Canada, HRDSG- ongoing) Possible co-operation with CITEL (MRA Task Force, TEL Chair, LSG – proposed co-operation) |
| <p>15. E-Commerce</p> <ul style="list-style-type: none"> Ensure that policy and regulatory environments better foster the uptake of e-commerce, facilitate the electronic delivery of services and enhance the development of e-commerce infrastructure. | <ul style="list-style-type: none"> Encourage dialogue on policy and regulatory aspects of e-commerce Provide assistance to economies in implementing policies and regulations favourable to e-commerce. | <ul style="list-style-type: none"> E-Commerce Skills Standard Project (Australia, HRDSG-ongoing) Electronic Commerce Seminars (AOEMA, BFGS – ongoing) Electronic Commerce Survey Projects (Canada, BFGS – completed 2000) Cybernet – Integrated Next Generation Electronic Commerce Environment Project (Japan, BFGS – ongoing) – improving user confidence Electronic Commerce Capability Building (Thailand, BFGS – commencement) Cross Country Smart Card Based Secure Electronic Commerce Project (Singapore, DCSG – commencement) |
| <p>15. Electronic Authentication</p> <ul style="list-style-type: none"> Encourage working level co-operation with the OECD on Electronic Authentication issues. | <ul style="list-style-type: none"> Build ties with OECD on Electronic Authentication issues | <ul style="list-style-type: none"> Electronic Authentication Task Group (Australia, BFGS – ongoing) – sharing of working documents |

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| <p>16. Interconnection</p> <ul style="list-style-type: none"> Encourage TEL to continue discussions on the APEC Principles of Interconnection on a voluntary basis. Consult with member economies on the need for further discussion on interconnection and, if appropriate, to continue work in a manner that is collegial and of mutual benefit. | <ul style="list-style-type: none"> Promote dialogue among members on whether there is a need to continue work on interconnection | <ul style="list-style-type: none"> Interconnection Task Group (LSG – ongoing) APII Test Bed Project for Interconnectivity and Interoperability (Japan, DCSG – ongoing) APEC TEL Interconnection Training Project (Australia, HRDSG – ongoing) |
| <p>1. Interoperability</p> <ul style="list-style-type: none"> More attention to be paid to user requirements for open standards and systems to support interoperability. | <ul style="list-style-type: none"> To pay attention to work into open standards and systems to support interoperability. | <ul style="list-style-type: none"> Business requirements for interactive systems in the APEC region (Australia, BFSG - commencement) APII Technology Centre (Japan, DCSG – ongoing) APII Test-bed Project (Korea, DCSG – ongoing) APII Test Bed Project for Interconnectivity and Interoperability (Japan, DCSG – ongoing) |
| <p>Reinventing Policy</p> | | |
| <p>2. Regulatory and Policy Challenges</p> <ul style="list-style-type: none"> Urge TEL to adopt a co-operative approach to discussing new regulatory and policy challenges presented by issues such as convergence, market liberalisation and the implementation of the WTO Agreement on Basic Telecommunications. Importance of surveying possible regulatory and policy approaches to accommodate convergence | <ul style="list-style-type: none"> To promote discussion on new policy and regulatory challenges To study regulatory and policy approaches to convergence | <ul style="list-style-type: none"> Regulators' Round Table on Convergence (LSG – TEL 23, 2001) Electronic government initiatives to facilitate business (Australia, BFSG – commencement) Regulatory Structures Project (Australia, LSG – commencement) Techno Economic Modelling Project (Australia, DCSG – ongoing) technical network simulations and economic forecasting methods to create decision making tools. |
| <p>3. Policy and Regulatory Dialogue</p> <ul style="list-style-type: none"> Encourage greater dialogue among policy and regulatory officials and, where appropriate, between officials and business sector. | <ul style="list-style-type: none"> Encourage dialogue among regulatory and policy officials Encourage dialogue between officials and business/private sector | <ul style="list-style-type: none"> Convergence roundtable (Singapore, Hong Kong, USA, ITU CoE, LSG – TEL23 commencement) E-Korea Forum (Korea, EKWS-TEL 24, completed) TEL Chair's paper on Private Sector/public outreach (to be tabled at TEL 23) |

Report of the Liberalization Steering Group (LSG) to Plenary
TEL 25 - March 11-15, 2002
Ha Noi, Viet Nam

The Liberalization Steering Group met on March 13-14, 2002. The Convenor, Kathy Fisher of Canada welcomed the participants and introduced the Deputy Convenor, Colin Oliver of Australia. The Convenor thanked the previous Convenor, Ms. Irene Wu of the FCC, USA, for her past leadership and contributions to the work of the LSG.

In her opening remarks, the Convenor reminded participants of the importance of the meeting as the APEC TEL Working Group prepares itself for TELMIN 5 in Shanghai in May 2002. In addition, the Convenor highlighted the TEL Chair's instructions to consider how ideas can be driven by results and, to be mindful of the key messages flowing from the Regulatory Structures Workshop/Regulators' Roundtable on March 12, 2002 and the PECC dialogue.

The Agenda (Annex A) was reviewed and modified to respond to requests from Plenary to provide an update on activities since Cancun (May 2000), including elements related to Internet Issues for inclusion in the Internet Issues Task Group report. The Convenor identified two items for inclusion under the Wireless Commercial Services agenda item:

- Discussion Paper: Licensing Policies for Investment and Buildout; and
- Presentation from Japan on the Provision of Radio License Information and Survey of Spectrum Use Situations in Japan

Regulatory Structures Project - Australia, as project overseer, reported that the project is currently on track with a completion date of June 2002. The draft regulatory analysis report will be ready by April 2002. A revised version will be circulated in May 2002 and a progress report prepared and delivered to the SOM. Following a general discussion on the proposals for future actions as highlighted in the Regulatory Options Report (RSWS 05), it was recognized that there was a need to refine the ideas related to future work and to hold further discussions at TEL 26.

Regulator's Round Table - Singapore, as project overseer, reported on the Regulatory Structures Workshop/Regulators Roundtable held on March 12, 2002. The progress report is contained in document LSG 13. Following general discussion on future topics and timing of Regulatory Roundtables, it was agreed to hold the next Roundtable on the margins of TEL 27. APEC member economies were invited to suggest topics to the project overseer by April 14, 2002.

Mutual Recognition Arrangements (MRA) - Mr. Andy Kwan of Canada, MRA Task Force Chair, reported on the meeting of Task Force held on Monday, March 12, 2002 (document MRATF 08). Ten economies have confirmed that they are participating in Phase I procedures and most of them reported good results. By the end of 2002, four more economies are expected to join in Phase I procedures. Five economies are participating in Phase II procedures. The Chair also reported that liaison with CITEL PCC.1 had been established and since the implementation of the Inter-American MRA is behind the implementation of the TEL MRA, active liaison with PCC.1 is not necessary at this moment in time.

The MRA Task Force Chair asked the LSG to recommend a one day meeting of the MRA Task Force prior to the TEL 26 meeting and a half day meeting following the LSG meeting at TEL 26.

MRA Implementation Project - Following completion of the MRA implementation Support Project, the HRDSG is now managing the MRA Training project.

MRA Management System - Australia oversees the MRA Management System project. Theo Polites of the Colony Park Group was invited to provide an update. It was reported that the management system is being released and will be live at the end of the TEL. In addition to the support received from AusAID and APLAC, sponsorship in kind was received from Industry Canada and CRC for the hosting of the server and the distribution of information to the Internet. There are two major outstanding issues. The first being the nomination of Registrars who controls who, from within an economy, can upload, edit and access data on the MRA management system. Uploading the data is a major task (subsequently considered in the MRA Joint Committee). Secondly, as per the proposal endorsed by Plenary in March 2000, assistance is requested in locating additional sponsors from within each economy to ensure the continued existence of the system.

Two project proposals were considered and endorsed by the MRA Joint Committee in support of the MRA management system. The LSG is seeking central funding in the amount of US \$20,000 for data load facilitation. Full details on the project are outlined in document MRAJC 03. In addition, the LSG is seeking central funding in the amount of US \$ 20,000 for the MRA Management System Outreach Program (MRAJC 02).

- Interconnection Resources Project - As overseer of the project, Australia reported that all stages of the project have been successfully completed. All project output, including the survey and results, literature survey, final report and flow chart, are available at http://www.necg.com.au/pappub_apec.shtml. It was recognized during the meeting that some economies may have difficulties in downloading the documents. Australia is prepared to assist in other ways, for example, providing the project output on a CD.

- Interconnection Training Project - As overseer of the project, Australia reported that a request for proposal (RFP) for the project was advertised and circulated to points of contact in February 2002. The closing date for the RFP is March 18, 2002. Australia also requested suggestions from the LSG regarding an appropriate time and place for the training workshop for this project.

- Unbundling of the Local Loop - Australia invited other APEC members to submit case studies of their experience with unbundling the local loop. Mr. Ewan Sutherland, Director of INTUG, provided an overview of the European experience in unbundling the local loop and offered to circulate additional background information on the European experience. Japan briefly introduced its efforts in unbundling the local loop. Japan noted the importance of promoting fair competition in local access markets in order to lower the charge for Internet access. Japan indicated its desire to submit its case on the competition in local access as a case study at TEL 26. The LSG endorsed Japan's proposal.

Wireless Commercial Services - A discussion paper on licensing policies for investment and buildout was circulated for information. Note was made by the USA that there was significant discussion of wireless technologies and their deployment in the Digital Divide and Convergence Workshops on Tuesday, March 12, 2002. In light of these discussions, the USA suggested that the LSG continue to invite discussion of commercial wireless licensing and policy issues, and development by member economies. Mr. Hiroaki Kimura, Ministry of Public Management, Home Affairs and Posts and Telecommunications delivered a presentation on the provision of radio license information and survey of spectrum use situations in Japan. The presentation also provided an historical view of licensing in Japan. APEC member economies were encouraged to share their spectrum allocation experience at future LSG meetings.

Organizational and decision-making in liberalized markets - Ms. Anita Dey of the US Federal Communications Commission made a presentation on regulatory transparency safeguards. APEC member economies were encouraged to make presentations on their decision-making regime at future LSG meetings.

Reference List - Elements of a Fully Liberalised Telecommunications Services Sector - Australia introduced its proposal for a stocktake of progress toward the key elements of a fully liberalised telecommunications sector in the APEC region. The aim of the project is to review progress toward realising the expectations set out in 1996 to assess whether the scope of the list is wide enough to encompass the key issues facing the sector, whether each element is still appropriate as an

identifier for a fully liberalised telecommunications market, and to recommend necessary adjustments or additional measures. Discussion focused on timing and links to other projects. Note was made of the linkage to the proposed future actions as highlighted in the Regulatory Options Report (RSWS 05) and to the proposal on WTO/GATS negotiations. The project was endorsed by the LSG. The LSG is seeking US\$120,075 from TILF funding for the project with a 2003 roll-out date. Australia, Canada, Singapore, the US and Hong Kong, China agreed to serve on the Oversight Committee.

WTO/GATS Negotiations - Australia introduced a proposal to support the WTO process by assisting APEC TEL members to take an active interest in the current WTO services negotiations and consider specific actions that can support the participation of APEC members in the WTO process. The proposal calls for a workshop to be held at TEL 26 and for voluntary reporting to LSG by members on the contributions made to the GATS process. Note was also made of the need for a stocktake of APEC member economies' WTO commitments and progress against commitments. The LSG supported the proposal and the suggestion for a stocktake of APEC member economies' WTO commitments and progress against commitments. Australia, Canada, Japan, the US and Hong Kong, China agreed to assist Singapore in the development of the workshop.

Other Business - LSG reviewed a status report on LSG projects since Cancun. The status report (Annex B) responds to the TEL Chair's requirement to update the Matrix of TEL Activities and to the Internet Issues Task Force Chair's requirement for input on Steering Groups' Internet related activities.

Collective Actions - The collective actions were reviewed and adopted. The new version is attached as Annex C.

The Convenor thanked the participants for their contributions and hard work and thanked the Deputy Convenor for his support. The meeting was adjourned.

Attachment A

The Liberalization Steering Group - APEC TEL 25

A G E N D A

1. Review and adoption of agenda
2. Notice of other business
3. Convergence
 - 3.1 Regulatory Structures Project (progress report – Australia)
 - 3.2 Convergence Roundtable (progress report – Singapore)
4. Mutual Recognition Arrangements (progress report – Canada)
 - 4.1 MRA Implementation Support Project (progress report – Australia)
5. Interconnection
 - 5.1 Interconnection Resources Project (final report – Australia)
 - 5.2 Interconnection Training Project (progress report – Australia)

6. Internet development
 - 6.1 Unbundling of local loop (proposal from Australia)
7. Wireless Commercial Services (USA)
8. Organizational and decision-making issues in liberalized markets
 - 8.1 Presentation on Rulemaking in the Federal Communications Commission – Ms. Anita Dey, Regional Specialist, Asia, International Bureau, Federal Communications Commission
9. Reference List – Elements of a Fully Liberalised Telecommunications Services Sector (proposal from Australia)
10. TEL support to WTO/GATS Negotiations (proposal from Australia)
11. Other Business
12. Review of Collective Action Plan

Attachment B

| <i>DRAFT</i> TELMIN 4 - Objectives | <i>DRAFT</i> LSG Current/Ongoing Projects | DRAFT Forward Agenda |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| GENERAL OBJECTIVES <i>Outreach to other organizations</i> - foster closer ties with regional and international groups and organizations to contribute to global debate on convergence and infocom issues | 1. The MRA Task Force established working relationship with CITEL PCC.1 Group in the Americas Region to coordinate implementation of MRAs. | |

ACCESS OBJECTIVES

Digital Divide - improving network access, especially in underserved urban, rural and remote areas

Digital Divide – assisting developing economies to reform their policy and regulatory structure to meet new environments

2. The United States oversees the work related to commercial wireless services. A Wireless Workshop was held in March 2001 (TEL 23) to examine how deployment of wireless infrastructure and technologies can assist APEC economies in achieving public policy, economic, teledensity and other goals. It also explored commercial and regulatory issues associated with the use of wireless technologies. Ongoing.

3. Australia oversees the Regulatory Structures Project. A report outlining current regulatory structures in APEC economies was prepared and distributed to APEC members in June 2001. Report is based on APEC members' response to convergence questionnaire.

4. In September 2001 (TEL 24), a Regulatory Structures Workshop was held to discuss policy approaches that government can use when dealing with convergence; how the role of industry comes into play when dealing with convergence, and issues with respect to regulatory flexibility.

5. A Regulatory Analysis Report and a Regulatory Options Report were prepared, distributed and discussed at a Workshop integrated with the second Regulators' Roundtable in March 2002 (TEL 25). The Regulatory Analysis Report identifies and addresses skills needed in developing economies to ensure adequate infrastructure and human resources to address convergence. The Regulatory Options

- [Conduct analysis of current licensing policies in APEC and identify principles to support market based development of commercial wireless services.]

Report sets out a blueprint for convergence. It explores viable regulatory options that APEC economies could consider as they work to manage in an environment of convergence. It also examines competitive options economies could consider as they attempt to deal with convergence.

6. Singapore oversees the Regulators' Roundtable project. A Roundtable was held in March 2001 (TEL 23). Discussions were organized around three themes: responsibility of regulators; convergence tools; and the role of regulators in rolling out technology.

7. Australia oversees the Interconnection Resources Project. A report on interconnection pricing and rural infrastructure build out was prepared based on analysis of interconnection pricing policies. The findings of the report were discussed at a Workshop in September 2001 (TEL 24). The report will serve as an input document to the Interconnection Training Project.

8. Projects described in 4 to 6 above apply.

- [Topics for future Roundtables: unbundling of local loop; universal service/access obligations; wireless issues; consumer/user perspectives.]

- [The LSG Collective Action Plan identifies future work on universal service. APEC economies are encouraged to voluntarily consider and develop policies based on principles adopted in TELMIN 3 in 1998.]

- [LSG can contribute to discussion of the development of Internet systems by focusing on the impact of regulatory/policy issues on consumers. From the point of view of consumer, the important elements of Internet service include availability, choice, price and quality. From the point of view of the consumer, the opportunity to access affordable Internet services via a variety of technologies - whether wireline, wireless, cable television, satellite, or some combination of these or others - is a benefit.]

- [LSG can also consider competition and market access in the links between international and domestic capacity and the status of competition and access within domestic markets as points relevant to the development of Internet systems.]

- [The LSG can also consider what regulatory/policy models or environments foster non-traditional supply channels and/or new business models for provisioning or supplying Internet capacity or services, both

Infrastructure Development –
explore refinement of universal
access policies

ICAIS – Foster discussion between
business/private sector and
government parties on appropriate
means to assess and reward the value
of products and services exchanged in
the provision of convergent Internet
services among APEC economies

ICAIS – encourage attention to the
development of Internet systems and
business models from the
perspectives of liberalisation,
business facilitation and human

resource development.

9. Projects described in 2, 6 and 7 above apply.

domestic and international.]

- [The LSG can consider the degree of competition and private sector's access to the market for international capacity such as legal and regulatory barriers to entry in ownership of capacity, rights to land submarine cables, licensing of international satellite services to carry Internet-related services, and the backhaul links between domestic and international landing points.

The LSG can consider what the reasonable terms are with respect to interconnection between domestic and foreign ISP's.

- Ongoing
- [Examine range of issues concerned with unbundling of local loop so as to facilitate access and competition, to promote investment in new infrastructure and services, and development of broadband services.]

[Undertake case studies on different approaches to unbundling local loop.]

international development of the Internet including charging arrangements, noting the initial suggestions in the proposals made by ICAIS Task Force.

ICAIS – TEL should discuss the kind of arrangements that will support high speed bandwidth connectivity in the APEC region.

ICAIS – work should address the relationship between charging arrangements and return on investments as it reflects the development of high-speed bandwidth connectivity. It should also consider the application of APEC Principles of Interconnection to Internet services.

10. The TEL LSG facilitated a presentation and discussion on licensing conditions on backhaul that affect investment decision on submarine cable landing. Ongoing.

11. The TEL LSG facilitated presentations and information sharing on unbundling the local loop.

12. Project described in 11 above applies.

GLOBALISATION/ MOBILISATION OBJECTIVES

Liberalization of telecommunications markets – keep up momentum of market liberalization keeping in mind any initiatives that might emerge from talks at the WTO.

Liberalization of telecommunications markets – study impact of regulatory, policy and technological environments on the delivery of and access to convergent services.

Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment

13. The TEL LSG has developed a Collective Action Plan (CAP) on liberalization. It was reviewed and updated at each TEL meeting, and included in the Chair's Report.

14. Project described in 6 above applies.

15. As of March 2002, there are nine economies participating in Phase I procedures and it is anticipated that four more economies will participate in Phase I by the end of 2002. As of March 2002, there are five economies participating in

- [Support for WTO/GATS negotiations – assist economies to meet the timetable for the request/offer phase of the GATS negotiations (initial requests by June 2002 and offers by March 2003). Hosting of a seminar on the WTO process and key issues.]
- [voluntary reporting to LSG by APEC members on the contributions made to the GATS process.]
- [Review progress toward the key elements of a fully liberalized telecommunications services sector as identified by Ministers at TELMIN 2 (1996).]
- [voluntary reporting to LSG by APEC members on progress made against collective action plan]

(MRA) - accelerate the pace of implementation of the MRA

Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment

(MRA) - outreach to other regional groupings and organizations interested in developing similar arrangements

Interconnection – encourage TEL to continue discussions on the APEC Principles of Interconnection on a voluntary basis.

Interconnection – encourage TEL to continue discussions on the APEC Principles of Interconnection on a voluntary basis.

Phase II procedures and at least two more economies will join Phase II by the end of 2002.

16. The MRA Task Force established working relationship with CITELEPCC.1 Group in the Americas Region to coordinate the implementation of MRAs.

17. The United States chaired an Interconnection Task Group. The Task Group facilitated discussion and information exchange on unbundling of local loop and interconnection pricing policies.

18. Project described in 7 above applies.

REINVENTING POLICY OBJECTIVES

Regulatory and policy challenges – urge TEL to adopt a cooperative approach to discussing new regulatory and policy challenges presented by issues such as convergence, market liberalisation and the implementation of the WTO Agreement on Basic Telecommunications.

19. Projects described in 6 above applies.

20. Projects described in points 3 to 5 apply.

- Ongoing.

- Ongoing.

Regulatory and policy challenges – importance of surveying possible regulatory and policy approaches to accommodate convergence.

Policy and Regulatory Dialogue – encourage greater dialogue among policy and regulatory officials and, where appropriate, between officials and business sector.

21. Projects described in point 6 applies.

- Ongoing.

Attachment C

**COLLECTIVE ACTION PLAN
(As Adopted at TEL 25)**

| COLLECTIVE ACTIONS | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Progressively reduce restrictions on market access for telecommunications services. |
| 2. | Progressively provide for non-discriminatory treatment of providers of all telecommunications services. |
| 3. | Encourage greater business/private sector investment and participation in provision of telecommunications services. |
| 4. | Implement the APEC Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment adopted at TELMIN3 in June 1998. Coordinate the MRA work in APEC TEL with other international groups. |
| 5. | Conform where appropriate with APEC Guidelines for Harmonization procedures for equipment certification. |
| 6. | Voluntarily consider and examine policies on Universal Service based on principles as adopted at TELMIN3 in June 1998. Consider the relevance of this work on the digital divide. |
| 7. | Implement APEC principles of interconnection, as adopted at TELMIN4 in May 2000, and hold further discussions to promote competition in telecommunications markets. |

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| 8. | Support the full implementation of the WTO Agreement on Basic Telecommunications by the APEC-WTO members, and help APEC non-WTO members with comparable liberalization steps. Assist APEC member economies participate in WTO/GATS negotiations. |
| 9. | Consider results of the regulatory structures and policy analysis to accommodate convergence and the evolving multimedia market in APEC. |
| 10. | Continue to supply updates on current commercial and consumer wireless licensing policies in APEC economies through the Spectrum Management and Policy database on the TEL website and, voluntary reporting through case studies and surveys. |

ANNEXE G

INTERNET ISSUES TASK GROUP (IITG)

REPORT TO TEL25 PLENARY, TO BE SUBMITTED TO TELMIN5 ON INTERNET ISSUES AND ICAIS

ICAIS

During TEL22, the Internet Issues Task Group (IITG) was established to coordinate activities and report on progress. Following this, the Terms of Reference were finalized by the TEL Chair in consultation with delegations. The IITG's first task was to organize an Information Seminar at TEL23, which heard three presentations:

1) Geoff Huston – Telstra – Australia: “Developments in the architecture and protocols of the Internet”. Mr. Huston gave an overview of the changing structure of the Internet, particularly in relation to the rapid development of cable capacity, the changing nature of the network itself as shown by network metrics, and trends in interconnection. His conclusion was that IP transmission is now a commodity market, that “peering” relationships are more normally “customer” relationships at many levels, but that the position of the Tier 1 carriers was no longer so dominant and there were many opportunities for lower-level ISPs to bypass interconnection bottlenecks. However, the evolving Internet content market is a significant issue that must be considered separately from the carriage market.

2) Masao Fujita – Star hub – Singapore: “Developments in Internet service provision from a carrier’s perspective”. Mr. Fujita described the experience of Star Hub as a new entrant to a competitive market. Star Hub aims to become an Internet gateway for Singapore, providing access to regional and global Internet infrastructure. It has noticed a relative decline in US traffic as bandwidth increases and regional links are developed. Star hub sees the development of interconnectivity within the Western Pacific region, and increased intra-regional peering, as essential for competitive Internet carriers. More opportunities for cable ownership are also important in order to reduce the price-setting power of the established carriers who own the cable systems. Quality of Service is also a significant rising issue as new applications require guaranteed uptimes and latency.

3) Barbara Dooley - CIX – USA: “Developments in large-scale bandwidth provision.” Ms Dooley described recent technical developments that are rapidly increasing capacity and lowering prices, particularly in the USA and Europe. She noted a decline of the satellite option as a major factor, as cable capacity prices

are coming down faster than anyone anticipated. She suggested that “public peering,” using common exchange facilities such as CIX, was showing some revival after declining in recent years. New arrangements are needed for services such as multicasting, and exchanges (Network Access Points) increasingly operated on the basis of fixed bandwidth rationing, rather than traffic flow accounting. New optical gateway protocols (OBGP) would make feasible much more direct peering, thus reducing dependence on established backbone providers.

Frank March (New Zealand), and Ricardo Rodriguez (Mexico), joined the presenters in a panel to discuss a range of issues raised by the speakers and from the audience. Some of the matters raised were concerns about costs and resulting difficulties of access, particularly for lesser developed economies; the expense of international connections; the need to develop regional hubs; the complexity of the issues and the rapid changes in Internet charging and economics; and the still high absolute cost of infrastructure and the need to balance this cost against the most favorable regulatory regimes.

The Task Group met considered the Terms of Reference and charged to itself with the role of continuing to discuss and develop international Internet charging arrangements, and foster discussion between business/private sector and government parties on the appropriate means to assess and reward the value of products and services exchanged in the provision of converged Internet services among APEC economies. To this end the Group decided to undertake two specific activities: initiation of online information and discussion, and organising an electronic “Virtual Forum” utilising email and website posting of views and proposals from economies. Suggestions for the initiation of discussion included publishing of the presentations to the seminar with permission of the authors. Other papers and contributions were also be invited. Secondly a small oversight group was nominated to advise and assist the convenor and liaise with the website administrators, consisting of Korea, China, USA, Mexico, Canada and Australia.

The Task Group also agreed to propose that a workshop or seminar be organised at TEL 24. This seminar should have strong involvement of both public and private sectors. It was agreed that it should involve as wide a range of private sector bodies as possible, and present a comprehensive and balanced view of the issues.

The IITG Workshop was held during TEL 24. The Workshop received the following presentations:

Current State of the debate on Internet Issues in different international organizations, presented on behalf of Ricardo Rodriguez, COFETEL, Mexico.

An introduction to the work of the Asia-Pacific Telecomm Unity Study Groups Related to Internet Traffic Routing in the Asia-Pacific region presented by Dr Jon-Won Lee (APT).

USA FCC’s recently released 2000 year-end Circuit Status Report was delivered by Mr. Joe Richardson on behalf of Ms Irene Wu (USA).

Pacific Islands Internet Providers was presented by Dr Frank March (New Zealand).

A proposal on *A method for settlement of international internet circuits* was presented by Mr. Zhao Zengming (China).

A proposal on *a measurement tool on international Internet traffic* was presented by Mr. Sang-hoon Lee (Korea).

Small ISPs in Thailand was presented by Mr. Somsak Siripattanakul (Thailand).

Discussion in the workshop focused on the challenge of answering the requirements of Ministers for a report to TELMIN 5 regarding international charging arrangements and the means to accelerate the accessibility of broadband access in the Asia-Pacific region. Mostly the discussion centered on the two proposals from China and from Korea on settlements and measurement of traffic. China’s proposal put forward some principles for assessing shares of total cost of bilateral traffic exchange in proportion to the attributable benefit of particular traffic streams. Korea’s proposal centered on methods of analyzing Internet traffic so as to identify the benefit of traffic stream components, using various techniques of application identification through packet sampling. Singapore and other speakers

generally supported the settlement approach suggested by China, and called for more work in developing the proposal.

The acting chairman requested the Task Group to consider the possibility of providing practical examples of implementation of these proposed approaches in relations between ISPs, either internationally or within particular economies, in order to support proposals to Ministers. Korea indicated this could be difficult within the available time-frame before TELMIN 5, but indicated that they would try to develop more applied models of their proposals, using actual examples of ISP traffic data.

The work continued through the use of the Virtual Forum, and the Task Group proposed to hold a second workshop in association with TEL25, in accordance with the terms of reference of the group.

At TEL25 five new documents were submitted. Two submissions provided elements for drafting the report and recommendation to TELMIN 5, one from China and one from Mexico. The delegation from Korea submitted a new document "*Korea's Approach to ICAIS Issue*". In this document Korea is proposing an APEC R&D project called: "*International Internet Traffic Measurement and Analysis to Seek a Proper Charging Model*", this project get full support from most APEC economies. The Australian submission presented the progress under the Program of Action in the Cancun Declaration in regard to ICAIS. The USA delegation submitted a recent document prepared by the OECD Secretariat: "Internet Traffic Exchange and the Development of End-to-End International Telecommunication Competition" to its Working Party on Telecommunications and Information Services Policy, (December 2001 [www.http://oecd.org/sti/telecom](http://www.oecd.org/sti/telecom)).

The US Representative drew attention of the group to the OECD report which concludes that competition is increasing in Internet backbone markets as a result of liberalization, and the consequent ability of telecommunication carriers to provide infrastructure and services on an end-to-end basis. There is increased competitiveness for transit services resulting in a decrease in price of transit services and more extensive use of peering. The Internet is becoming less hierarchical. There has also been a sharp decrease in the cost of Internet access for consumers and business users. The OECD report concludes that current arrangements provide the right incentives for developing backbone markets. Different business models are being pursued. The US market was shown to be competitive and the Internet less US centric. The Asia-Pacific market was shown to be developing consistent with global trends. Thus, the imposition of something external to the market process runs the risk of fundamentally altering the incentives for commercial responses and solutions to any perceived problem.

Responding to Ministers' instructions from TELMIN5 to continue discussing the international development of the Internet, including charging arrangements that will support high-speed bandwidth connectivity the IITG is of the view that the TEL should take into consideration the work related to Internet traffic arrangements from other international intergovernmental fora.

The IITG noted that in all APEC economies recently there has been increasing investments in infrastructure. In addition, telecommunication carriers in the OECD countries are facing competitive international backbone markets when they need to access another country, with the effect of minimizing its costs for the connectivity they need. In this emerging competitive Internet traffic exchange market, new players are looking for commercial solutions which in some cases may be either a) buying transit services from competing regional and global players; or b) entering into commercial partnership to build their own infrastructure.

Quite a number of economies are of the view that the Asia-Pacific developing economies are still facing inequitable charging arrangements based on the hierarchy model of peering and transit. However other economies do not agree that the current charging arrangements hinder the development of Internet in the region.

As stated by TELMIN4: "Internet charging arrangements between providers of network services should be commercially negotiated and, among other issues, reflect:

- a) the contribution of each network to the communication;
- b) the use by each party of the interconnected network resources; and
- c) the end to end costs of international transport link capacity."

In this regard, further work was proposed by China focusing in *Establishing New International Settlement Model for Internet Services Based on Costs*. Korea also proposed an *R&D project to Develop a Measurement System that Can Analyze the Feature of International & Domestic Internet Traffic for Fair Charging Arrangements* (An amended project was then submitted to the DCSG, which name is “Flow-based Internet Traffic Measurements and Analysis”). Several economies expressed support for these project proposals. Singapore and Hong Kong China also noted that one pragmatic approach could be to encourage the private sector to enter into commercial peering arrangements to facilitate cost-sharing of Internet traffic.

Singapore, Hong Kong China and New Zealand proposed further efforts be pursued to strengthen local Internet developments in the region for example: a) building regional content; b) building capacity links and access nodes to interconnect locally and regionally; and c) advance deregulation and competition within the region.

With reference to TELMIN4’s decision: “where there are dominant players and de facto monopolies, governments must play a role in promoting fair competition,” the meeting agreed that such roles could take the form of the following efforts:

- a) foster a fair, reasonable and competitive environment;
- b) prevent the polarization of the Internet development within the APEC region especially taking into account the interest of the less developed economies;
- c) enhance the exchange of information and communications on the research of settlement models and standards.

INTERNET ISSUES

Contribution of the steering groups to APEC TEL discussion within the Internet Issues Task Group:

DCSG

Throughout year-end 2000, 2001, and early 2002, the DCSG reviewed progress made on working themes and current/new projects in support of the TELMIN4 ministerial guidance on Internet development and ICAIS (International Charging Arrangements for Internet Services) issues. Since TELMIN4, the DCSG noted the two theme areas of general Internet development, and work on ICAIS, and agreed to try to keep these areas in balance. The DCSG has identified the following work areas:

1. Promote greater information-sharing. The DCSG endorses additional seminars on ICAIS/IITG (Internet Issues Task Group) issues.
2. Promote greater international Internet development.
 3. Assess dynamic business conditions to promote greater public and private investment and increase awareness.
 4. Assess trends in growth of available bandwidth within and between APEC economies.
 5. Assess implications of ICAIS arrangements on Internet infrastructure development (cause and effect relationships).
 6. Track growth of local traffic management techniques (including caching and mirroring).
 7. Track high-speed bandwidth development within and between economies and to project needs.
 8. Track the variety of cooperative arrangements and their impact on high-speed bandwidth development.
 9. Provide empirical measurement data on breakthroughs based on next-generation Internet research, to seek out new applications and activities in the APEC region.
10. Continue with the following existing and new projects/activities:
 - a) Optimal Topology of Test-beds: Research Networks and Simplified Commercial Networks in the APEC Region (Korea)
 - b) APII Test Bed Project (Korea)

- c) APII IPV6 R&D Tested Project (Japan)
- d) Development and Financial Resources Catalogue Project (USA: to expand to include Internet resources)
- e) Flow-based Internet Traffic Measurements and Analysis Project (Korea).

The DCSG stresses the importance of the Internet issues, appreciates IITG's efforts and offers its full support to the IITG in the perspective of development cooperation.

LSG

| TELMIN 4 OBJECTIVES | STATUS OF LSG PROJECTS SINCE CANCUN (MAY 2000) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>ICAIS</i> – Foster discussion between business/private sector and government parties on appropriate means to assess and reward the value of products and services exchanged in the provision of converged Internet services among APEC economies</p> | <p>22. In September 2001 (TEL 24), a Regulatory Structures Workshop was held to discuss policy approaches that government can use when dealing with convergence; how the role of industry comes into play when dealing with convergence, and issues with respect to regulatory flexibility.</p> <p>23. A Regulatory Analysis Report and a Regulatory Options Report were prepared, distributed and discussed at a Workshop integrated with the second Regulators' Roundtable in March 2002 (TEL 25). The Regulatory Analysis Report identifies and addresses skills needed in developing economies to ensure adequate infrastructure and human resources to address convergence. The Regulatory Options Report sets out a blueprint for convergence. It explores viable regulatory options that APEC economies could consider as they work to manage in an environment of convergence. It also examines competitive options economies could consider as they attempt to deal with convergence.</p> <p>24. Singapore oversees the Regulators' Roundtable project. A Roundtable was</p> |

held in March 2001 (TEL 23). Discussions were organized around three themes: responsibility of regulators; convergence tools; and the role of regulators in rolling out technology.

25. Australia oversees the Interconnection Resources Project. A report on interconnection pricing and rural infrastructure build out was prepared based on analysis of interconnection pricing policies. The findings of the report were discussed at a Workshop in September 2001 (TEL 24). The report will serve as an input document to the Interconnection Training Project.

26. The United States oversees the work related to commercial wireless services. A Wireless Workshop was held in March 2001 (TEL 23) to examine how deployment of wireless infrastructure and technologies can assist APEC economies in achieving public policy, economic, teledensity and other goals. It also explored commercial and regulatory issues associated with the use of wireless technologies.

27. Points 3 and 4 above apply.

28. The LSG facilitated a presentation and discussion on licensing conditions on backhaul that affect investment decisions on submarine cable landing.

29. The LSG facilitated presentations and information sharing on unbundling of the local loop.

ICAIS – encourage attention to the development of Internet systems and business models from the perspectives of liberalization, business facilitation and human resource development.

ICAIS – continue to discuss the international development of the Internet including charging arrangements, noting the initial suggestions in the proposals made by ICAIS Task Force.

ICAIS – TEL should discuss the kind of arrangements that will support high speed

bandwidth connectivity in the APEC region.

ICAIS – work should address the relationship between charging arrangements and return on investments as it reflects the development of high-speed bandwidth connectivity. It should also consider the application of APEC Principles of Interconnection to Internet services.

30. Point 8 above applies.

BFSG

The work of the BFSG is necessarily focused on development of capacity and opportunities for businesses and governments to gain advantage from use of the Internet and its associated technologies, services and applications. The Steering Group is contributing directly to Internet capacity building through the eSTG, which is working, on infrastructure security and electronic authentication issues within APEC economies. The Steering Group has also approved a project to provide information on user protection, security and privacy in multiple languages and adapted to local conditions in different economies.