

Asia-Pacific Economic Cooperation

1998 Report on Economic and Technical Cooperation

APEC SOM Committee on ECOTECH (SCE)

1998

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1998
REPORT ON ECONOMIC AND TECHNICAL COOPERATION TO
THE TENTH MINISTERIAL MEETING

Executive Summary

In their 1997 Vancouver Declaration, *Connecting the APEC Community*, the APEC Leaders noted the “progress that had been made in the 1996 Framework for Strengthening Economic Cooperation and Development in APEC”. They called on APEC Ministers and Officials “to focus on addressing the key challenges” identified in the Manila Declaration. The leaders also directed the ministers “to give all elements of the Framework equal weight and attention, and to be mindful of its indivisibility as an integrated set of objectives requiring coordination and communications across the APEC agenda...”

Over the past several years the activities of the Working Groups and other APEC fora have been expanding rapidly, and with it the need to provide management, coordination and overall direction for these activities. In 1998, the SOM established the SOM Sub-Committee on Economic and Technical Cooperation (ESC) to assist SOM in the management of the APEC ECOTECH agenda. In line with its terms of reference and 1998 work program, the ESC, with the assistance of the APEC Secretariat, conducted in April 1998, an initial evaluation of current ECOTECH activities. The evaluation covered all the work of the various APEC fora that was related to the six priority areas identified in the Manila Declaration. The evaluation identified several issues in terms of the duplication of effort, coordination among fora involved in ECOTECH work, results-orientation of the projects, and relevance to and participation by the business/private sector. The ESC concluded that significant improvement of APEC’s ECOTECH work was needed to fully implement Ministers’ 1996 Manila Declaration on Strengthening Economic Cooperation and Development.

Following up on the project evaluation, the ESC Chair developed a set of guidelines for strengthening the management of ECOTECH activities, including measures to enhance the participation of the business/private sector. The guidelines were later endorsed by the SOM and issued to APEC fora. The ESC also supported two recommendations from the 1997 APEC Business Advisory Council (ABAC) concerning APEC’s economic and technical cooperation agenda; namely, the ABAC plan to establish a new Partnership for Equitable Growth (PEG) and the APEC technology education initiative involving major IT producers.

The APEC fora continue to make good progress in their work in the six priority areas. In 1998, there were 274 ongoing projects/activities relating to the six priority areas spread across all the APEC fora. This represents a significant body of work in APEC and can be regarded as the critical building blocks for achieving APEC goals. Many of these projects/activities are highlighted in Section 3 of this report. In some cases, these projects/activities represent tangible and substantive ECOTECH deliverables for 1998.

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1. INTRODUCTION

In their 1997 Vancouver declaration, *Connecting the APEC Community*, the APEC leaders noted the “progress that has been made in the 1996 Framework for Strengthening Economic Cooperation and Development in APEC”. They called on APEC ministers and officials “to focus on addressing the key challenges” identified in the Manila Declaration. The leaders also directed the ministers “to give all elements of the Framework equal weight and attention, and to be mindful of its indivisibility as an integrated set of objectives requiring coordination and communications across the APEC agenda...”

1997 also saw the establishment of the SOM Sub-Committee on ECOTECH (ESC). The main objective of the ESC is to advance a more effective implementation of APEC’s ECOTECH agenda by consulting with and integrating the efforts of various APEC fora through a results-oriented approach which benefits all member economies, providing a policy management tool for strengthening and streamlining APEC’s work, and providing guidance on possible actions which could be undertaken to achieve APEC ECOTECH goals.

The ESC met on three occasions in 1998. The first was in Singapore on 28-29 April 1998 during which it approved the terms of reference of the SOM Sub-Committee on ECOTECH as **Annex 1** and its work program as **Annex 2**. The second meeting was held in Kuching, Malaysia on 15 June 1998, while the third was held in Mexico City on 4 September 1998. The three meetings were presided by the Chairman of the Sub-Committee, Ambassador Jorge Lozoya of Mexico.

The adoption of the *Declaration on an Asia-Pacific Economic Cooperation Framework for Strengthening Economic Cooperation and Development* in 1996 enables ECOTECH to gain equal prominence with trade and investment liberalization and facilitation within APEC. The Manila Declaration of November 1996 enumerated the following as ECOTECH goals:

- To attain sustainable growth and equitable development in the Asia-Pacific region;
- To reduce economic disparities among APEC economies;
- To improve the economic and social well-being of the people, and
- To deepen the spirit of community in the Asia Pacific.

Its guiding principles are:

- Mutual respect and equality;
- Mutual benefit and assistance;
- Constructive and genuine partnership, and
- Consensus -building

Some 274 ECOTECH projects were underway or completed by APEC fora in 1998. Coordination is important to enhance efficiency, effectiveness and streamlining all these activities in line with the main thrust of the Leaders and Ministerial instructions. The ESC assisted SOM in managing the ECOTECH activities systematically by identifying duplications and gaps, making recommendations on priorities, and addressing common issues facing the different fora.

The Manila Declaration identified six priority areas. They are:

- **Developing Human Capital**
Human resources development is one of the key factors to ensure sustainable economic growth. APEC envisioned capacity building for member economies where education and training would provide prosperity and improve the well-being of the people. As of September 1998, there were 74 projects in the area of developing human capital undertaken by various APEC fora. Human Resources Development is one of APEC's priority themes in 1998.
- **Fostering Safe and Efficient Capital Markets**
The regional financial crisis and recession have highlighted the importance of APEC actions in this ECOTECH priority area. 16 projects were underway in various APEC fora.
- **Strengthening Economic Infrastructure**
Building and modernizing infrastructure in the Asia-Pacific region is essential to achieving APEC's long-term goal of sustainable growth and equitable development. APEC should consider identifying a few selective initiatives with an emphasis to accelerating the implementation of APEC's commitment to reinvigorating infrastructure development in the region, particularly within the APEC developing economies. This would instill a sense of confidence in the resumption of economic growth in these economies. Various APEC fora are undertaking 27 projects within this priority area.
- **Harnessing Technologies for the Future**
Expanding the application of new technologies will be an important means to stimulating development and increasing efficiency over the longer term. This was another priority theme of the Malaysian year. There are currently 54 activities being undertaken by various APEC fora.
- **Promoting Environmentally Sustainable Development**
The issue of sustainability could be integrated into APEC's agenda through increased attention to the links among economic growth, population, resource issues and poverty reduction as well as advancing work in clean technology/production, sustainable cities and sustainability of the marine environment. 60 projects are being undertaken by various fora in APEC.
- **Encouraging the Growth of Small and Medium Enterprises**
Small and medium enterprises (SMEs) are an important engine of economic growth in APEC. They constitute more than 85 percent of all businesses in the region. 26 SME projects are currently being undertaken by the various APEC fora.

17 other projects/activities did not appear to serve any of the above six priority areas.

A summary of ECOTECH projects/activities in the six priority themes undertaken by APEC fora in 1998 and the ECOTECH Matrix which provides descriptions of those activities are at **Annexes 3 and 4**.

2. MANAGEMENT OF ECOTECH ACTIVITIES

2.1 Evaluation

In line with its terms of reference and 1998 work program, the ESC with assistance from the APEC Secretariat, conducted in April an initial evaluation of ECOTECH programs then underway. The review included mainly activities underway or reaching completion in 1998. The raw material for the evaluation was a consolidated matrix of APEC ECOTECH activities categorized by the six priority areas, the APEC Secretariat program directors' knowledge about projects and, where available, project progress reports. In some cases, only limited information was available; in others the project had not actually started, so the 'evaluation' merely focused on project objectives and design.

This initial review involved a broad overview on ECOTECH activities, their relationship to one another and their relevance to the six priorities, rather than a micro-evaluation of individual projects. In addition to providing some factual information, the ESC evaluated the activities broadly in terms of the following elements:

- Duplication
- Gaps
- Relevance to the six priorities and goals of the Manila Declaration
- Nature of outcomes
- Linkage to ongoing work programs of fora and member economies' action plans
- Extent of member economies' interest and participation
- Business relevance and participation.

2.2 Key Findings

The evaluation identified various issues in terms of duplication of effort, coordination among fora involved in ECOTECH work, results-orientation of the projects, and relevance to and participation by the business/private sector. The ESC concluded that significant improvement in APEC's ECOTECH work was needed to fully implement Ministers' 1996 Manila Declaration on Strengthening Economic Cooperation and Development.

Significant findings from the evaluation include the following:

- A total of some 238 activities were underway in APEC, at the time of the review, that supported one or more of the six priorities. Another 22 activities were underway that did not appear directly relevant to any of the six. Some, though not all, of these were already in the pipeline when the Manila Declaration was issued. (Note: the figures in this section reflect the status of ECOTECH activities when

the evaluation was conducted in April 1998 and differ from the more recent situation depicted in the matrix in **Annex 4**.)

- The breakdown of activities by priority was as follows:

Developing human capital	78
Developing stable, safe and efficient capital markets	13
Strengthening economic infrastructure	31
Harnessing technologies for the future	45
Promoting environmentally sustainable development	47
Encouraging the growth of SMEs	24

- The breakdown by type of ECOTECH activity was as follows:

Training/exchange programs	54
Workshop/seminar	35
Study/research/report	62
Database/network development	33
Policy reform/standards setting/harmonization	33
Mixed/other	21

- Among the 238 activities at the time of the review, there was a strong indication of possible duplication of effort. Further expanding the evaluation by including completed projects may have revealed greater duplication.

- Possible gaps were identified in each of the six areas.

- In each priority area, there are activities conducted by more than one APEC forum, and coordination on the “priority-level” seemed to require further improvement. The current efforts seem to fall short of the Manila Declaration’s call for working groups and other relevant APEC fora to coordinate with each other and integrate their work on cross-cutting issues to achieve focused outcomes and demonstrate breakthroughs in advancing the goals of APEC.

- Many ECOTECH activities also seemed to fall short of the Manila Declaration’s injunction that they be “goal-oriented with explicit objectives, milestones, and performance criteria”.

- Most project outcomes were oriented more to process than to easily measurable results: studies, training for APEC officials, new databases, etc. These outcomes can serve the objectives of the six priorities, but they usually depend on close linkages with the fora’s ongoing work programs and, crucially, with individual members’ action plans. While available information did not easily lend to a definitive judgement, such linkages often appeared to be weak.

- The extent of economies’ interest and participation varied widely from one activity to another. The financial crisis has had a negative impact on members’ travel budgets, resulting in reduced attendance at or postponment of some recent events. The burden of project oversight did not appear to be very evenly shared among economies.

- Business relevance and participation varied widely among the priorities; for example, they appeared fairly high in the case of Infrastructure and low in the case of Developing Human Capital. Business interest seemed higher in cases where it had been included in work program design than in the various public-private roundtables soliciting business views about general topics, e.g. the elements of a sound investment environment.

2.3 Strengthening the Management of ECOTECH Activities

Based on this evaluation and the clear need to improve implementation of the Manila Declaration, the ESC Chair developed proposed guidelines for strengthening the management of ECOTECH activities, including enhancing the participation of the business/private sector. The ESC discussed and endorsed the draft guideline at its second meeting in Kuching and submitted them to SOM II, where they were reviewed and approved in Kuching.

The guidance, issued by the SOM Chair to all APEC fora on 9 July 1998 with immediate effect, aims to improve the quality of APEC's ECOTECH work. The guidance aims to ensure that APEC ECOTECH activities relate to one or more of the six priority areas and are goal-oriented and results-oriented. APEC fora that propose ECOTECH projects are enjoined to ensure that they do not duplicate efforts already underway, and the Budget and Administration Committee and APEC Secretariat are urged to scrutinize projects to prevent such lack of coordination. APEC fora are also encouraged to work together with business representatives to develop their collective work programs and to involve business in all stages of the ECOTECH project cycle. (In this regard, the Chair of the APEC Business Advisory Council has welcomed the new guidance and pledged to work closely with APEC fora on their ECOTECH agendas.) A full copy of the SOM's guidance is provided in **Annex 5**.

Senior Officials and the ECOTECH Sub-Committee believe that rigorous implementation of these guidelines will enhance the quality of APEC's ECOTECH work and help us realize the objectives of the Manila Declaration. At the same time, ESC will continue to monitor and evaluate ECOTECH activities and look for additional ways to improve them.

2.4 ECOTECH and ABAC Recommendations

In November 1997, the APEC Business Advisory Council (ABAC) made two recommendations concerning the APEC Economic and Technical cooperation agenda. First, ABAC sought Economic Leaders' endorsement of its plan to establish a new Partnership for Equitable Growth (PEG), an organization that would serve as a catalyst for business/private sector participation in ECOTECH activities.

Economic Leaders in Vancouver welcomed ABAC's establishment of the PEG, while APEC Ministers drew attention to the benefits of expanded public-private cooperation in ECOTECH. Following up, the ESC Chair wrote to the ABAC Chair in July to brief him on current ESC activities and to relay the keen interest of the APEC community in the founding of the PEG. The ABAC Chair responded in August indicating ABAC's willingness to hold dialogues with APEC sub-groups concerning their ECOTECH

agendas and to provide in-kind and technical assistance to cooperatively developed projects. ABAC is expected to provide an update on the status of PEG at the Kuala Lumpur AELM.

Second, ABAC sought Economic Leaders' endorsement of an APEC Information Technology Education Initiative involving major IT producers. While Leaders did not specifically refer to this recommendation, a number of APEC programs are underway that could be considered responsive to the proposal. One provides short-term training courses to upgrade technical skills needed to conduct electronic commerce. Another provides vocational training in cooperation with participating private firms. Finally, ABAC plans to launch a major new skills development initiative that would involve public-private collaboration to impart training in information technologies.

2.5 ECOTECH Element in EVSL

Economic and technical cooperation is an integral part of APEC's Early Voluntary Sectoral Liberalisation (EVSL) exercise. In Vancouver Ministers emphasized that sectoral agreements or arrangements should include details of ECOTECH, as well as market opening and facilitation activities. Consequently an ECOTECH component is being developed for each of the 15 sectoral initiatives as in **Annex 6**. The Committee on Trade and Investment has managed the EVSL process, in consultation with ESC on the ECOTECH elements.

The sectoral initiatives, as noted by Trade Ministers in Kuching, include an outline of the ECOTECH activities under development. They focus on the priority themes of developing human capital, harnessing technologies of the future and environmentally sustainable growth. Many of these projects/activities are to be carried out in conjunction with other APEC fora and/or the private sector.

2.6 Emergency Preparedness

In Vancouver the APEC Economic Leaders welcomed the initiative by the APEC Ministers for APEC to define its value-added role in formulating emergency preparedness and disaster recovery measures and instructed Senior Officials to explore measures for joint action. As directed the SOM submitted its Report to Ministers on 1 June 1998. The report proposed the following recommendations for further work and development:

- The formulation of an APEC Framework for Longer Term Capacity Building Cooperation for Emergency Preparedness in APEC;
- Identification of further emergency preparedness technical cooperation initiatives in all APEC fora including information sharing through the establishment of an APEC Website, and
- The staging of a trade fair exhibition and conference to focus on the issue of smoke/haze/air pollution/forest fires and their impacts.

The SOM's Report to Ministers is at **Annex 7**.

3. HIGHLIGHTS OF THE ECOTECH PROJECTS/ACTIVITIES IMPLEMENTED IN 1998

As mentioned earlier, 274 projects/activities are being implemented in 1998. The majority are conferences/workshops, information sharing and exchange, training programs and research studies. Very few involve setting up any physical structure such as training centers. The ESC evaluated the existing work programs and advised Senior Officials on possible measures to ensure effectiveness and relevance of current work in meeting the goals under each theme. The need for coherence, systematic and effective integration was a particular focus of the ESC. The APEC Secretariat has drawn these projects/activities and organized them according to the six priority areas which were considered at the third meeting of the SOM Sub-Committee on ECOTECH in Mexico City.

The following projects/activities represent the most significant and high-impact activities and will bring significant benefit to APEC. The Chair of the ESC took the view that these projects/activities should be regarded as critical building blocks in achieving APEC goals. These projects/activities conducted by the various APEC fora as mentioned below are expected to have immediate, high profile impact. These highlighted projects/activities reflects APEC's 1998 ECOTECH deliverables that are actual and substantive.

3.1 Developing Human Capital

Work on developing human resources this year was guided by the directives of Leaders in Vancouver to focus more on capacity building and to address the financial crisis in the region. In addition to the numerous projects currently being undertaken by the various APEC fora, a more comprehensive and action-oriented skills development plan for APEC has been formulated to focus concerted efforts on activities that contribute directly toward a more rapid building up of skills base of the region's workforce. As a direct response to the financial crisis, the Human Resources Development Working Group (HRD WG) created a Task Force on the Human Resource and Social Impacts of the Financial Crisis to assess the situation and recommend options to address the problem.

The Action Programme on Skills Development for APEC seeks to intensify efforts on skills development in four areas of focus:

- Upgrading the industrial skills base;
- Spawning new entrepreneurs;
- Technology skills for the new millenium, and
- Strengthening institutional infrastructure to facilitate trade and investment liberalization.

Under the Action Programme on Skills Development which is at **Annex 8**, three approaches have been outlined to further intensify efforts in skills development. This programme will also build on the existing projects related to skills development by accelerating/intensifying their implementation and by seeking more economy participation. In order to address the problem currently being faced by the public sector, the plan will encourage a market-driven approach to skills training emphasizing greater business involvement through a "smart partnership" between the public and the private

sectors. This will also ensure that there is no mismatch between training and the real work environment and that output matches demand.

The non-profit approach adopted by the Penang Skills Development Centre has been recognized to serve as a possible “best practice” model for the “smart partnership” approach. This model is based on a collaborative efforts involving the public sector, the business sector, and academe. The public sector provides the basic infrastructure such as land and building; the business sector provides the management of the centre, identifies skills needs as demanded by business and provides technology and tools on loan to the centre; and the academe offers advice and research as well assists in the training of trainers.

The HRD WG Task Force on the Human Resource and Social Impacts of the Financial Crisis brought together experts, particularly from the most affected economies, to discuss and analyze the likely human and labor market impacts of the crisis and to identify and compare measures adopted in response to them. Experts from those economies which have overcome similar crises in the past were also invited to share their experiences. An experts’ workshop cum Task Force planning meeting was held in April 1998 and this was followed by a one-day symposium in June 1998 in conjunction with the 18th HRD WG meeting. It is interesting to note that in the June Symposium business, labor and gender groups were represented apart from practically all of the participating delegates to the working group meeting. The Synthesis paper presented during the June Symposium as well as the major economy papers are available on the APEC Secretariat web site. The Task Force is now deliberating on how to publish the results of the symposium for submission to Leaders and Ministers in November.

The HRD WG adopted the recommendations of the Task Force which include:

- (a) that the HRD WG undertake a project examining best practices in member economies in balancing market liberalization with labor market adjustment policies to respond to external shock;
- (b) that the HRD WG contribute to the efforts of the APEC Ministers process to strengthen corporate governance in general and financial sector supervision and regulation in particular through support to training programs as appropriate;
- (c) that the HRD WG contribute to the Economic Committee’s project to examine the impact of trade liberalization by undertaking specific analyses of the human resources and social impacts;
- (d) that APEC explore ways of cooperating with IFIs, consistent with existing guidelines regarding non-member participation, to promote dialogue so that resources and investments can be channeled not only to financial restructuring, but also to other productive uses including needs of the social sectors of the affected economies, and
- (e) that HRD WG develop stronger links with key private sector stakeholders, including business, labor, women, youth and non-governmental organizations, to enable them to contribute inputs to the Working Group activities.

Apart from these main activities, a number of APEC fora have undertaken numerous HRD-related projects. The HRD WG alone has more than 60 projects on a variety of issues related to its eight medium term priorities. These priorities are based on Leaders and Ministers directives and include issues on:

- Quality basic education
- Labor market analysis and information
- HRD for SMEs and for sustainable development
- Vocational training and professional and technical skills
- Lifelong learning and school-to-work transitions
- Mutual Recognition of skills and qualifications
- Equitable development and quality of the labor forces and work places in member economies
- Cooperation in education and training to support trade and investment liberalization

Some of the HRD WG projects which are expected to be completed this year are:

Education:

- The development of a multi-media series of profiles for Primary Six school students is expected to be completed by December 1998. The final output would consist of a teacher's guide, student handbook, a video tape and a CD.
- The development of a network of education hubs that contributes to the collective learning of APEC economies has started this year with Singapore awarding two scholarships for a Masters program at National University of Singapore (NUS).
- To enhance cooperation between higher education, a pilot UMAP (University Mobility and Asia and the Pacific) Credit Transfer Scheme is being developed.
- A "best practice" report in professional engineering accreditation, recognition, and development and a pilot exchange project have been completed. A third stage is being developed which will seek agreement on a framework for an "APEC Engineer".

Training and skills development:

- There is an ongoing on-the-job training program for APEC youth in Japan. The project is called Japan-APEC Partnership for Education and Training (JAPET)
- A comparison of skill testing standards among APEC members to determine what types of trades can be mutually recognized in terms of their skill qualifications will be completed this year.
- A workshop will be held in September this year to discuss the development of vocational teacher standards.

- A five-year annual symposium from 1996 onwards to enhance the quality of government officials, managers, entrepreneurs and trainers in the field of HRD for white collar workers in the region.
- An ongoing vocational training project in cooperation with local and business groups providing vocational training to people who do not work for those firms in the region.
- As part of an APEC Vocational Training Program, a training course was conducted for 40 vocational training instructors from 10 member economies from 1 April to 30 June 1998.

Business management and electronic commerce:

- The first meeting of the APEC Chief Human Resources Officers (CHRO) Network was held in February 1998. This project intends to establish a regular dialogue mechanism within the Business Management Network of the HRD WG by which entrepreneurs, high government officials and senior researchers from APEC economies can jointly analyze the challenges of enterprise management in the region.
- A symposium was held in June 1998 to assess the status quo of distance learning practices and to exchange information on multimedia distance learning. An electronic web site is now in place. The ultimate goal is to form a consortium of MDL practitioners.
- A training workshop is planned for October this year on “Internet & Electronic Commerce: Training based on Java technology in APEC”. The idea is to develop and disseminate training modules accessible to APEC members for the upgrading of electronic skills in business through the Internet and web site.
- A compilation of case studies highlighting lessons learned by companies who have entered into pilot joint implementation projects on greenhouse gas emissions is expected to be completed by October 1998. This is intended to contribute to the development of business management practices in joint implementation.

Labor market:

- A symposium entitled, “Overcoming Bottlenecks: Freer and More Open Labour Markets for APEC Economies” was held in January 1998. It discussed some of the problems in key sectors, assessed the nature of the labor shortages, and focused on the skilled labor markets issues and policy alternatives. It was attended by business representatives, specialists and scholars from APEC member economies.
- An APEC LMI Database has been established and updated since 1996. The main function of the database is to encourage and facilitate cooperation among member economies through the exchange of information and statistical analysis that will assist them to assess and manage their policy making more effectively. The next steps include the development of strategies for technical assistance on capacity

building and the establishment of an information strategy, including the publications of an analytical labor market report.

- Projects are underway examining how workplace safety and health contribute to productivity as well as the relationship between wages and productivity

Women and youth:

- A conference entitled, *Gender and Lifelong Learning: Enhancing the Contribution of Women to SMEs in the Asia-Pacific Region for the 21st Century*, was held in June 1998. Three clusters of issues were identified at the Result Conference: (a) women's lifelong learning needs in the context of SMEs; (b) issues facing women and the economy, and (c) the effect of the economic crisis on women's lifelong learning needs and opportunities in the context of SMEs.
- An experts' meeting was held in June 1998 to discuss linkages between paid and unpaid work and human resources policy. One of the objectives of this project is to elaborate a role for APEC in enhancing Asia-Pacific regional awareness of women's needs and role and access to resources.
- An APEC HRD Electronic Source Book on the Internet on work, study and exchange opportunities in the APEC region has been updated and maintained in 1998.

Some of the HRD-related activities of the other working groups are described in the following paragraphs:

The Fisheries Working Group (FWG) has a comprehensive regional program of on-site in-plant training on HACCP-based seafood inspection. Workshops had been held in a number of economies already with a final one scheduled this year. This activity involves technical cooperation and skills transfers which will help enhance overall quality and safety of seafood products produced in APEC economies.

The Industrial Science & Technology Working Group (IST WG) has a number of ongoing projects in the HRD area. One of them is the ongoing study of transborder flow of researchers and identification of major legal/institutional/social issues and other factors related to researcher exchange. Results of two major surveys would be reported during 1998. It had completed one gender-related project, an APEC Experts Meeting on Gender in Science, Industrial Technology and Engineering in March this year. Another gender-related activity of the working group is a multi-year project which started in 1997 and will be completed in 1999 involving the study of best gender practices in the workplace. The 1st APEC Youth Science Festival was held on 14-20 August 1998 to better acquaint the youth in this area. The IST WG also printed this year the proceedings of the 1997 Symposium on the status of public understanding on S&T in the economies in the region. A Feasibility Study on APEC Training for Practical Technology of Laser Application and Operation is scheduled to be completed in 1998. The Study is intended to result in a training program for engineers and technicians of practical laser application techniques. Finally, an APEC R&D Leaders forum was organized in March 1998 as a step toward establishing a network among APEC R&D organizations/institutions.

The Telecommunications Working Group (TEL WG) has been likewise much involved in HRD, particularly through its HRD Steering Group. The second phase of a distance learning project is being developed in consultation with the HRD WG. Building on the success of the 1997 Distance Learning Pilot Project, the distance learning web site will be used to deliver educational content to support implementation of the APEC EVSL Mutual Recognition Arrangement for Telecommunications Equipment and other HRD-related projects. A collaborative research on multimedia HRD system network technologies is expected to be completed this year and will provide a continuous source of information on various practices that will benchmark the similar needs of APEC member economies. The Working Group is also involved in a number of training initiatives in this area. It has likewise pursued projects to enhance co-operation among economies in personnel exchange programs and training, and in the new area of disaster recovery and contingency planning.

The Tourism Working Group (TWG) is expected to complete the development of common occupational skills standards for use in the travel and tourism industry this year. This will cover a selected number of areas, which will facilitate the mobility of tourism and travel personnel within the region.

The Trade Promotion Working Group (WGTP) has completed a number of HRD-related projects this year. A one-off training program on international trade promotion skills was held on 27-30 July this year. This was intended to enhance participants' understanding of trade promotional measures among member economies and to develop trade promotion capabilities and skills among participants. A Compilation of TSAT Course Catalogue, a compilation of information related to training programs offered by trade promotion organizations or other affiliated/accredited institutions/centers in APEC economies, has been published and distributed to TP WG members. A program of exchange of trade promotion experts on development of local industries and trade and investment promotion, comprising of seminars, case studies and visits, was held on 16-21 February 1998. Phase I of a joint HRD WG/WGTP project to train specialists in trade and investment insurance has been completed while Phase II of the same project will start in August this year.

The Transportation Working Group (TPT WG) has a number of ongoing projects on HRD. It has two seafarers training projects which are intended to promote high quality instruction for seafarers consistent with the requirements of the International Maritime Organization Convention on the Standard of Training Certification and Watchkeeping (STCW). It is also in the process of establishing a Virtual Center for Transportation Research, Development and Education as a network of institutions providing transportation research, development and education. The Virtual Center is to be located on the TPT WG web site which is currently under development. The Working Group also has an Experts Group on Maritime Safety which identifies maritime safety issues and problems in the region and provides solutions. It has established a project team to support the participation of women by highlighting "success stories" which would provide examples to the TPT WG members of training and development initiatives in the transportation sector.

The Agricultural Technology Cooperation Experts Group (ATC) is in the process of establishing a data base for information concerning institutions involved in technology transfer, training facilities, courses, activities and seminars available in the region. It is

also involved in activities aimed at strengthening existing regional agricultural technology transfer training facilities and developing cooperative training programs.

The Committee on Trade and Investment (CTI) has designed various training programs for most of the 15 TILF issue areas. The Sub-Committee on Customs Procedures (SCCP) has strategically undertaken a package of multi-year technical training programs to ensure that all member economies can implement the Collective Action Plans by established target dates. Other multi-year training programs, named Partners for Progress, have been organized in the areas of standards and conformance, intellectual property and competition policy. Market Access Group, Group on Services and the Informal Meeting of Mobility of Business People have initiated their training programs this year.

The Policy Level Group on SMEs (PLG SME) has also contributed in this area in at least two ongoing projects. A study involving the gathering of basic statistics on women-owned and operated-SMEs is being undertaken to analyze the challenges facing women entrepreneurs in SMEs and to recommend appropriate policy measures to help women entrepreneurs make a greater contribution. On the other hand, an APEC Center for Entrepreneurship is expected to be set-up by the end of the year to foster and promote SME entrepreneurship and training human resources among SMEs in the region.

3.2 Developing Sound, Safe and Efficient Capital Markets

The regional financial crisis and recession have highlighted the importance of APEC action in this ECOTECH priority area. Without seeking to duplicate the work of the main international financial institutions, APEC has taken action in several areas consistent with its mandate and competence to address the underlying causes of the financial instability. APEC's efforts to build sound regional capital markets will help prevent a recurrence of the crisis.

Economic Leaders drew attention to APEC's important role when they met in Vancouver in November 1997. Stressing their resolve "to work together to address these shared challenges," the Leaders stated that "APEC can play a particularly valuable role in exploring ways, in cooperation with the World Bank, the IMF, and the Asian Development Bank, of intensifying its economic and technical cooperation, giving priority to upgrading financial systems, enhancing cooperation among market regulators and supervisors and other measures to help improve the integrity and functioning of financial markets."

Most of APEC ECOTECH work in this priority area has been conducted under the APEC Finance Ministers process, though other APEC groups have also been active in their areas of expertise. The Finance Ministers Technical Working Group has been implementing various collaborative initiatives to develop regional capital markets that were launched at the Ministers' meeting in April 1997 in Cebu, Philippines. These include:

- **Strengthening financial market supervision.** Action plans will be implemented to improve domestic training of banking supervisors and securities regulators and enhance international cooperation in such training programs.

- **Developing asset-backed securitization activities.** A voluntary action plan has been adopted to help economies that want to speed development of securitization activities in their markets. It focuses on removing impediments to market development, technical assistance and continued sharing of experience. Adoption of the plan followed a survey to assess members' existing level of securitization activities and an international conference on securitization and a workshop for regulators held in Kuala Lumpur in December 1997.
- **Reform of pension systems .** Given the important role of pension systems in capital market development, a regional forum on pension reform was held in Mexico in February 1998 to examine alternative reform strategies. Chile will host a second forum in the next year that will focus on policy issues concerning sound pension systems.
- **Developing credit rating agencies.** A seminar on credit rating agencies was held in Manila in March 1998 that sought to develop best practices for development of domestic rating agencies and promote full information disclosure by corporate borrowers. Work will continue to identify ways to improve rating agencies' ability to channel timely and accurate information to capital markets.
- **Strengthening clearing and settlement infrastructure .** Several member economies and the ADB stand ready to provide technical assistance to members with less advanced clearing and settlement systems.
- **Cooperation among export credit agencies and export financing institutions.** In response to the credit crunch resulting from the crisis, 15 institutions signed a protocol agreement in November 1997 setting out a framework for technical cooperation with respect to private infrastructure projects. (Prompted initially by the Economic Committee's Infrastructure Workshop, this initiative was later successfully linked to a similar exercise launched under the Finance Ministers process.)

APEC Finance Ministers met 23-24 May 1998 in Kananaskis, Canada. They reviewed the causes of the financial crisis, policies to restore stability and growth – including measures to cushion the impact on the poor, and ways to strengthen financial markets to reduce the chances of a recurrence. In reviewing progress on the above ECOTECH initiatives, Ministers agreed to continue efforts over the next year in three priority areas:

- **Capital market development.** This would subsume the continuing elements of the above initiatives, other than financial market supervision. In addition, Ministers launched a new initiative on developing domestic bond markets, to be coordinated by Hong Kong, China.
- **Capital account liberalization.** Ministers reaffirmed their commitment to continue working on designing a Voluntary Action Plan for Supporting the Freer and Stable Flow of Capital, an effort that began before the current turmoil set in. They also asked Deputies to work with the IMF and World Bank to compare the experiences of economies in managing the capital market liberalization process, in order to study how to promote freer capital flows while maintaining macroeconomic and financial stability. They also asked Deputies to work with the IMF to examine how to monitor capital flows.

- **Strengthening financial systems.** Finance Ministers called for timely and comprehensive implementation of plans to improve training of bank supervisors and securities regulators. They also launched an initiative, coordinated by Malaysia in conjunction with the World Bank and ADB, to study ways to strengthen corporate governance in the APEC region. Australia will host a seminar with senior business people to identify priorities for reform in this area.

Recognizing the impact of the financial crisis on trade, investment and APEC's work in areas such as labor markets and infrastructure development, other elements of the APEC process must also be active in this priority. Senior Officials in early 1998 therefore directed relevant APEC fora to incorporate initiatives and measures that would help alleviate adverse effects on economies arising from the current situation. Examples of such initiatives include:

- **The 1998 APEC Economic Outlook** reviews the situation in regional currency and financial markets, the impacts of the financial crisis on member economies, and the measures they have taken to restore stability and growth. The Economic Outlook Symposium, held in Xiamen, China 16-17 May, addressed the impact of the crisis on APEC members.
- The **Human Resource Development Working Group (HRD WG)** has endorsed the recommendations of its Task Force on the Human Resource and Social Impacts of the Financial Crisis, which held a symposium on this topic 15 June in Taipei. The team suggested that HRDWG examine best practices in member economies on balancing market liberalization with labor market adjustment; cooperate with the Finance Ministers process to strengthen corporate governance and financial sector supervision and regulation, through support to training programs; develop closer links with business and civic groups to enable them to contribute to its activities, and that APEC work with international financial institutions to ensure that social needs of the affected economies are addressed.
- An Australian-led initiative will identify a package of **economic governance capacity building** assistance activities through a survey of APEC economies and international economic and financial institutions. The survey will identify needs, and programs underway to meet those needs, and possible gaps that could be filled by APEC economies and international agencies. This analysis could form the basis for developing a package of ECOTECH activities to build capacity in economic governance.
- The 4th **APEC Investment Symposium**, held on 29-30 September 1998 in Kuala Lumpur, discussed the impact of the crisis on investment trends and government policy responses, including changes to investment regimes. Delegates were changing business perceptions of investing in the region in the wake of the financial turmoil and priorities for action on investment liberalization.
- The public/private sector **Regulatory Reform Symposium**, 5-6 September in Malaysia, considered further APEC work on deregulation and regulatory management, including in the financial sector.

3.3 Strengthening Economic Infrastructure

In November 1997, the APEC Economic Leaders endorsed *The Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development*. The objective of the Vancouver Framework is to strengthen partnerships between the public and private sectors in order to put in place and manage the infrastructure required for the development of the APEC region. The follow up of this initiative is reflected in the paper on the *Next step of APEC Infrastructure 1998* that appears in **Annex 9**. The paper outlines the various activities underway in APEC fora, which respond to the Vancouver Framework.

In 1998, APEC has undertaken a broad range of activities to implement the Vancouver Framework. Most notably, the Economic Committee, through its Infrastructure Workshop, is undertaking a work program focussing on the following areas:

- Research and analytical work on issues relating to the overall infrastructure environment.
- The APEC Public-Business/Private Sector Dialogue on Infrastructure and Sustainable Development which was held in Taipei on 20-22 May 1998. The proceeding of the Dialogue will be published.
- Implementation of the Vancouver Framework components on Improving Capacities and Information and Consultation, including the establishment of the Infrastructure Facilitation Network.

At the APEC Ministerial Meeting in Vancouver, “Ministers called on all APEC fora to continue to participate actively in addressing the infrastructure development needs in the region.” Ministers identified a number of areas for cooperation including: creating an Asia-Pacific Information Society, creating an integrated Asia-Pacific Transportation System, energy infrastructure, infrastructure for sustainable cities and infrastructure for rural diversification and integration. In response to the Ministers’ call, various APEC fora have advanced work in these areas of cooperation. These include:

- **Creating an Asia-Pacific Information Society.** The Telecommunications Working Group (TEL) has taken the lead in working toward realizing this goal. TEL’s actions toward achieving this goal include: the completion of the Mutual Recognition Arrangement for Telecommunications Equipment; expanding connection to the Asia-Pacific Information Infrastructure (APII) for research networks and testbeds, and for universities and public institutions such as hospitals, museums, galleries and libraries, with initial emphasis on addressing the needs of the medical community; and, expanding access to basic telecommunications services through voluntary actions by member economies, and through policy advice such as the model universal access policy endorsed by Telecommunications Ministers at their June 1998 meeting in Singapore.
- **Creating an Integrated Asia-Pacific Transportation System.** The various specialized groups under the Transportation Working Group have been actively advancing work in this area. The Intermodal Task Force has developed a systems analysis project which aims to demonstrate various options for intermodal infrastructure investments, and the costs, benefits and potential impacts associated

with these options. The Urban Transport Forum is developing a best practices manual identifying the best methods to address urban transport problems. The Air Services Group has completed the final report on more competitive air services with fair and equitable opportunity. The report, to be submitted to Transport Ministers, includes a recommendation on the options to be developed and implemented. The Ports Experts Group is continuing work to improve port efficiency through exchange of information and experiences among port experts and has completed an interactive web-based Port Database. The Road Safety Experts Group is working on a best practices manual on comprehensive road safety strategy development and to establish a road safety data exchange program.

- **Economically Viable and Environmentally Sustainable Energy Infrastructure.** The Energy Working Group (EWG) has finalized a report on the Natural Gas Initiative which was submitted to Energy Ministers in Okinawa. The report contains a set of recommendations on ways to accelerate investment in natural gas supplies, infrastructure and trading networks in the APEC Region. The EWG has also completed work on the Power Infrastructure Initiative which aims to develop recommendations to assist energy security through improved fuel supply market operation.
- **Infrastructure for Sustainable Cities.** The Infrastructure Workshop under the Economic Committee began work this year on developing an action program to implement the recommendations of the Vancouver Framework relevant to infrastructure for sustainable cities.
- **Infrastructure to Support Rural Integration and Diversification.** The Infrastructure Workshop has taken on the task of developing new approaches to public-private sector partnership for rural infrastructure development. The aim will be to bring together decision-makers and experts to identify new funding strategies. A symposium is planned for 1999. In addition, the Energy Working Group is also undertaking projects related to rural integration, namely, the projects on the Facilitation of Rural Electrification in the APEC Region and the Assessment of Integrated Rural Energy and Village Power Program for Potential Collaborative Projects in the APEC Region.

3.4 Harnessing Technologies for the Future

Work in the area of Harnessing Technology for the Future in 1998 was guided by the directives of the Leaders in Vancouver. Leaders also directed Ministers to focus further efforts on this area. APEC Leaders also directed Ministers to formulate an APEC Agenda for Science and Technology Industry Cooperation into the 21st Century in view of the growing role of science and technology to strengthen the spirit of the APEC community. The ESC, with input from various APEC fora, assisted in drawing up the APEC Agenda for Science and Technology Industry Cooperation into the 21st Century (See **Annex 10**) for SOM III consideration. The Agenda was submitted for endorsement to the 3rd APEC Ministerial Conference for Regional Science and Technology Cooperation held in Mexico in October 1998. The Agenda could be summarized as follows:

Purpose: To facilitate and strengthen economic and technological cooperation to achieve the APEC vision by encouraging the flow of technology.

Vision: A dynamic and prosperous Asia Pacific region based on industrial science and technology through creation of strong open innovation systems and development of sustainable regional science and technology networks and partnership.

Principles: open access, balanced benefits, private sector/business participation, and supportive regulatory framework.

Mechanisms: improved availability and access to information, improved human resource development, improved business climate, enhanced policy dialogue and review, and facilitation of networks and partnerships

Technology areas: These include biotechnology, environmental and cleaner production technologies, communication, information technologies/electronics, advanced materials, mechatronics, transportation, resource management technology, energy, sustainable agriculture and emergency preparedness and climate prediction.

Implementation: Relevant APEC fora and member economies will implement actions to strengthen science and technology cooperation in line with the vision and principles set out.

The ESC worked closely with the Industrial Science and Technology Working group to form a mechanism to realize key priorities through cooperative efforts and joint activities that leverage science and technology resources of APEC member economies. The ESC supported the Working Group to build upon its ongoing programs and develop new initiatives to augment advances in technological capacities and enhance collaboration consistent with the vision set forth by APEC Leaders. The ESC share the vision of the 21st Century of a dynamic and prosperous Asia-Pacific region built on the development and application of industrial science and technology which supports economic growth and improves quality of life while safeguarding the natural environment. The ESC will work cooperatively with the IST Working Group and others to catalyze the development of strong sustainable regional S&T networks and partnerships.

The Industrial Science and Technology Working Group (IST WG) has been undertaking programs to realize its vision for the 21st century: a dynamic and prosperous Asia Pacific region built on development and application of industrial science and technology, while safeguarding the natural environment. The IST WG, at its 14th meeting in March 1998, developed its revised action program, focusing on harnessing technologies for the future. The action program explored several key issues to take into account in developing APEC activities to build the region's capacities in this area. The IST WG activities in this area include:

- Maintenance and improvement of the APEC Science and Technology Website (ASTWeb) and 2nd APEC technomart (Chinese Taipei, January 1998) to promote access to regional science and technology information and encourage dialogue
- APEC science and technology network to expand researcher mobility

- APEC youth science festival (Seoul Korea, August 1998) and APEC ad-hoc group on gender and science and technology to enhance public interest in science and technology, particularly among youth and women, implementation of APEC cleaner production strategy and APEC action plan on emerging infectious disease, activities related to natural disaster mitigation, activities of APEC Virtual Centre for Environmental Technology Exchange (Japan), APEC Coordinating Centre for Good Clinical Practices (Singapore) and the International Molecular Biology Network (Korea) that are designed to ensure sustainable development
- Activities of the APEC Centre for Technology Foresight (Bangkok, Thailand, January 1998) to identify and evaluate emerging generic technologies
- 2nd meeting of APEC Network of Science and Technology Industrial Parks (Australia, October 1998) and APEC Research and Development Leaders Network meeting (Chinese Taipei, March 1998) to enhance sharing of information and experiences in the region.

The **Energy Working Group (EWG)** has contributed to economic and social well-being in the Asia Pacific region, while mitigating the environmental effects of energy supply and use. Relevant activities include: APEC clean fossil energy technologies technical seminars, which started from 1993 with focus on exchange of information and discussion of technology options, analysis of renewable energy retrofit options to existing diesel mini-grids, APEC energy R&D and technology transfer seminar.

The **Human Resources Development Working Group (HRD WG)** focused, through the activities of its HRD Network for Industrial Technology, on technical skills training with a special interest in lifelong learning issues. The WG is now developing a network of industrial technology practice firms in APEC and will hold the medium and small-sized company's international technology conference.

The **Telecommunications Working Group (TEL WG)** has pursued from its inception application of advanced technologies and has been active particularly this year. TEL organized an electronic commerce symposium to explore requirements of electronic commerce such as electronic data interchange (EDI) applications and ATM communication technology to the telecommunications area.

The **Transportation Working Group (TPT WG)** has pursued more advanced technologies to ensure more efficient, safer and more environment-friendly transportation systems, which include: satellite navigation and communications system, technical transportation exchange program, and intelligent transport system applications.

The **Trade Promotion Working Group (WGTP)** held the 3rd APEC International Trade Fair '98 in Kuala Lumpur in November 1998, which highlighted significant contributions made by new technologies and skilled manpower to APEC economies.

The **Agricultural Technical Cooperation Experts Group (ATC)** work program includes such areas as research, development and extension of agricultural biotechnology, agricultural technology transfer and training, and sustainable agriculture through plant and animal quarantine and pest management.

The **Policy-Level Group on Small and Medium Enterprises (PLG SME)** has an action program that includes technology and technology sharing as one of its five priority areas. PLG-SME pursued cross-border inter-firm linkages, with focus on joint ventures or technological alliance in the region, and study of best practices in the management of technological extension programs oriented toward SMEs.

The **Committee on Trade and Investment (CTI)** and its sub-fora have been pursuing activities, which would contribute to the enhanced flow of technology. These activities included development of and alignment to international standards, harmonization of trade data elements, survey and dissemination of current status of IPR laws and regulations, and an IPR information mall.

The **Economic Committee (EC)** is undertaking a research project, which is a study on information society. This study is focused on analysis of the impact on overall economic growth and development from the growth of information society.

3.5 Safeguarding the Quality of Life through Environmentally Sound Growth

Economic Leaders re-affirmed the importance of sustainable development when they met in Vancouver in November 1997. The Leaders stated that “achieving sustainable development remains at the heart of APEC’s mandate. Equity, poverty alleviation and quality of life are central considerations, and must be addressed as an integral part of sustainable development. We have made a commitment to advance sustainable development across the entire scope of our workplan.”

The focus for APEC ECOTECH work in this priority area is related to the three areas identified at the APEC Ministerial Meeting on Sustainable Development in Manila in 1996, and agreement at the Environment Ministerial meeting in Toronto in June 1997 to advance work in the areas of:

- Clean technology/clean production;
- Sustainable cities, and
- The sustainability of the marine environment.

Cleaner Production. The Industrial Science and Technology Working Group has been working to implement projects in support of the APEC Cleaner Production Strategy. It will support the work of the APEC Center for Environmental Technology Exchange, the APEC Coordinating Center for Good Clinical Practices and the International Molecular Biology Infectious Diseases and seek activities related to disaster mitigation.

Sustainability of Marine Environment. The Marine Resource Conservation Working Group has implemented a number of workshops to create awareness and obtain commitment from the stake-holders, including government agencies, scientists, the private sector, and non-government organizations. Various goals and action were set up. They include:

- Apply GPA to domestic action to prevent the transfer of land-based pollution to the marine environment;

- Work out policy strategy and action plan for preventing transfer of ship-based pollution to the environment;
- Make recommendations for applying friendly fishery technology, regulatory and management implication to prevent the impact of destructive fishing practices on the marine environment.

Some projects provided the forum with the capability for:

- Detecting, monitoring, and managing harmful algal disasters;
- Applying available ocean information systems and ocean models for forecasting the impact of marine environment impacts.

The networks of ocean research and ocean information were established, and task forces were set up to develop common analytical methods and standard for harmful algae.

Sustainable Cities. Two initiatives, which were endorsed by Environment Ministers in June 1997, have been implemented, namely, *The Workshop on Economic Instruments toward Sustainable Cities in APEC* (in cooperation with the EC) held in Chinese Taipei, December 1997; and *APEC Symposium on environmental education for sustainable cities* (in cooperation with the HRD WG) held in Japan in September 1998.

Sustainable development and the environment are cross-cutting issues that encompass a wide range of activities in various fields. In 1998 the various APEC fora have continued to respond to Leaders' and Ministers' call for APEC to advance work in this priority area. This is reflected in the broad range of current activities being undertaken by the various APEC fora that relate to sustainable development. These include:

The Economic Committee is coordinating APEC's response to the Leaders' request to study **The Impact of Economic Growth and Expanding Population on Food, Energy and the Environment (FEEEP)**, and is preparing the final report which will draw on information prepared by the Task Force on Food, the Energy Working Group, the Industrial Science and Technology Working Group and Senior Environment Officials, amongst others. The final report, setting out options for possible joint actions to respond to FEEEP issues, will be presented to Leaders in Kuala Lumpur in 1998. The EC will publish the proceedings of the FEEEP Symposium held in Canada in September 1997.

The EC is working to complete a project launched in 1997 on "Trade-Related Environment Measures and Environment-Related Trade Measures". A Workshop was held in July 1998 to discuss the preliminary findings of the survey. The Committee will consider publication of the results of the survey and the proceedings of the Workshop. The project is scheduled for completion in 1998.

In March 1998, the EC published its "Survey Results on the Use of Economic Instruments in APEC Economies", which reviewed APEC member economies' experiences with the use of economic instruments for environmental protection. The instruments included in the survey were environmental user charges, deposit/refund systems, tradable permits/quotas, and financial incentives/environment liability. The section on 'lessons learned' indicated what works and what does not and thus assists members in designing and implementing measures that are suitable for their own particular circumstances.

The **Human Resources Development Working Group (HRD WG)** has initiated a project to develop case studies highlighting “lessons learned” by companies that have entered into Joint Implementation Project, a particular approach to responding to global change involving a collaborative approach between producer and user of emissions control technology, is expected to be completed in October this year. Another project which seeks to promote awareness of the human resource management skills and knowledge required to implement cleaner production principles, specifically in the food industry, will be completed within the year. An ongoing self-funded project is the APEC Sustainable Development Training and Information Network which is designed to promote capacity building for sustainable development.

The **Energy Working Group** has current projects that focus on clean fossil energy technologies, energy efficiency and conservation, new and renewable energy technologies, and cooperation on energy standards. The EWG is implementing the Osaka Energy Action program, which has as one of its central planks the integration of 14 principles for rational energy consumption into the energy policies of member economies and the uptake of environmentally sound energy technologies and processes.

The **Transportation Working Group (TPT WG)** has created a Steering Committee on Safe and Environment-Friendly Transportation Systems to deal with projects and activities which pursue the achievements of the overall safety and environment-related goals agreed upon by APEC Transport Ministers, including: 1) completion of an Inventory of Regional Cooperation on Oil Spill Preparedness and Response Arrangements, 2) preparation of a best practice manual, 3) preparation of maritime safety issues, and, 4) promotion of high quality instruction for seafarers).

The **Telecommunications Working Group (TEL WG)** is developing a model of electromagnetic compatibility which will assist economies to manage the problems of electromagnetic interference and support information systems which facilitate sustainable development. TEL WG is also compiling a Practical Telework Manual that will help member economies promote Telework, since the promotion of Telework contributes to sustainable development especially because it helps reduce emission of greenhouse gases.

The **Fisheries Working Group (FWG)** has implemented an APEC Aquaculture Forum which provided a forum where economies with an investment and interest in the sustainable development and growth in aquaculture as an industry could share information about new technologies. The FWG is continuing to implement a number of projects to address environmental and sustainable development issues.

The **Policy Level Group on Small and Medium Enterprises (PLG SME)**, through in-depth research, has gathered the eco-efficient measures that some APEC member economies have successfully undertaken in different industrial sectors so that SMEs in the region can apply them for their own economical and environmental benefits.

The **Agricultural Technical Cooperation Experts Group (ATC)** has identified a plan of action which includes the preparation of a Directory of Experts among member economies and institutional networks on sustainable agriculture, preparation of a questionnaire and holding a seminar/workshop on sustainable agriculture. The

seminar/workshop on sustainable agriculture is schedule to be held in the Philippines in May 1999.

The **Committee on Trade and Investment (CTI)** has been engaged in the area of environmental management standards. A particular activity this year will be the International Quality Assurance Systems (self-financed) project, co-sponsored by the CTI/SCSC and HRD-WG. CTI has been given the responsibility for managing the Early Voluntary Sectoral Liberalisation process. Proposed liberalisation in the environmental goods and services area will expand global trade by enhancing market access and removing impediments, thereby assisting the adoption of environmentally friendly practices in APEC economies. In the forestry and fisheries sectors, sustainable management programs aim to ensure that increased trade does not lead to unsound practices.

An updated *Overview of APEC Activities in Sustainable Development for 1998* is at **Annex 11**.

3.6 Strengthening the dynamism of the Small and Medium Enterprises

The high point in SME activities this year was the **5th Meeting of APEC Ministers Responsible for SMEs** held in Kuala Lumpur on 7-8 September 1998. One of the major highlights of the meeting was the deliberation on the Proposed Plan of Action for SME Development which is envisaged as a set of broad guidelines for SME development in individual economies. The SME Ministers likewise discussed two important topics which were very high on the agenda of APEC this year: Addressing the Impact of Regional Financial Instability on SMEs within the APEC Region, and Electronic Commerce and SMEs. The SME Ministers noted the progress of ongoing PLG SME projects which have significant impact on capacity building of the public and private sectors to provide high quality information and services to SMEs and to improve their capacity to adopt new technology and penetrate new markets, and endorsed three new project proposals as prioritized by the PLG SME.

The Plan of Action for SME Development builds on the Framework of SME activities approved by Ministers in 1997 and provides a convenient reference point for review of initiatives, programmes and regulatory frameworks to promote the development of SMEs and to plan future action at the individual economy level and collaborative efforts at the APEC level. It will address the dual concerns of SME development in APEC: (i) the needs of the export-oriented enterprises, and (ii) those of the domestic – oriented firms which need to adjust to the challenges of globalization. It will also integrate the interests of the micro-enterprises and of women and young entrepreneurs.

The broad objectives and strategic directions define the basic thrust of the Plan as follows:

- Removing sectoral constraints and impediments to SME development.
- Strengthening the economic foundations in order to enhance the competitiveness of SMEs.
- Establishing the institutional framework to coordinate and facilitate the growth and structural adjustment of the SMEs.

- Moving toward balanced development of SMEs.

The Plan was not intended to be prescriptive or make an attempt to prioritize industries based on the principle of level playing field. The emphasis is on creating a conducive environment for growth and development of SMEs of each economy's preference and aspirations. It is a rolling plan and its implementation requires institutional framework at both the economy and APEC levels. In addition, the private sector also assumes a critical role in the Plan.

On the financial crisis, the SME Ministers took note of the work underway in APEC on addressing the impact of the financial instability and endorsed the need for specific measures for SMEs in helping them to overcome their difficulties as a result of the financial crisis. Ministers strongly endorsed APEC Finance Ministers' decisions to:

- Share knowledge and experiences on approaches to financial market regulations;
- Consider establishing a global system of multilateral surveillance of national financial sector supervisory and regulatory systems, and
- Develop immediate measures to support SMEs and strengthen social safety nets in affected economies.

In taking note of the reforms being taken by individual economies to strengthen financial institutions and economic governance at the domestic level, Ministers also stressed the importance of APEC economies taking measures either individually or collectively to prevent a future recurrence of the crisis.

In this regard, the SME Ministers directed the PLG SME to work closely with other APEC fora to assist SMEs to overcome their difficulties resulting from the financial crisis. Ministers encouraged the adoption of specific measures to address the impact of the financial crisis on SMEs, such as:

- Ensuring the availability of trade financing by export credit agencies
- Expansion of industrial supply and subcontracting business cooperation
- Better risk assessment capabilities in relation to credits for SMEs
- Dissemination of information on opportunities to build better business linkages for trade and investment among SMEs
- Establishment of an interactive business matching web sites

In the area of electronic commerce, the SME Ministers took note of the work in the various APEC fora and endorsed the need for specific programs for SMEs both at the economy and regional levels to promote and facilitate the wider use of E commerce. Ministers also recognized the need for the setting up of appropriate information infrastructure to ensure business access to electronic works. In this regard, they directed PLG SME to work closely with the relevant APEC fora to address the concerns of SMEs and develop capacity building initiatives to assist SMEs.

In reviewing the progress of the ongoing projects of the PLG SME, the SME Ministers took note of the following developments in 1998:

- The successful holding of a Market Development Seminar in November of 1997.

- The publication of “best practices manuals” relating to eco-efficiency in the small and medium enterprises. It analyzes the environmental regulatory framework developed in a group of APEC economies, the macroeconomic variables, economic development and industrial model.
- The publication of the final report on the assessment of the feasibility of developing operational set of measures (or indicators) and development of an action plan for the implementation of a set of SME indicators in APEC economies.
- The completion of Phases I and II of the Training and Certification Program for Small Business Counsellors. The purpose of the project is to recognize and sustain the small business counselling profession across the region and enhance the competitiveness of SMEs in the global market.
- The successful holding of the 1998 SME Business Forum which is an annual gathering of business representatives back-to-back with the APEC SME Ministers Meeting.
- The publication of the second edition of the Guide for SMEs in the APEC Region, *Helping Your Business Grow*.
- The completion of the study on the operating environment in China for SMEs from APEC economies. The project involves the undertaking of a survey of over 300 SMEs on the obstacles and challenges inherent in the PRC operating environment. It will make policy adjustment recommendations to the Chinese Government with a view to creating a more liberal operating environment for SMEs in China.
- The completion of the project “APEC Technoforum” on improving communications between SMEs and APEC.

The **Fisheries Working Group (FWG)** is expected to complete late this year a manual explaining the different market and trading requirements and technical requirements and health regulations associated with airfreighted live and fresh fish and shellfish. The manual will be made available to seafood traders in the region and should benefit fish harvesters, importers, wholesaler and retailers in APEC economies.

The **Human Resources Development Working Group (HRD WG)** has designated an SME focal point within the working group to coordinate SME-related activities. A cross-cultural training course for SMEs using online (Internet) technology will be offered online through the existing web site by November 1998. Another important project of the HRD WG targeted on SMEs is the 2nd Medium and Small-sized Companies International Technology Practice Firms in APEC (MITEC’98) to be held in Yantai, China in October. The objective of the conference is to encourage SMEs to venture into developing innovative technologies and to seek new partnerships on an international scale. Also in June this year, an experts’ meeting was held on “Gender and Lifelong Learning: New Women Development in the Asia-Pacific Region for the 21st Century”. The idea is to develop a set of aggregated data on women in various SME sectors from APEC

economies and to identify best practices for developing and providing women's life-long learning tools and training programs in each economy.

The **Industrial Science and Technology Working Group (IST WG)**, for its part, is planning a workshop to develop an action plan to improve diffusion of S&T research.

The **Telecommunications Working Group (TEL WG)** is engaged in a number of projects on electronic commerce which aim to help SMEs understand the benefits of doing business electronically. These include:

- The APEC-PECC Electronic Commerce Policy Dialogue in March
- The ongoing SME Electronic Commerce Seminars provided in cooperation with the Asia-Oceania Electronic Messaging Association
- The publication of a guidebook for conducting electronic data interchange via the Internet
- The completion of a major survey of Legal and Regulatory Issues surrounding SME's ability to engage in electronic commerce
- The Workshop on Authentication held in September
- The Integrated Next Generation Electronic Commerce Environment Project (INGECEP/Cybernet) which puts electronic commerce into practice while clarifying the legal and technical issues which result, especially for SMEs

The **Trade Promotion Working Group (WGTP)** contributed a number of SME-related projects this year. The APECNet, a homepage which contains information on the WGTP projects and its activities, as well as capabilities for searching for business opportunities (including business matching services and posting inquiries) by the business community of member economies, and access to member economies, homepages. This project will enhance the exchange of information among SMEs on raw materials, production know-how and marketing strategies among enterprises within the region. This is intended to facilitate strategic alliances among enterprises in the APEC region. The Working Group is also establishing an APEC Information Center for Trade Promotion which will compile and regularly update data on trade-friendly environments in member economies. The 3rd APEC International Trade Fair '98 to be held in November will also definitely provide SMEs in the region with an opportunity to develop networks and markets.

The **Agricultural Technology Cooperation Group (ATC)** has a project involving the marketing, processing and distribution of agricultural products. It looks into the technical consideration for the harmonization of agricultural standards, requirements and regulations. This will provide increased transparency affording greater opportunities for small and medium-sized enterprises.

4. CONCLUSION

Over the past several years the ECOTECH activities of the various APEC fora have expanded rapidly and it has become clear there is a need for a process or structure to provide management, coordination and overall direction for these activities. The effectiveness and efficiency of the management process will have a direct impact on the goal of focused and targeted deliverables in the ECOTECH area.

Consequently, one of the first tasks of the newly-created SOM Sub-Committee on ECOTECH was to undertake an evaluation of the ECOTECH activities conducted by APEC fora. The findings of the evaluation indicated a need to improve the implementation of the Manila Declaration. As a result, the ESC developed a set of guidelines on strengthening the management of ECOTECH activities. The guidelines were subsequently endorsed and issued by the SOM. It is believed that the rigorous implementation of the guidelines will help to improve the management and coordination of APEC's ECOTECH activities with the view of identifying cross cutting issues and focus economic and technical activities on the six priority areas set by Leaders in Manila. It will enable APEC to make substantive contributions toward the goals of sustainable growth and equitable development and reducing disparities in the region based on the APEC member economies' diverse and complementary capabilities.

The preceding overview of APEC ECOTECH activities shows that the various APEC fora have been active in progressing work on the six priority themes of the Manila Declaration. Their projects and activities cover the broad spectrum of economic and technical cooperation. At the same time the breadth of activities also indicates the need for greater coordination in order to focus these activities on the six priority themes. It reaffirms the need for the ESC to continue to serve as a mechanism for coordinating and managing APEC's Economic and Technical Cooperation agenda, as well as identifying value-added initiatives for cooperative action. The ESC can contribute to improving the coordination of activities and cooperation among working groups and APEC fora. It can advance the Economic and Technical Cooperation agenda by integrating the efforts of various APEC fora through a results-oriented outcome-based approach, facilitating a policy management tool for strengthening APEC's work, and providing guidance on possible actions which could be undertaken to address APEC priorities. The ESC will have a role to evaluate the projects, programs and activities, to identify gaps and overlaps as well as make appropriate adjustments to economic and technical cooperation in order to achieve more targeted and effective deliverables. Also discussed was the possibility of meeting with the Lead Shepherds and Chairs of APEC fora engaged in specific cross-cutting issues in order to have policy discussions to obtain measurable outcomes in the six priority areas.

ANNEX 1

Terms of Reference of SOM Sub-committee on Economic and Technical Cooperation

TERMS OF REFERENCE OF SOM SUB-COMMITTEE FOR ECONOMIC AND TECHNICAL COOPERATION

A. BACKGROUND

1. SOM has been mandated by Leaders to mandate and coordinate the APEC Economic and Technical Cooperation (ECOTECH) agenda. In Vancouver, Ministers have committed to further strengthen economic and technical cooperation in APEC by fully implementing the Framework for Strengthening Economic Cooperation and Development, which was agreed in Manila. In this connection, Ministers endorsed the proposal by Senior Officials to establish a SOM Sub-Committee for Economic and Technical Cooperation.
2. The SOM Sub-Committee will assist the SOM in coordinating and managing APEC's ECOTECH agenda, as well as identifying value-added initiatives for cooperative action.

B. OBJECTIVES

3. The main objective of the SOM Sub-Committee is to advance more effective implementation of the APEC's ECOTECH agenda by consulting with and integrating the efforts of various APEC fora through a results-oriented, outcomes-based approach which benefits all member economies; providing a policy management tool for strengthening and streamlining APEC's work; and providing guidance on possible actions which could be undertaken to achieve APEC ECOTECH goals, namely:
 - To attain sustainable growth and equitable development in the Asia-Pacific region;
 - To reduce economic disparities among APEC economies;
 - To improve the economic and social well-being of the people; and
 - To deepen the spirit of community in the Asia-Pacific.
4. The pursuit of the ECOTECH goals through concrete projects will take into consideration members' diverse and complementary capabilities and guided by the principles of :
 - Mutual respect and equality;
 - Mutual benefit and assistance;
 - Constructive and genuine partnership; and
 - Consensus building.

5. The SOM Sub-Committee will serve as a forum to discuss, formulate as well as coordinate action oriented integrated strategies in consultation with existing APEC groups and the business community, as necessary to implement the APEC Framework for Strengthening Economic Cooperation and Development which has identified the following six priority themes:
 - Develop human capital
 - Develop stable, safe and efficient capital markets
 - Strengthen economic infrastructure
 - Harness technologies for the future
 - Safeguard the quality of life through environmentally sound growth
 - Develop and strengthen the dynamism of SMEs

Activities

5. The SOM Sub-Committee will :
 - Report to SOM on its proposed work program and assist the SOM to effectively implement the 1996 Framework for Strengthening Economic Cooperation and Development. In so doing, the SOM Sub-Committee shall ensure that all the elements of the Framework are developed.
 - Review progress of APEC activities towards achieving APEC ECOTECH goals.
 - Identify and recommend for Senior Officials consideration specific issues and value added initiatives to assist the achievement of ECOTECH goals taking into account the economic situation, requirements and capacities of all member economies.
 - Examine and evaluate ECOTECH programmes and activities and recommend to Senior Officials means to achieve visible, targeted and result-oriented deliverables to address member economies priorities.
 - Assist the SOM to improve the management and coordination of ECOTECH activities among APEC fora, including APEC Working Groups and Policy Level Committees, with a view to improving the identification and coordination of new cross-cutting issues.
 - Evaluate proposals to include new priority areas within the Framework for Strengthening Economic Cooperation and Development.
 - Encourage active participation of the private sector in the activities of economic and technical cooperation. Consider the recommendations of ABAC regarding the process of economic and technical cooperation in APEC.
 - Undertake ECOTECH-related tasks as directed by Senior Officials.

C. ORGANIZATION AND OPERATION

6. A Chairperson will be appointed who will be devoted to meeting the objectives of the SOM Sub-Committee.
7. A Vice-Chairperson(s) will be appointed to assist the Chair in managing the tasks and work programme of the SOM Sub-Committee.

8. The Chairperson and Vice Chairperson(s) will serve for a term of two years.
9. Membership of the SOM Sub-Committee will be open to all economies.
10. The SOM Sub-Committee shall meet regularly.
11. The SOM Sub-Committee would report regularly to the SOM.
12. The operation and effectiveness of the SOM Sub-Committee will be reviewed at the end of a 2-year term.

ANNEX 2

1998 Work Program of SOM Sub-committee on Economic and Technical Cooperation

1998 WORK PROGRAMME OF SOM SUB-COMMITTEE ON ECONOMIC AND TECHNICAL COOPERATION

The mission of the SOM Sub-Committee on Economic and Technical Cooperation (ESC) is to assist the SOM in managing and coordinating the APEC ECOTECH agenda. The ESC shall:

1. Review APEC ECOTECH activities in consultation with relevant Working Groups/Fora, to assess their contribution to the goals of APEC's ECOTECH agenda, identify gaps, potential duplications on cross-cutting issues and make appropriate recommendations;
2. Identify areas where relevant Working Groups/Fora should intensify work, notably pertaining to the 1998 priority themes of Human Resources Development and Harnessing Technologies for the future. The ESC should, in undertaking this task, take full recognition of the financial problems besetting some APEC economies, and complement efforts underway in other APEC fora to develop safe and efficient capital markets;
3. Oversee the follow-up on decisions taken on the 1997 priority themes of Infrastructure Development and Environmentally Sustainable Growth;
4. Review the ECOTECH component of EVSL to ensure that the proposed ECOTECH activities are supportive of and contribute to the liberalization and capacity building objectives of the sectors selected by Ministers in 1997;
5. Make recommendations to the SOM including on:
 - The formulation of an APEC Agenda for Science and Technology Industry Cooperation into the 21st century; and
 - Enhancing the involvement of the private/business sector in APEC ECOTECH activities.

ANNEX 3

Summary Table of ECOTECH Activities by APEC Fora and Priority Themes

SUMMARY TABLE OF ECOTECH ACTIVITIES BY APEC FORA AND PRIORITY THEMES

APEC fora	EW G	FW G	HR D	IST	MR C	TEL	TW G	TID	TP	TPT	AT C	CTI	EC	SM E	SEO M	FIN	Total
<i>Developing Human Capital</i>	-	1	28	7	-	9	1	-	-	5	1	20	-	2	-	-	74
<i>Fostering safe, efficient capital markets</i>	-	-	1		-	-	-	-	-	-	1	5	1	-	-	8	16
<i>Strengthening economic infrastructure</i>	8	-	-		-	5	1	-	-	6	-	2	5	-	-	-	27
<i>Harnessing technologies for the future</i>	6	-	2	20	-	13	-	-	-	2	4	4	1	2	-	-	54
<i>Promoting environmentally sustainable development</i>	6	2	3	20	7	1	2	-	-	1	2	-	2	1	13	-	60

<i>Encouraging the growth of small and medium enterprises</i>	-	1	2	2	-	6	-	-	4	-	1	1	-	9	-	-	26
<i>Other Activities</i>	2	1	-	-	-	-	4	2	3	-	-	5	-	-	-	-	17
Total	22	5	36	49	7	34	8	2	7	14	9	37	9	14	13	8	274

Updated: 27 August 1998

ANNEX 4

Matrix of Projects and Activities Related to Economic and Technical Corporation According to the Six Priority Areas

I. DEVELOPING HUMAN CAPITAL

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. FWG Mr. Matteo Milazzo, NOAA, US Dept. of Commerce, Tel: 1-301- 713-2286 Fax: 1-301 - 713-2313	Moving Towards Improved Seafood Inspection <u>Regimes</u> (Phase II) <i>* Also contributes to Priority V.</i>	Comprehensive regional program of on-site in-plant training on HACCP- based seafood inspection.	Ongoing – final workshop to be held in 1998 (probably Peru).	Private sector will also participate	This activity involves technical cooperation and skill transfers which will help enhance overall quality and safety of seafood products produced in APEC member economies. Workshops have been held in Indonesia, Papua New Guinea, China, Korea, Mexico and Chile.
2. HRD WG (EDFOR) Ms. Barbara Bennett, Assistant Secretary, International Division, DEETYA, Australia. Tel: 61-2-6240-7522 Fax: 61 -2-6240-7388 Email: Barbara.Bennett@ Deetya.gov.au	Improving the Understanding of Cultures in APEC	Develop a multi-media series of profiles for Primary 6 school students.	The project was completed in November 1997 and continued as a self-funded project. Australia is now preparing the final versions of the materials which is expected to be completed by December 1998.		The final output would consist of a teacher’s guide, student handbook, a video tape, and a CD. Each EDFOR Contact person will be given 100 copies of the school kits for distribution to schools in their economies.

<p>3. HRD WG</p> <p>Ms Jacinthe Arsenault Youth Coordinator, HRDC, Canada Tel : 1-613-952-6831 Fax : 1-613-941-4576 Email: Jacinthe.arsenault@ spg.org http://www.apecsec.org.sg/ workgroup/hrdwg/youth.ht ml</p>	<p>APEC HRD Electronic Source Book</p>	<p>Production of an electronic source book on the Internet, on work, study and exchange opportunities in the APEC region.</p>	<p>Implemented, presented to the 2nd APEC HRD Ministerial meeting in Seoul, 25 -26 Sept 1997. Canada offered to maintain the web page during 1998.</p>	<p>-</p>	<p>The Source Book is already uploaded at the APEC Secretariat Home Page.</p>
<p>4. HRD WG (NEDM)</p> <p>Mr. Tedd Linsermeyer, US National Safety Council, USA. Tel: 1-301-926-5053 Fax: 1-301-869-4516</p>	<p>Examining How Workplace Safety and Health contributes to Productivity</p>	<p>To document the link between workplace safety and health contribution and productivity. To disseminate guidelines and information on safety and health best practices to businesses and SMEs. To examine the feasibility of macroeconomic analysis of the safety and health-productivity linkage. Case studies will examine how companies, after implementing successful workplace safety and health programs will reduce illness and injuries, also reaped additional benefits in the form of higher productivity.</p>	<p>19 case study nominations have been received. Six were selected for further development and presentation at a regional symposium to be hosted by Australia later this year. From these, participants will identify a set of broad principles and “best practices” which can be replicated by other companies in the region. Project overseers invite interested economies to submit case study nominations.</p>	<p>Yes</p>	<p>Case studies component of this project will be conducted with the assistance of private sector association and bodies such as the US National Safety Council and the US Voluntary Protection Program Participants Association. Other organizations like the Philippines Chamber of Commerce and Industry, the Employers’ Confederation of the Philippines and the SMEs will also be participating.</p>

<p>5. HRD WG (BMN/NEDM)</p> <p>Ms. Carmela I. Torres, Assistant Secretary, Department of Labor and Employment, Philippines Tel: 63-2-527-2115/527-3563 Fax: 63-2-527-3572/527-3448</p> <p>Mr. Charles A. Barrett, Vice President, Business Research, The Conference Board of Canada, Ottawa, Canada. Tel: 1-613-526-3280 Fax: 1-613-526-5385</p>	<p>HRD Working Group Task Force on the Financial and Economic Crisis</p>	<p>The project aims to explore, examine and research the likely human and labor market impacts of the current financial and economic crisis to the main economies affected. It likewise will try to estimate the likely degree of restructuring that might be required in the labor markets and associated sectors of affected economies to cope with the impact of unemployment, increase in demand for training and retraining, access to technical and vocational education and related programs. It also intends to identify and share knowledge especially from those which have overcome similar crises in the past; information and “best practices” as well as related HR services in labor market programs undertaken by economies which could be tailored and used by individual economies as appropriate. Finally, the project will facilitate possible policy and program reforms or coordination, and specific action deliveries to mitigate the HR effect of the crisis.</p>	<p>Funding approved. Small Expert Workshop cum planning meeting – April 1998. Symposium – June 1998. Further research and analysis, best practices – June 1998. Reporting to WG, Ministers and possibly Leaders – November 1998.</p>	<p>Yes</p>	<p>The Task Force is now studying options on how to publish the proceedings of the June Symposium in Chinese Taipei for possible submission to Ministers and Leaders.</p> <p>Beneficiaries: SMEs, APEC planners, labor market and ordinary people of the affected economies.</p>
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<p>6. HRD WG (NEDM)</p> <p>Ms. Heather Gibb, Senior Researcher, The North-South Institute, 200-55 Murray Street, Ottawa, Canada. Tel: 1-613-341-3535 Fax: 1-613-341-7435 Email: hgibb@nsi-ins.ca</p>	<p>Linkages between Paid and Unpaid Work in Formulating Human Resources Development Policies</p>	<p>To explain the concept of unpaid work, to demonstrate the HRD policy implications of the linkages between paid and unpaid work. To provide examples from APEC member economies of policies and programs that have been adopted by governments and the private sector that recognize and adjust for workers' paid and unpaid work activities.</p>	<p>This project was endorsed by the HRD WG at the May 1997 meeting and was approved by the BAC in July 1997. First experts meeting held last June; 2nd one to be held in January 1999; concluding workshop to be held in June 1999.</p>		<p>A framework paper that will set out the basic concepts of productive paid and unpaid work. A workshop will be held to present and discuss project findings and best practices. A project report that will synthesize results from a survey of participating member economies, which will contribute to better policy alternatives and delivery mechanisms to promote full participation and maximize the return of investment in human resources. An interactive website will be created to disseminate the project findings.</p>
<p>7. HRD WG (BMN)</p> <p>Ms. Areeya Rojvithee Ministry of Labour and Social Welfare, Thailand Tel: 662-643-4985 Fax: 662-247-6603</p>	<p>APEC Chief Human Resources Officer (CHRO) Network Project</p>	<p>To conduct periodic get-together and network of entrepreneurs, government and academic institutions to promote information exchange.</p>	<p>Project started on August 1996 and <i>expected to</i> be completed in 1998. Two planning meetings <i>were</i> held <i>in</i> 1997 and the first meeting of the group was held in Bali in January 1998. Development of the database continues. Phase III of the project has just been approved by BAC.</p>	<p>With private/Business sector participation.</p>	
<p>8. HRD WG (EDFOR)</p> <p>Ms. Susan Leong, Deputy Director, Planning Division, Ministry of Education, Singapore. Tel: 65-470-9108 Fax: 65-470-9256 Email: susan_leong@moe.gov.sg</p>	<p>APEC Education Hubs</p>	<p>To develop a network of educational hubs that contribute to the collective learning of APEC members. APEC members can offer to be hubs for one or few areas of specialization so that APEC scholars can study together, interacting and cross fertilizing each other.</p>	<p>Singapore offered 2 scholarships for a Master program at NUS. Two awardees were from the People's Republic of China and Korea.</p>	<p>Possible</p>	<p>Creation of hubs in APEC and offers of scholarships for APEC scholars.</p>

<p>9. HRD WG (EDFOR)</p> <p>Ms. Barbara Bennett, Assistant Secretary, International Policy Branch, DEETYA, GPO Box 9880, Canberra, ACT, Australia 2601. Tel: 61-2-6240-7388 Fax: 61-2-6240-7514 Email: barbara.bennett@Deetya.gov.au</p>	<p>University Mobility and Asia and the Pacific (UMAP)</p>	<p>To enhance cooperation between higher education institutions, to contribute to a better understanding within the economies of the Asia-Pacific region of the cultural, economic and social systems of the region by increasing mobility of higher education students and staff. To study fee waivers and full academic recognition given for study overseas based on agreements between institutions.</p>	<p>The last UMAP meeting was held at Naresuan University, Phitsanulok, Thailand on 4 Nov. 97. Next UMAP Reference Group meeting scheduled in Bangkok for 25-27 Aug. 98. A pilot UMAP Credit Transfer Scheme is being developed.</p>	<p>Publication of a paper on UMAP which provides for the first time some comparative statistics on student and staff exchanges in the Asia-Pacific region. To organize a regional workshop to discuss a way to systematically tackle qualifications recognition through credit transfer.</p>
<p>10. HRD WG (HURDIT)</p> <p>Mr. Yoshikazu Satoh, Asian Affairs Bureau, Ministry of Foreign Affairs, Japan Tel: 81-3-3581-2912 Fax: 81-3-3581-9546</p>	<p>Japan-APEC Partnership for Education and Training (JAPET)</p>	<p>Facilitate employment of foreign students in Japan who come from APEC region and want to get on-the-job training for 2-3 years after graduating from colleges or other equivalent educational institutions from Japan</p>	<p>Ongoing – Since March 1997 an advertisement has been placed on the Internet to increase the number of participating private companies. Fifty (50) companies participated in 1997.</p>	<p>To create on-the-job training opportunities to APEC youth in Japan.</p>
<p>11. HRD WG (EDFOR)</p> <p>Ms. Jennifer Ledger, Assistant Secretary, National Office of Overseas Skills Recognition, DEETYA, Australia Tel: 61-2-6240-7628 Fax: 61-2-6240-7636 Email: jennifer.ledger@deetya.gov.au URL: http://www.deetya.gov.au/nors</p>	<p>HRD Ministerial Priority: Acceleration and expansion of project initiatives on mutual recognition of skills qualifications</p>	<p>Stage 1: Production of a report on current requirements for professional recognition in engineering, accountancy and surveying (completed)</p> <p>Stage 2: Best practices in professional engineering accreditation, recognition and development, and pilot exchange project.</p>	<p>Completed: Stage 1 Report from 11 economies.</p> <p>Ongoing: Stage 2, Steering Committee met on 17 May 1996.</p> <p>A third stage is being developed which will seek agreement to a framework for an “APEC Engineer”.</p>	<p>Conclude bilateral agreements for mutual recognition between interested professional bodies and governments, as appropriate.</p>

<p>12. HRD WG (HURDIT)</p> <p>Mr. Matt Ngui, Centre for Research Policy, University of Wollongong, Australia. Tel: 61-42-21-3256 61-42-21-3257 Email: matt.ngui@uow.edu.au</p>	<p>Global Advantage through People: Human Resource Management Policies and Practices in APEC Economies</p>	<p>Systematic analysis of key HRM policies and practices; comparative analysis on employment relations domain; provide case studies on HRM.</p>	<p>As a result of preparatory survey last year, six enterprises in Thailand and one from Papua New Guinea were selected and the vocational training at these enterprises have been implemented since fiscal year 1997. Awaiting submissions from a few economies on the profile of their human resources policies and practices. Expected completion date is end of 1998.</p>		<p>Bring together for the first time into a single source, details of current HRM policies and practices in firms and agencies in APEC economies.</p>
<p>13. HRD WG (BMN)</p> <p>Dr. David McClain, University of Hawaii, Honolulu, USA. Tel: 1-808-956-7331 Fax: 1-808-956-3261 URL:http://uuwi.sphere.no.jp/mdl</p>	<p>Human Resources Development and Information Technology: Multimedia Distance Learning in the Asia-Pacific Region, Phase 1</p>	<p>Assessing the status quo of distance learning practices and holding an international symposium for information exchange on multimedia distance learning.</p>	<p>International Symposium was held in Chinese Taipei in June 1998. An electronic web site in place. As project members anticipate forming a consortium of MDL practitioners, project completion date was extended up to the end of 1999.</p>	<p>Multi-media vendor contracted</p>	<p>Promote information exchange on multimedia distance learning through an international symposium featuring 'best practices' and 'next practices' case studies</p>

<p>14. HRD WG (EDFOR)</p> <p>Division of Multilateral Cooperation, Department of Foreign Affairs, State Education Commission, 35 Da Mu Cang Hutong Xidan, Beijing 100816, PRC. Tel: 86-10-6609-6394 Fax: 86-10-6601-3647 Email: wangw@sun.ihep.ac.cn</p>	<p>Vocational Teacher Standards and the Formulating Standards</p>	<p>To develop method for formulating vocational teacher standards. To define, based on the method developed, a set of well-structured and easy-operating vocational teacher standards a three or more levels such as elementary, median and high. To set up a database of vocational teacher standards across APEC.</p>	<p>This project was endorsed by the HRD WG in May 1997 and approved by the BAC in July 1997. The project started officially in January 1998. The participants were asked to comment on the workplan the Chinese team had designed. Project workshop to be held on 21-28 September 1998 in Beijing.</p>	<p>Detailed formulating method of vocational teacher standards, sequences, contents and means. The teacher standards include record of education, experience (teaching and specialty), concrete requirements of pedagogy and specialty. A database compiling teacher vocational standards.</p>
<p>15. HRD WG (contact the APEC Secretariat for a full list)</p>	<p>APEC Study Centers</p>	<p>Establish APEC Study Centers in all APEC member economies.</p>	<p>Ongoing: Study Centers or Study Center Consortia have been established in 15 member economies. ASC Consortium Meeting held in Bangi, Malaysia on 11-13 August 1998.</p>	<p>Use Study Centers to develop regional co-operation in higher education, study key regional economic issues, improve workers' skills, facilitate cultural and intellectual exchanges and foster understanding on the diversity of the region.</p>

<p>16. HRD WG</p> <p>Ms. Runothai Singkalvanij, Director Mr. Satoshi Matsunaga, Advisor</p> <p>APEC BVP Coordinating Office, c/o Federation of Thai Industries, Bangkok, Thailand. Tel: 66-2-229-4052 Fax: 66-2-229-4057 Email: foreign@ksc.th.com Http://www.apecsec.org.sg/ bvp/html/home.htm</p>	<p>Exchange and transfer of managerial and technical skills by exchange of business volunteers (Business Volunteer Program)</p>	<p>Promote HRD to create business, legal and other environments favourable to trade and investment by mutual expert dispatch among private sector entities in the APEC region.</p>	<p>The APEC BVP Coordinating Office was established in Thailand in January 1997</p> <p>The 1st Focal Points Meeting was organized on 18-19 June 1997.</p> <p>The APEC BVP is now ready to accept and process applications. So far only 3 applications from private business in Thailand have been received. No expert dispatch has taken place yet.</p>	<p>With private/ business sector participation.</p>	
<p>17. HRD WG</p> <p>Mr. Peter Gerber, Executive Director of the Foundation. Dr. Inbom Choi, Managing Director of the Grants & Programs Secretariat, Seoul, Korea Tel: 82-2-576-7373 Fax: 82-2-576-5303 Email: secretariat@apecef.org Http://www.apecsec.org</p>	<p>The APEC Education Foundation</p>	<p>The APEC Education Foundation is an independent grant making organization, which supports research, scholarship and educational programs related to the APEC region.</p>	<p>Ongoing: The Foundation has been incorporated. Fund-raising is underway and proposals are being accepted for a first round of grants.</p>	<p>With private/ business sector participation.</p>	<p>Develop a financial resource base and channel investments into the development of human resources in the region.</p> <p>Establish information linkages among all APEC educational institutions, develop and maintain a database on HRD related activities and institutions.</p>

<p>18. HRD WG (BMN/HURDIT)</p> <p>Mr. Matt Ngui, HURDIT Project Manager, Centre of Research Policy, University of Wollongong, Australia Tel: 61-2-4221-3273 Fax: 61 -2-4221-3257 Email: matt_ngui@uow.edu.au</p>	<p>Internet & Electronic Commerce: Training based on Java Technology in APEC</p>	<p>To develop and disseminate training modules accessible to APEC members for the upgrading of electronic skills in business through the Internet and websites. To conduct short term course on designing Internet and websites based on Java technology including acquiring the knowledge and understanding of security and relevant legal issues such as intellectual property rights. To identify gaps in training in advanced technology training by comparing and contrasting electronic commerce policies and practices across selected APEC economies. To disseminate the training modules, knowledge, and experience gained in this project and make recommendations to Senior Officials on the future training needs in electronic commerce in the region.</p>	<p>Implementation of the project begins in early 1998. Project organizers are encouraging nominations from participating economies for membership in the international implementation team. The training workshop is planned for 1-2 October 1998 in Sydney, Australia. A survey questionnaire on relevant E-commerce issues were distributed during the HRDWG Meeting last June. The Australian Aid Agency has agreed to fund a limited number of participants from P.R. China, Indonesia, the Philippines and Thailand.</p>	<p>Yes</p>	<p>An Internet and electronic commerce training module based on the Java system will be prepared, design, develop and manage electronic commerce securely for the use of APEC economies on the world wide web and in hard copies. A short training course on Internet and electronic commerce in selected industry will be introduced for a number of officials, business owners and managers, and students from APEC economies to advance their skills, knowledge and understanding of all facets on electronic commerce. A full report will be delivered to the APEC HRD meeting in 1999 outlining the training, participation by members, the relevant security and legal issues and policy recommendations to Senior Officials and the business sector for future development in human resource development in electronic commerce in the Asia-Pacific region.</p>
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<p>19. HRDWG (NEDM)</p> <p>Ms. Carmela I. Torres, Assistant Secretary, Department of Labor and Employment, DOLE Executive Building, Intramuros, Manila, Philippines. Tel: 63-2-527-2115/527-3563 Fax: 63-2-527-3572/527-3448 Email: citdole@mnl.sequel.net</p> <p>Ms. Erlinda Capones, Director, NEDA, NEDA sa Pasig, Amber Avenue, Pasig City, Philippines. Tel: 63-2-631-0945 loc. 161/133 Fax: 63-2-631-2189 Email: emc@nedamis.neda.gov.ph</p>	<p>Wages and Labor Productivity in the APEC region</p>	<p>To develop comparable database on wages and labor productivity for the various member economies. To develop a mechanism for comparable wages and labor productivity statistics to become a regular element of the APEC LMI. To identify sources of variations in wages and labor productivity among member economies.</p>	<p>A draft framework for the study is being developed for distribution to members in July 1998.</p>	<p>Meeting with experts in wages and labor productivity statistics (hosted by the Philippines). Documentation of methods to some acceptable level of comparability among wage and labor productivity measures. Presentation of findings as a publication and conference. Publication of identification of wage differentials and various sources of labor productivity. Implementing strategy for the institutionalization of the efforts for these and other related measures to form regular elements of the APEC LMI .</p>
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<p>20. HRDWG (HURDIT)</p> <p>Mr. Tatsuo Fujimura, Deputy Managing Director, Planning Department, Japan International Cooperation (JICA), Shinjuku Maynds Tower Bldg, 10th Floor, 2-1-1 Yoyogi Shibuya-ku, Tokyo 151, Japan Tel: 81-3-5352-5023 Fax: 81-3-5352-5490</p>	<p>APEC Symposium on HRD: HRD and Ability Evaluation for White Collar Workers (SF)</p> <p><i>* Also contributes to Priority III</i></p>	<p>To develop human resources that play an important part in enhancing economic growth, trade and development in the Asia Pacific. To discuss HRD for white collar workers among government officials engaged in the development of human resources and representatives of business groups in the region.</p>	<p>Ongoing from 1996 onwards for five years</p>	<p>With private sector participation.</p>	<p>To enhance the quality of government officials, managers, entrepreneurs and trainers in the field of HRD for white collar workers in this region.</p>
<p>21. HRDWG (HURDIT)</p> <p>Mr. Tatsuo Fujimura, Deputy Managing Director, Planning Department, Japan International Cooperation (JICA), Shinjuku Maynds Tower Bldg, 10th Floor, 2-1-1 Yoyogi Shibuya-ku, Tokyo 151, Japan. Tel: 81-3-5352-5023 Fax: 81-3-5352-5490</p>	<p>Vocational Training Project in Cooperation with Enterprises</p> <p><i>* Also contributes to Priority VI</i></p>	<p>To contribute to the community of the Asia Pacific region by cooperating with local firms and business groups in providing vocational training to the people who do not work for those firms in the region.</p>	<p>Ongoing since 1996. As a result of preparatory survey last year, six enterprises in Thailand and one from Papua New Guinea were selected and vocational training at these enterprises have been implement-ed since 1997. Preparatory surveys are continuously conducted in other economies. For 1998, 3 enterprises from Indonesia and 2 from Chile were selected for vocational training in Japan.</p>	<p>With private sector participation</p>	<p>Increased opportunities for the people seeking to gain skills in the region.</p>

<p>22. HRD WG (HURDIT)</p> <p>Mr. Jung-woo Yi, International Cooperation Division, Korea Manpower Agency (KOMA). Tel: 82-2-704-3346 Fax: 82-2-716-5742</p>	<p>APEC Vocational Training Program</p>	<p>To expand the supply capacity of technical and skilled manpower of the vocational training institutes in the APEC members, especially in developing members; to support the training of technical and skilled manpower of the APEC members; particularly of the developing economies; to promote technology transfer and exchange between APEC members; to promote the globalization of APEC member industries by resolving the shortage of skilled manpower, which is an enormous obstacle towards inducing greater flows of foreign investment opportunities; to obtain full support and promote participation in the activities of APEC members through active implementation of vocational training program which would benefit all APEC members.</p>	<p>A database containing research reports, evaluation studies, curriculum materials, policy documents, questionnaires and surveys, workshops, seminars, theses and relevant journal information, has been adopted using CDS-ISIS; distribution of the database is held twice a year; a proposal on International Forum for APEC HRD Vocational Training Information Exchange will be put forward for 1998. This proposal represents Phase II of the project. Phase II suggest recruiting a total of 50 participants. Training course conducted for 40 vocational training instructors from 10 member economies from 01 April to 30 June 1998. Project proponent will continue to take measures for the establishment of an APEC Network.</p>	<p>To train instructors, teachers, trainer or those who will be instructors in the field of vocational training from APEC member economies (especially developing economies). The training duration is 2 months and can accommodate 50 participants per year. To provide the exchange of vocational training information by securing facilities, equipment and database.</p>
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<p>23. HRD WG (BMN)</p> <p>Dr. Charles Rajam, Deputy Director, International Business Institute, 10 Kent Ridge Crescent, Singapore 119260. Tel: 65-772-6442 Fax: 65-776-1308 Email: fbacr@nus.edu.sg</p>	<p>A Program for Chief Executives on the Management of Change</p>	<p>To provide an understanding of how the global business environment is changing. To sensitize chief executives for the challenges emerging in the Asia-Pacific Region. To understand the significance of strategy for enterprise – private and public. To update chief executives with the latest thinking in strategic management. To help participants better understand the process of managing change. To provide a forum for senior managers of enterprises in the APEC community to share country-specific knowledge, experiences, and best practices. To foster business-to-business linkages across the APEC community.</p>	<p>Project sponsors are exploring linkages with the Chief Human Resources (CHRO) initiative, and where possible seek to incorporate elements from the withdrawn project, Enterprise Organizational Changes in a Globally Interdependent Economy.</p>		<p>This project will provide a shared comprehensive set of baseline statistics and information, facilitating research which will provide significant regional comparisons and understanding of trends in the development of, and requirement for, member economies' human resources. This will provide economies with a basis for local policy analysis and will inform stakeholders in industry, including SMEs, government and education and training.</p>
<p>24. HRD WG (LMI Group)</p> <p>Ms. Linda Lipp, Assistant Secretary, Occupational Analysis, Economic Migration and Research Branch, DEETYA, Canberra, Australia. Tel: 61-2-6240-8640 Fax: 61-2-6540-9066 Email: linda.lipp@Deetya.gov.au Http://www.eagleeye.Com.au/draft/apec</p>	<p>APEC Labour Market Database Project (Phase I – Development of APEC LMI Database)</p>	<p>Project consists of 3 elements: The main function of the LMI database will be to encourage and facilitate cooperation among APEC members through the exchange of information and statistical analysis that will assist them to assess and manage their policy making more effectively. Capacity Building in LMI to conduct seminars and training programs to assist APEC member economies in the collection and processing of LM information. HRD Outlook Publication – a biannual publication to disseminate LM information in regards to policies and new development and analyses of labour market data based on LMI databases.</p>	<p>A database has been set up and updated since November 1996. APEC LMI systems was scheduled to be launched at Subic Leaders Meeting in November 1996. The LMI web page will be hotlinked to the APEC Secretariat's Homepage. A publication of the APEC HRD Outlook is expected in 1997/98.</p>		<p>This project will provide a shared comprehensive set of baseline statistics and information, facilitating research which will provide significant regional comparisons and understanding of trends in the development of, and requirement for, member economies' human resources. This will provide economies with a basis for local policy analysis and will inform stakeholders in industry, including SMEs, government and education and training.</p>

<p>25. HRD WG (LMI Group)</p> <p>Ms. Linda Lipp, Assistant Secretary, Occupational Analysis, Economic Migration and Research Branch, DEETYA, Canberra, Australia. Tel: 61-2-6240-8640 Fax: 61 -2-6540-9066 Email: linda.lipp@Deetya.gov.au Http://www.eagleeye.com.au/draft/apec</p>	<p>APEC Labour Market Database Project (Phase II – Enhancement of database)</p>	<p>The project consists of 3 elements:</p> <ol style="list-style-type: none"> 1. Ongoing maintenance, updating of the LMI database. Further development and expansion of database to be reviewed. 2. Development of strategies for technical assistance on Capacity Building. 3. Establish an information strategy, including publications on an analytical labour market report. 	<p>A database has been set up and updated since November 1996. APEC LMI systems was scheduled to be launched at Subic Leaders Meeting in November 1996. The LMI web page will be hotlinked to the APEC Secretariat's Homepage. A publication of the APEC HRD Outlook is expected in 1997/98. The Philippines is leading the Capacity Building phase of the project and Canada and Korea are leading the Production of Policy-oriented labour market analysis phase. BAC has just approved funding for the maintenance of the LMI Database for 1999.</p>	<p>Database fully operational, supporting effective policymaking and trade and investment by 1998-2000. Conduct of seminar and training programs in collection and processing of LMI; provision of experts assistance on LMI. Publication and circulation of the first issue of the report by late 1998.</p>
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26. HRD WG	APEC Industrial and Technical Training Program of Human Resources Development	To improve the ability of the workers of private businesses in the region. To facilitate technology transfer through on -the-job training	This project had been presented and endorsed as a self-funded project during the 16 th HRD WG meeting in Montreal in May 97. A pilot project will be conducted to demonstrate the usefulness of the project through voluntary participation from member economies. Each member economy would be asked to publicize training projects and survey the demand for them. A survey will be conducted to determine the level of demand among its labor force for industrial and technical training in other APEC economies and among its business community for industrial trainees from the other economies. Due to the financial crisis this project has been postponed. A report will be made at the next HRD WG Meeting in January 1999.	A on-the-job training program will be offered to member economies for a period of 3-6 months. Each member economy would conduct a survey to determine the level of demand among its labor force for industrial training in other APEC economies, and among its business community for industrial trainees from other economies. The results should be notified to the Korea Chamber of Commerce & Industry (KCCI). The KCCI would mediate and coordinate demand and the supply of industrial trainees based on the information provided by each member economy. The KCCI role would be largely one of collecting, processing and disseminating the supply/demand information provided by the member economies.
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<p>27. HRD WG (NEDM)</p> <p>Mr. Richard Braddock, Director, APRIM/Graduate School of Management, Macquarie University, Sydney, Australia Tel: 61-2-9850-9929 Fax: 61-2-9850-9926 Email: Richard.Braddock@mq.edu.au or aprim@mq.edu.au</p>	<p>Gender and Life-Long Learning: New Women Development in the Asia Pacific Region for the 21st Century</p> <p><i>* Also contributes to Priority VI</i></p>	<p>To target the skills and vocational qualifications required by women to participate in, and make a positive contribution to the growing and rapidly internationalizing SMEs sectors in the member economies. To provide practical know-how tools for women's life-long training and learning in each APEC member economy. To minimize disparities among APEC member economies through sharing information on applied models of best practice in gender development and learning experiences with each other. To provide practical policy suggestions and recommendations for policy makers at all levels to assist women's HRD.</p>	<p>As of 9 July 1997, the project coordinator received comments from participating economies for the final version of the survey questionnaire. Individual economies are preparing reports. Discussions with women studies experts from Australia in consultation with other experts are being undertaken. The Result Conference was held on 13-14 June 1998. Final Report to be published by December 1998.</p>	<p>A set of aggregated data on women in various SMEs sectors from all APEC member economies will be gathered. Best practice for developing and providing women's life-long learning tools and training programs in each member economy will be identified. Policy recommendation will be presented to policy makers at all levels in purpose to reduce skill deficiencies and women unemployment as well as promoting women HRD toward the liberalization and facilitation of trade and investment. An international conference will enable all economies to share information and experiences.</p>
<p>28. HRD WG (BMN)</p> <p>Mr. Alan Howatson, Senior Research Associate, Business and Environment Research Program, The Conference Board of Canada, Ottawa, Canada. Tel: 1-613-526-3280 Fax: 1-613-526-4857 Email: howatson@conferenceboard.ca</p>	<p>The Business Management of Joint Implementation Projects: A Sustainable Development Challenge for APEC (Greenhouse Gas Emissions)</p>	<p>To contribute to the development of business management practices in joint implementation by highlighting a set of "lesson learned" by companies which have entered into pilot joint implementation projects on greenhouse gas emissions.</p>	<p>The kick-off workshop and the development of case studies are completed. Final Project workshop to be held in August. Final Report to be disseminated by October 1998</p>	<p>Case studies will highlight lessons learned by companies who have entered into pilot joint implementation projects on greenhouse gas emissions. A final conference will present the findings and a report including case studies will be disseminated.</p>

<p>29. HRDWG (NEDM)</p> <p>Ms Onny Priyono. Senior Researcher Centre for Strategic & International Studies. Jakarta, Indonesia. Tel: 6221-380-9637 Fax: 6221-380-9641 Email: incpec@global.net.id</p>	<p>Impact of trade liberalization on labor markets in the Asia Pacific Region.</p>	<p>Project aims to lay the groundwork for effective policy responses to labor market adjustments caused by trade liberalization in the Asia Pacific economies. Project intends to implement the GTAP methodology for predicting changes in the magnitude & composition of labor market demands due to trade liberalization.</p>	<p>Started research work for data implementation.</p>	<p>Yes</p>	<p>Simulation and evaluation with policy recommendations. Beneficiaries: Government planners and private corporations.</p>
<p>30. ISTWG</p> <p>Mr Shinya Wakimoto International R&D Cooperation Division, Agency of Industrial Science and Technology, MITI Japan Tel:81-3-3501-6011 Fax:81-3-3580-8025</p>	<p>APEC Study on Promoting Researcher Exchange (14.A.2.02) <i>*Also contributes to Priority IV</i></p>	<p>Study on current study of trans-border flow of researchers and identification of major legal/institutional/social issues and other factors which are related to researcher exchange.</p>	<p>Ongoing (March 1998: Report of the draft Survey-1 for member authorities. September 1998: Report of the Survey-1 for member authorities and the Survey-2 for individual researchers)</p>		<p>To provide useful background information to develop an individual plans to address the issue on trans-border flow of researchers</p>
<p>31. IST WG</p> <p>Marie Lyne Tremblay, Manager, APEC S&T Relations, International Business Branch, Industry Canada Tel: 1 613 952 1882 Fax: 1 613 952 5381</p>	<p>APEC ISTWG Ad-hoc group on Gender and S&T (14.A.2.03)</p>	<p>Study of best gender practices to remove barriers and encourage women's participation in 3 key areas of education, research and work places.</p>	<p>Sept '97: 1st meeting Mar '98: 2nd meeting Sept '98: 3rd meeting Mar '99: 4th meeting</p>	<p>Best gender practices in the work place are expected as input from business sectors.</p>	<p>Sharing of best gender practices to help to integrate women into the mainstream of APEC activities</p>

<p>32. ISTWG</p> <p>Dr Marie Lyne Tremblay Industry Canada Tel: 1-613-952-1887 Fax: 1-613-952-5381</p>	<p>APEC Experts Meeting on Gender in Science, Industrial Science, Technology and Engineering</p> <p>(14.A.2.04)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>To hold a seminar to enhance the understanding of male and female participation (and its ratio) in scientific, technological and engineering education and professional field</p>	<p>Completed (March 1998)</p>	<p>Better coordination in collecting gender-desegregated data in science and technology, which will contribute to open discussion on policy options for women's enhanced participation in this field.</p>
<p>33. ISTWG</p> <p>Kyu-ha Cho Korea Science Foundation Tel: 82-2-555-9766 Fax: 82-2-555-2355</p>	<p>1st APEC Youth Science Festival</p> <p>(14.A.2.05)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>Various kinds of activities will be held in the area of science and technology for APEC Youth</p>	<p>On-going (14-20 August 1998, Seoul)</p>	<p>Business sectors are expected in the festival with their scientific products for exhibition</p> <p>The Festival will help the youth to enhance their understanding and interest of science and technology</p>
<p>34. ISTWG</p> <p>Mr Osamu Yamashita Science & Technology Agency, Japan Tel: 81-3-3581-3757 Fax: 81-3-3595-0567</p>	<p>Public Awareness Activities for Science and Technology</p> <p>(14.A.2.06)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>To exchange information and discuss on the current and future activities concerning public understanding on S&T in the economies in the region.</p>	<p>On going (Aug 1997: Hold the APEC Symposium concerning public understanding on S&T; Mar 1998: Printed the proceedings of the APEC Symposium and distributed to member economies in the 14th IST-WG. Established the home-page to facilitate information exchange on activities on public understanding on S&T before long.)</p>	<p>The cooperation on the science and technology museum and educational laboratories of the APEC economies; The implementation of APEC joint projects to attract youngster's attention to science and technology; A symposium concerning public understanding on science and technology hosted by Japan.</p>

<p>35. IST WG</p> <p>Mr Hisaya Watanabe Regional Technology Division, Agency of Industrial Science and Technology, MITI, Japan Tel: 81-3-3501-8794 Fax: 81-3-3501-7917</p>	<p>Feasibility Study on APEC Training for Practical Technology of Laser Application and Operation</p> <p>(14.A.2.08)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>Study about the needs, conditions, procedures and curriculums upon a training program for engineers and technicians of practical laser application technic.</p>	<p>On-going (March -April 1998: First survey on the relevant contact peoples/ organizations April-May 1998: Second survey on a practical questionnaire September 1998: Report on the results)</p>	<p>This project, when eventually gives successful birth to a training program, would provide a significant platform on which member economies will be able to harness the future technology.</p>
<p>36. ISTWG</p> <p>Dr Chao-Yih Chen Department of Industrial Technology, Ministry of Economic Affairs, Chinese Taipei Tel:886-2-351-7891 Fax:886-2-351-4850</p>	<p>Networking of APEC R&D Leaders and Researchers</p> <p>(14.B.3.05)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>Networking of S&T researchers and institutes</p>	<p>Ongoing (March 1998, APEC R&D Leaders forum was organized in Chinese Taipei)</p>	<p>Establishment of network among APEC R&D organizations/institutions</p>
<p>37. TELWG/HRDWG</p> <p>Mr. Tony Zeitoun, Canadian International Agency Fax 1-819-997-0945. Tel.1-819-997-1480.</p>	<p>Distance Learning</p> <p><i>* Also contributes to Priority IV.</i></p>	<p>To develop and deliver two courses on distance education. "Train-The- Trainer in Distance Education" and "The Management of Distance Education".</p>	<p>Pilot project completed in 1997. Second project approved for funding to revise and improve methodology and content, while also applying technology to other subject matter</p>	<p>N/A</p> <p>To enhance the effectiveness of training and education for APEC economies; provide APEC with practical experience on the distance learning activities and explore the feasibility of developing a "virtual" APEC distance learning network with a permanent Network Administration Center. Newly funded project will use technology proven in first phase to provide training to further develop and improve methods and content, and support implementation of the MRA for Telecommunications Equipment under EVSL.</p>

<p>38. TELWG Mr. Choon Won Lee, Korea Telecom HRD Group Director. Fax: 82-2-725-2770 Tel: 82-2-750-5901</p> <p>Ms. Aurora Rubio, Chief Telecom Policy and Planning Division, Philippines Fax: 63-2-631-1583 Tel: 63-2-631-5823</p>	<p>Resource and Information Sharing</p> <p><i>* Also contributes to priority IV.</i></p>	<p>Exchange information and sharing best practices experiences on the implementation of the APII.</p>	<p>In preparation (to commence in 1997-99)</p>	<p>N/A</p>	<p>The sharing of information on HRD/HRM “best practices and experiences” of member economies to be established in a data base.</p>
<p>39. TELWG</p> <p>Mr. Toshiyuki Yamada, Ministry of Posts & Telecommunications, Japan. Fax: 81-3-3501-0344 Tel: [81] 3-3504-4971 Email: t-yamada@ mpt.go.jp</p>	<p>Collaborative research on Multimedia HRD System Network Technologies</p> <p><i>* Also contributes to Priority IV.</i></p>	<p>To provide a continuous source of information on various practices that would benchmark the similar needs of APEC member economies.</p>	<p>Ongoing (to be completed in 1998)</p>	<p>In cooperation with the private sector.</p>	<p>To promote the development and use of new technologies.</p>
<p>40. TELWG Mr. Michael V. McCabe, US State Department, Fax: 1-202-647-0158 Tel: 1-202-647-5778</p> <p>41. TELWG Mr Sung-il Ahn, MIC International Infrastructure Division, Korea. Fax: 82-2-750-1259 Tel: 82-2-750-1243</p>	<p>Telecommunications Training Pilot Project (in China)</p> <p>APII Co-operation Center</p> <p><i>* Also contributes to Priority IV.</i></p>	<p>A “train the trainer” course on network development.</p> <p>To provide the means for training of engineers.</p>	<p>Ongoing (to begin in 1998, and continue in succeeding years)</p> <p>Ongoing (1996-2000)</p>	<p>In cooperation with the private sector</p> <p>In cooperation with the private sector.</p>	<p>Design and delivery of a one-week course on network management (1998) which will be replicated in other APEC economies in succeeding years by persons who have received the training.</p> <p>To train engineers, focusing on the technologies necessary for conducting international joint experiments in the field of Information Infrastructure and applications.</p>

<p>42. TELWG</p> <p>Mr. Toshiyuki Yamada, Ministry of Posts & Telecommunications, Japan. Fax: 81 -3-3501-0344 Tel: [81] 3-3504-4971 Email: t-yamada@mpt.go.jp</p>	<p>APII Technology Center</p> <p><i>* Also contributes to Priority IV</i></p>	<p>To provide means for engineer training focusing on the technologies necessary for conducting international joint experiments in the field of information infrastructure and application</p>	<p>Ongoing (1996-2000)</p>	<p>In cooperation with the private sector</p>	<p>To share information, train engineers and conduct joint international R&D.</p>
<p>43. TELWG</p> <p>Dr. Insoo Kang, APII Cooperation Center, Korea. Tel: 82-2-570-4270 Fax: 82-2-570-4069</p>	<p>Human Resource Exchange Program</p>	<p>Each APEC member develops education/training programs to provide useful information on its telecommunications and information industry. APII Cooperation Center identifies the best way to implement each program on the basis of demand of each member for education/training program</p>	<p>Ongoing</p>	<p>In cooperation with the private sector</p>	<ol style="list-style-type: none"> 1. Reducing opportunity cost of huge investment in implementing its plan for telecommunications and information industry development. 2. Accessing better knowledge and information on different telecommunications and information structure of each economy. 3. Increasing the benefits of liberalization for both developed and developing economies.
<p>44. TELWG</p> <p>Miss Hataitip Chairojkanjana Chief of International Cooperation Section, International Services Division Tel: . 66 2 272-6888 Fax: 66 2 279-5563 e-mail: hataitip@ptd.go.th</p>	<p>Disaster Recovery/Contingency Planning Training Course Project</p> <p><i>* also contributes to Priority III</i></p>	<p>To design, develop, implement and evaluate a training course on disaster recovery and contingency planning. The training will assist APEC economies to project their telecommunications networks which are themselves critical resources for disaster recovery planning and practice.</p>	<p>To be completed in 1999</p>	<p>N/A</p>	<ol style="list-style-type: none"> 1. A five-day seminar for 25-30 people 2. Video instruction modules available for future use covering the full spectrum of topics essential for contingency planning and disaster recovery for telecommunications networks.

<p>45. TELWG</p> <p>Prof. CHUA Siew Keng SCS, Nanyang Technological University Tel: 65-7996394 Fax: 65-7927526 E-mail : tskchua@ntu.edu.sg</p>	<p>Symposium for Collaborative Strategies for Multimedia and World Wide Web Skills Development Project</p> <p><i>* also contributes to Priority IV</i></p>	<p>To bring together experts in the field of multimedia production training do discuss how government, industry and educational institutions in APEC economies can address rapidly expanding requirements for human resources in the multimedia and internet content provision industries.</p>	<p>To be completed in 1999</p>	<p>Business/private sector involvement</p>	<ol style="list-style-type: none"> 1. A two-day symposium bringing together industry, government and educational institutions 2. Will develop strategies to address the shortage of personnel trained in multimedia and WWW skills. 3. Will address TELMIN3 directive to provide training in multimedia skills to advance the APII
<p>46. TWG</p> <p>Mr Gede Ardike, Directorate General of Tourism, Indonesia. Fax: 62-21- 386-7589 Tel: 62-21- 383-8400</p>	<p>Facilitating and Promoting Human Resource Development</p> <p><i>* Also contributes to Priority III.</i></p>	<p>Develop common occupational skill standards for use in the travel and tourism industry.</p>	<p>To be completed 1998.</p>	<p>N/A</p>	<p>To prepare and develop the professional skill, and facilitate the labor movement in APEC region. A selected number of areas where agreed occupational skill standards have been developed.</p>
<p>47. TPT WG</p> <p>Dr. Budhi M. Suyitno, Secretary of Education and Training Agency, Ministry of Communications of Indonesia Tel: 62-21-345 6585 Fax 62-21-384-7480</p>	<p>Seafarers Training Project (Phase II)</p>	<p>This project will promote the provision of high quality instruction for seafarers consistent with the requirements of the revised provisions of the International Maritime Organization Convention on the Standard of Training, Certification and Watchkeeping (STCW).</p>	<p>Phase I and II completed</p> <p>The Request for Proposal has been submitted to APEC economies to select a consultant.</p>		<p>Improvement in the quality of seafarers in APEC member economies. Maritime trainers and the trainee seafarers are the immediate beneficiaries. Shipping and associate industries will ultimately benefit from highly skilled seafarers.</p>
<p>48. TPT WG</p> <p>N. M. Teweng Secretary of R&D Agency, Ministry of Communications of Indonesia. Fax 62-21-424-1741 Tel: 62-21-424-5939 Email: transina@dnet.net.id</p>	<p>Virtual Center for Transportation Research Development and Education</p>	<p>To establish a Virtual Center for Transportation Research, Development and Education as a network of institutions providing transportation research, development and education The Virtual Center is to be located on the TPT-WG web site that is currently under development.</p>	<p>A work plan is being prepared as well as a cooperation agreement with the supporting economy (Australia). A small group led by Australia has been established for the development of the TPT-WG website.</p>		<p>Determine appropriate steps to establish a virtual center for transportation research, development and education.</p>

<p>49. TPT WG</p> <p>Mr. Bud Streeter, Director General, Marine Safety, Transport Canada, Tel: 1-613-998-0610 Fax: 1-613-954-1032 Email: streetb@tc.gc.ca</p>	<p>Experts Group on Maritime Safety</p>	<p>To identify maritime safety issues and problems in the region and propose recommendations for improvement</p>	<p>A detailed Survey report identifying safety issues and problems in the region will be tabled at TPT -WG-14. A project proposal entitled “Safer Shipping in the Asia Pacific Region- An Integrated Approach” to develop appropriate regulatory and economic mechanism needed for a sound shipping in the Asia Pacific region, was approved by the 13th TPT -WG meeting.</p>	<p>Implementation by APEC economies of the recommendations of the Experts Group on safety problems and programs and mechanism to promote the implementation of, and compliance with, applicable international rules and standards.</p>
<p>50. TPT WG</p> <p>Ms. Luisa Sgobba, Transport Canada Fax: 1-613-991-6422 Tel: 1-613-991-6405 Email: sgobbal@tc.gc.ca</p>	<p>Women in the Transportation Sector</p>	<p>A project team/has been established to support the participation of women in the APEC process by highlighting “success stories” which would provide examples to the TPT -WG members of training and development initiatives in the transportation sector and also indicate how to implement similar or related initiatives..</p>	<p>The 13th TPT -WG approved the project Increased Participation of Women in The Transportation Sector: A Compendium of Success Stories. The small group is working on a definition of the term “success stories” as well as a draft questionnaire.</p>	<p>To increase the participation of women in the transportation sector.</p>

<p>51. TPT WG</p> <p>Ms. Joanne Blackburn Assistant Secretary Maritime Transp. Div. Dept. Of Workplace Relations and Small Business, Australia Fax: 61 26 274 7744 Tel: 61 26 274 7982 Email: JBlackbu@</p>	<p>Seafarers STCW Training in the Philippines</p>	<p>This project will promote the provision of high quality instruction for seafarers consistent with the requirements of the revised provisions of the International Maritime Organization Convention on the Standard of Training, Certification and Watchkeeping (STCW).</p>	<p>A suitable program of training has been developed. A workshop is to be held in the Philippines as soon as a venue can be arranged.</p>		<p>This project is intended to improve the skills of maritime trainers in relation to teaching methodologies, curricula and the requirements of the revised provisions of the STCW Convention.</p>
<p>52. ATC</p> <p>Dr. Syarifuddin Karama, Secretary General Ministry of Agriculture, Indonesia. Tel: 62-21- 780-4427 Fax: 62-21- 780-4428</p> <p>Mr. Suharyo Husen, Alternate Coordinator for APEC ATC, Director of International Cooperation Bureau, Ministry of Agriculture, Indonesia Tel: 62-21-780-4176 Fax: 62-21-780-4428 Consultation with HRD WG Network for Sustainable Development Training and Infomation</p>	<p>Agricultural Technology Transfer and Training</p>	<p>Establishment of a data base for information concerning institutions involved in technology transfer, training facilities, courses, activities and seminars available in the region; strengthening of existing regional agricultural technology transfer and training facilities; develop cooperative training programs</p>	<p>Revised questionnaire has been distributed. Work on strengthening regional AT&T facilities will continue until 2001.</p>		<p>Improved efficiency and effectiveness of member economies in the area of AT&T. Agribusiness will benefit and also individual farmers, who fall into the SME category.</p>

<p>53. CTI: Market Access Group (MAG)</p> <p>Chair: Ms. Ng Kin Neo Tel: 65-337-6628 Fax: 65 -337-6898/ 337-6828</p>	<p>Seminar on the WTO Integrated Database</p>	<p>A seminar to educate APEC members on the IDB system and its technical requirements was conducted by 2 experts from WTO under its IDB Technical Assistance Program</p>	<p>June 1998</p>		<p>The seminar promoted a better understanding of the PC-IDB database system pertaining to its data elements, format, structure, etc. It was also intended to help member economies to comply with data submission requirements to possibly meet both requirements of WTO as well as APEC's objective to develop expanded databases for trade policy analysis purposes.</p>
<p>54. CTI: Group on Services</p> <p>Chair: Mr. Juan Bournas Tel: 56-2-696-0043 Fax: 56-2-696-0639</p>	<p>Training on Trade in Services</p>	<p>Experts from international organizations and developed member economies of APEC were invited to lecture on the GATS.</p>	<p>May 1998</p>	<p>Yes</p>	<p>The training program promoted a better understanding of the content and impact of trade liberalization in services.</p>
<p>55. CTI : SCSC</p> <p>Project Proponent: Japan Mr. Shigeo Matsutomi Tel: 81-3-3581-5794, Fax: 81 -3-3592-0504</p>	<p>APEC / PFP Project on Standards and Conformity</p>	<p>Conduct a training program on Standards and Conformity Assessment Schemes</p>	<p>On-going (1996-2000) To be held in Malaysia in Nov-Dec. 1998.</p>		<p>Course will develop human resources by providing knowledge needed to establish and rationalize standards and conformity assessment schemes</p>
<p>56. CTI: SCSC/ HRDWG (Joint Project)</p> <p>Mr. Jesus Motoomull (SCSC) Tel: 63-2-890-4965 Fax: 63 -2-890-4926</p> <p>Dr. Norihiko Maeda (HRD) Tel: 81-3-3503-6621 Fax: 81 -3-3501-0550</p>	<p>International Quality Assurance Systems (IQAS) Project</p>	<p>Develop a basic training course for executives of SMEs that fully integrates approaches for managing quality, environment and organizational change, following the structure of the ISO management standards</p>	<p>First phase completed in 1997. As next phase, a trainer's training would be held in Manila on 28 Sept. to 2 Oct. 1998.</p>	<p>Yes</p>	<p>Contribute to capacity-building of human resources managers and business professionals in integrating quality and environmental management systems in the workplace, especially of Small and Medium Enterprises (SMEs)</p>

<p>57. CTI: Subcommittee on Customs Procedures (SCCP)</p> <p>Project Overseer: Mr William Claypole Revenue Canada Fax: 9-1-613-954-1423</p> <p>Mr Douglas M Browning US Customs Service Fax: 1-202-927-2064</p>	<p>SCCP Program to Implement WTO Valuation Agreement</p>	<p>Develop, design and deliver technical and human resource assistance required by members in implementing the Valuation Agreement.</p>	<p>Ongoing (1997-2000) Phases I and II had been completed. Follow-up to begin in 1998.</p>		<p>Enable APEC members to administer the WTO Valuation Agreement equitably and effectively by providing them with technical training. Help ensure that APEC has the appropriate foundation of Customs systems and procedures in place by 2010/2020.</p>
<p>58. CTI:SCCP</p> <p>Project Overseer: Mr Mike Spong Tel: 64-4-474-8315 Fax: 64-4-472-3886</p>	<p>SCCP program to implement Advance Classification Ruling Systems</p>	<p>Develop, design and deliver technical and human resource assistance required by 3 members in implementing the system.</p>	<p>Ongoing (1997-1999) Technical assistance had been extended to the Philippines in Oct 97. The scheduled 1998 technical assistance to Chinese Taipei has been delayed till March 99. Funding for technical assistance to PNG in 1999 has also been approved by BAC in its July meeting.</p>		<p>This system facilitates international trade by ensuring certainty and predictability and thus enables traders to make sound business decisions based on legally binding advice.</p>
<p>59. CTI:SCCP</p> <p>Project Overseer: Mr Mike Spong Tel: 64-4-474-8315 Fax: 64-4-472-3886</p>	<p>SCCP program to implement the Kyoto Convention</p>	<p>Development of a comprehensive strategy for the implementation of the Kyoto convention through an overview seminar, research missions and workshops in interested member economies.</p>	<p>Ongoing. (1997 - 1999) A Seminar on the Kyoto Convention was held in PRC in April 1998. Funding request for 1999 activities was approved by BAC in its July meeting.</p>		<p>The Kyoto Convention provides guidance to Customs administrations in simplifying and harmonizing their customs procedures. Thus, improved efficiency in customs clearance, faster deliveries, etc. would benefit importers, exporters and manufacturers in the region.</p>

<p>60. CTI:SCCP</p> <p>Project Overseer: Mr Tim Chapman Australian Customs Service Fax: 61 -2-6275-6819</p> <p>Will complement work done in TEL WG and TPT WG.</p>	<p>SCCP program to implement UN/EDIFACT electronic message standards.</p> <p><i>*Also contributes to priority IV.</i></p>	<p>Development of a staged approach to the implementation of UN/EDIFACT through introductory seminars, training needs analyses and a series of follow-up missions to interested members.</p>	<p>Ongoing. (1997 - 1999). The consultant, Novacomm Inc had conducted field trips to economies between Jan – Mar 1998. Training courses were conducted in April 1998 at the APEC Secretariat. Funding request for 1999 activities was approved by BAC in its July meeting.</p>	<p>IATA (International Air Transport Association) had conducted an introductory seminar on UN/EDIFACT on 26-27 April 97 in Singapore.</p>	<p>Increased efficiency in Customs procedures by reducing and eventually eliminating paper and its handling and storage costs. Simplification and harmonisation of Customs electronic interchange in the region will promote improved communication between customs administrations and the importing/exporting community.</p>
<p>61. CTI: SSCP (in consultation with the CTI IPR-GT)</p> <p>Project Overseer: Mr Douglas Browning Tel: 1-202-927-0400 Fax: 1-202-927-2064</p>	<p>SCCP Program to Implement the WTO “TRIPS” Agreement</p>	<p>Development of a comprehensive program to implement border enforcement of IPRs as provided for in the WTO “TRIPS” Agreement.</p>	<p>Ongoing. (1997 - 1999). An APEC Conference to implement Border Enforcement Aspects of WTO TRIPS Agreement was held in Oct-Nov 97, including back-to-back economy assessment exercise. Next phase is on-site training in member economies to be conducted in 1998-1999. Funding for these activities had been approved.</p>		<p>To enable members establish adequate and effective IPR border enforcement regime as provided for in the WTO TRIPS Agreement. Scientific and artistic research and creativity will be stimulated when protected from uncompensated exploitation. Tax revenues will increase from both domestic profits and international investment.</p>
<p>62. CTI:SCCP</p> <p>Project Overseer: Mr Yoshio Okubo Tel: 81-3-3581-3825 Fax: 81 -3-5251-2123</p>	<p>Implementation of the Harmonised System (HS) of Classification</p>	<p>Development of a training program to assist members to develop proficiency in the administration of the Harmonised System.</p>	<p>Funding for 1998-1999 activities have been approved. The HS workshop will be held in the Philippines on 18-20 August 98.</p>		<p>Better trained customs personnel in member economies for determining and ensuring accurate, consistent and uniform applications of the HS classification.</p>

<p>63. CTI: SCCP</p> <p>Convenor: Canada Mr William Claypole Tel: 1-613-954-6980 Fax: 1-613-954-2224</p>	<p>Implementation of Clear Appeal Provisions</p>	<p>Development of a training program to assist members in the implementation of the clear appeal provisions.</p>	<p>Funding for project has been approved. To begin in 1998.</p>		<p>Establish a system in each custom administration in the region whereby an aggrieved party could seek appeals.</p>
<p>64. CTI: SCCP</p> <p>Convenor: Australia Mr Tim Chapman Australian Customs Service Fax: 61 -2-6275-6819</p>	<p>Risk Management</p>	<p>Establishing a plan of action to adopt and implement a systematic approach to risk management in customs operations.</p>	<p>Collating information on members' practices in the area of risk management. Funding for project has been approved for 1999 activities.</p>	<p>AUSAID (Australian Agency for International Development) has provided some funding to conduct a basic training on risk management for a few members.</p>	<p>Enable members to share with each other "best practices" in the area of risk management which forms an essential component of all customs work. Enhance operational effectiveness of Customs personnel.</p>
<p>65. CTI:SCCP</p> <p>Convenor: Chinese Taipei and US Ms Lilian Hsieh Tel: 886-2-322-8216 Fax: 886-2-394-1479</p> <p>Mr Jerry Worley Tel: 1-202-927-0440 Fax: 1-202-927-6892</p>	<p>Provision for Facilities for Temporary Importation.</p>	<p>Development of a training program following the completion of a training needs analysis. Istanbul Convention training portions will be coordinated with the WCO. ATA training portions will be developed.</p>	<p>Funding for 1998-1999 activities have been approved. A seminar on Temporary Importation Procedures (ATA Seminar) will be held in Chinese Taipei on 22-24 September 1998.</p>		<p>Importers and exporters who trade with numerous economies will benefit from harmonised customs procedures for goods which are imported temporarily in that they will not have to be familiar with numerous procedures. Also, generally, temporary importation procedures involve relief from all or portion of the duties normally payable, so they will benefit financially.</p>

<p>66. CTI:SCCP</p> <p>Convenor: Mr Douglas M Browning US Customs Service Fax: 1-202-927-2064</p> <p>Mr Zhou Guanshan PRC Customs General Administration Fax: 86-10-6519-5394</p>	<p>SCCP Program to Implement WCO Customs Guidelines on Express Consignment Clearance</p>	<p>Development of a comprehensive training program following the completion of initial assessment missions in some member economies. A questionnaire was also circulated to all members to determine their respective training needs.</p>	<p>Funding for the conduct of an Overview Seminar on the WCO Guidelines on Express Consignment Clearance to be held in 1999 has been approved by BAC at its July 98 meeting.</p>	<p>The first phase of the project was funded by the International Express Carriers Conference (IECC) and Conference of Asia Pacific Express Carriers (CAPEC).</p>	<p>Technical assistance to member economies will equip customs administrations in the APEC region with ability to establish necessary clearance procedures, which address time sensitive shipments. The implementation of efficient express delivery services would thus facilitate trade in the region. This project is being developed with inputs/assistance from the express industry.</p>
<p>67. CTI: IPEG</p> <p>Project proponent: Japan Mr. Shigeo Matsutomi Tel: 81-3-3581-5794 Fax: 81-3-3592-0504</p>	<p>APEC/PFP Course on Management of Industrial Property Rights</p>	<p>To enhance APEC members' understanding of industrial property rights, related law and enforcement as well as computerization of IPR administration</p>	<p>Ongoing (1996-2000). Held in Thailand in Oct. – Nov. 1998.</p>		<p>Better trained and increased awareness of personnel in intellectual property rights, related laws and enforcement as well as computerization of IPR administration.</p>
<p>68. CTI: IPEG</p> <p>Lead Economy: Korea</p>	<p>Policy framework of the TRIPS Agreement and technical cooperation</p>	<p>Present offers and requests of technical cooperation and develop bilateral/multilateral technical cooperation project</p>	<p>Proposed by Korea and agreed at IPEG in March 1998,</p>		<p>Facilitate technical cooperation among APEC members. Also enable members to conduct cooperation programs for common interest.</p>
<p>69. CTI: Competition Policy</p> <p>Project proponent: Department of Internal Trade, Ministry of Commerce, Bangkok Tel: 66-2-222-2212 Fax: 66-2-225-5123</p>	<p>APEC/PFP Competition Policy Training Course</p>	<p>A seminar involving competition experts from government, international organizations, academia and business. Its purpose is to develop human resources capable of establishing and effectively managing competition policy and law and, thus, to help establish an environment enabling fair and free competition.</p>	<p>Ongoing (1996-2000) To be held in Thailand</p>	<p>Yes, as trainers.</p>	<p>Better trained officials working in the competition policy area, including a better appreciation of the policy context for competition law and a closer appreciation of the business perspective on competition policy.</p>

<p>70. CTI: Government Procurement Experts Group</p> <p>Convenor: Miss Adeline Wong, Hong Kong, China. Tel: 852-2398-5305 Fax: 852-2787-7799</p>	<p>Seminar on Non-binding GP Principles</p>	<p>The seminar aims at laying the foundation for development of a set of non-binding principles on GP and liberalization of GP markets throughout the region.</p>	<p>6-7 September 1998</p>	<p>Yes, as speakers and possibly as participants.</p>	<p>This seminar will enhance understanding of GP principles and prepare members for discussion on the development of a set of non-binding GP principles by end 1999.</p>
<p>71. CTI: Dispute Mediation Experts' Group</p> <p>Project overseer: Thailand Judge Voravithi Dvadasin Ministry of Justice, Bangkok Tel/Fax: 66-2-541-2271, 541-2298-9</p>	<p>Symposium on alternative mechanisms for the settlement of transnational commercial disputes</p>	<p>Private/Public sector seminar on mechanisms for dealing with private sector business disputes</p>	<p>Held on 27-28 April 1998</p>	<p>Yes, as speakers and participants.</p>	<p>Increased knowledge by private parties of the services available to them in case of disputes with other private partners</p>
<p>72. CTI: Uruguay Round Agreement Implementation</p> <p>Convenor: United States Jane Earley Tel: 1-202-395-4755 Fax: 1-202-395-3512</p>	<p>Training Programme on implementation of the WTO Agreement on Subsidies and Countervailing Measures</p>	<p>Training /workshop to deal with issues which might arise in the course of implementing the Agreement on Subsidies and Countervailing Measures, focusing on the notification requirements of subsidies.</p>	<p>The training program was conducted in early July 1998.</p>	<p>Business sectors will benefit from enhanced knowledge of the subsidy regulations and member economies' practices thereon.</p>	<p>Increased knowledge by member economies on the issues related to this area, especially details on the notification requirements.</p>

<p>73. PLG SME</p> <p>Prof. Chun Bang Jee, Hoseo University, 78-101 Banpo Apt. Banpo-dong, Seocho-gu Seoul, Korea. Tel: 82-0418-40-5255; Fax: 82-0418-40-5250</p>	<p>Study of Women Entrepreneurs in SMEs in APEC region</p>	<p>A study involving gathering basic statistics on women owned and operated SMEs to analyze the challenges facing women entrepreneurs in SMEs in APEC and to recommend appropriate policy measures to help women entrepreneurs make a greater contribution,</p>	<p>An advisory committee meeting was held last May. Meeting with experts in July/August. A conference in July 1999 to discuss the findings of the research and publication of a final report</p>	<p>Business women will be involved with the research work, the experts meetings and the final conference.</p>	<p>Provide statistics and research on the challenges facing women SME entrepreneurs to help shape future SME policies in APEC.</p> <p>The direct beneficiaries are SME policy makers, SME agencies and research institutions and the women entrepreneurs who participate in the project. The indirect beneficiaries are women entrepreneurs and managers, in general.</p>
<p>74. PLG SME</p> <p>Dr. Soeharto Prawirokusumo. Head of R & D Agency for Cooperatives and Small Enterprises, Indonesia. Tel: 62-21- 799-5475 Fax: 62-21- 798-7955</p>	<p>APEC Center for Entrepreneur-ship Development for SMEs in Indonesia</p>	<p>Objective of centre is to foster and promote SME Entrepreneurship and training human resources among SMEs in the APEC region</p>	<p>The Centre is expected to be set up by the end of 1998. Project Selection Panel now deliberating on the awarding of contract to an international consultant.</p>	<p>There will be an active partnership between the Centre and the business sector</p>	<p>Develop a feasibility study for the creation of the APEC Centre for Entrepreneurship Development that is focussed on SMEs and building a management information systems for SME entrepreneurship development.</p>

II. FOSTERING SAFE, EFFICIENT CAPITAL MARKETS

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. HRD WG (BMN) Ms Wen Haiying, Deputy Director General, Department of General Planning, Ministry of Personnel No. 5 Yuhuli Beisihuan Donglu, Beijing 100101, P.R. China. Tel: 86-10-6492-3923 Fax: 86-10-6492-3923 or 6492-3934	Trade and Investment Insurance Training Program '98	To train those who are working or will work with institutions that provided trade and investment insurance in APEC economies with a view to contribute to the liberalization and facilitation of trade and investment in the APEC region.	Jointly with the Trade Promotion Working Group, planning for the second phase is taking place and will accelerate in mid - 1998. A kick-off meeting will be held in <i>August</i> 1998 to discuss implementation of the project.	With private/ business sector participation	Two-week training programs of lectures and field studies will be conducted in some member economies.

<p>2. ATC</p> <p>Ms Mari Izumi, Ministry of Agriculture, Forestry and Fisheries, Japan. Tel: 81-3- 3501-4986 Fax: 81 -3- 3580-8592 Email: mari_izumi@mn. Maff.go.jp</p> <p>Dr Te-Yeh Ku Food and Agriculture Department, Council of Agriculture Chinese Taipei Tel: 886-2- 383-2607 Fax: 886-2- 312-5812 Email: susan@mail.coa.gov.tw</p>	<p>Cooperative Development of an Agricultural Finance System</p>	<p>Collection and exchange of information on agricultural finance systems; establishment of database on coordinators, experts, consultants and training opportunities; establish a regional agricultural credit information network</p>	<p>A Workshop on Risk Assessment for Agricultural Financing was held in Tsukuba, Japan on 16-17 March 1998. The list of coordinators, experts, consultants had been distributed and is available on the ATC homepage. Establishment of an agricultural credit information network will be completed by 2000</p>		<p>The development of agriculture and rural communities through strengthened agricultural finance in each economy.</p>
<p>3. CTI: Investment Experts Group (IEG)</p> <p>Chair: Dato J Jegathesan Tel 60-3-255-3633 Fax 60-3-253-8507</p>	<p>Updating the APEC Guidebook on investment regimes</p>	<p>The guidebook provides information on foreign investment regimes of member economies.</p>	<p>Ongoing</p>		<p>The transparency of APEC investment regimes will be increased.</p>

<p>4. CTI: Investment Experts Group (IEG)</p> <p>Chair: Dato J Jegathesan Tel 60-3-255-3633 Fax 60-3-253-8507</p>	<p>Promote an ongoing mechanism for dialogue with the APEC business community on ways to improve the APEC investment environment</p>	<p>The 4th APEC Investment Symposium will be held in Malaysia. Business representatives as well as government officials will be invited to the meeting.</p>	<p>Scheduled for 29-30 September 1998.</p>	<p>Individual member economies will invite representative from their private sectors to participate in the symposium. The organizers of the symposium will invite prominent business leaders to speak at the meeting.</p>	<p>The Symposium will provide an effective forum for the private sectors and investment officials of member economies to exchange views on important investment issues and identify means to enhance the investment environment and promote investment flows in the region.</p>
<p>5. CTI: Investment Experts Group (IEG)</p> <p>Chair: Dato J Jegathesan Tel 60-3-255-3633 Fax 60-3-253-8507</p>	<p>Training on strategies to identify and promote investment in specific areas</p> <p><i>*Also contributes to Priority I</i></p>	<p>A training program in the form of lectures, workshops, a case study and visits to high-tech establishments and R&D organizations. The training program will be held in Australia.</p>	<p>Postponed</p>		<p>The training will provide investment officials of member economies with the opportunity to enhance the level of knowledge in the promotion and development of SME and further improve the investment environment in APEC member economies.</p>
<p>6. CTI: Investment Experts Group (IEG)</p> <p>Chair: Dato J Jegathesan Tel 60-3-255-3633 Fax 60-3-253-8507</p>	<p>Training on FDI policy administration and adjustment</p> <p><i>*Also contributes to Priority I</i></p>	<p>A seminar will be held in Thailand.</p>	<p>Postponed</p>		<p>The seminar will provide member economies with an opportunity to acquire more inputs relevant to FDI policy and administration options which will in turn help the process of investment facilitation and liberalization.</p>

<p>7. CTI: Investment Experts Group (IEG)</p> <p>Chair: Dato J Jegathesan Tel 60-3-255-3633 Fax 60-3-253-8507</p>	<p>Training Program on Improving the Capacities on Statistical Reporting and Data Collection</p> <p><i>*Also contributes to Priority I</i></p>	<p>Development of an efficient, accurate technical mechanisms for statistical reporting and data collection. The training program will be held in China.</p>	<p>Held on 6-10 July 1998</p>		<p>It is expected to improve the present foreign investment statistical system in APEC member economies.</p>
<p>8. Economic Committee</p> <p>Dr Lan Xue Chair, Task Force on the 1998 Economic Outlook Tel: 8610- Fax: 8610-6278-2605</p> <p>Liaison with Finance Ministers process, and IST WG.</p>	<p>1998 APEC Economic Outlook: analytical study and compilation of economic data; research symposium</p> <p><i>*Also contributes to priority IV</i></p>	<p>Preparation of the 1998 APEC Economic Outlook. Analysis of the economic instability that has affected some member economies and consequent prospects for the region. The structural chapter will focus on the role of Science and Technology in supporting economic growth and development.</p>	<p>To be completed by November 1998</p>		<p>1998 – Publication and presentation to Ministers in Kuala Lumpur. Economic policy makers will be the principal beneficiaries, but the document will also be a valuable public reference. The proceedings of the research symposium will be published as a companion volume.</p>
<p>9. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	<p>Enhanced cooperation among export financing institutions</p>	<p>Implement a November 1997 Protocol Agreement that provides for cooperation in risk sharing among export credit/financing agencies, information sharing, and technical assistance and training.</p>	<p>Ongoing.</p>		<p>Synergies to be achieved through information exchange, knowledge transfer, possible co-lending, all of which could help mobilize private financing for infrastructure and SMEs.</p>
<p>10. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	<p>Strengthening financial market supervision</p>	<p>Implement action plans to raise the quality of domestic training programs of APEC banking supervisors and securities regulators and enhance international cooperation in training.</p>	<p>Approved by Finance Ministers in May 1998. Implementation to begin in 1998.</p>		<p>Improved capacities of banking supervisors and securities regulators will have economy-wide benefits, including for small savers and investors.</p>

<p>11. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	Pension fund reform	Hold a Regional Forum on Pension Fund Reform attended by 15 APEC economies and other outside experts in Mexico. Chile will host a second forum focusing on policy issues.	First forum was held 4-6 February 1998. Second to be held in the next year.		Forum allowed experts to share experiences in establishing pension systems and compare alternative reform approaches, including their impacts on capital market development.
<p>12. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	Increased use of asset securitization activities in domestic capital markets	Implement a voluntary action plan to help economies accelerate development of securitization activities based on the results of a public-private International Conference on Asset Securitization and a survey of existing securitization activities in member economies.	Finance Ministers adopted the plan in May 1998. Conference was held December 1997 in Kuala Lumpur.	Experts from private banks and other firms took part in the conference.	Action plan to focus on education and training, creating a register of securitization experts, and accounting and legal initiatives. Increased use of securitization will have economy-wide benefits, including for small savers and investors.
<p>13. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	Developing credit rating agencies and strengthening information disclosure standards	Hold a seminar on credit rating agencies in Manila. Possible further work in 1998-99.	Seminar was held 26-27 March 1998.		Increased awareness of the importance of credit rating agencies and information disclosure to sound capital markets development will have economy-wide benefits, including for small savers and investors.
<p>14. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	Strengthening clearing and settlement infrastructure	Provision of bilateral technical assistance to economies with less advanced systems.	Bilateral offers are standing.		Stronger clearing and settlement infrastructure will have economy-wide benefits, including for small savers and investors.

<p>15. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	<p>Development of domestic bond markets</p>	<p>New initiative to be coordinated by Hong Kong, China. Further information unavailable.</p>	<p>Launched by Finance Ministers in May 1998</p>	<p>Aims to build on contributions from the APEC Financiers Group</p>	<p>Strengthening of domestic bond markets will have economy-wide benefits, including for small savers and investors.</p>
<p>16. Finance Ministers' Working Group</p> <p>Chair: Ms. Teh Ija Jalil Malaysia Tel: 603-258-2520 Fax: 603-253-5707</p>	<p>Strengthening corporate governance</p>	<p>New initiative to be coordinated by Malaysia along with the World Bank and ADB. Australia will host a seminar to identify priorities for reform.</p>	<p>Launched by Finance Ministers in May 1998. Implementation in 1998-99.</p>	<p>Business people to attend the seminar.</p>	<p>Strengthened corporate governance will support capital market development and economic development generally.</p>

III. STRENGTHENING ECONOMIC INFRASTRUCTURE

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. EWG Mr. George Zeigler US Dept. of Energy USA Tel: 1-202-586-6114 Fax: 1-202-586-6148 Email:george.zeigler@hq.doe.gov	Accelerating Investment in Natural Gas Supplies, Infrastructure and Trading Networks in the APEC Region <i>* Also contribute to Priorities II, IV and VI</i>	To make recommendations to improve the climate for private sector investment in natural gas development in APEC	Recommendations to Energy Ministers in October 1998 To be complete in October 1998	Input from Business sector is key to the success of the project. PECC Energy Forum has played major role.	Two workshops involving business were held in May and July 1998 to discuss the draft report. The final report of the project was approved at EWG 16 and the recommendations will be forwarded for endorsement at the 3 rd APEC Energy Ministers’ Meeting. Both governments and business sector will benefit from the result of the project, which will improve the environment for investment in natural gas development, and facilitate the sustainable development of APEC member economies.
2. EWG Mr. Robin Bryant, Coal Development Branch, Department of Primary Industries and Energy, Australia. Tel : 61 -6-272-4629 Fax : 61-6-272-4965 E-mail : rbyant@dpie.gov.au	APEC Coal Trade and Investment Liberalisation and Facilitation Workshop Series <i>* Also contributes to Priority VI</i>	To develop strategies to facilitate and liberalisation coal trade and investment	Completed	Business sector will be involved in the project workshop	Second workshop was held on 1-2 April 1998 in Manila and the proceedings of the workshop were published in June 1998. Scope for power sector benefit from improved access to competitively priced raw materials and removal of managerial and technological impediments to coal trade and investment. Potential gains to coal producers via increased exports and industry, including SMEs from increased competition in the power sector.

<p>3. EWG</p> <p>Mr. Paul Ross, Energy Policy Branch, Energy Division, Dept. of Primary Industries and Energy, Australia. Tel: 61-6-272- 4480 Fax: 61 -6-272- 3741 E-mail: paul.ross@dpie.gov.au</p>	<p>Power Infrastructure Initiative : Consultancy and Workshop on Promoting Energy Security Through Improved Access to International Fuel Markets <i>* Also contributes to Priorities II and VI</i></p>	<p>To develop recommendations to assist energy security through improved fuel supply market operation</p>	<p>Completed.</p>	<p>Industry and Government Regulators were involved</p>	<p>The report was published in April 1998 and recommendations will be presented to Energy Ministers in Okinawa in October 1998. Member economies will benefit from implementation of recommendations which are aimed at improving energy security in the APEC region's power sector, through the efficient operation of market based mechanisms.</p>
<p>4. EWG</p> <p>Dr. Sun Chun, US Department of Energy. Tel: 1-202-586-8650 Fax: 1-202-586-4729 E-mail: sun.chun@hq.doe.gov</p>	<p>Coal and Natural Gas Competition in APEC Economies <i>* Also contributes to priority IV.</i></p>	<p>Examine and summarize the status and possible future roles of coal and natural gas in each member economy</p>	<p>Ongoing</p>	<p>Business sector will be involved in the implementation of the project and will provide financial support to the project.</p>	<p>The survey will make decision-makers aware of the options available for optimising tradeoffs that the respective economies can make in determining long-range energy goals. The data accumulated will also help APERC significantly in its activities.</p>
<p>5. EWG</p> <p>Mr. Kenichi Matsui , The Energy Data and Modelling Centre, IEE, Japan Tel: 81-3- 5401-43241 Fax: 81 -3- 5401-4350 E-mail: apeced@po.ijnet.or.jp</p>	<p>Operation of APEC Energy Database</p>	<p>To establish consistent framework for energy data reporting and processing and to produce annual APEC Energy Statistics including energy supply and demand projections within the APEC region to assist the identification of significant trends</p>	<p>Ongoing</p>	<p>The business sector is periodically invited to provide advice on the collection of statistics and on the analytical outputs</p>	<p>"The APEC Energy Statistics, 1996" will be available in October 1998.</p>

<p>6. EWG</p> <p>Mr. Toshiio Sano, Energy Resources, Economics Affairs Bureau, Japan Tel: 81-3-3581-9065 Fax: 81-3-3592-0504 E-mail: hio.sano.mofa.go.jp</p>	<p>Facilitation of rural electrification in the APEC region</p> <p><i>* Also contributes to Priorities I, II, III and VI</i></p>	<p>Furthering of rural electrification in the APEC region</p>	<p>Completed</p>	<p>Electricity Utilities were involved</p>	<p>The project addressed specific issues and actions, which could be taken to further rural electrification. The project highlighted successful innovative approaches to rural electrification, which are frequently implemented by SMEs.</p>
<p>7. EWG</p> <p>Mr. Andre W van Rest, Office of Energy Efficiency and Renewable Energy, US Department of Energy. Tel: 1-202 586 9793 Fax: 1-202 586 1605 E-mail: andre.vanrest.@hq.doe.gov</p>	<p>Assessment of Integrated Rural Energy and Village Power Program for Potential Collaborative Projects in the APEC Region</p> <p><i>* Also contributes to Priority VI</i></p>	<p>Identify and explore opportunities to integrate rural energy-economic development programs with village power programs, identify opportunities for collaboration between rural energy, rural economic development, and village power programs, and explore the potential benefits of integrating energy and agricultural development programs at the village level in the APEC region.</p>	<p>In preparation.</p>	<p>Business sector has been involved in the development of the project.</p>	<p>The final product of the project, a technical report, will be published at the completion of the project. The report is expected to facilitate and accelerate renewable energy development in the APEC region. Governments, rural economic development agencies, economic and energy institutions and peoples in rural areas will benefit from the result of the project.</p>
<p>8. EWG</p> <p>Mr. Keiichi Yokobori President, Asia Pacific Energy Research Centre, Tokyo, Japan Tel: 81-3-5401-4551 Fax: 81-3-5401-4555 E-mail: yokobori@aperc.leej.or.jp</p>	<p>Energy Demand and Supply Outlook for the APEC Region for the year 2010</p>	<p>This joint study was undertaken by APERC, which is staffed by experts from most APEC member economies. The findings of the Outlook will improve the understanding by the governments, and business sectors of member economies of regional energy markets and trends, thus increasing certainty in policy and business decision making</p>	<p>Completed</p>	<p>Results of study have been made available to the business sector</p>	<p>The Outlook was published in March 1998, and will be provided as input to discussions at the 3rd Energy Ministers' Meeting in Oct 1998. The Outlook will foster member economies' understanding of the energy policy implications of future energy supply and demand trends and developments, and assist member economies' decision making process.</p>

<p>9. TELWG Mr Sung-il Ahn, MIC International Infrastructure Division, Korea. Fax: 82-2-750-1259 Tel: 82-2-750-1243</p>	<p>APII Cooperation Center <i>* Also contributes to Priority IV.</i></p>	<p>By the implementation of a work program establishing and providing database on the APII, developing and promoting cooperative projects, supporting APII, supporting HRD activities, and advancing the Internet as a seamless platform for cooperation.</p>	<p>Ongoing (1996-2000)</p>	<p>In cooperation with the private sector.</p>	<p>To implement the APII.</p>
<p>10. TEL WG Mr John Henry US Department of Commerce Tel : 1-202-482-5834 Fax : 1-202-482-1193</p>	<p>Data Compilation</p>	<p>Guide to Regulatory Environments in APEC member economies.</p>	<p>Ongoing (to be revised for completion prior to APEC Leader's Meeting November 1998)</p>	<p>N/A</p>	<p>This guide is a useful resource in that, it details the policy, legislative and regulatory environment for telecommunications in all APEC member economies. It is of particular value to the business/private sector as well as APEC member economies</p>
<p>11. TELWG Mr. Toshiyuki Yamada Ministry of Posts & Telecommunications, Japan. Fax: 81-3-3501-0344 Tel: [81] 3-3504-4971 Email: t-yamada@ mpt.go.jp</p>	<p>Interconnectivity and Interoperability <i>* Also contributes to Priority IV.</i></p>	<p>An APII (Asia Pacific Information Infrastructure) Test Bed Project for Interconnectivity and Interoperability (APII-TPII) with the goal of interconnecting various regional testbeds.</p>	<p>Ongoing (1996-2000)</p>	<p>In cooperation with the private sector.</p>	<p>To establish end-to-end global seamless networks in the Asia-Pacific region.</p>
<p>12. TELWG Mr. Toshiyuki Yamada Ministry of Posts & Telecommunications, Japan. Fax: 81-3-3501-0344 Tel: [81] 3-3504-4971 Email: t-yamada@ mpt.go.jp</p>	<p>Clarifying the key elements necessary for promoting business /private sector participation in telecommunications infrastructure development <i>* also contributes to Priority II</i></p>	<p>APEC Seminar on Promoting Business/Private Sector Participation in Telecommunications Infrastructure Development (July 1997, Tokyo) Task Force to clarify the key elements necessary to secure the proper environment for promoting business/private sector participation in telecommunications infrastructure development.</p>	<p>Ongoing (1996-1998) Report delivered to TEL 17 (03/98) and key results presented to Ministers at TELMIN3, Singapore, June 1998.</p>	<p>In cooperation with the private sector.</p>	<p>To promote business/private sector participation in telecommunications infrastructure development. Report developed by Task Force, to be posted to a web site for information of APEC economies.</p>

<p>13. TELWG Ms. Vivien B.L. Wang, Directorate General of Telecommunications, Chinese Taipei. Fax: 886-2-2343-3938 Tel: 886-2-2343-3899 Email: dgt40@dgt.gov.tw</p>	<p>To identify common interests, position, and actions, to assist APEC WTO members in implementing the WTO agreement <i>*Also contributes to Priority IV</i></p>	<p>Support of the WTO Agreement on Basic Telecommunications. To encourage APEC WTO member economies either to help each other in developing better WTO committed telecom Agreement or to create a more beneficial telecom Industry and operation.</p>	<p>Ongoing (1998-1999)</p>	<p>N/A</p>	<ul style="list-style-type: none"> • The project will survey APEC economies and analyse the steps necessary for each to become compliant with the agreement. • A database of results of the analysis. • A workshop to ensure a co-operative exchange of information and experience to facilitate implementation of the Agreement.
<p>14. TWG Ms Jennifer D. Harrison, Department of Industry, Science & Tourism Division, Australia. Fax: 61-6- 279- 7285 Tel: 61-6- 279 7108</p>	<p>Identify Impediments to Tourism Growth and Formulate Strategies that will improve Tourism movements <i>* Also contributes to Priority V.</i></p>	<p>A study on public and private sector of APEC economies on the impediments/barriers to tourism. Development of criteria for establishing priorities for action</p>	<p>Published in April 1997. Incorporation of CAP's and their implementation accordingly with a short/medium and long term time-frame.</p>	<p>In cooperation with the private sector.</p>	<p>To encourage a liberalization of trade and investment in tourism; to develop strategies to overcome impediments; network with other sectors and other APEC fora; and integrate cooperative efforts and information exchange networks. To contribute in the identification of sectors where early voluntary liberalization in tourism would have a positive impact on trade, investment, and economic growth</p>
<p>15. TPT WG Gloria Jeff Deputy Administrator for Policy, Federal Highway Administration. Dept. of Transportation, United States. Fax. 1-202-493-2084 Tel. 1-202-366-2240 E-mail : Gloria.Jeff@Fhwa.dot.gov</p>	<p>Intermodal Task Force (ITF)</p>	<p>As follow-up to the Transportation Congestion Points Study, the ITF has been established to focus on relieving problems where multiple modes are involved in freight and passenger transport in the Asia Pacific Region</p>	<p>The ITF has identified 8 high priority tasks. An interim meeting will be held in Vancouver, August 5-7 1998 to identify obstacles to intermodality, establishing an APEC intermodal pilot project program and creating an interactive website, among other objectives</p>	<p>Information and opinions were sought from the business sector</p>	<p>Improvement in or elimination of all bottlenecks identified in the TPT Congestion Points Study, particularly the Phase III Best Practices Manual. Guidelines, standards and provisional options associated with an integrated transport system.</p>

<p>16. TPT WG</p> <p>Mr. Hyun-Chul Park, Director, International Cooperation Division, Ministry of Construction and Transportation, Korea Fax: 82-2-503-7304 Tel: 82-2-504-9065 E-mail : hcbak@hanmail.net</p>	<p>Urban Transport Forum</p>	<p>To assist economies in developing transportation systems that help reduce congestion and are energy efficient and environmentally friendly</p>	<p>Contract awarded and the project of developing a best practice manual is ongoing. It is expected to be completed by December 1998.</p>	<p>Open to business sector participation</p>	<p>Development of a best practices manual identifying the best methods to address urban transport problems.</p>
<p>17. TPT WG</p> <p>Mr. Hai Eng Chiang, Civil Aviation Authority of Singapore, Singapore Fax: 65-545-6515 Tel: 65-541-2370</p>	<p>Air Services Group</p> <p>(The project has many components. All or some of these components may fall under TILF subject to further consideration by the TPT-WG. The TPT-WG has provisionally categorized this as a TILF /ECOTECH activity in the transportation action plan for the purpose of the TPT-WG reports to other APEC Fora).</p>	<p>The Air Services Group reconvened to analyze and prioritize the eight options contained in the Options Paper presented to Transportation Ministers, and prepare, on a consensus basis, a recommendation on the options to be developed and how they will be implemented, and submit a comprehensive final report to Transportation Ministers by mid-1998</p>	<p>Air Services Group was reconvened in Singapore on 14-14 Oct. 97 and 25-26 Feb. 98. Report on Options has been completed and submitted for consideration and endorsement of Transportation Ministers.</p>		<p>Comprehensive final report including recommendations on options to be implemented by each member economy developed on a consensus basis by the TPT WG.</p> <p>Promotion of a more competitive air transportation operating environment, on the basis of fair, reciprocal and equitable access to markets and opportunity for all economies</p>

<p>18. TPT WG</p> <p>Mr. Susumu Murata, Ports and Harbours Bureau, Ministry of Transport, Japan. Fax: 81 -3-3580-4496 Tel: 81-3-3580-6851 Email: S-MURATA@so.motnet.go.jp</p>	<p>Port Experts Group</p>	<p>To continue work on the 6 themes (Port Data Base, Regional Port Development Strategy, Port Administration, Management and Operation, Environmental Considerations, Technical Standards and Technology Development, Natural Disasters and Damage Prevention Measures) of the Port Experts Group to identify relevant port issues in the APEC region and to set up proper actions for these issues</p>	<p>Interactive web-based Port Data Base has been developed. Work to collect data and information for other themes has begun. All work to be completed by March 2000.</p>	<p>Improvement in port efficiency through exchange of information and experiences among port experts, and program to improve port capacities in the APEC region. Identification of common issues and formulation of an action plan.</p>
<p>19. TPT WG</p> <p>Mr. Tokuho Tanaka Maritime Transport Bureau, Ministry of Transport, Japan. Fax: 81 -3-3580-7954 Tel: 81-3-3580-5997</p>	<p>Maritime Initiative (The project has many components. All or some of these components may fall under TILF subject to further consideration by the TPT -WG. The TPT -WG has provisionally categorized this as a TILF /ECOTECH activity in the transportation action plan for the purpose of the TPT -WG reports to other APEC Fora).</p>	<p>To develop an efficient, safe and competitive environment for maritime transport in the region.</p>	<p>Mission statement to be finalized at 13th TPT WG. Questionnaire for transparency exercise is being implemented.</p>	<p>Elaboration of an inventory which would contribute to the transparency of maritime policies among APEC economies.</p>

<p>20. TPT WG Mr. Tyh-Ming Lin, Deputy Director General, Institute of Transportation, MOTC, Chinese Taipei, Fax: 886-2-2545-0434 Tel: 886-2-2349-6706 Email: tmlin@iot.gov.tw</p>	<p>Road Safety Experts Group (RSEG)</p>	<p>The RSEG has been established to identify safety issues and problems in the region and to develop comprehensive road safety strategies. The group will organize a road transportation workshop, develop best practices manual on comprehensive road safety strategy development, and establish a road safety data exchange program.</p>	<p>A questionnaire adopted by the 13th TPT-WH has been circulated to all economies. It is expected to analyze by the next meeting.</p>		<p>Implementation by APEC economies of comprehensive road safety strategies and using standards and measures identified by RSEG as best practice.</p> <p>Best counter measurements for solving road transportation safety problems</p> <p>A guideline for how to develop a road transportation safety package</p>
<p>21. CTI: IPEG Lead Economy: Thailand</p>	<p>Protection of well-known trademarks.</p>	<p>As a first step, collect information on practices concerning the protection of well-known marks and conduct, as a second step, a comparative study based on this information with a view to exploring possible common criteria for the protection of well-known marks within the APEC region.</p>	<p>Information on practices for the protection of well-known is being collected from member economies.</p>		<p>Compilation of and comparative analysis on the protection of well-known marks could lead to the possible development of common criteria, which could give adequate protection for well-known mark holders in the APEC region.</p>
<p>22. CTI: Competition Policy Convenor: New Zealand Lead Economy: Chinese Taipei</p>	<p>The Competition Policy and Law Database [Subject to confirmation of the Convenor]</p>	<p>Member economies provide and update quarterly database on competition policies, laws and procedures for publication in the Internet.</p>	<p>1997 – Ongoing</p>	<p>The first stage for the establishment of the database had been completed and was made available for public access in February 1998. The complete database is scheduled for public release in early 1999.</p>	<p>Transparency in regional competition policies. Free information available to support business decision-making. Cross fertilization of competition policy approaches.</p>

<p>23. Economic Committee –Infrastructure Workshop</p> <p>Mr Ruslan Diwiryo Chair, Infrastructure Workshop Tel: 62-21- 726-0961 Fax: 62-21 726-0620 Liaison with the Finance Ministers process and ABAC</p>	<p>Research and analytical work on issues relating to the overall infrastructure environment</p>	<p>Analysis of infrastructure and economic development relationships, in particular the impact of the Asian financial crisis on infrastructure requirements;</p>	<p>1998-99</p>		<p>Identification of options for infrastructure development and possible joint activities. Government and business (large and SMEs) will benefit</p>
<p>24. Economic Committee –Infrastructure Workshop</p> <p>Mr Ching Kuo Hsiao Section Chief Public Construction Commission Chinese Taipei Tel: 886 2 2375 8761 Fax: 886 2 2361 9039</p>	<p>1998 Public-Business/Private Sector Dialogue on Infrastructure</p> <p><i>*Also contributes to priority V</i></p>	<p>Roundtable discussion between the public and business sectors on the theme of Infrastructure and Sustainable Development</p>	<p>The Dialogue took place in Taipei in May 1998.</p>	<p>Extensive cooperation with the business sector</p>	<p>1998 – The Dialogue outcomes will contribute to the implementation of the Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development; the proceedings of the Dialogue will be published and distributed to all participants and to the wider business community.</p>
<p>25. Economic Committee – Infrastructure Workshop</p> <p>Mr Dan Ciuriak DFAIT, Canada Tel: 1 613 995 8619 Fax: 1 613 944 2732</p>	<p>Implementation of Vancouver Framework components on Improving Capacities and Information and Consultation.</p> <p><i>*Also contributes to priority I</i></p>	<p>Development of state of the art practices in various aspects of infrastructure planning, design, development and management; promoting formation of an Infrastructure Facilitation Network focused on Centres of Excellence; encouragement of information-sharing through integrating and developing the Infrastructure Demand Information Database and the Infra-Net; follow-up on initial training experiences</p>	<p>Commencing 1998; ongoing project</p>	<p>Business inputs have been sought in developing the Infrastructure Facilitation Network and in contributing to the timeliness of the data on the internet</p>	<p>1998 – establishment of the Infrastructure Facilitation Network and the improved information for business about infrastructure opportunities in the Asia-Pacific region is directly aimed to benefit business; improvement of public-private sector partnerships for infrastructure development will improve the climate for private investment in public infrastructure.</p>

<p>26. Economic Committee – Infrastructure Workshop</p> <p>Mr Jean Bilodeau Director General Administration Directorate Environment Canada Tel: 1 819 997 2991 Fax: 1 819 997 1781</p>	<p>Infrastructure for Sustainable Cities</p> <p><i>*Also contributes to priority V</i></p>	<p>Develop an action program to implement the recommendations of the Vancouver Framework relevant to infrastructure for sustainable cities and to advance the focused outcome on infrastructure for sustainable cities endorsed by Ministers in 1997</p>	<p>Commencing in 1998</p>	<p>Business inputs have been sought in developing the proposals for infrastructure for sustainable cities</p>	<p>Improvement of public-private sector partnerships for development of urban infrastructure will improve the climate for private investment in public infrastructure.</p>
<p>27. Economic Committee – Infrastructure Workshop</p> <p>Mr Larry Deaton USDA Mr Mark Borthwick US PECC Tel: 1 202 293 3995 Fax: 1 202 293 1402</p>	<p>Infrastructure for Rural Integration and Diversification</p>	<p>Develop new approaches to public-business/private partnership for rural infrastructure development by bringing together decision-makers and experts to identify new funding strategies</p>	<p>Planning will commence in 1998; a symposium will be held in 1999</p>	<p>Extensive business participation in design and expected strong business participation in implementation</p>	<p>Improvement of public-private sector partnerships for development of infrastructure in rural areas will improve the climate for private investment in these areas and expand business opportunities in economic development of rural areas.</p>

IV. HARNESSING TECHNOLOGIES OF THE FUTURE

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries (if impact on business, note if large or SMEs)</i>
1. EWG Dr. Sun Chun U.S. Dept. of Energy, Tel: 1-202-586-8650 Fax: 1-202-586-4729 E-mail: sun.chun@hq.doe.gov	APEC Clean Fossil Energy Technologies Technical Seminars <i>* Also contribute to Priorities I & V</i>	Exchange of available up-to-date information and data and in-depth discussion by recognised experts. Discussions focus on operating efficiencies, technological developments, including possible options for encouraging the adoption of improved technologies into APEC economies, environmental performance and project financing.	On-going. These are a series of annual seminars started in 1993.	Through invited speakers and participation in the seminar as part of the delegations of member economies	The last seminar was held in October 1997. The next one is scheduled for Oct. 1998 in Japan in conjunction with the Energy Ministers’ meeting. Information presented and data resulting from discussions of potential applications of these technologies will assist members in the formulation of integrated energy and environmental policies and their ability to evaluate various technology options that could be used to resolve specific energy production and environmental impact issues. It also contributes to a technical resource database on the effective use of clean coal technologies in producing energy from coal in a more environmentally friendly manner.
2. EWG Mr. Andre W van Rest, Office of Energy Efficiency and Renewable Energy, US Department of Energy. Tel: 1-202 586 9793 Fax: 1-202 586 1605 E-mail: andre.vanrest@hq.doe.gov	Workshop on Emerging Energy - Efficient Industrial Technologies <i>* Also contribute to Priorities I, & VI</i>	Provide a forum for manufacturers, designers and potential users to exchange information on emerging energy -efficient industrial technologies and identify demonstration possibilities for these technologies in APEC member economies.	In preparation	Business sector will be involved in the project implementat- ion	The workshop is scheduled for Oct. 1998 and its proceedings subsequently published. The project will broaden member economies’ understanding on those energy -efficient industrial technologies, which are cost-effective but not yet fully commercialised. This will in turn promote the utilisation of the technologies in member economies. Governments, business sector and society as whole will benefit.

<p>3. EWG</p> <p>Mr. Andre W van Rest, Office of Energy Efficiency and Renewable Energy US Department of Energy Tel: 1-202 586 9793 Fax: 1-202 586 1605 E-mail: andre.vanrest@hq.doe.gov</p>	<p>Development of Analytic Methodologies to Incorporate Renewable Energy in Member-wide Energy and Economic Planning</p> <p><i>* Also contributes to Priorities I, & VI</i></p>	<p>Identify, assess and improve methodologies to incorporate renewable energy options in member- wide energy and economic planning, establish the basis for future work to develop improved renewable energy technologies and modelling capacities for use by energy and economic planners and analysts.</p>	<p>Ongoing</p>	<p>Business sector will be involved in the project implementati -on</p>	<p>A final report of the project with recommendations is scheduled for completion in July 1999. Member economies can use the analytic tools developed through this study to objectively evaluate the role of renewable energy in economic development plans. Energy developers, utility planners, NGOs and regional development groups will also benefit from this project.</p>
<p>4. EWG</p> <p>Mr. Andre W van Rest, Office of Energy Efficiency and Renewable Energy, US Department of Energy. Tel: 1-202 586 9793 Fax: 1-202 586 1605 E-mail: andre.vanrest@hq.doe.gov</p>	<p>Analysis of renewable energy retrofit options to replace or augment diesel mini-grids.</p> <p><i>* Also contribute to Priorities I, & VI</i></p>	<p>To establish a methodology for analysing appropriate applications of renewable energy technologies, develop a new analytical model to evaluate retrofit options taking into account economic and technical feasibility, and infrastructure requirements</p>	<p>On-going</p>	<p>Business sector will be consulted during the course of project implementati on</p>	<p>The final report of the study will be available in late 1998. With the results of this project, the application of renewable energy technologies to replace diesel can be included in the discussions relating to meeting energy needs in renewable resources in the APEC region. The member economies can use the model developed through this project to objectively evaluate the possibility to replace or augment diesel minigrids with renewable energy systems. Anticipated beneficiaries of this project are numerous and varied and could include energy developers, decision-makers, NGOs and regional development groups.</p>

<p>5. EWG</p> <p>Dr. Sun Chun, US Department of Energy. Tel: 1-202-586-8650 Fax: 1-202-586-4729 E-mail: sun.chun@hq.doe.gov</p>	<p>APEC Joint Multilateral Demonstration Project for recovery and Utilisation of Coal Mines Gas</p> <p><i>* Also contribute to Priorities I, V & VI.</i></p>	<p>To confirm the magnitude of the environmental improvement associated with the recovery and utilisation of Coal Mines Gas and establish the feasibility of proceeding with the detailed design and construction of a demonstration facility to recover this resource at the site selected.</p>	<p>In preparation</p>	<p>The business sector has been involved in the development of this project</p>	<p>A pre-feasibility and preliminary engineering study will be available at the end of Phase II of the project, which will lead to Phase III of the project.</p> <p>The project offers the potential to achieve significant economic benefits for the coal mine regions, the mine operators, and the miners. An increase in mine safety will coincide with the recovery of a valuable energy resource. A less tangible, but equally important, benefit will be the reduction in the environmental impact associated with coal mine gas released to the atmosphere. The data generated will form the basis for resource information for use, not only in future phases of the project, but other similar projects.</p>
<p>6. EWG</p> <p>Mr Yoshihiro Echizenya Overseas Affairs Division, Policy Planning Department, NEDO, Japan. Tel: 81-3-3987-9403 Fax: 81-3-3981-1059</p>	<p>APEC Energy R&D and Technology Transfer Seminar</p> <p><i>* Also contributes to Priorities V</i></p>	<p>To promote the introduction and popularisation of renewable energy and energy conservation technologies in order to realise the rational use of renewable energy in APEC region.</p>	<p>On-going. These are a series of seminars held since 1992</p>	<p>Representatives from private and business sector attend the seminars as part of the delegations of members</p>	<p>A seminar was held in Jakarta in May and a second seminar will be held in Okinawa in Oct 1998. The proceedings of both workshops will be published in 1998.</p> <p>The project aims to promote the introduction and popularisation of renewable energy and energy conservation technologies, in order to realise rational use of energy in APEC region.</p>

<p>7. HRD WG (HURDIT)</p> <p>Mr. Matt Ngui, Centre for Research Policy, University of Wollongong, Australia. Tel: 61-2-4221-3256 61-2-4221-3257 Email: matt.ngui@uow.edu.au</p>	<p>Network of Industrial Technology Practice Firms in APEC</p>	<p>To stimulate industrial technology business by students and trainees with the assistance of a facilitator and according to accepted business principles. It will provide hands-on experience, develop business acumen and enhance the knowledge of real life business practice in an international setting.</p>	<p>Approved proposal (HRD 14)</p> <p>A one-year extension has been sought to complete the tasks specified in the 1997 contract. Practice Firms in USA, Canada, and soon, in Chinese Taipei have been developed. Practice Firm Trade Fair to be held in Melbourne on 28 August 1998. Training Package for APEC to be completed by end of 1998.</p>	<p>Establish and develop a network of practice firms focused on industrial technology as means of increasing effective management capabilities.</p>	<p>To develop business capabilities of managers and potential managers from APEC economies; to establish network of practice firms; to provide recommendations to HRD WG.</p>
<p>8. HRD WG (HURDIT)</p> <p>Ms. Han Ping, Ms. Zhao Wei, China (Yantai) Asia-Pacific World Trade Center, Yantai, Shandong Province, P.R. China Tel: 86-535-6280001 Fax: 86-535-6280003 Email: apccn@public.ytpptt.sd.cn Website: http://www.Apec-china.com</p>	<p>Medium and Small sized companies International Technology Conference (MITEC 98)</p> <p><i>*Also contributes to Priority VI</i></p>	<p>The objective of the conference is to encourage SMEs to venture into developing innovative technologies and to seek new partnerships on an international scale such as the APEC scale.</p>	<p>Japan in cooperation with China is hosting MITEC'98 in Yantai on 8-14 October 1998.</p>	<p>Yes</p>	<p>Paper presentations and hosting conference to discuss and exchange ideas.</p>

<p>9. ISTWG</p> <p>Mr Brian Delroy Dept. of Industry, Science and Tourism, Australia Tel: 61-6-213-6372 Fax: 61 -6-213-6388)</p> <p>Mr Osamu Yamashita Science & Technology Agency, Japan Tel: 81-3-3581-3757 Fax: 81 -3-3595-0567</p> <p>Dr Taehee Kim KORDIC, Korea Tel: 82-42-828-5062 Fax: 82-42-822-1974</p>	<p>Facilitating S&T Information Flow</p> <p>(14.A.1.01)</p> <p><i>*Also contributes to Priority III</i></p>	<p>To develop and implement an APEC S&T Web (ASTWeb) on the Internet, linking S&T Web sites across all APEC member economies; to provide links to directory on research organisations, human resource and projects; and to offer CD-ROM based bibliographic information.</p>	<p>Ongoing (Concept development was completed in Nov 96; further conceptual development culminating in Webmaster Training Course in Feb1998; Phase III development of site with emphasis on increased content, functionality and user-friendliness now underway. In 1998: distribution of CD-ROM, a prototype of a directory database system, will be completed)</p>		<p>To enhance the flow and application of information, technology and expertise; and to enhance links between government agencies, private/business sectors (including SMEs) and organization engaged in collaborative research and development.</p> <p>Improve research and development activities in APEC economies, enhance the economic exchange among APEC economies; and ultimately support the sustainable economic growth of each economy and the region as a whole.</p>
<p>10. ISTWG</p> <p>Prof. Yongyuth Yuthavong NSTDA, Thailand Tel: 66-2-644-8002 Fax: 66-2-644-8020</p>	<p>Establishing APEC Center for Technology Foresight</p> <p>(14.A.1.03)</p> <p><i>*Also contributes to Priorities I</i></p>	<p>To establish an APEC Center for Technology Foresight for exchange of information and experiences in foresight, for training in foresight techniques and for carrying out foresight studies.</p>	<p>Ongoing until December 1998</p>	<p>Private sector will be consulted</p>	<ul style="list-style-type: none"> • A study on “Water Supply and Management” will highlight potentially important technologies relevant to local economies and social needs. • 2 workshops will provide training in this field among APEC members • A website has been established.
<p>11. ISTWG</p> <p>Mr John C.I. Ni SMEs Administration MEA, Chinese Taipei Tel: 886-2-367-3885 Fax: 886-2-367-3896</p>	<p>APEC Technomart II</p> <p>(14.A.1.05)</p> <p><i>*Also contributes to Priority III</i></p>	<p>Exhibition, seminar/workshop, Industry tours, technology presentation</p>	<p>Completed (1997: survey, January 1998, : holding of the Technomart II in Chinese Taipei)</p>	<p>Business participation was great</p>	<p>Promotion of trade and exchange of information on S&T, especially those related to SMEs</p>

<p>12. ISTWG</p> <p>Prof. Lenny Tan National University of Singapore Tel: 65-772-3296 Fax: 65-778-5743</p>	<p>APEC Coordinating Center for Good Clinical Practice (GCP)</p> <p>(14.A.1.06)</p> <p><i>*Also contributes to Priority V</i></p>	<p>Establishing a centralized database to support GCP information and holding seminars, sharing experiences and procedures, developing a harmonized APEC approach to GCP standards</p>	<p>Ongoing (March 2001: completion of the project)</p>		<p>Database on GCP, resource for GCP capabilities, resource for GCP guidelines and regulations</p>
<p>13. ISTWG</p> <p>Mr Li Xiaofu International Organization Affairs, SSTC, China</p> <p>Tel:86-10-685-15048 Fax:86-10-685-12594</p>	<p>APEC Network of Science & Technology Industrial Parks</p> <p>(14.A.1.07)</p>	<p>Exchange of information and experiences on the science and technology network</p>	<p>On-going Inaugural meeting of the network was held in September 97, with following meetings to be held annually.</p>		<p>Establishment of APEC Network of trade in technology -driven services</p>
<p>14. ISTWG</p> <p>Mr Lu Ji Jian Ministry of Economic Cooperation and Foreign Trade, China. Tel: 86-10-6519-7357 Fax: 86-10-6519-7926</p>	<p>Compilation of Technology and High Tech product Catalogue in APEC Region</p> <p>(14.A.1.08)</p> <p><i>*Also contributes to Priority III</i></p>	<p>To compile a catalogue.</p>	<p>Ongoing</p>	<p>Business sector contribution</p>	<p>Improvement of the linkage between users and suppliers.</p>

<p>15. ISTWG</p> <p>Prof. Yongyuth Yuthavong NSTDA, Thailand Tel: 66-2-644-8002 Fax: 66-2-644-8020</p>	<p>APEC-Wide Studies of Megacities and Technology and Learning in 2010 by the APEC Center for Technology Foresight</p> <p>(14.A.1.13)</p> <p><i>*Also contributes to Priorities I in this activity</i></p>	<p>Foresight Studies involving experts from APEC economies and the wider community.</p>	<p>To be carried out in 1999</p>	<p>Private sector will be consulted</p>	<ul style="list-style-type: none"> • Identification of areas for social & technological research • Identification of areas needing policy decisions • Identification of opportunities for private sector involvement & investment • Development of international networks.
<p>16. ISTWG</p> <p>Chile</p>	<p>Technology Innovation in the exploitation of natural resources</p> <p>(14.A.1.14)</p>	<p>A workshop on case studies for exploitation of natural resources.</p>	<p>Sep '98 to be completed</p>		
<p>17. ISTWG</p> <p>Prof Meng Hsien-Chun Chinese Taipei Tel: 886 2 2737 7818 Fax: 886 2 2737 7962</p>	<p>APEC Technomart Network</p> <p>(14.A.1.15)</p>	<p>Creation of technomart network in APEC economies.</p>	<p>Ad-hoc task force: Aug 98 Completion: 1999</p>		<p>This will offer an advance for information exchange and innovation service.</p>
<p>18. ISTWG</p> <p>Dr Sung-Chul Chung STEPI, Korea Tel: 82-2-250-3201/02 Fax: 82-2-253-8102</p>	<p>APEC Science and Technology Network (ASTN)</p> <p>(14.A.2.01)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>To promote joint activities among members in the field of scientist exchange and training program. Construction and operation of a computer-based network.</p>	<p>Ongoing (December 1996: Establish a task force June 1997: ASTN Secretariat was established in the STEPI, June 1998: Implemented R&D management training program</p>		<p>To facilitate and promote researcher exchange.</p>

<p>19. ISTWG</p> <p>Mr Shinya Wakimoto International R&D Cooperation Division, Agency of Industrial Science and Technology, MITI Japan Tel:81-3-3501-6011 Fax:81-3-3580-8025</p>	<p>Development of Biodegradable plastics (14.B.3.01)</p> <p><i>*Also contributes to Priority V</i></p>	<p>Promotion of research on biodegradable plastics made from tropical farm products</p>	<p>Ongoing March 2001:completion of the project</p>		<p>The research out comes will help create new market for tropical farm products, cultivate new industries in the APEC region and contribute to the solution of environmental issues</p>
<p>20. ISTWG</p> <p>Mr Shinya Wakimoto AIST, MITI, Japan Tel: 81-3-3501-6011 Fax: 81-3-3580-8025</p>	<p>Research on Industrial Measurement System (14.B.3.02)</p>	<p>To develop technologies for multi- coordinate position measurement system.</p>	<p>Ongoing (March 2001:completion of the project)</p>		<p>Realization of simple multi-coordinate measurement technology applicable to the semi-conductor process, precise measuring system, machine tool and so on.</p>
<p>21. ISTWG</p> <p>Mr Yoichi Otsuka Science and Technology Agency, Japan Tel: 81-3-3581-5271 Fax: 81-3-3581-5909</p>	<p>Collaborative Research on Disaster Prevention (14.B.3.03)</p> <p><i>*Also contributes to Priority VI</i></p>	<p>To secure safety and prosperity by preventing and mitigating earthquake disasters.</p>	<p>Ongoing (December 1997: Printed directory on researchers and institutes, In 1998: Hold a Workshop to start joint research on disaster Prevention)</p>		<p>The project will enhance safety and prosperity by helping to prevent and mitigate such disasters.</p>
<p>22. ISTWG</p> <p>Mr Yoichi Otsuka Science and Technology Agency, Japan Tel: 81-3-3581-5271 Fax: 81-3-3581-5909</p>	<p>Mutual Utilization of Research Facilities (14.B.3.04)</p> <p><i>*Also contributes to Priority I</i></p>	<p>To make a compendium of the important research facilities in the region and efficiently utilize R&D capabilities.</p>	<p>Ongoing (Mid-1996: made a compendium, From 1997: to make and update homepage of the compendium From 1998: to start mutual utilization of some research facilities)</p>		<p>Mutual utilization of the research facilities will be significant in fostering research. This project will contribute to share information of research facilities in each member economies.</p>

<p>23. ISTWG</p> <p>Prof Chin-Hsiung Loh, Director, National Centre for Research on Earthquake Engineering Chinese Taipei Tel: 886 2 2732 6607 (ext 210) Fax: 886 2 2732 2223</p>	<p>Asia-Pacific Workshop on Seismic Design and Retrofit of structure (14.B.3.07)</p>	<p>A workshop to promote collaboration in earthquake hazard mitigation, focusing on seismic design and retrofit of structures.</p>	<p>Workshop will be held in Chinese Taipei on 6 to 9 July 1998.</p>		<p>Promotion of regional cooperation in earthquake mitigation among APEC economies will contribute to disaster prevention programme.</p>
<p>24. ISTWG</p> <p>Adam Holbrook Simon Fraser University at Harbour Centre, Vancouver, Canada Tel:1-604-291-5192 Fax:1-604-291-5165</p>	<p>Working Party on Data Collection on trade in technology - based services (WPDCTTS) (14.B.6.01)</p>	<p>Gathering data on trade in technology -based services</p>	<p>On-going (Jan 1998:assesment of the members' interest)</p>		<p>Better understanding of trade in technology -driven services</p>
<p>25. ISTWG</p> <p>Dr Ching-Yen Tsay National Science Council, Chinese Taipei Tel: 886-2-737-7506 Fax: 886-2-737-7785</p>	<p>Establishing Science and Technology Policy Research Center (14.B.6.03) <i>*Also contributes to Priority I</i></p>	<p>To conduct a symposium and networking for the Centre</p>	<p>On-going (97-2000: to promote a large -scale S&T policy research, July 2000-2005: setting- up the network for the virtual centre)</p>		<p>Outcome will include a databank on S&T policy and a strategic plan for S&T cooperation</p>
<p>26. ISTWG</p> <p>Mr Lu Ji Jian Ministry of Economic Cooperation and Foreign Trade, China. Tel: 86-10-6519-7357 Fax: 86-10-6519-7926</p>	<p>Symposium on the Utilization of EDI in all trade areas in APEC (14.B.6.04) <i>*Also contributes to Priority III</i></p>	<p>To study on the current utilization of EDI network, research on a possibility of its wider implementation.</p>	<p>Ongoing (1996: Project planning; 1997-98:symposium, training course, 1999: research, 1999-2020: implementation)</p>		<p>Creation of a free trade environment and enhance trade links (especially SMEs); Establishment of a coordination strategy and mechanism for EDI trade-net in the APEC region.</p>

<p>27. ISTWG</p> <p>Ms Angela Clark, Asvisor, International Ministry of Research Science and Technology, NZ Tel: 64-4-472-6400 Fax: 64-4-471-1284</p>	<p>Study on S&T Program Evaluation Methods among APEC Members</p> <p>(14.B.6.05)</p>	<p>Large-scale investigation on the implication of essential S&T program of government actions to APEC members</p>	<p>1998: Experts' symposium will be held for final report</p>		<p>It is aimed at establishing and developing mutually recognizable components of evaluation process</p>
<p>28. ISTWG</p> <p>Prf. Peter Mora, Coordinator, Queensland University Advanced Centre for Earthquake Studies, Quakes, Australia</p> <p>Tel:61-7-3365-2128 Fax:61-7-3365-7347</p>	<p>APEC Cooperation for Earthquake Simulation</p> <p>(14.C.5.11)</p>	<p>It aims at developing numerical simulation models for the complete earthquake generation process, to assimilate new earthquake observations into such models</p>	<p>Cooperative program is expected to be implemented from the late part of 1998 through to 2001</p>	<p>This program is expected to have wide participation from Business sectors</p>	<p>A comprehensive understanding of the earthquake cycle</p>
<p>29. TELWG</p> <p>Mr Andy Kwan, Industry Canada. Fax: 1-613- 957-8845 Tel: 1-613- 990-4712 Email: kwan.andy@ic.gc.ca</p>	<p>Equipment Certification Requirements and Conformance Assessment Procedures</p> <p><i>* Also contributes to Priority III.</i></p>	<p>To promote the completion of a framework for a MRA on conformance assessment and certification and assist economies with the implementation of the MRA.</p>	<p>The completed MRA was endorsed by TELMIN 3 (06/98). Seventeen economies submitted timetables by which they will be MRA compatible. The MRA to be implemented as soon as possible, with assistance of project</p>	<p>In cooperation with the private sector.</p>	<p>The project responds to the Bogor Declaration goal of open and free trade through the eventual establishment of an MRA which will allow for the free flow of equipment in the region. Competition in the procurement of telecommunications equipment will lead to lower prices for consumers and greater access to a variety of telecommunications equipment and services. The MRA is the first deliverable completed under the EVSL banner.</p>

<p>30. TELWG</p> <p>Mr Richard Thwaites, Dept of Communications & the Arts, Australia Fax: 61 -2-6271-1890 Tel: 61-2-6271-1893</p>	<p>MRA Implementation Support Project</p>	<p>The project will support implementation of the APEC TEL MRA by identifying individual and collective administrative, legal, industrial and commercial barriers to efficient implementation of the APEC TEL MRA, and recommending ways to overcome those barriers.</p>	<p>Project to be completed in 1999.</p>	<p>Business/private sector involvement</p>	<ul style="list-style-type: none"> • A general report on implementation identifying common challenges. • A restricted-distribution report for each economy recommending specific work required to encourage implementation. • A three-day workshop to share findings and results of previous work. • A published report. • Training for implementation using the TEL Distance Learning Pilot Project.
<p>31. TELWG</p> <p>Mr Richard Thwaites, Dept of Communications & the Arts, Australia Fax: 61 -2-6271-1890 Tel: 61-2-6271-1893</p>	<p>Interactive Medical Curriculum Project</p>	<p>To develop and test an interactive medical education application on both basic and advanced networks.</p>	<p>In preparation (to be completed 1998)</p>	<p>In cooperation with the private sector, educational and medical institutions.</p>	<p>To test and develop the APII, using the health sector, and demonstrating the importance of the APII in delivering health care.</p>
<p>32. TELWG</p> <p>Dr. Insoo Kang, APII Cooperation Center, Korea. Tel: 82-2-570-4270 Fax: 82 -2-570-4069</p>	<p>APII Test-bed Project <i>* Also contributes to Priority V.</i></p>	<p>This project tests technology and application services to build effective APII and enhances interconnectivity and interoperability between test-beds.</p>	<p>Ongoing</p>	<p>In cooperation with the private sector</p>	<p>Undertaking tests on eleven projects related to the Korea-Japan Test-bed from January 1998 on a step-by-step basis. Discussions are under way for the Korea-Singapore, Korea-China test-bed projects.</p>
<p>33. TELWG</p> <p>Dr. Insoo Kang, APII Cooperation Center, Korea. Tel: 82-2-570-4270 Fax: 82 -2-570-4069</p>	<p>Supporting Program for International Joint Research Projects</p>	<p>This program intends to develop telecommunications technologies by promoting joint research activities among Korean and non-Korean research institutes, businesses and universities</p>	<p>Ongoing (1997-)</p>	<p>In cooperation with the private sector</p>	<p>Since this program was launched in July 1997, selection for the third and the fourth quarter of 1997 has been completed. This program will promote R&D and international cooperation in telecommunications by financing research activities for the selected projects.</p>

<p>34. TELWG</p> <p>Ms. Diane Steinour, US Commerce Department, NTIA. Fax: 1-202-482-1865 Tel: 1-202-482-1866</p>	<p>Development and Financial Resources Catalog</p>	<p>Multiphase project to improve information flow on development and financial sources, by establishing a catalog by Economy, for a Web page and potential publication.</p>	<p>Ongoing</p>	<p>In cooperation with the private sector.</p>	<p>Increased transparency among APEC Member Economies regarding funding sources to promote further deployment of the APII.</p>
<p>35. TELWG</p> <p>Ms. Diane Steinour, US Department of Commerce, NTIA. Fax: 1-202-482-1865 Tel: 1-202-482-1866</p>	<p>Spectrum Policy and Management Database : Prototype Development</p>	<p>Multiphase project to exchange “best practices” information and to establish a Database of Spectrum allocations by Economy.</p>	<p>Ongoing</p>	<p>In cooperation with the private sector.</p>	<p>Increased transparency for business/private sector to improve trade opportunities, as well as for Member Economies to exchange information on best practices to manage the scarce spectrum resource, in support of the APII.</p>
<p>36. TELWG</p> <p>Mr. Michael Baker, AOEMA A, Australia Email: michael.baker@aoema.org</p>	<p>Database of Existing Certification Authorities</p>	<p>AOEMA on behalf of APEC TEL will monitor the development of CAs in the region and the world and establish a database of information on their operation, with a first report to TEL 17.</p>	<p>Ongoing (began in 1997)</p>	<p>In cooperation with the private sector</p>	<p>To assist member economies to identify key agencies world wide responsible for the development of Certification Authorities – a key requirement for the rapid introduction of Electronic Commerce.</p>
<p>37. TELWG</p> <p>Mr Ian McAlister, Australian Communications Authority, Australia Fax: 61-2-6253-2424 Fax: 61-2-6256-5451 Email: imcalist@sma.gov.au</p>	<p>Harmonized Electromagnetic Compatibility (EMC) Project.</p> <p><i>* Also contributes to Priority V.</i></p>	<p>Provide a model implementation procedure for the establishment of effective EMC management.</p>	<p>Completed in 1977. Final report made to TEL 17 (03/98), Brunei and information to be posted on the web.</p>	<p>N/A</p>	<p>To assist member economies to manage electromagnetic interference and compatibility.</p>

<p>38. TELWG</p> <p>Mr. Richard Thwaites, Assistant Secretary, Department of Communications and the Arts, Australia Fax: 61-2-6271-1890 Tel: 61-2-6271-1893</p>	<p>Universal Access to the Benefits of the APII – an APEC TEL Seminar for Industry and Government</p>	<p>A two day seminar examining commercial, regulatory and policy approaches to Universal Access in the APEC region</p>	<p>Seminar completed March 1998. Resulting principles endorsed by TELMIN3 (06/98) for voluntary use by economies</p>	<p>Private and Government speakers have been invited to participate</p>	<p>To fulfil directive from the Second APEC Ministerial Meeting on the Telecommunications and Information Industry and to provide an important resource for policy makers. The seminar was successfully concluded, and was instrumental in developing a set of principles for use by APEC member economies wishing to develop a universal access policy</p>
<p>39. TEL WG</p> <p>Dr. Insoo Kang, APII Cooperation Center, Korea. Tel: 82-2-570-4270 Fax: 82-2-570-4069</p>	<p>APEC TEL WG Website</p>	<p>This project was proposed by Singapore at the 15th APEC TEL Meeting. Effective support for activities of APEC TEL WG requires the increased use of the Internet. This project has been taken over by APII Cooperation Center, and continues to develop</p>	<p>Ongoing (1998-)</p>	<p>N/A</p>	<p>Making it easier for APEC TEL Member Economies, the APEC Secretariat to do its job of supporting various APEC-related international function such as TEL meetings, SOM or Ministerial/Leaders Meeting. Also provides an invaluable source of information on TEL activities to partners in the business/private sector.</p>
<p>40. TEL WG</p> <p>Dr. Insoo Kang, APII Cooperation Center, Korea. Tel: 82-2-570-4270 Fax: 82-2-570-4069</p>	<p>A joint Study on “The Impact of APII”</p>	<p>Korea proposed this study at the 13th APEC TEL Meeting. After that, it was reported to the 2nd Telecommunications Ministers Meeting. The detailed information on its progress was reported to the 15th APEC TEL Meeting. A final draft has been tabled for discussion at TEL 18</p>	<p>Ongoing (To be complete in September 1998)</p>	<p>N/A</p>	<p>Systematic and in-depth study of the political, economic and social implications of the APII with coordinated efforts of APEC members. The final report will be made at the 18th APEC TEL Meeting in September 1998.</p>
<p>41. TELWG</p> <p>Michael V. McCabe, EB/CIP, Dept. of State, Washington, DC USA Tel: 202-647-5778 Fax: 202-647-0158 Email mccabemv@ mc6820wpoa.us-state.gov</p>	<p>Education al Seminar on Applications of Global Positioning System (GPS) Technologies</p> <p><i>* also supports Priority I.</i></p>	<p>To design, develop and provide a seminar on civil and commercial uses of Global Positioning System (GPS) technology, specifically those which enhance productivity of the APII. The economic costs and benefits of GPS applications will be discussed, and technology demonstrations will be included.</p>	<p>To conclude during 1999.</p>	<p>Business/ private sector participation will be actively sought.</p>	<ul style="list-style-type: none"> • A one-day seminar on civil and commercial uses of GPS. • Output documents to be made available for purchase and on the world wide web.

<p>42. TPT WG</p> <p>Ted Davies Federal Aviation Administration, Dept of Transportation, USA. Fax: 1-202-267-5071 Tel: 1-202-267-7894</p>	<p>Satellite Navigation and Communications Systems SN&C Advisory Committee</p>	<p>The SN&C Advisory Committee has been established to undertake a series of cooperative actions to facilitate implementation of satellite-based navigation and communications system in the APEC region consistent with ICAO and IMO standards and the establishment of an Advisory Committee to monitor these cooperative actions</p>	<p>Ongoing. The “Forum on Satellite Technology and Intermodalism” will be held in February 1999, in Singapore. The event will feature panel sessions and technology demonstrations on global navigation satellite systems, intelligent TPT systems and e-commerce.</p>	<p>Business sector to be consulted.</p>	<p>Implementation of satellite-based navigation and communications systems in the APEC region consistent with ICAO and IMO guideline.</p>
<p>43. TPT WG</p> <p>Kenji Ishii, Ministry of Transport, Japan Fax: 81 -3-3580-4447 Tel: 81-3-3581-4052</p>	<p>Transport data and information networks: APEC Database of Transportation Technology Research</p>	<p>To promote the use of data and information networks related to transport technology institutes in APEC economies.</p>	<p>To update every two years and publish the Database in 1998. The Database has been connected to the APEC Home Page.</p>		<p>Provide information in the database in order to facilitate transportation technology research in APEC economies and publication of database every two years.</p>
<p>44. ATC</p> <p>Dr Dennis Gebbie Department of Primary Industries and Energy, Australia. Tel: 61-2-6272- 4932 Fax: 61 -2-6272-4600 Email: dennis.gebbie@dpi.gov.au</p>	<p>Research, Development and Extension of Agricultural Biotechnology</p>	<p>Exchange of information in the areas of biotechnology research, technology transfer, biosafety systems, the interface between public and commercial aspects and public perceptions</p>	<p>Ongoing. An information network, Bionet, was installed on the ATC homepage in 1997. A Risk Assessment Workshop on Biotechnology was held in Hawaii on 4-7 March '98. The third Workshop on Biotechnology focusing on capacity building and public understanding will be held in Malaysia on 5-9 October 1998.</p>		<p>Guidance to APEC members on issues related to the commercialization of genetically engineered organisms, the harmonization of biosafety and the commercial and public development of biotechnology for social and economic development. This work will benefit both large firms and SMEs</p>

<p>45. ATC</p> <p>Mr. Roger Mireles ATC Coordinator Asia & Americas Division, International Trade Policy, United States Department of Agriculture Tel: 1-202- 720-1335 Fax: 1-202-690-1093 Email: mireles@fas.usda.gov</p>	<p>Marketing, Processing and Distribution of Agricultural Products</p>	<p>Develop cooperative work plans to improve post-harvest technology for the handling of perishable crops and to improve food processing technology</p>	<p>To be commenced in 1997-98</p>		<p>Improved efficiency in the handling of perishable crops and processed food to reduce loss and improve safety. The work will be beneficial to large firms and SMEs.</p>
<p>46. ATC</p> <p>Dr. Syarifuddin Karama, Coordinator for APEC Ministry of Agriculture, Indonesia Tel: 62-21- 780-4427 Fax: 62-21- 780-4428</p> <p>Mr. Suharyo Husen Alternate Coordinator For APEC ATC Director of International Cooperation Bureau, Ministry of Agriculture Indonesia Tel: 62-21-780-4176 Fax: 62-21-780-4428</p>	<p>Agricultural Technology Transfer and Training</p>	<p>Establishment of a data base for institutions involved in technology transfer; strengthening of existing regional agricultural technology transfer and training facilities.</p>	<p>Work on strengthening regional AT&T facilities will continue until 2001.</p>		<p>Improved agricultural production and reduced risk which will benefit both large business and SMEs.</p>

<p>47. ATC</p> <p>Mr. Roger Mireles, Asia & Americas Division, International Trade Policy, United States Department of Agriculture Tel: 1-202- 720-1335 Fax: 1-202- 690-1093 Email: mireles@fas.usda.gov</p> <p><i>Cooperation with the CTI on the Uruguay Round Implement Action Seminar on the WTO SPS and TBT Agreements</i></p>	<p>Plant and Animal Quarantine and Pest Management</p> <p><i>*Also contributes to Priority I</i></p>	<p>Technology and information transfer through seminar, symposium and workshop</p>	<p>Risk Assessment Workshop on Plant Pests was held in Hawaii on 2- 4 March '98</p> <p>Follow up workshop in Spring 1999</p>		<p>Improved efficiency of quarantine systems in APEC economies and assistance to economies to comply with WTO obligations</p>
<p>48. *CTI:SCCP</p> <p>Convenor: Canada: Mr William Claypole Tel: 1-613-954-6990 Fax: 1-613-954-0828</p> <p>to consult TIDWG, TEL WG and TPT WG</p>	<p>Harmonization of trade data elements.</p>	<p>To develop a program to review data elements (trade and customs) and study the current clearance procedures in all member economies. A Compendium of simplified and harmonised data elements, their definitions and recommended coding will be published at the end of the project.</p>	<p>Collection of data elements required for customs import processes have been completed. Visits to member economies will be conducted in 1998/99. Funding for project for 1998 and 1999 activities had been approved.</p>		<p>Harmonization and computerization of data elements through adopting international codes will enhance customs clearance procedures. Automation in this regard will significantly benefit both the customs administrations and importer/exporters in the region. Common data elements will form a solid and comparable trade database for use by member economies.</p>

<p>49. CTI: IPEG Project overseer: Australia Mr. Claus Dirnberger Tel: 61-2-6261-2027 Fax: 61 -2-6261-3514</p>	<p>Survey and dissemination of:</p> <ul style="list-style-type: none"> • the current status of IPR laws and regulations • information on IPR jurisprudence, administrative guidelines • information on IPR activities of other related organizations 	<p>To undertake a survey and to upload its results to the APEC Homepage. Surveys which are being undertaken are as follows:</p> <ul style="list-style-type: none"> • the current status of IPR laws regulations • information on IPR jurisprudence, administrative guidelines • information on IPR activities of other related organizations 	<p>Ongoing</p>		<ul style="list-style-type: none"> • Facilitate member's WTO notification requirements, for the implementation of TRIPS by developing economies in general, • Facilitate access by officials and the public at large to information concerning member economies' laws and regulations
<p>50. CTI: IPEG Lead Economy: Japan</p>	<p>IP Information Mall</p>	<p>Establish IP offices' Internet homepages providing IP information; and create a network providing easy and quick access to each member's IP information</p>	<p>An initial model of 'IP Information Mall,' a cluster of links to the selected contents of the Homepages of IP offices in the APEC region has been developed and uploaded to the APEC Homepage</p>	<p>Survey of user's needs for information disseminated is under way, and the results will be incorporated into IP Information Mall activity in 1998.</p>	<p>Ensure easy and quick access to information provided by IP Offices of APEC members.</p>
<p>51. CTI: IPEG Lead Economy: Mexico</p>	<p>Information Exchange on Current IPR Administrative Systems</p>	<p>To collate information on registration requirements for IPRs received from APEC economies and make this publicly available through the Internet.</p>	<p>Ongoing</p>		<p>Ensure an easy and quick access to information on current registration requirements for IPRs in APEC economies.</p>

<p>52. Economic Committee Dr Denis Gauthier Micro-Economic Policy Analysis Branch, Industry Canada Tel: 1-613 941-8187 Fax: 1-613- 991-1261</p> <p>Mr Oh Jong Nam International Economic Policy Bureau, Ministry of Finance and Economy Korea Tel: 82-2-503- 9144 Fax: 82-2- 503-9074</p>	<p>Research project – Study of the Information Society</p>	<p>Analysis of the impact on overall economic growth and development in the region of the growth of the Information Society</p>	<p>To be completed in 1998</p>		<p>1998 - Publication of the research. The study will provide contextual background to to APEC’s work program on electronic commerce and TILF-related activities in promoting liberalization of telecommunications and trade in other information society-relevant areas. Policy-makers will be the beneficiaries</p>
<p>53. PLG SME</p> <p>Kalsom Abdul Rahman PLG Chair, SMIDEC, 701D, Level 7, Tower D, Uptown 5, 47400 Petaling Jaya, Selangor, Kuala Lumpur. Tel: 60-3-925-8585 Fax: 60-3-925-9119</p> <p>54. PLG SME</p> <p>Carlos Alvarez. Head of Strategic Development Division. Moneda 921 Tel. 52-2- 631- 8622 Fax 52-2-638-1039</p>	<p>Cross Border Inter - Firm Linkages</p> <p>Study of Best Practices in the Management of Technological Extension Programs Oriented toward SME.</p>	<p>The project’s objective is to link large companies, particularly but not necessarily, in developing economies with SMEs as well as between SMEs for the supply of parts and components and to forge joint ventures or technological alliances in the region</p> <p>To identify “best practices” in the governmental management of technological extension programs for SMEs among APEC economies.</p>	<p>4 Workshops will be organized by Malaysia for companies to make presentations over 12 months, the first year trial period. Phase I of three phases had been completed in conjunction with Malaysia’s MITI/SMIDEC annual exhibition event, “ SMI Showcase’98”, 25-29 June 1998 in Kuala Lumpur. In its final phase with a Seminar scheduled 27-28 August 1998 in Santiago, Chile.</p>	<p>Chambers of Commerce in the APEC economies will identify interested companies in respective industry groups to be linked.</p>	<p>Beneficiaries will be measured in the final stage of the project and will be assessed in terms of numbers of MOUs, JV Agreements, Franchise and technical assistance agreements. Building linkages among the APEC Chambers of Commerce for SMEs is also an expected benefit.</p> <p>The “best practices” manual will serve to analyze and diffuse key elements that could lead to the more effective approaches to help SMEs.</p>

V. PROMOTING ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. EWG Mr. Andre W van Rest Office of Energy Efficiency and Renewable Energy, US Dept of Energy Tel: 1-202- 586-9793 Fax: 1-202- 586-1605 E-mail: andre.vanrest@hq.doe.gov	Energy Benchmark System: Development and Implementation <i>* Also contributes to priority IV.</i>	To institute a regularly scheduled, uniform system for energy benchmark data collection and dissemination for use by APEC member economies to improve the energy efficiency of commercial buildings and industries	On-going	Business/priv ate sector and non- governmental institutions will be involved during the collection of the benchmark data	The report on the results of the project with recommendations for refinement will be available in late 1998. The final product will be an updated database that can be made available on diskette and on the internet (World Wide Web).
2. EWG Mr. Iakao Isozaki Agency of Natural Resources and Energy, MITI, Japan Tel: 81-3-3501-6795 Fax: 81 -3-3595-3056	Energy Efficiency Improvement Initiative <i>* Also contribute to priority IV.</i>	Establish the basis for information exchange of energy efficiency in both data and technology area and to begin mutual review among member economies in energy efficiency area. The project will identify obstacles, objectives and measures to improve energy efficiency	Ongoing.		A report is currently being prepared for the consideration of Energy Ministers in Oct. 1998. A proposed ‘pledge and review’ framework is being developed for the endorsement of Energy Ministers. Member economies will benefit from the project through the exchange of information and options. This will result in improvements in energy efficiency and the adoption of environmentally friendly energy policies.

<p>3. EWG</p> <p>Mr. Andre W van Rest Office of Energy Efficiency and Renewable Energy, US Department of Energy. Tel: 1-202 586 9793 Fax: 1-202 586 1605 E-mail: andre.vanrest@hq.doe.gov</p>	<p>Overview of Trade Flows of Energy - Using Products between APEC Member Economies</p> <p><i>* Also contributes to Priority VI</i></p>	<p>To examine the trade flow of eight energy-using appliances/equipment between APEC member economies. It is expected that this information will help the EWG identify priorities for its work program for cooperation on energy standards.</p>	<p>Ongoing. The project report will be available in the second half of 1998.</p>	<p>Business sector has been involved in the implementati on of the project.</p>	<p>The aim of the project is to lay the basis for cooperation on energy standards and to facilitate trade in electrical products through the acceptance of energy testing standards in the exporting economy. Currently exporters are required to separately test their e products to ensure they comply with the standards of each importing economy.</p>
<p>4. EWG</p> <p>Mr Frank Pool EE & C Authority PO Box 388 Wellington, New Zealand Tel:64-4470 2210 Fax: 64 4499 5330 E-mail: poolf@moc.govt.nz</p>	<p>Review of Energy Efficiency Test Standards and Regulations in APEC Member Economies</p> <p><i>* Also contributes to priority IV.</i></p>	<p>Identify similarities and differences in regulating for energy efficiency between APEC member economies and to determine the reasons for these differences and whether they act as impediments to trade.</p>	<p>Ongoing. The project is scheduled to be completed in late 1999.</p>	<p>Business sector will be involved in the planning and implementati on of the project</p>	<p>The project will help to reduce impediments to trade by establishing the basis for the direct comparison of outcomes of testing to different standards and reducing the need for multiple testing. As a result, trade in energy-using products will be promoted.</p>
<p>5. EWG</p> <p>Dr. Gil Winstanley International Energy Division Natural Resources Canada</p> <p>Tel: 1-613-996-2993 Fax: 1-613-995-5576</p>	<p>Study on Environmentally Sound Infrastructure in APEC Electricity Sectors</p> <p><i>* Also contribute to Priority VI</i></p>	<p>The project is to ensure that environmental soundness and efficiency are built into the APEC region's energy infrastructure as new capacity additions are made and aims to improve the implementation mechanisms for environmental/energy policies consistent with the liberalisation of electricity markets</p>	<p>The initial study was completed in 1997, but the project is continuing</p>	<p>Business sector has been involved in the implementati on of the project</p>	<p>In August 1997, Energy Ministers directed the EWG to develop a work program to advance the recommendations of a consultancy study on environmentally sound power infrastructure. A work program will be presented to Ministers in Okinawa in Oct 1998. The study's recommendations are designed to assist the development and implementation by member economies of policies, which will assist the development by private investors of environmentally sound energy infrastructure.</p>

<p>6. EWG</p> <p>Mr. Tomas Astorga, GEMEED, Santiago, Chile.</p> <p>Tel: 56-2-696-7804 Fax: 56-2-695-6935 E-mail: gemeed@revna.cl</p>	<p>Environmental Cooperation Workshops for Sustainable Development of Mining Activities</p>	<p>The aim of the workshops aim is to review the environmental impact of mining activities in APEC economies, the introduction of, and development of, environmental protection policies, environmental standards, and the techniques to prevent mine/processing pollution.</p>	<p>Ongoing. The second workshop is scheduled for end Sept. 1998 to further advance the theme.</p>	<p>Business sector has been involved in the workshops</p>	<p>The workshop will discuss best practices in mining activities, clean technology for mining activities, and international regulations against the background of sustainable development in minerals and metals.</p>
<p>7. FWG</p> <p>Mr. Tony Battaglone Dept of Primary Industries and Energy, Canberra.</p> <p>Tel: 61-2-6272-4570 Fax: 61 -2-6272-4215</p>	<p>The Impact of Longline Fishing and a Review of Mitigation Measures</p>	<p>To assess the impact of longlining on the environment and analyse the effectiveness and costs of mitigation methods on bycatch.</p>	<p>Being reviewed in light of FAO work on bycatch.</p>		<p>If the project proceeds, it is anticipated that it will provide a better understanding of different longlining techniques employed within APEC economies. This would allow economies to compare and select best practice techniques, which could then be applied to different fisheries to suit the condition of that fishery.</p> <p>The Project is currently being reviewed in light of the FAO work on bycatch, to ensure that it does not overlap or duplicate the FAO work.</p>
<p>8. FWG</p> <p>Mr. Glenn Hurry, Dept. of Primary Industries and Energy, Canberra</p> <p>Tel: 61-2-6272-5037 Fax: 61 -2-6272-4215</p>	<p>APEC Aquaculture Forum</p>	<p>The APEC Aquaculture Forum was held on 8 June 1998 in conjunction with the ninth meeting of the FWG in Taipei, and involved industry and academics. The Forum provided a venue where economies with an investment and interest in the sustainable long-term development and growth of aquaculture could share information about new technologies, and discuss and plan initiatives that will progress and improve the industry.</p>	<p>Held in June '98 in conjunction with FWG 9.</p>	<p>Private sector were invited to participate.</p>	<p>The Forum aimed to promote the sustainable development of aquaculture and contribute to solve common fisheries resource management problems and aquaculture disease control.</p> <p>Improvement in aquaculture practices and knowledge will enhance prospects for sustainable production and long-term trade performance in fisheries products.</p>

<p>9. HRD WG (BMN)</p> <p>Mr. Rick Schulberg Oregon Economic Development Dept., USA</p> <p>Tel: 1-503-986-0199 Fax: 1-503-986-0256 Email: rick.j.schulberg@State.or.us</p>	<p>APEC Sustainable Development Training and Information Network</p>	<p>Assessment of sustainable development information and training needs, priorities and available resources of APEC members; and through a conference in Portland; Oregon, US, to then consider recommendations for the establishment of an APEC sustainable development training and information network.</p>	<p>Phase II (Implementation) in 1998. A support office has been established in Portland, Oregon, and a home page has been put up since September 1997. An advisory group has been formed with the participation of all members.</p>	<p>Yes</p>	<p>An APEC Sustainable & Development Training and Information Network</p>
<p>10. HRD WG (BMN)</p> <p>Mr. Leslie Williams, The Research Institute for Asia Pacific, Sydney, Australia</p> <p>Tel: 61-2-9290 3222 Fax: 61 -2-9262 4849 Email: L.Williams@Riap.biz.usyd.edu.au</p>	<p>Human Resources for Sustainable Development (Phase II)</p>	<p>To establish a sustainable development network to share information on education to promote academic collaboration in Asia Pacific region and to develop a continuing education program.</p>	<p>Phase II commenced in June 1996.</p> <p>Project coordinators continue to seek feedback on the draft APEC Master of Sustainable Development Course and liaise with tertiary institutions in the region to form a consortium to offer the course. A number of institutions have agreed to offer the course. Project has been transformed into a self-funded project with completion now targeted at 2000.</p>		<p>Phase II develops the “APEC Master of Sustainable Development Course” and a draft continuing education seminar curriculum (training program).</p>

<p>11. HRD WG (BMN)</p> <p>Mr. Leslie Williams, Director, Research Institute for Asia and the Pacific, University of Sydney, GPO Box 7068, Sydney, NSW, Australia 2001. Tel: 61-2-9290-3233 Fax: 61-2-9262-4819 E-mail: L.Williams@riap.biz.usyd.edu.au</p>	<p>Human Resources Management for Cleaner Production Needs in APEC</p>	<p>To promote regional awareness of human resource management skills and knowledge required in the overall implementation of effective Cleaner Production (CP) principles in the food industry sector among APEC economies.</p> <p>To produce teaching and training materials that will develop the human resource management skills needs in CP processes, including skills that are aimed at developing and implementing appropriate technological solutions. To introduce a pilot regional training program aimed at improving the CP awareness and management skills of middle and senior level personnel in the food industry sector among APEC member economies. To establish and develop a network of Human Resources Managers in CP needs in APEC to share information and appropriate technologies, and increase the level of cooperation to improve and to encourage cleaner production needs methods, management system and best practice.</p>	<p>Stage I: Completed Stage II: Draft and finalize outlines and templates for project outputs (Jan.-March 98); Develop project outputs (Jan.-April 98); Commence plans for pilot training workshop and symposium (Feb.- May 98). Stage III: Produce draft case studies, resource materials and training manuals (May 98); Conduct pilot training workshop and symposium –Chinese Taipei (May-June 98); Evaluation of research and training materials by experts and focus groups (May -July 98); Review/revise training materials and package materials – APEC training program (July-Sept. 98); Publication of training materials and resourcing APEC networks and industry (November 98); Publication and dissemination of project report (November 98)</p>	<p>Yes</p>	<p>Develop teaching and training materials. To conduct workshop/symposium with industry, government and education experts to trial and assess teaching and training materials produced (pilot training program). Two reports will be published and disseminated through various fora. First report includes survey findings and case studies. The second report summarizes the workshop proceedings and presents recommendations for Cleaner Production Needs. Establishment of a network of CP specialists.</p>
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<p>12. ISTWG</p> <p>Dr Phyllis Genter Yoshida U.S. Dept of Commerce Tel: 1-202-482-6814 Fax: 1-202-219-3310</p>	<p>APEC Cleaner Production Strategy (14.C.5.00)</p> <p><i>*Also contributes to Priority V</i></p>	<p>An integrated set of projects that provide sector-based and cross-cutting information sharing and training for cleaner production technology.</p>	<p>In progress 1997: establish a task force, completed strategy and begin implementation of project; 1998: 11 projects underway, more planned</p>	<p>Industry involved in creating strategy and will help implement and benefit from projects</p>	<p>Adoption of innovative, cross-cutting policies and methods for cleaner production by APEC economies; reduction of pollution and strengthening of APEC's industrial capacity.</p>
<p>13. ISTWG</p> <p>Mr William Kirksey Environmental Technology Evaluation Center USA Tel: 1 202 842 0555 Fax: 1 202 682 0612</p>	<p>APEC Environmental Technology Verification Workshop (14.C.5.01)</p> <p><i>*Also contributes to Priorities IV and V</i></p>	<p>Workshop and follow-up activities among APEC economies to develop a coordinated approach to verify the performance of environmental technology.</p>	<p>Workshop Held in August 1998; other activities planned</p>	<p>Participation by companies and NGOs</p>	<p>Development of key criteria and methods that will permit comparative analysis of environmental technology among APEC economies.</p>
<p>14. ISTWG</p> <p>Mr Ted MacDonald US Environmental Protection Agency USA Tel: 1 202 564 6114 Fax: 1 202 565 2411</p>	<p>Cleaner Production Initiative in the Electronics and Computer Service (14.C.5.02)</p> <p><i>*Also contributes to Priorities IV and V</i></p>	<p>To pursue a dialogue between industry and government officials to explore cleaner production in the electronics and computer sector</p>	<p>June 1998: a conference was held; follow-up activities and more meetings planned for 1999.</p>	<p>Industry involved both in planning, implementing and as a customer of the information developed.</p>	<p>It will help to form a partnership between industry and government to promote information sharing on policies, practices and technologies for sustainable developments in the electronics and computer sector.</p>

<p>15. ISTWG</p> <p>Mr Randy Yamada US-Asia Environmental Partnership Tel: 1 202 712 1699 Fax: 1-202 2163379</p>	<p>Use of Industrial Environmental Performance Indicators by APEC economies to set environmental improvement objectives and track progress</p> <p>(14.C.5.03)</p> <p><i>*Also contributes to Priority IV and V</i></p>	<p>To explore the possibility of creating APEC benchmarks for environmental performance of key industry sectors</p>	<p>November 1998: a conference is scheduled on the subject at which participating economies will present the results of their studies and efforts under the project; follow-up activities planned.</p>	<p>Industry involved both in planning, implementing and a customer of the information developed.</p>	<p>Improvement of tools to measure and assess the environmental performance of industries.</p>
<p>16. ISTWG</p> <p>Sadiq Hasmain National Research Council of Canada Tel: 613-993-6040 Fax: 613-952-9907</p>	<p>Cleaner Production Technologies: A proposal for Innovation and Apprenticeship in Pollution Prevention</p> <p>(14.C.5.04)</p>	<p>To provide process or product innovation in pollution prevention to SMEs and to provide apprenticeship opportunities to future engineers and scientists in this field</p>	<p>In preparation</p>		<p>Information sharing on the application of modulation and simulation for cleaner production</p>
<p>17. ISTWG</p> <p>Chic-sen Lin IDB, Ministry of Economic Affairs, Chinese Taipei, Tel: 886-2-703-2398 Fax: 886-2-704-2753</p>	<p>Training Course on Cleaner Production for Textile Dyeing and Finishing Industry in APEC member economies</p> <p>(14.C.5.05)</p>	<p>Comprehensive training of the APEC textile dyeing and finishing industry on various cleaner production technologies</p>	<p>Spring 1998: Training workshop</p> <p>1998-1999: workshops in member economies</p> <p>Summer 1999: conference on the subject</p>	<p>Great participation is expected from business sectors</p>	<p>Enhanced Performance and productivity of APEC textile industry</p>
<p>18. ISTWG</p> <p>Mr Shinya Wakimoto Agency of Industrial Science and Technologies, MITI, Japan Tel: 81-3-3501-6011 Fax: 81-3-3580-8025</p>	<p>Acid Rain Monitoring System</p> <p>(14.C.5.06)</p> <p><i>*Also contributes to Priority V</i></p>	<p>Study on development of sensors for measuring the primary components of acid rain.</p> <p>Study on prediction model.</p> <p>Study on development of automatic monitoring system.</p>	<p>Ongoing('96:preliminary study; '97:development of system; '98:field test; '99:networking; 2001:evaluation)</p>		<p>Development of an on-site advanced acid rain monitoring system.</p>

<p>19. ISTWG</p> <p>Dr Sang Ki Rhee Korea Research Institute of Bioscience and Biotechnology, Korea Tel: 82-42-860-4005 Fax: 82-42-860-4592</p>	<p>APEC Joint Research on Bio-diversity and its Bioconversion</p> <p>(14.C.5.07)</p> <p><i>*Also contributes to Priority V</i></p>	<p>To identify and initiate joint research projects, symposia on the subject</p>	<p>Ongoing (April 1996: A symposium and workshop were held, Dec. 1998: completion of the project)</p>		<p>Enhancement of understanding and cooperation in the field of bio-diversity.</p>
<p>20. ISTWG</p> <p>Dr Hung-Tack Huh, Korea Ocean Research & Development Institute Tel: 82 345 400 6201 Fax: 82 345 408 5934</p>	<p>APEC Joint Research on Marine Environment</p> <p>(14.C.5.08)</p>	<p>A training workshop on trace metals, focusing on sampling and analytical techniques.</p>	<p>Dec '98: Completion of the project</p>		<p>Improved capabilities for analysis and assessment of marine environmental problem and improved monitoring programmes thereof.</p>
<p>21. IST WG</p> <p>MrYoshikazu Goto MITI, Japan</p> <p>Tel: 81-3-3501-4665 Fax: 81-3-3580-6329</p>	<p>APEC Virtual Center for Environmental Technology Exchange</p> <p>(14.C.5.09)</p> <p><i>*Also contributes to Priority V</i></p>	<p>Establishing the APEC virtual center for environmental technology to promote APEC environmental technology exchange activities.</p>	<p>Ongoing (1996: survey, symposium, and prototype. 1997: virtual center in Japan in full-scale operation, 1998: workshops, and survey 2000: comprehensive review.</p>		<p>The virtual centre in Japan has been in operation since 1997. Australia and Chinese Taipei have plans to put their virtual centers into operation in 1998. Promote regional S&T cooperation and linkage of institutes in the field of environment. Contribute to the dissemination of technology concerning environmental protection in APEC.</p>
<p>22. ISTWG</p> <p>Prof. Yim Jeongbin Institute of Molecular Biology and Genetics, Seoul National University, Korea</p> <p>Tel: 82-2-880-6702 Fax: 82-2-871-4315</p>	<p>Determination of Priority Needs for Molecular Biology and Biotechnology in APEC Economies</p> <p>(14.C.5.10)</p> <p><i>*Also contributes to Priority IV</i></p>	<p>To determine the priority concerns and needs for molecular biology and biotechnology development, and to define workable strategic framework and implementation plan</p>	<p>June 1998: 1st network meeting in Korea</p>		<p>Enhanced information exchange related to molecular biology and strengthened competency of scientists</p>

<p>23. ISTWG</p> <p>Mr Hiroshi Fujita R&D Bureau Science & Technology Agency, Japan Tel: 81-3-3581-1715 Fax: 81-3-3501-3683 Mr Masato Nakmura Science & Technology Agency, Japan Tel: 81-3-3580-6561 Fax: 81-3-3581-7442</p>	<p>Research Cooperation on Environmental Issues</p> <p>(14.C.5.12)</p> <p><i>*Also contributes to Priority V</i></p>	<p>Research on Understanding Earth Phenomena using Earth Observation Data from space. Seminar on Earth Observation Information Network (EOIN) Dynamics of Earth' Interior</p>	<p>Ongoing Mar 1997: APEC Seminar on Earth Observation for users. Dec 1997: WS on Global Cooperation of Seismic Networks</p>		<p>A workshop on global cooperation of Seismic network and enhanced understanding of the Earth phenomena and pursuing of a sustainable development.</p>
<p>24. ISTWG</p> <p>Micahel Sharpe, Senior Programme Officer Laboratory Centre for Disease Control Health Canada</p> <p>Tel:1-613-954-3196 Fax: 1-613-952-8286</p>	<p>APEC Emerging Infectious Disease</p> <p>(14.C 5.13)</p>	<p>Development of an APEC action plan on emerging diseases(EID) towards (1) public health systems development, disease outbreak response disease prevention and control, and (2) advancing scientific knowledge in this area</p>	<p>An action plan for EID was completed in March 1998</p>	<p>Active participation is expected from business sector</p>	<p>The project ant its results will help to reduce human and economic burden from emerging infectious diseases</p>
<p>25. ISTWG</p> <p>Dr Jih-Shing Yang, Union Chemical Laboratories, ITRI, Chinese Taipei Tel: 886 3 573 2622 Fax: 886 3 573 2349</p>	<p>Enhanced implementation of ISO 14001 Environmental Management System for APEC economies</p> <p>(14.C.5.14)</p>	<p>To develop information and tools to promote implementation of ISO 14001 EMS.</p>	<p>Sep '98: Workshop Early '99: technical assistance</p>		<p>Workshop and technical assistance will help to produce a core group of public and private sectoral individuals with expertise on SME 14001 EMS.</p>
<p>26. ISTWG</p> <p>Prof Chen Kum, Acting Director, Commission for Int'l Cooperation Chinese Society for Sustainable Development China Tel/Fax: 8610625 8133</p>	<p>Cleaner production Auditing System of APEC member economies</p> <p>(14.C.5.15)</p>	<p>Development of Computer software to improve application and discrimination of cleaner production in industrial sectors in the APEC region.</p>	<p>To be completed in one year.</p>		<p>A software for CP audit and its detailed operational manual.</p>

<p>27. ISTWG</p> <p>Mr Mark Kasman US Environmental Protection Agency, USA Tel: 1202 564 6112 Fax: 1202 565 2411</p>	<p>Adoption and development of a multilingual environmental thesaurus system</p> <p>(14.C.5.17) <i>*Also contributes to Priority IV</i></p>	<p>Development of a standardized reference language for environmental terminology.</p>	<p>Project began in 1998; it requires two years to be completed.</p>	<p>Industry will use the results</p>	<p>Broadens an ongoing US-European effort to expand the development of an international thesaurus systems and standardized reference language for environmental technology.</p>
<p>28. ISTWG</p> <p>Mr David T Y Wang Metal Industries Research and Developing Centre, Chinese Taipei Tel: 886 7 351 3121 Fax: 886 7 353 2758</p>	<p>Training course on cleaner production for the metal finishing industry in the APEC member economies</p> <p>(14.C.5.20)</p>	<p>Training on cleaner production technologies for the metal finishing industry.</p>	<p>Training course is scheduled for the spring of 1999.</p>		<p>Enhanced environmental performance and productivity in the metal finishing industry.</p>
<p>29. ISTWG</p> <p>Dr Ann Marie Kimble University of Washington USA Tel: 1 206 616 2949 Fax: 1 206 543 3964</p>	<p>APEC Telecommunications Network for emerging infections</p> <p>(14.C.5.21)</p>	<p>Provides internet-based information from the US National Library of Medicine and other key sites, a distance learning academic course on EIDS, and exchange of EID surveillance information.</p>	<p>Ongoing; website and listserv became operational in 1998; other activities planned.</p>	<p>Health professionals and health-related businesses</p>	<p>The EID Network will provide information needed to help monitor APEC economies monitor and deal quickly with emerging infectious diseases to help support the region's sustainable development.</p>
<p>30. ISTWG</p> <p>Dr Melinda Moore Centers for Disease Control and Prevention USA Tel: 1 770 488 7231 Fax: 1 770 448 7742</p>	<p>Emerging Infectious Disease; Enhancing E coli 0157 surveillance (Food Safety)</p> <p>(14.C.5.22)</p>	<p>Clinical and laboratory surveillance, outbreak early warning, exchange and archiving of strains, evaluation of diarrhea diagnosis algorithms.</p>	<p>Ongoing</p>	<p>Health professionals and health-related businesses</p>	<p>The project addresses a key pathogen related to food safety and increases the capacity of APEC economies to react appropriately and quickly.</p>

<p>31. ISTWG</p> <p>Dr Melinda Moore Centers for Disease Control and Prevention USA Tel: 1 770 488 7231 Fax: 1 770 448 7742</p>	<p>Emerging Infectious Diseases: Influenza Virus Surveillance Focused on the Rapid Identification of Newly Emerging Viruses (14.C.5.23)</p>	<p>Network to strengthen laboratory based surveillance and regional networking to rapidly detect new influenza viruses not previously identified in humans and to develop pandemic response plans.</p>	<p>Ongoing</p>	<p>Health professionals and health- related businesses</p>	<p>Support networking among APEC economies to strengthen the ability to respond to new influenza viruses.</p>
<p>32. MRC</p> <p>Mr. J Roderick Forbes Dept. of Fisheries and Oceans Institute of Ocean Sciences, Sidney, B.C, Canada.</p> <p>Tel: 1-250-363-6443 Fax: 1-250-363-6479 Email: forbesr@dfo-mpo.gc.ca</p>	<p>Management of Red Tide and Harmful Algal Blooms in the APEC Region (APEC MRT/HAB Project)</p> <p><i>* Also contribute to Priorities I and IV</i></p>	<p>To help each APEC economy develop a scientific and regulatory infrastructure sufficient to certify that its seafood is free from <u>the threat of</u> algal toxins, by developing the common analytical, detection methodology, and regulatory standards that are acceptable to all economies in the region. This project will also develop a set of guidelines for algal biotoxin management program to mitigate the seafood contamination of algal toxin and related economic impact.</p>	<p>On-going. This is a comprehensive five-year program starting from 1996 following a successful Red Tide Project</p>	<p>Business sector and non- governmenta l institutions will be involved in some activities of the project</p>	<p>Some of the activities of the project (meetings, seminars and training courses) were completed in 1996 and 1997, and others will be completed in either 1998 or later. The immediate beneficiaries of the project will be the scientists, government officials and the aquaculture industry who will be better able to respond to the threat from algal toxins and harmful algal blooms. The citizens of the APEC members and consumers of seafood products throughout the world are the ultimate beneficiaries.</p>
<p>33. MRC</p> <p>Dr.Gwo-Dong Roam, Bureau of Water Quality Protection, Environmental Protection Administration, Chinese Taipei Tel: 886-2-2311 3197 Fax: 886-2-2389 -9860 Email: gdroam@adm.epa.gov.tw</p>	<p>Ocean Model and Information System for APEC Region</p> <p><i>* Also contribute to Priorities I and IV</i></p>	<p>To develop useful ocean information systems for member economies, the project allows member economies to apply useful and friendly ocean information (i.e., satellite image, in situ data, etc.) to policy making for marine resources conservation. To address the need of coastal zone planning and management through information exchange, technology transfer and capability building, and developing ocean models to predict marine environmental changes</p>	<p>On-going. This is a five- year program starting from 1997</p>	<p>Business sector and non- governmenta l institutions will be involved in some activities.</p>	<p>Some of the activities of the project (meetings, training workshops and studies) were completed in 1997, and others will be completed in either 1998 or later.</p> <p>The models and data bank produced as the results of the project will help the scientific communities and decision makers to better understand the situation and make suitable decisions to conserve and improve the marine environment.</p>

<p>34. MRC</p> <p>Mr. Sham Chun-hung, Joseph Agriculture & Fisheries Department, Hong Kong. Tel: 852-2873-8326 Fax: 852-2814-0018 Email: jchsham@hkstar.com</p>	<p>APEC Workshop on Impact of Destructive Fishing Practice on the Marine Environment</p> <p><i>* Also contribute to Priorities I and IV</i></p>	<p>To address incidence and impacts of destructive fishing practices, the recommendation was developed on legislative and regulatory affairs. The project came out of a suggestion on the need for defining areas of action and development of a concrete action for promotion of environmentally friendly fishing practices and protection of coral reef environments.</p>	<p>Workshop was held from 16 to 18 December 1997. The report of the workshop will be available by the end of 1998.</p>	<p>Business sector is involved in the implementatio n of the project</p>	<p>The project aims at facilitating cooperation among APEC member economies in addressing the impacts of destructive fishing practices, especially cyanide fishing, on the marine environment. It will benefit both private and public sectors, including government departments, scientific agencies and environmental groups, fishermen and fish traders.</p>
<p>35. MRC</p> <p>Ms. Maureen Walker Office of Oceans Affairs, State Department, USA</p> <p>Tel: 1-202-647-9098 Fax: 1-202-647-9099</p>	<p>Workshop on Decommissioning of Offshore Oil and Gas Platforms</p> <p><i>* Also contribute to Priorities I and IV</i></p>	<p>To exchange information on decommissioning of disused and abandoned offshore platforms and the potential for new uses for such structures, as artificial reefs.</p>	<p>The two-day workshop is in preparation</p>	<p>Business sector will be involved in the implementatio n of the project</p>	<p>The relevant government agencies and business sector will benefit from the project by addressing the issues involved in platform decommissioning and alternate beneficial uses of platforms, and regulatory requirements concerning platform decommissioning, changes in technology, the cost/benefit of available alternatives and other uses for platforms such as the Rigs to reefs program.</p>
<p>36. MRC</p> <p>Mr. Garry Reynolds, Water Pollution Prevention Section, Environment Protection Group, Environment Australia</p> <p>Tel: 61-2-6274-1684 Fax: 61-2-6274-1640</p>	<p>Working Together: Regional Workshop on Preventing Maritime Accidents and Pollution in the Asia-Pacific Region</p> <p><i>* Also contribute to Priority IV</i></p>	<p>Review current initiatives and programs which address maritime pollution and accidents in the region, identify issues of mutual concern in the region and seek common approaches to address these issues. A strategy and action plan to strengthen protection of the marine environment from ship and combat marine pollution were developed.</p>	<p>The workshop was held from 20 to 23 April 1998 and a report of the workshop will be published in 1998.</p>	<p>Business sector, NGOs and community will be involved in the project implementa tion</p>	<p>The immediate beneficiaries will be government agencies with responsibility for coastal and maritime environments and trade. The benefit will also extend to government bodies responsible for public health and safety, and fisheries management agencies, cruise tourism bodies, groups responsible for port infrastructure and ship construction and operation, as well as public and private sector organizations concerned with industries such as oil supply.</p>

<p>37. MRC</p> <p>Ms. Susan Ware, Office of International Affairs, National Oceanic and Atmospheric Administration, USA Tel: 1-202-482-6196 Fax: 1-202-482-4307 Email: susan.ware@noaa.gov</p>	<p>Workshop on Regional Implementation of the Global Plan of Action (GPA) for the Protection of the Marine Environment from Land-Based Sources of Pollution</p> <p><i>* Also contribute to Priority IV</i></p>	<p>To discuss the application of the GPA in the Asia Pacific area for the purpose of developing regional and subregional programs of action. To provide economies with a “tool kit” for implementing their domestic programs.</p>	<p>The workshop was held from 14 to 16 April 1998 and its proceedings will be published in 1998.</p>		<p>The workshop focused on the methodological approaches contained in Chapters 2 & 3 of the GPA and explored possible initial steps related to the Global Clearing House call for in Chapter 4. It is hoped that a common approach would emerge and the approach will then be implemented. The immediate beneficiaries of the project will be government agencies with responsibility for coastal environments, economic development or activities in coastal areas and public health and safety. Further benefits will be shared by fisheries management agencies, public works, as well as the private sector and NGOs.</p>
<p>38. MRC</p> <p>Dr. John S MacDonald, Chairman, MacDonald Dettwiler and Associates, Canada Tel: 1-604-231-2223 Fax: 1-604-273-9830</p>	<p>Ocean Research Network for the Pacific (ORNEP)</p> <p><i>* Also contribute to Priority IV</i></p>	<p>The initiative will build a network of centres of excellence in ocean and coastal research and related technology to support the marine interests of the economies of the Pacific region.</p>	<p>Ongoing. This is a multi-year, self-financing project. The first-year operation was completed in 1997, and its second-year operation was endorsed and will be implemented in 1998.</p>	<p>Business sector and NGOs will be involved in the project implementation</p>	<p>Marine science and technology institutions across APEC will benefit through a sharing of talent, technology and funding to address major APEC challenges in sustaining its marine resources.</p>
<p>39. TELWG</p> <p>Yasunao Taketomi Min. of Posts and Telecommunications, Japan Tel: 81-3-3504-5602 Fax: 81-3-3503-0690 Email: y-taketo@mpt.go.jp</p>	<p>Telework Manual</p>	<p>To develop a practical manual setting forth the advantages of telework, appropriate processes to follow when implementing a telework program, and related issues which need to be addressed in order to implement telework successfully.</p>	<p>On going (to be completed in 2000)</p>	<p>N/A</p>	<p>A manual will be prepared and distributed to each economy.</p>

<p>40. TWG</p> <p>Mr Robert Sowman Ministry of Commerce New Zealand Tel: 64 4 499 3670 Fax: 64 4 472 0030</p>	<p>Promote best practice models for sustainable development in the APEC region</p> <p><i>* Also contributes to Priority I.</i></p>	<p>Compile and publish tourism and environmental best practice case studies in APEC economies.</p>	<p>Completed in 1997. To explore edit a second electronic version in 1998.</p>	<p>In cooperation with the private sector.</p>	<p>To promote examples of best practices, sharing information and improving environmental cooperation.</p>
<p>41. TWG</p> <p>Dr Michael J Hatton APEC TWG Sustainable Tourism Project 444 Broadway Ave. Toronto, Ontario Canada M4G 2R1 Tel: 1 416 421 0848 Fax: 1 416 421 6855</p>	<p>Promote best practice models for Sustainable tourism development and local community involvement</p>	<p>Compile and produce a hard copy publication and a web site on the best practice models on tourism activities which are integrated with local community participation and which are environmentally and socially sustainable</p>	<p>Commenced in 1998</p>	<p>In cooperation with the private sector</p>	<p>To promote examples of sustainable tourism projects and activities where local communities can benefit.</p>
<p>42. TPT WG</p> <p>George D. Esguerra, Transport Planning Service, Philippines. Fax. 63-2-727-1703</p>	<p>Oil Spills Preparedness and Response</p>	<p>To publish an inventory on oil spills preparedness and response arrangement in the APEC region. To develop sub-regional cooperative quick response contingency plans for oil spills.</p>	<p>Inventory has been distributed at the 13th TPT -WG meeting and is available at the APEC website.</p>		<p>Dissemination of a complete inventory and development of quick response contingency plans for oil spills.</p>
<p>43. ATC</p> <p>Dr Ku Te-Yeh Food and Agriculture Department, Council of Agriculture Chinese Taipei Tel: 886-2- 312-6980 Fax: 886-2- 312-5812 Email: susan@mail.coa.gov.tw</p>	<p>Conservation of Plant and Animal Genetic Resources</p>	<p>Collaboration on collection of information on plant and animal genetic resources; development of genetic resource databases; exchange and safe storage of the genetic resource materials.</p>	<p>Second workshop focusing on animal genetic resources will be held on 3-6 Nov. '98 in Chinese Taipei.</p>		<p>The activity will:</p> <ul style="list-style-type: none"> • Identify APEC-wide needs for genetic resources management based on the genetic resource database of individual member economies • Establish an APEC information network for the exchange of genetic resources related information; • Develop APEC networks and channels for exchange of genetic resource materials. <p>The work will benefit the public sector and also business.</p>

<p>44. ATC</p> <p>Dr. Rogelio N. Concepcion Director, Bureau of Soils and Water Management, Department of Agriculture Philippines Tel : 63-2-923-0433 Fax : 63-2-920-4318 Email: bswm@phil.gn.apc.org</p> <p><i>Coordination with Task Force on Food, Senior Environment Officials</i></p>	<p>Sustainable Agriculture</p>	<p>Identification of suitable mechanisms for information exchange; establishment of a network of experts and contacts</p>	<p>First workshop will be held on 28-30 Oct. 98 in Davao City, Philippines.</p>		<p>Establishment of an APEC information network to assist the development of practices which will promote sustainable agriculture. The public will be the beneficiaries as well as the farmers.</p>
<p>45. Economic Committee, in conjunction with the Task Force on Food, Energy Working Group and Senior Environment Officials</p> <p>Dr John M Curtis, Chair, Economic Committee, Department of Foreign Affairs and International Trade, Canada</p> <p>Tel: 1-613- 992-7776 Fax: 1-613- 992-4695</p>	<p>Study of “The Impact of Economic Growth and Expanding Population on Food, Energy and the Environment”</p>	<p>Analytical study of these interlinked issues and preparation of a report to APEC Economic Leaders proposing options for joint activities.</p>	<p>A detailed report will be presented to Leaders in 1998</p>	<p>Business was involved in the 1997 FEEEP Symposium and business sector views are reflected in the development of the report to Leaders</p>	<p>1998 Report to Leaders on the conclusions of the study and presentation of possible joint activities to be undertaken by APEC.</p>

<p>46. Economic Committee</p> <p>Mr Dave Black, Environment Canada. Tel: 1-819- 997-1158 Fax: 1-819- 997-0709</p>	<p>Economic Instruments for Environmental Protection</p>	<p>Survey of APEC member economies to gather factual information on the use of economic instruments for environmental protection</p>	<p>Study completed; publication in March 1998</p>		<p>1998 - Results of the Survey were published in March 1998. Information on the use of economic instruments will benefit policy-makers.</p>
<p>47. PLG SME</p> <p>Luisa Montes Finance Director Mexican Ministry of the Environment, Natural Resources and Fisheries. Mexico. Tel: 52-5- 628-0845 Fax: 52-5- 628-0649</p>	<p>Eco-efficiency in the Small and Medium Enterprises</p>	<p>To analyze the environmental regulatory framework developed in a group of APEC economies, the macroeconomic variables, economic development and industrial model and develop a “best practices” manual</p>	<p>Publication of the “best practices” manual is in the final stages of preparation. Final seminar and presentation of publication on Eco-efficiency in SMEs to be given in Mexico City 19 - 20 March 1998. PROJECT COMPLETED</p>		<p>Provide assistance to the SMEs in the APEC region in reflecting environmental concerns and requirements.</p>
<p>48. Senior Environment Officials Meeting (SEOM)</p> <p>Canada in cooperation with Malaysia</p>	<p>Non-binding principles or guidelines for sustainable development of infrastructure</p>	<p>APEC members agreed to a set of guidelines and principles for sustainable development in infrastructure based on practical experiences for dissemination to APEC economies</p>	<p>Agreed to at the Environment Ministerial Meeting in Toronto 9 - 10 June 1997</p>	<p>Business forum held in conjunction with the Ministerial Meeting provided input to the guidelines</p>	<ul style="list-style-type: none"> • Provide guidance in integrating sustainable development principles into infrastructure to trainers and practitioners across the APEC region. • Promote and monitor pilot projects to demonstrate successful application of these principles.
<p>49. SEOM</p> <p>Japan in cooperation with HRD-WG and Education Forum Network</p>	<p>APEC Symposium on environmental education for sustainable cities</p>	<p>A symposium will be convened to share ideas and experiences on environmental education related to urban issues, especially the way toward circulation based society and improvement of living environment.</p> <p>Exchanging views between environmental engineers and educators.</p>	<p>Endorsed by Environment Ministers in June 1997.</p> <p>To be held on 20-21 September 1998 in Sendai, Japan</p>	<p>Business sector will be invited as audience</p>	<ul style="list-style-type: none"> • Raise awareness in member economies • Provide trainers with new tools for incorporating environmental principles into infrastructure development and material flow

<p>50. SEOM</p> <p>Canada in coordination with the HRD – APEC Sustainable Development Training & Information Network</p>	<p>APEC Urban Capacity Building Initiative</p>	<p>Establish an APEC Urban Capacity Building network and develop tools to help staff of public and private sector and other institutions involved in urban development of infrastructure</p>	<p>Networking Event in Bangkok in January 1999.</p> <p>Initiative was endorsed by Environment Ministers in June 1997</p>	<p>Business sector will participate</p>	<ul style="list-style-type: none"> • Provide information and training on urban capacity building skills • Raise awareness in APEC member economies • Develop training approaches and tools for enhancing skills, knowledge and attitude of urban development practitioners.
<p>51. SEOM</p> <p>Canada in cooperation with APEC Fora</p>	<p>Compendium of Best Practices for Sustainable Urbanization</p>	<p>Collection of best practices from APEC members which was tabled at the Environment Ministerial Meeting in June 1997 and put on the website.</p>	<p>Prepared for Ministerial Meeting June 1997</p>		<ul style="list-style-type: none"> • Provide best practices information available on the website address: http://www.ec.gc.ca/env
<p>52. SEOM</p> <p>Hong Kong, China in cooperation with the Economic Committee</p>	<p>Innovative Approaches to financing of sustainable infrastructure development</p>	<p>Program to examine and disseminate innovative approaches to financing sustainable infrastructure development and building planning, design, construction and operation.</p>	<p>Decision paper circulated by Hong Kong, China</p> <p>Work progressing: Final report expected by end 1999 or early 2000.</p> <p>Initiative was endorsed by Environmental Ministers in June 1997</p>		<ul style="list-style-type: none"> • Provide information about new ways of sustainable infrastructure development financing. • Improve sustainability of APEC cities.
<p>53. SEOM</p> <p>Chinese Taipei in cooperation with the Economic Committee</p>	<p>Workshop on Economic Instruments toward Sustainable Cities in APEC</p>	<p>Seminar to provide an opportunity to discuss best practices and exchange information on economic instruments being used in APEC economies to enhance environmental protection of cities.</p>	<p>Held in Chinese Taipei, 17-19 December 1997</p> <p>Initiative was endorsed by Environment Ministers in June 1997</p>		<ul style="list-style-type: none"> • Help increase knowledge about economic instruments • Help to demystify the use of economic instruments in APEC economies and outline the benefits of their use.

<p>54. SEOM</p> <p>United States in coordination with the APEC Sustainable Development Training and Information Network</p>	<p>Environmental Business Information System and Network</p>	<p>Setting up a business network to facilitate private sector access to environmental regulations and administrative procedures. To be done by the Sustainable Development Training and Information Network, University of Oregon</p>	<p>In progress</p> <p>Initiative was endorsed by Environment Ministers in June 1997</p>	<p>Business is being consulted</p>	<ul style="list-style-type: none"> • Improve information about and access to environmental regulations and administrative procedures in APEC economies for the business sector.
<p>55. SEOM</p> <p>Canada in cooperation with APEC Secretariat</p>	<p>APEC “Clean Cities” Internet Website</p>	<p>Environment Canada created a clean cities Internet website consisting of best practices on clean cities from member economies linked to the APEC homepage</p>	<p>Website was put up in June 1997</p> <p>Initiative was endorsed by Environment Ministers in June 97</p>	<p>Business was consulted</p>	<ul style="list-style-type: none"> • Disseminate information on practical solutions to urban environment problems • Provide information tool on sustainable cities for APEC website: http://www.cleancities.com
<p>56. SEOM</p> <p>Canada</p>	<p>Double the number of Local Agenda Cities by the Year 2003</p>	<p>Local Agenda 21 planning presents a practical framework for engaging stakeholders in community issues, while protecting local, regional and global ecosystems</p>	<p>By the Year 2003</p> <p>Initiative was endorsed by Environment Ministers in June 1997</p>		<ul style="list-style-type: none"> • Raise awareness of the Local Agenda 21 Cities work and planning systems. • Contribute to greater networking on environment protection issues among APEC cities
<p>57. SEOM</p> <p>Mexico and Canada in cooperation with the HRD WG</p>	<p>Seminar on the poorest and most disadvantaged sectors of the urban population</p>	<p>A seminar will be convened to share ideas and experiences on APEC member economy programs and initiatives that promote social and economic development for the most disadvantaged sectors in the urban centres</p>	<p>To be held in Mexico City (date to be confirmed)</p> <p>Disseminate widely</p>		<ul style="list-style-type: none"> • Provide information about the issues and problems faced by the poorest and most disadvantaged of the urban population. • Raise awareness and share solutions for improving the situation of the poorest and most disadvantaged sectors of the urban population

58. SEOM United States in cooperation with the Transportation Working Group	Research and a seminar on reducing lead and other vehicular emissions	One of the Action Programs from the Program of Action for Sustainable Cities endorsed by Environment Ministers	Progress to be confirmed Initiative was endorsed by Environment Ministers in June 1997.		
59. SEOM China	Seminar on environment and economic policies held in Beijing	First formal activity of the China APEC Environmental Protection Centre established as an initiative of President Jiang Zemin – the seminar discussed pollution control and environmental protection, indicators for sustainable cities.	Held in Beijing in 18-20 September 1997 Initiative was endorsed by Environment Ministers in June 1997		<ul style="list-style-type: none"> • Raised the issues on pollution control and environmental protection in cities in APEC • Helped to launch the Chinese Centre for Environmental Protection
60. SEOM U.S.A.	Guide to phasing lead out of gasoline	<p>“Implementors’ Guide to Phasing Lead Out of Gasoline “, a tool that can be used by a country once the political decision has been made to phase out leaded gasoline.</p> <p>The guide assists such countries in addressing a range of issues, from designing a feasible lead phase-out schedule to developing a list of priority activities.</p>	The guide will be available in October 1998, and workshops based on it will be held in 1999.		<ul style="list-style-type: none"> • “Implementors’ Guide to Phasing Lead Out of Gasoline” will be available in October 1998.

VI. ENCOURAGING THE GROWTH OF SMEs

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. FWG Mr. Matteo Milazzo, NOAA, US Dept. of Commerce Tel: 1-301-713-2286 Fax: 1-301-713-2313	APEC Markets for Airshipped Live and Fresh Food Fish <i>*Also contributes to Priority V.</i>	A “How to” manual explaining different market and trading requirements and technical requirements and health regulations associated with airfreighted live and fresh fish and shellfish has been prepared,	Manual is being redrafted to incorporate comments from member economies. Completion expected in late 1998.	Part of the information will be obtained from the private sector	The manual will be made available in late-1998 to seafood traders in the region and should benefit fish harvesters, importers, wholesaler and retailers in APEC economies, particularly recent entrants to the trade most of whom are small enterprises
2. HRD WG (BMN) Mr. Leslie Williams, The Research Institute for Asia Pacific, Sydney, Australia Tel: 61-2-9290 3222 Fax: 61-2-9262 4819 Email: L.Williams@riap. Biz.usyd.edu.au	Cross-Cultural Training for SMEs on Interactive CD-ROM	Specifications: <ul style="list-style-type: none"> • Assessment of CD-ROM hardware capacity of APEC economies; • Survey existing and planned product in the field; • Cross-Cultural Skills audit of SMEs; • Identify cross-cultural training needs of SMEs; • Produce content design and technology specifications of pilot CD-ROM; • Produce a pilot CD-ROM. 	Demonstrate the prototype at the PLGSME Meeting in Ottawa, Sept 1997. User guide has been drafted and copies of the prototype have been distributed to participating economies focus group testing. Refinement of the pilot continues, and in the process of being modified to take into account rapid technological changes. Online (Internet) technol- ogy rather than CD-ROM will be used. Training service is expected to be offered online through the existing web site by November 1998.	With private sector participation.	Project aims to create multimedia training tool that provides Asia-Pacific related cross-cultural and market entry skills for SMEs using online (Internet) technology.

<p>3. HRD WG</p> <p>Mr. Michio Kimura, Dean, IDE Advanced School, Institute of Developing Economies, 20 Araki-cho, Shinjuku-ku, Tokyo, Japan 160</p> <p>Tel: 81-3-3359-3601 Fax: 81 -3-3359-3604 Email: kimura@ideaix01.ide.go.jp</p>	<p>International Conference of Entrepreneurship Development Institutions in Asia- Pacific</p>	<p>This project seeks to provide a venue for experiences in entrepreneurship development and consolidate lessons into training program, resulting in greater synergy and cooperation among institutions in the region involved in entrepreneurship development.</p>	<p>The project overseers are revising the project, and are postponing implementation until mid- 1998.</p>		
<p>4. ISTWG</p> <p>Cameron MacDonald Canada Institute of Scientific and Technical Information , National Research Council of Canada</p> <p>Tel: 613-990-7215 Fax:613-952-9112</p>	<p>Workshop on access and diffusion of scientific and technological research to SMEs</p> <p>(14.A.1.04)</p> <p><i>*Also contributes to Priority I</i></p>	<p>Workshop to develop an action plan to improve diffusion of S&T research</p>	<p>Ongoing</p>		<p>An action plan to improve diffusion of S&T research beneficial to SMEs</p>

<p>5. ISTWG</p> <p>Dr Rogelio A. Panlesigui Industrial Technology Development Institute, Philippines</p> <p>Tel: 63-2-837-2071 Fax: 63-2-837-3167</p>	<p>APEC Center for Technology Exchange for Small and Medium Enterprise (ACTETSME)</p> <p>(14.A.1.09)</p> <p><i>*Also contributes to Priority I</i></p>	<p>ACTETSME aims to accelerate the development of SMEs in the region through information, technology and training exchange and make them more competitive both in local & foreign markets. The Center will operate as a resources hub with capability for information networking, organizing special activities to facilitate technology transfer projects and HRD development through training.</p>	<p>Ongoing</p> <p>(with nine (9) identified Economy Coordinators and fifty-four (54) Focal Points)</p>	<p>Full ABAC support in the identification of Economy Coordinators for the establishment of the APEC Network for SMEs and enhancement of the on-line business facilitation services of the ACTETSME website.</p>	<ul style="list-style-type: none"> • Conduct of the Appreciation Workshop on Factory Automation Systems and Technologies (FAST) from 2-5 Sept, 1998, in conjunction with the Control Asia '98 exposition. • Completion of the list of Economy Coordinators for the APEC Network for SMEs. • Completion of the enhanced "Let's Do Business" page of the ACTETSME website which is an on-line business facilitation information service for SMEs in the region.
<p>6. TELWG</p> <p>Mr Peter Ferguson, Canada</p> <p>Fax: 1-613- 991 -0959 Tel: 1-613- 941-5245</p>	<p>SME Electronic Commerce Survey</p> <p><i>* Also contributes to Priority III.</i></p>	<p>To provide a full survey of the electronic commerce activities and aspirations in APEC.</p>	<p>On going (to be completed in 1998)</p>	<p>In cooperation with the private sector.</p>	<p>To understand how electronic commerce affects the SME's organizationally and financially and what are the legal and regulatory barriers to the effective use of Electronic Commerce.</p>
<p>7. TELWG</p> <p>Mr Peter Ferguson, Canada</p> <p>Fax: 1-613- 991 -0959 Tel: 1-613- 941-5245</p>	<p>Overview of Electronic Commerce Law</p>	<p>A broad survey of Legal and Regulatory issues regarding the implementation of electronic commerce in the region, particularly for SMEs</p>	<p>Ongoing (to be completed in 1998).</p>	<p>In co- operation with the private sector</p>	<p>A report outlining for APEC member economies what legal and regulatory issues can contribute to or impede the implementation of electronic commerce. All businesses and government will be beneficiaries, but particularly SMES.</p>
<p>8. TELWG</p> <p>Mr. Masaaki Kobashi, MITI, Japan.</p> <p>Fax: 81 -3- 3580-6403 Tel: 81-3- 3501-2964</p>	<p>EDI/Internet</p> <p><i>* Also contributes to Priority III & IV</i></p>	<p>To serve the overall interest of APEC member economies SMEs to the benefits using internet for electronic commerce.</p>	<p>Ongoing (1996-1998)</p>	<p>In cooperation with the private sector.</p>	<ul style="list-style-type: none"> • To sensitize SMEs to the benefits on using Internet for Electronic Commerce. • Guidebook on implementing EDI on the Internet

<p>9. TELWG</p> <p>Mr Yuichi Tosaki, Japan Electronic Messaging Association, Fax: 81-3- 3583-5813 Tel: 81-3 3583-5811</p> <p>Mr Michael Baker, AOEMA, Australia. Michael.baker@aoema.org</p>	<p>Electronic Commerce Seminars</p> <p><i>* Also contributes to Priority III & IV.</i></p>	<p>Help SMEs to understand the benefits of doing business electronically.</p>	<p>Ongoing (1996-1998)</p>	<p>In cooperation with the private sector.</p>	<p>To migrate from paper based applications to electronic commerce and communications.</p>
<p>10. TELWG</p> <p>Mr Michael Baker AOEMA, Australia.</p> <p>Email: Michael.baker@aoema.org</p>	<p>Survey of Certification Authorities</p>	<p>Build a database of certification authorities to assist businesses with conducting electronic commerce in the region</p>	<p>Ongoing (began 1997)</p>	<p>In cooperation with the business/private sector</p>	<p>A database of certification authorities in the APEC region and around the world, which will facilitate the introduction of reliable electronic transactions between economies and businesses.</p>
<p>11. TEL WG</p> <p>Mr. Toshiyuki Yamada Ministry of Posts & Telecommunications, Japan. Fax: 81-3-3501-0344 Tel: [81] 3-3504-4971 Email: t-yamada@mpt.go.jp</p>	<p>Integrated Next Generation Electronic Commerce Environment Project (INGECEP/Cyber Net)</p> <p><i>* Also contributes to Priority IV</i></p>	<p>To verify information and communication security technology for SMEs and connect virtual shopping malls of both domestic and overseas domain</p>	<p>Ongoing (1996-1998)</p>	<p>In cooperation with the private sector</p>	<p>To reveal the legal and technical issues associated with the international settlement of electronic debit payment for particular benefit for SMEs.</p>
<p>12. TP</p> <p>Mr. Michael Wei 3rd Department, Board of Trade, Chinese Taipei, Tel: 886-2-397-7301, Fax: 886-2-321-6445</p>	<p>Facilitation of strategic alliances among enterprises in the APEC region</p> <p><i>*Also contributes to Priority III</i></p>	<p>Enhance the exchange of information for SMEs on raw materials, production know-how and marketing strategies among the enterprises within the Asia Pacific</p>	<p>This project will be integrated into APECNet.</p>	<p>Information will be collected on the local firms interested in strategic alliance</p>	<p>Strategic alliance among the enterprises and identification of its priority areas will benefit SMEs.</p>

<p>13. TP</p> <p>Mr. Ahmad Suhaimi Hj Osman, Mr. Wan Latiff, Malaysia</p> <p>Tel: 60-3- 294-7259 Fax: 60-3- 294-7362</p>	<p>3rd APEC International Trade Fair</p>	<p>Trade fair by the APEC member economies to enhance trade opportunities and activities</p>	<p>To be held on 13-16 Nov. '98 in Kuala Lumpur, Malaysia</p>	<p>Private sectors made a great contribution to the fair through exhibition of their goods</p>	<p>Trade Fair will contribute to enhancement of trade opportunities among the member economies, including the SMEs.</p>
<p>14. TP</p> <p>Hirumi Takahashi Import Division, Ministry of Int'l Trade and Industry, Japan</p> <p>Tel: 81-3-3501-1659 Fax: 81-3-3501-0997</p>	<p>APEC Program for Exchange of Trade Promotion Experts</p>	<p>Exchange program of trade promotion experts on development of local industries and trade and investment promotion</p>	<p>Held on 16-21 Feb.'98 in Japan</p>		<p>Further mutual cooperation on trade and investment promotion, especially development of regional industries by trade and investment promotion</p>
<p>15. TP</p> <p>Soh See Kong Trade Development Board, Singapore.</p> <p>Tel: 65-337-6628 Fax: 65-337-6898</p>	<p>APECNet</p> <p><i>*Also contributes to Priority VI</i></p>	<p>A homepage which contains information on the WGTP and its activities, as well as capacity to search for business opportunities</p>	<p>It is now available on the Internet.</p>	<p>The APECNet includes business matching services and posting inquiries by the business community</p>	<p>The APECNet will facilitate the dissemination of trade promotion and other related activities and opportunities for SMEs of WGTP member economies.</p>
<p>16. ATC</p> <p>Mr. Roger Mireles, Asia & Americas Division, International Trade Policy, US Department of Agriculture</p> <p>Tel: 1-202- 720-1335 Fax: 1-202- 690-1093 Email: mireles@fas.usda.gov</p>	<p>Marketing, Processing and Distribution of Agricultural Products</p>	<p>Technical consideration of the harmonization of agricultural standards, requirements and regulations.</p>	<p>Information and contact points were published for 12 APEC members. Harmonization work will commence in 1999.</p>	<p>PECC</p>	<p>Increased transparency to provide greater opportunities for small and medium enterprises</p>

<p>17. CTI: Government Procurement Experts Group</p> <p>Convenor: Miss Adeline Wong, Hong Kong, China</p> <p>Tel 852-2398-5305 Fax: 852-2787-7799</p>	<p>APEC GP Homepage and Database of GP Opportunities</p>	<p>The GP Homepage contains comprehensive information on members' GP regimes as well as contact points where further information could be obtained. Some members have also established hotlinks with their own databases of procurement opportunities.</p>	<p>Completed 1997.</p> <p>Information will be updated as and when necessary</p>	<p>Information is readily accessible by the business sector via the Internet</p>	<p>The Homepage and GP databases increase transparency of GP regimes and opportunities by the provision of readily accessible information to all interested parties. Potential suppliers, in particular, Small and Medium Enterprises, would benefit from the improved access to GP information.</p>
<p>18. PLG SME</p> <p>Maria Fina Yonzon, Director Bureau of Small and Medium Business Development, Philippines.</p> <p>Tel. 63-2-890-5492 Fax. 63-2-890-3433</p>	<p>SME Indicators.</p>	<p>The identification of a set of key APEC indicators of SME activities and the testing of the feasibility of introducing comparable indicators in a selection of member economies</p>	<p>Report to be submitted to the SME-PLG Meeting in March 1998 for comment and action. Final Report prepared and published and will be presented to the SME Ministerial Meeting in September 1998.</p>		<p>Assess the feasibility of developing operational set of measures (or indicators).</p> <p>Develop an action plan for the implementation of a set of SME indicators in APEC economies</p>
<p>19. PLG SME</p> <p>Fortunato T. De la Pena, Executive Director, APEC ACTETSME, Los Banos, Laguna.</p> <p>Tel. 63-2-927-1034 Fax. 63-2- 927-1034 E-mail ftdpl@upissi.ph.net</p>	<p>Enterprise Development program.- Phase I</p> <p>(A project of ACTETSME)</p>	<p>1. Training of Trainers in Enterprise Development</p>	<p>In progress. Completed consultation on training models. Program development is expected to be completed in early 1998. In its final phase with the group to finalize work of the consultant in November 1998.</p>		<p>Train a group of about 25 extension and development workers to become trainers in enterprise development.</p>

<p>20. PLG SME</p> <p>Project Leader: Fortunato T. De la Pena, Executive Director, APEC ACTETSME, Los Banos, Laguna. Tel. 63-2-927-1034 Fax. 63-2-927 1034 E-mail ftdlp@upissi.ph.net</p> <p>Project Co-Leader Lois Stevenson Director, Policy Development, Entrepreneurship and Small Business Office, Industry Canada, 235 Queen St., Ottawa, Canada KIA 0H5</p> <p>Tel. (613) 954-3555 Fax.(613)954 -5492</p>	<p>Training and Certification Program for Small Business Counsellors</p>	<p>A highly collaborative initiative guided by an International Advisory Group of 12 experts from 11 APEC economies. The purpose of the project is to recognize and sustain the small business counselling profession across the region and enhance the competitiveness of SMEs in t he global market.</p>	<p>Phase I: June to Oct.1997: Needs analysis of small business counsellors in participating economies; establishment of criteria for the program; decision on core and optional training modules.</p> <p>Phase II: Oct 1997-Oct 1998: establishment of course delivery structure, i.e. the APEC Network of Institutes of Small Business Counsellors; development of self- directed and workshop learning materials. Phase III: Nov 1998 to Dec 1999: Implementation of program (conditional upon renewed funding).</p>	<p>Phase I: private sector counsellors were consulted through surveys on core competencies needed by small business counsellors. Phase II: private sector consultants and training experts are developing the learning materials and the infrastructure which will be tested in each participating economy. Phase III: small business counsellors and SMEs will be the prime beneficiaries of the program. They will be asked to provide feedback on their training and consulting needs and the training materials will be updated continually.</p>	<p>Train a group of SME consultants to become trainers in SME enterprise development, particularly those in the counselling profession; increased competencies of small business counsellors; increased supply of highly qualified counsellors; increased employment opportunities for counsellors; development of an on-going pool of expertise accessible to all APEC SMEs and comparable counselling services of high quality across the region on a sustained basis.</p>
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<p>21. PLG SME</p> <p>Wang Shanchuan. Deputy Director General State Economic & Trade Commission, Beijing. Tel. N/A</p>	<p>Study on Operating Environment in China for SMEs from APEC economies.</p>	<p>The project involves the undertaking of a survey of over 300 SMEs on the obstacles and challenges inherent in the PRC operating environment. Project will consist of information gathering and processing, field trips, a seminar and final report.</p>	<p>Commenced in 1997, with completion of a final report in August 1998. Questionnaire survey and field studies completed in May 1998 and seminar held in July 1998.</p>	<p>China Centre for Business Cooperation and Coordination, a PRC NGO will lead the implementation of the study</p>	<p>Assess the circumstances faced by SMEs in PRC, particularly SMEs funded by APEC economies.</p> <p>Make policy adjustments recommendations to the Chinese government with a view to creating a more liberal operating environment for SMEs in China.</p>
<p>22. PLG SME</p> <p>Kalsom Abdul Rahman PLG Chair, SMIDEC, 701D, Level 7, Tower D, Uptown 5, 47400 Peteling Jaya, Selangor, Kuala Lumpur</p> <p>Fax: 60-3-925-9119 Tel: 60-3-925-8585</p>	<p>APEC SME Business Forum and Exposition</p>	<p>Annual gathering of business representatives, back to back to the APEC Ministers meeting in charge of SMEs.</p>	<p>1998 Meeting will be held in Kuala Lumpur September 1998. (1997 meeting was held in September in Ottawa, Canada)</p>	<p>Business sector participation is ongoing.</p>	<p>Provide business-matching opportunities.</p> <p>Address issues affecting the capacity of SMEs to do business in the region.</p>
<p>23. PLG SME</p> <p>Christine Topoulos, Special Assistant to the Chairman. Export-Import Bank of the United States Washington, D.C.</p> <p>Tel: 1-202-565-3515 Fax: 1-202-565-3505 E-mail c.topoulos@exim.gov</p>	<p>Survey to Identify Issues and Develop Solutions in SME Trade Finance.</p>	<p>Identify common issues through trade associations survey members.</p>	<p>Completed in September 1997. Report still pending Survey and analysis done by US EX-IM Bank in cooperation with Export Credit Agencies.</p>	<p>Worked with Trade Associations and ECAs and experienced difficulties with respect to long distances and time zones.</p>	<p>Preparation of a Report for Ministers, for their selection of most important issues/solutions for 1988 efforts.</p>

<p>24. PLG SME</p> <p>Kalsom Abdul Rahman PLG Chair, SMIDEC, 701D, Level 7, Tower D, Uptown 5, 47400 Peteling Jaya, Selangor, Kuala Lumpur</p> <p>Fax: 60-3-925-9119 Tel: 60-3-925-8585</p>	<p>Second Edition of the Guide for SMEs in the APEC Region: “Helping Your Business Grow”</p>	<p>The second edition will update the following points: Statistics on the contributions of SMEs in APEC economies; new opportunities for SMEs; new projects and seminars available to SMEs; rules and policies involving SMEs; APEC Focal Points; APEC Organization Structures; and a new section on women SMEs and the challenges they face in the region.</p>	<p>To be completed by September 1998 in time for the 5th SME Ministerial Meeting.</p>	<p>Business will be consulted.</p>	<p>Respond to SME Ministerial directive to update the book on a regular basis to ensure its relevance and effectiveness. Provide updated information for SMEs in the region to help them become better informed, more competitive and to allow for broader networking. Provide special information on women SMEs in response to SME Ministers’ 1997 directive to provide direct support to women SMEs.</p>
<p>25. PLG SME</p> <p>John Ni Director General SMEA Ministry of Economic Affairs Chinese Taipei. Fax: 886-2- 367-3914 Tel. 886-2-367-3914</p>	<p>APEC SME Techno Forum (Previously named Tech-Connect Forum)</p>	<p>An electronic forum to convey suggestions for multilateral improvements in the business environment of APEC</p>	<p>Held in Chinese Taipei, 19-26 January 1998.</p>	<p>Will benefit technologically advanced SMEs.</p>	<p>Provide improved understanding amongst relevant SME managers of what APEC is doing to open up opportunities for trade and investment in the region.</p>
<p>26. PLG SME</p> <p>Francine L’Esperance Team Leader, Industry Canada 235 Queen Street 5th Floor A Tower East Ottawa Ont. K1A 0H5.</p> <p>Tel: 613-954-5484 Fax: 613-946-1035</p>	<p>APEC Benchmarking Database for SMEs</p>	<p>The project, which is based on the earlier successful feasibility study, will establish “national” benchmarking/business diagnostic databases and link them to an APEC central database to help SMEs gain an understanding of their performance compared with their competitors and/or potential partners. The pilot project will collect company data from 100 companies in the economies prepared to participate.</p>	<p>The central benchmarking database will be launched at the SME 1998 Ministerial Meeting in Malaysia 10-11 Sept 98 and be completed by end of Dec 98. A pilot project among SMEs of a few participating economies had been completed and individual performance reports received. Member economies were encouraged to use this benchmarking questionnaire to ascertain their level of development.</p>	<p>The Team which will determine the structure and technical protocol of the APEC central and national databases will consist of industry and institute experts as well as government officials.</p>	<p>Provide a database of SMEs meeting internationally -validated performance standards and facilitate business matching for pursuing export opportunities</p> <p>Assist SMEs in identifying their strengths and making decisions on specific improvements to increase industrial competitiveness.</p>

VI. OTHER ACTIVITIES

<i>APEC Forum Lead Agency and involvement of other APEC Fora (if any)</i>	<i>Activity</i>	<i>Description of Activity</i>	<i>Status/ Timeframe</i>	<i>Business sector Inputs (if any)</i>	<i>Expected Outcome (including 1998 “deliverables”) and Expected Benefits and Beneficiaries, (if impact on business, note if large or SMEs)</i>
1. EWG Mr Bob Alderson First Assistant Secretary, Energy Division DPIE, Australia Tel: 61-2-6272-4475 Fax: 61-2-6272-3741 Email: bob.alderson@dpie.gov.au	Assessing the Impacts of Liberalising Energy Trade and Investment in APEC Member Economies <i>* Also contribute to Priority VI</i>	Provide quantitative analysis of the economic costs and benefits of policies to liberalise energy trade and investment	Ongoing. The study is scheduled to be completed and published by the end of 1999.	Business sector will be involved in the implementati on of the project	Member governments, energy departments, planning and regulatory organisations, utilities and business organisations will be able to draw on the improved information for their decision making and benefit from any energy market liberalisation that might ensue from the projects.
2. EWG Mr. Tomas Astorga, GEMEED, Santiago, Chile. Tel: 56-2-696-7804 Fax: 56-2-695-6935 E-mail: gemeed@revna.cl	Comprehensive Linked Database on Mining Related Opportunities and Regional Legal Framework <i>* Also contributes to priority II</i>	To establish a comprehensive linked database on the opportunities of the mining sector covering the elements of trade, mineral resources, mining property treatment, taxation regimes, and legal framework. The database will provide APEC member economies with a complete and up to date assessment of their respective mining sectors.	Ongoing. First phase of the database development has been completed and its second phase will be started in 1998.	Business sector will be involved in the implementat- ion of the project	The database will assist their strategic planning, definition of new trends, investment development, production, trade and transportation among APEC member economies. Relevant government agencies, institutions and relevant companies will benefit from the database

<p>3. FWG</p> <p>Dr. Marshall Moffat, Fisheries and Oceans Canada, Ottawa, Tel:1-613-9932611 Fax:1-613-9513254</p>	<p>Free Trade and Investment in the Fisheries Sector of the Asia-Pacific Region: Economic Analysis of Tariffs</p>	<p>Prepare and publish a study that will assess the net economic impact of removing tariffs from the fisheries sector in the Asia-Pacific region</p>	<p>In preparation, expected completion in September 1998. A published report will be available to member economies after September 1998.</p>		<p>This study will directly benefit APEC economy scholars along with policy-makers and government officials of member economies implementing policy for the fisheries sector as they relate to trade liberalization and facilitation.</p>
<p>4. TWG</p> <p>Ms Jennifer D. Harrison, Department of Industry, Science & Tourism Division Australia Fax: 61 - 6- 279-7285 Tel: 61 -6-279-7108</p>	<p>Economic Impact of the Tourism Development in the APEC Region</p> <p><i>* Also contribute to Priority I</i></p>	<p>A study on the economic impact of tourism in APEC.</p>	<p>Ongoing (to be completed in 1998)</p>	<p>In cooperation with the private sector.</p>	<p>Raise awareness and understanding among governments and APEC fora of the economic significance of tourism and the importance of removing barriers to tourism's development. Adoption of a common set of measurement indicators.</p>
<p>5. TWG</p> <p>Ms Jennifer D. Harrison, Department of Industry, Science & Tourism Division Australia Fax: 61 - 6- 279- 7285 Tel: 61 - 6- 279 -7108</p>	<p>Develop Database of Core Statistical Information to assist Industry and Governments to develop more effective Marketing and Planning Regimes</p> <p><i>* Also contributes to Priority IV.</i></p>	<p>Establish an up-to-date inventory of tourism statistical information.</p>	<p>In preparation (to commence in 1998)</p>	<p>Consult with WTO</p>	<p>Achieve a better understanding of tourism progress among APEC member economies. A credible database to assist tourism representatives in promoting tourism and lobbying on issues affecting the tourism sector.</p>
<p>6. TWG</p> <p>Mr Rene R. De Los Santos, Office of Tourism, Department of Tourism, Philippines Fax: 63-2-587- 532 Tel: 63-2-525- 2928</p>	<p>Promotion of Culture and History in the Region.</p>	<p>Seminar -workshop on the promotion of culture and history in the APEC Region.</p>	<p>Seminar – workshop held on 16 - 18 June 1998</p>	<p>Seminar – Workshop</p>	<p>Formulate of cultural tourism programmes and the promotion of sustainable cultural tourism in the APEC region, adding value to tourism and involve local communities in the development of the sector.</p> <p>Formation of a project document for the APEC History and Culture Plan</p>

<p>7. TWG</p> <p>Mr. Tuo Chung-Hwa, Director, International Division, Tourism Bureau, Chinese Taipei.</p> <p>Fax: 886-2-771-7036 Tel: 886-2-349-1610</p>	<p>Encourage standard symbols for visitor signage in the APEC region.</p>	<p>Collect existing symbols for visit signage and develop set of standard symbols</p>	<p>To commence in 1998- 1999</p>	<p>In cooperation and with the participation of the private sector</p>	<p>Develop a set of standard symbols for visitor signage in the APEC region.</p>
<p>8. TIDWG</p> <p>Ms Paula N. Muroff Bureau of the Census, U.S. Dept. of Commerce, Washington, D.C.</p> <p>Tel: 1-301-457-2846 Fax: 1-301-457-2908</p>	<p>TIDDB (Trade and Investment Data Database)</p> <p><i>* Also contribute to Priorities IV and VI.</i></p>	<p>To establish a TIDDB system and further maintain and develop the system.</p>	<p>Maintenance and development of the system is ongoing. BAC has approved fund to continue the maintenance and development of the TIDDB for 1999.</p>		<p>Establishment of the state-of-the-art tool which can be used to supply, load, store, present and analyse any statistical data. To provide the region's policy makers and advisors with the most consistent and up-to-date statistical measures of trade and investment between APEC member economies Merchandise trade data for 1991-1995 now available on TIDDB</p>
<p>9. TIDWG</p> <p>Mr. Ivan King, Australian Bureau of Statistics, Canberra</p> <p>Tel: 61-2-6252-6038 Fax: 61-2-6253-1051</p>	<p>APEC Trade and Investment Data Publication</p>	<p>To develop and disseminate a publication, in printed and electronic form, that promotes knowledge of the TIDDB.</p>	<p>Ongoing – publication will be released in Nov. '98</p>		<p>Helps users to understand what data is available from the TIDDB, how the data has been compiled and what limitations apply; and helps to make access to the data available to the widest possible audience.</p>

<p>10. TP</p> <p>Wang Shichun Ministry of Foreign Trade and Economic Cooperation (MOFTEC), China. Tel: 86-10-65197714 Fax: 86-10-65197213</p>	<p>Case Study on Trade Promotion and Poverty Alleviation – The Case of Yunnan</p>	<p>Analytical reports on the study of targeted poverty counties and scenarios proposed for the development of trade and poverty alleviation</p>	<p>Publication and distribution of its final report has been completed</p>	<p>The project demonstrated different scenarios to promote trade development and poverty alleviation in the areas covered by the projects, which could be emulated in other member economies</p>
<p>11. TP</p> <p>Harumi Takahasi, Import Division, Ministry of Int'l Trade and Industry, Japan</p> <p>Tel: 81-3-3501-1659, Fax: 81-3-3501-0997</p>	<p>APEC Information Centre for Trade Promotion</p> <p><i>*Also contributes to Priority VI</i></p>	<p>Collection, analysis and processing of information from APEC economies</p>	<p>Expected to be completed in 1998</p>	<p>Shared information on this matter will help to promote trade among business sectors in member economies</p>
<p>12. TP</p> <p>Michael Crawford, Australian Trade Commission, Australia</p> <p>Tel: 61-2-6201-7532 Fax: 61-2-6201-7301</p>	<p>Core Characteristics Survey of TPOs in APEC region</p>	<p>Printed document setting out the characteristics of trade promotion organizations of member economies</p>	<p>Distribution of survey results to member economies in 1998</p>	<p>Facilitation of improved trade promotion in APEC region by sharing information on the role, structure and other core characteristics of TPOs in member economies</p>
<p>13. CTI/ SCCP/MAG</p> <p>Chair : Australian Customs Services Mr Stephen Holloway</p> <p>Tel : 61-2-62756825 Fax : 61-2-62756819</p>	<p>Creation and maintenance of APEC Tariff Database in Internet</p>	<p>To include tariff schemes and tariff-related information in the Internet to facilitate access by the public.</p>	<p>Ongoing.</p> <p>Federal Express Corp., USA created and offers to maintain the database for APEC free of charge.</p>	<p>The tariff database had been made available for public access since May 1997.</p>

<p>14. CTI: SCSC</p> <p>Project Overseer: Philippines Mr J. Motoomull</p> <p>Tel: 63-2-890-4965 Fax: 63-2-890-4926</p>	<p>Survey on Technical Infrastructure Development for Measurement Standards, Laboratory Accreditation, Inspection Bodies, Quality System and Product Certification Bodies Accreditation</p>	<p>To identify areas of technical infrastructure needs to facilitate involvement in mutual recognition arrangements.</p>	<p>Completed in April 1998</p>		<p>Survey will help improve and maintain the level of the standards and conformance infrastructure to facilitate broad participation in mutual recognition arrangements in both the regulated and voluntary sectors in the region.</p>
<p>15. CTI: IPEG</p> <p>Project overseer: Australia Mr. Claus Dirnberger</p> <p>Tel: 61-2-6261-2047 Fax: 61-2-6261-3514</p>	<p>Dissemination of contact points of Intellectual Property Rights Experts.</p>	<p>To upload to the APEC Homepage, information on contact points of intellectual property rights experts and to update that information twice a year</p>	<p>Ongoing</p>	<p>Relevant contact points in business and academic sectors are included</p>	<p>Dissemination of relevant contact details facilitates easy access for business and academia to relevant IP experts and fosters closer working relationship between these experts. A pamphlet marketing the APEC Contact Point List has been prepared by Australia and will be circulated in member economies later in 1998.</p>
<p>16. CTI: IP</p> <p>Project overseer: Australia Mr. Claus Dirnberger</p> <p>Tel: 61-2-6261-2019 Fax: 61-2-6261-3514</p>	<p>Survey and dissemination of the current status of IPR laws and regulations</p>	<p>To undertake survey on the current status of IPR laws and regulations and to upload results of the survey to the APEC Homepage</p>	<p>Ongoing</p>		<p>Dissemination of the relevant information would ensure easy and quick access to the most current IPR laws and regulations.</p>
<p>17. CTI: Deregulation</p> <p>Project overseer: New Zealand Mr. Geoff Connor Acting Manager Competition & Enterprise Br, Ministry of Commerce, New Zealand</p> <p>Tel: 64-4-474-2914 Fax: 64-4-499-1791</p>	<p>APEC Regulatory Reform Symposium</p>	<p>Symposium will provide a forum to bring together government, academics and business to gain a better understanding of regulatory policy in the process of liberalizing trade and investment</p>	<p>5-6 September 1998</p>	<p>Business sector will attend as speakers and participants</p>	<p>Objective is to draw together themes and principles of deregulation and regulatory reform within APEC.</p>

ANNEX 5

Guidance on Strengthening Management of APEC ECOTECH Activities

GUIDANCE ON STRENGTHENING MANAGEMENT OF APEC ECOTECH ACTIVITIES

Approved by Senior Officials, 18 June 1998 in Kuching, Malaysia

Guidance to Fora and Project Overseers

1. Project proposals should state which of the six priorities listed in the Manila Declaration the project aims to serve and how. Activities that do not relate to any of the priorities should be exceptional and strongly justified.
2. Fora must ensure that the ECOTECH activities they propose and undertake are “goal-oriented with explicit objectives, milestones, and performance criteria” or contribute directly to a priority-wide framework that meets these requirements.
3. Activities should be highly focused and results-oriented. When process-oriented activities (workshops, surveys, reports, etc.) are still considered useful, the project application should clearly indicate how the results will be used to achieve focused action-oriented outcomes, including how they will be factored into the forum’s collective work program (including follow-up ECOTECH work) and members’ IAPs.
4. Each forum that proposes ECOTECH activities is responsible for ensuring that they do not duplicate its own past, present or planned activities or those of other Fora. Close and collegial coordination with other APEC Fora is required to achieve this aim. Ambiguous situations may be referred to ESC for advice on how best to achieve APEC-wide coordination.
5. Fora should strive for balance among the economies that organize and oversee ECOTECH activities, and should develop projects that have the active participation of a large number of economies. Fora are reminded that funding for government officials’ travel is only available in well-justified exceptional cases.
6. Fora are encouraged to share their own experiences of managing ECOTECH activities – successful and unsuccessful – and lessons learned with ESC for dissemination to other Fora.

Guidance for BAC

7. BAC is responsible for advising SOM on budgetary matters and those relating to management coordination among APEC Fora, and therefore shares in the responsibility for implementing the Manila Declaration.
8. BAC’s review of applications for APEC-funded projects is a critical step in this process. In general, a more discerning approach is needed to minimize the kinds of problems identified by the evaluation of ECOTECH activities.
9. BAC should take into account the guidance contained herein in addition to the guidelines already established in reviewing project applications. In general,

review of an activity's results-orientation is as important as its compliance with established financial procedures.

10. The BAC representative of the economy proposing a project should be prepared to explain and defend the project in the BAC. This will enable the relevant APEC Secretariat director to provide independent advice on the project's merits and thereby remove a conflict of interest inherent in the status quo. (See paragraph 13.)

Guidance for the APEC Secretariat

11. The APEC Secretariat can provide valuable support to APEC Fora that develop and implement ECOTECH activities and to the BAC's review of their merits.
12. In its consultation with project proponents and in the advice it provides to BAC, the Secretariat should be authorized and encouraged to comment on any aspect of a project it feels competent to address. For example, it should comment on issues of duplication, results-orientation or others noted above, as well as on financial procedures.
13. It is important in discharging this function that program directors serve the APEC process as a whole, and not be influenced by the interests of any particular forum.
14. To improve coordination of ECOTECH activities, the Secretariat should also make full use of its information-sharing role and exploit the capabilities of its new project database.

Guidance for Enhancing Business/Private Sector Involvement in ECOTECH Activities

15. Fora could invite business people, especially representatives from ABAC and regional trade and industry associations, to attend future meetings for policy dialogue on business recommendations relevant to the forum's ECOTECH agenda. This could include careful review of the relevant ABAC recommendations.
16. Fora could work together with business representatives to set priorities and develop collective work plans of the Fora. They could review the justification for any elements of the plans that are not relevant to business needs and priorities.
17. Fora could seek to involve the business/private sector in all stages of the ECOTECH project cycle. This could include inviting business proposals of specific projects to realize the collective work plans; soliciting and taking into account business feedback on projects proposed by member economies; joint development of projects; inviting active business participation in project execution; seeking business representatives' evaluation of completed projects; and ensuring that such evaluations are fed back into the project development process. Once established, ABAC's Partnership for Equitable Growth could be one vehicle for facilitating such public-private collaboration.

18. Fora could invite business support – financial, in-kind or technical – for future cooperatively developed projects or those already in the pipeline that business considers relevant to its needs.
19. Each forum could consider how it could contribute to cross-cutting focused outcomes developed in collaboration with the business/private sector and involving other APEC Fora.
20. Participation of business/private sector will be in accordance with the existing Consolidated Guidelines on Non-Member Participation.

ANNEX 6

ECOTECH Components of EVSL Sectoral Initiatives

ECOTECH COMPONENTS OF EVSL SECTORAL INITIATIVES

Sectors	Measures described in the section of “ECOTECH”
1. Environmental goods and services	APEC members are encouraged to submit and support proposals for projects that will facilitate this initiative. This could also be done by drawing on existing resources and through existing channels such as the Industrial Science and Technology Working Group’s Cleaner Production Task Force and various other APEC working groups and committees.
2. Fish and fish products	<p>The following ECOTECH initiatives are proposed for funding and implementation beginning in 1999. These initiatives are intended to contribute to the goals of fisheries conservation, trade facilitation and economic growth, including adjustment to trade liberalization:</p> <ul style="list-style-type: none"> • Cooperation and technology transfer in sustainable aquaculture, capture fisheries and resource conservation and management; • Technical cooperation to design and improve cost effective fishing technologies to incorporate environmental and conservation issues; • Technical cooperation to find practical means to address the problem of destructive effects of harvesting live fish (United States is coordinating); • Capacity building in the development and implementation of inspection systems based on risk assessment and quality systems such as HACCP (while providing sufficient time frame before imposing these conditions on member economies), in order to protect human health and to facilitate access to markets and also to assist member economies in meeting SPS requirements generally; • Collaborative research on inherent properties of fish that relate to food safety, e.g., formaldehyde content in fish, etc.; • Enhanced cooperation in technical infrastructure (e.g., upgrading existing laboratories and equipment for testing of standards); • Economic and technical cooperation to explore opportunities for further investment expansion in the appropriate fisheries sub-sector and facilitate cooperation to attract foreign investment capital into those fisheries sub-sectors; • Economic and technical cooperation to adopt appropriate post-harvest technologies to improve product quality and to minimize fish wastage and discards; and • A study to eliminate barriers to early voluntary liberalization in the fisheries sector (a draft project proposal has been developed by Korea).

3. Forest Products	<p>Candidate initiatives for economic and technical cooperation could include:</p> <ul style="list-style-type: none"> (a) Economic and technical cooperation to increase communities' forestry knowledge and their ability to develop solutions to such forest issues as forest resource assessment using criteria and indicators; (b) Economic and technical cooperation to enhance local industry development in a sustainable manner through training programmes on sustainable forest practices (e.g. Prompt reforestation, protection of water quality, protection of special sites, and logger training), and more efficient use of by-products; (c) Economic and technical cooperation to enhance collaborative work on forest fire prevention/management and the development of forest fire monitoring and information systems; (d) Enhanced cooperation to facilitate a more liberalised trade in the forest product sector by: <ul style="list-style-type: none"> • Enhancing infrastructure, personnel and systems for standard conformance, and promoting exchange of information on standards, technical regulations and other provisions applied to the forest product sector in member economies by contributing positively to, and not duplicating, the work of the Sub-committee on Standards and Conformance of the APEC Committee on Trade and Investment; • Developing training programmes in areas such as paper stock collection and utilisation, recycling and waste reduction, furniture design, finishing and packaging. (NB: The foregoing list of potential subjects for training programmes is indicative only and is subject o further reflection); • Enhancing transparency applied to the forest product sector in member economies by supporting work being undertaken by the Sub-committee on Customs Procedures of the APEC Committee on Trade and Investment; • Promoting exchange of market information and provision of marketing advisory services to enhance market access for forest products through cooperation among relevant associations in member economies; • Improving the information and monitoring systems associated with harmful forest pests; • Economic and technical cooperation to enhance the quality and designs of Builders' Carpentry & Joinery as well as furniture produced; • Economic and technical cooperation to enhance market access for forest products through provision of marketing advisory services.
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<p>4. Medical equipment and instruments</p>	<p>It is a shared idea that ECOTECH contributing to liberalisation and facilitation will be actively pursued. Therefore, APEC will develop an implementation plan and time-table for this regard by drawing upon the relevant technology of medical equipment and instruments as well as the expertise of regulators, to assist APEC economies seeking to upgrade their healthcare standards and for common progress while reducing economic and technical disparities among APEC economies.</p> <p>Recognising their shared responsibilities for sustainable and equitable development in the Asia-Pacific region, APEC economies shall make voluntary contributions commensurate with their abilities to the cooperation.</p> <p>Initiatives of the cooperation (illustrative list of ECOTECH projects has been proposed by PRC for further discussion) to be finalised by Nov 1998 could include:</p> <p>(a) Technical assistance and training programmes:</p> <ul style="list-style-type: none"> • [To improve the flows of technological information and technology needed by developing economies;] • To help economies establish cooperative projects which could be likely to obtain financial assistance from TILF Fund and/or other sources. • To assist Human Resources development for developing economies. • To help regulators of developing economies to have training in regulation-related area, e.g., in labs, in notified body for issuing certificates, in regulation institutions etc. <p>(b) Educational seminars to enhance the understanding of:</p> <ul style="list-style-type: none"> • Country-specific health care delivery systems and their effect on economic resources. • The role of government regulation in medical technology sector. • Use of international standards and certificates. • How to facilitate investment and financing in the medical technology sector. • National health insurance systems and reimbursements. <p>In addition to the above, the implementation plan to be developed will support and build upon existing/on-going work programmes in other APEC fora, which contribute to the outcomes which the Medical Equipment and Instruments proposal is designed to achieve.</p>
<p>5. Telecommunications MRA</p>	<p>The 'APEC TEL MRA Implementation Support project has been approved for APEC funding by the BAC.</p>

6. Energy	<p>Specific implementation plan and timetable for ECOTECH in the Energy Sector in accordance with the work program and timetable of the Energy Working Group. Activities that APEC Energy Ministers have endorsed as a priority include:</p> <ul style="list-style-type: none"> • Extension of investment facilitation work of EWG to include natural gas pipelines, distribution infrastructure & trading systems (Recommendations to be considered by Energy Ministers in Oct 1998). • Work program to promote policy practices that facilitate investment in environmentally sound infrastructure (Oct 1998). • Development of a comprehensive linked database on mining and energy-related investment opportunities and regional legal framework within APEC member economies (1998-1999). • Energy efficiency cooperation: <ul style="list-style-type: none"> - Development of energy efficiency data and indicators (1998/99) - Consideration of pledge and review system (Oct 1998)
7. Toys	<p>Given the importance of ECOTECH, APEC economies are encouraged to develop initiatives or a programme for appropriate ECOTECH activities to facilitate implementation of liberalisation of trade in toys. As a first step, suggestions are welcome from APEC economies, based on which a programme on ECOTECH activities could be drawn up for implementation on a collective basis.</p> <p>It is envisaged that ECOTECH activities could include technical assistance and training programmes :</p> <ul style="list-style-type: none"> • To improve the flows of technological information and technology needed by developing economies. • To help economies establish cooperative projects which could be likely to obtain financial assistance from TILF and/or other sources. • To assist Human Resources development for developing economies.

<p>8. Gems and jewelry</p>	<ul style="list-style-type: none"> • Promote joint research and development, flows of technological information, educational and training programs relating to gems, precious metals and jewelry. Programs under this initiative should not duplicate work underway in other international fora and should be narrowly targeted. Suggested areas of focus where APEC could make a particular contribution are: training in testing, assaying and appraisal, and other areas where technical expertise is critical, work related to harmonizing certification and labeling standards, hallmarking, and work to enhance safe and environmentally sound production techniques such as in areas of electroplating and small-scale refinery. Other areas of assistance may be the development and implementation of training programs covering design of jewelry and various aspects of jewelry manufacturing such as stone setting, engraving, casting, surface enhancements, merchandise development and lapidary. Training programs may also be developed and implemented to assist APEC economies in seeking advanced technology and expertise, upgrading their technical standards and to reach a common level of progress while reducing economic and technical disparities among APEC economies. • In sharing the responsibilities for sustainable and equitable development in the Asia-Pacific region, APEC economies are encouraged to make voluntary contributions commensurate with their abilities to the cooperation. <p>Initiatives of cooperation, which should seek to enhance safe and environmentally sound production techniques, could include technical assistance in the following areas:</p> <ul style="list-style-type: none"> - Heat processing of ruby and blue sapphire. - Colorful gemstone processing. - Finishing process of jewelry. - Heat processing of precious metals. <ul style="list-style-type: none"> • Convene an APEC Jewelry Conference with two ‘streams’: one with a technical focus to examine latest problems and developments; the other having a policy focus to highlight trade liberalization initiatives, international cooperation and collaborative projects. <p>* Technology transfer should also be considered.</p>
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9. Chemicals	<p>APEC economies will cooperate with the private sector to provide economic and technical assistance in such activities as:</p> <ul style="list-style-type: none"> • Extending a responsibility program, such as Responsible Care or other voluntary standards, to those regional economies not currently participating in such a program with the aim of promoting the environmental, health and safety performance of the chemical industry in such activities as research and development, manufacturing, emergency response, warehousing and storage and transportation. • Strengthening the capacity of economies to address the non-tariff measures covered by the initiative, including identification of non-tariff measures, facilitation and liberalization of customs procedures and alignment of chemical standards and testing, with the aim of encouraging a consistent and effective regulatory environment for firms operating in the region. Activities might include (but not be confined to) assisting with the implementation, within national economies, of multilaterally accepted approaches on test guidelines, good laboratory practices and material safety data sheets. • Technical assistance and training programs to assist Human Resources development for developing economies, to help regulators of developing economies to have training in regulation-related areas, e.g., in labs, in notified bodies for issuing certificates, in regulation institutions. Educational seminars to enhance the understanding of economy-specific chemical production and management systems and their effect on economic resources; the role of government regulation in the chemical technology sector, use of international standards and certification, and how to facilitate investment and financing in the chemical technology sector.
10. Oilseed and oilseed product	<p>Recognizing the importance of sustainability and enhanced productivity in the oilseeds sector, and further to the 1996 Leaders Declaration on Strengthening Economic Cooperation and Development, interested economies would examine options for economic and technical cooperation within this sector. This work could build upon work programs underway in the Agriculture Technical Cooperation (ATC) Experts Group, Task Force on Food (TFF), in addition to other appropriate Fora.</p>
11. Food sector	<p>APEC member economies would :</p> <ul style="list-style-type: none"> • Undertake any necessary follow -up to work on food currently underway through the Food Task Force under the Economic Committee; • Continue as appropriate work in the Agricultural Technical Cooperation Experts' Group; and • Identify further ECOTECH measures for the food sector such as training and technical cooperation in relation to food safety and food control issues.

12. Natural and synthetic rubber	<ul style="list-style-type: none"> • Cooperate in the (pre-competitive) development of production technology between rubber producing economies in APEC on an ongoing basis. • Cooperate in the development of domestic industries in rubber producing economies through the transfer of production and manufacturing technology (in order to reduce the risk of price fluctuations).
13. Fertilizers	<p>The International Fertilizer Industry Association (IFA) and its international membership provides a wide range of ongoing economic and technical activities in the fertilizer sector which include agronomic and research programs, training, sharing of “best practices” and other activities. These long-standing ECOTECH activities are already readily accessible to APEC members and may be pursued by interested parties with an interest in the fertilizer sector.</p> <p>The IFA through its web site makes this information readily available to interested parties. For example, the IFA web site includes access to a 632-page handbook as prepared by 80 agricultural experts from 27 countries containing detailed information on current fertilizer use recommendations and practices for a wide range of world crops suitable for every major agricultural region across the globe.</p> <p>Longstanding ECOTECH assistance is also provided by a variety of fertilizer industry sector sources including that provided by the Potash & Phosphate Institute (PPI) and the Potash & Phosphate Institute of Canada (PPIC). These organizations promote agronomic research and education programmes, identifying scientifically sound applications of potash, phosphate and other inputs. The PPI/PPIC are funded by member companies who produce potash and phosphate in North America and provide information and technical services through various strategically-located international offices throughout Asia (including China and Singapore) and Latin America (including Mexico). They focus on the need to provide information on site-specific nutrient management and precision agriculture.</p>
14. Automotive	<p>Support existing and develop/implement new education and training programs to promote the sustainable economic development of the automotive sector through a common understanding of automotive issues, best practices, the development of human resources and the proliferation of trade facilitating technology.</p> <p>ECOTECH programs in the auto sector would focus on, but not be limited to, such goals as the improvement of automotive safety and emissions standards/regulations, traffic control measures and customs procedures.</p>
15. Civil aircraft	<p>Member Economies have been invited to identify individual ECOTECH proposals that might be considered by APEC experts in conjunction with the Civil Aircraft EVSL nomination. Any proposal(s) put forward for consideration will be subsequently reviewed by APEC experts and, if appropriate, referred at a later date for formal approval.</p>

EMERGENCY PREPAREDNESS IN APEC CAPACITY BUILDING AND INSTITUTIONAL STRENGTHENING

Background Paper

June 1, 1998

Introduction

Several prominent events (e.g. haze and drought in Southeast Asia, unusually damaging storms and floods in North and South America, etc.) prompted APEC Economic Leaders and Ministers to raise the question of whether APEC could usefully involve itself in improving emergency preparedness in the region. At the APEC Economic Leaders and Ministerial Meetings in Vancouver, November 1997, consensus was reached on the need to examine this issue further. This paper reviews existing APEC initiatives that contribute in one way or another to emergency preparedness, situates this in the context of what is being done through other international fora / programs, and considers possible next steps.

Background on Emergency Preparedness in the Asia Pacific Region

The Asia-Pacific area includes 52% of the earth's surface area, 59% of the world's population, and over 70% of the world's natural disasters. Vast distances, diverse cultures and languages, and inadequate telecommunication structures all seem to hamper the coordination of disaster relief efforts. The impact of natural disasters in the Asia-Pacific region since 1990 has been estimated at over 200,000 deaths and over US \$5 billion in material damage. A number of these events have had trans-boundary impacts and have required regional responses. *Accordingly, emergency preparedness is an economic and social issue which is of relevance to the entire Asia Pacific community.*

A brief scan of the Asia-Pacific "landscape" and its recent history provides us with a list of several natural / man-made disasters to which the region has been exposed:

- Weather-related phenomena and in particular El Niño (its effects are felt across the entire Asia-Pacific causing floods, hurricanes, typhoons, tornadoes, ice storms, drought, forest/brush fires, haze and air pollution, infrastructure damages, etc.).
- Earthquakes (the Pacific Rim is a high-risk area with major quakes in Kobe and San Francisco this decade).
- Tidal waves/tsunamis (population is disproportionately located in coastal zones).
- Sea-level rise and global change.
- Volcanic hazards.
- Ocean oil spills (increased marine traffic around the Pacific Ocean).
- Industrial accidents leading to widespread air/water pollution.
- Disease and epidemiological emergencies affecting humans, animals, plants.

There already exist both international institutional frameworks and a history of ad hoc cooperation to prepare for and cope with disasters in these various areas. In addition, a number

of organizations within the Asia-Pacific region are involved in the functions of emergency preparedness. While a full stock-taking would be a major task, a brief summary of some of these organizations may be found in Annex A which provides us with a glimpse of the broad range of initiatives being pursued. This initial scan demonstrates that there is considerable activity by the United Nations in coordinating international efforts for emergency preparedness and response. There are also existing bilateral programs and initiatives at the grass-roots local government and non-governmental organizations level to build local capacity and provide immediate rapid response.

APEC is itself already engaged in a number of activities that fall under the general rubric of emergency preparedness. A stock-taking of these existing activities can be found in Annex B. These activities include cooperation in the areas of emerging infectious diseases, earthquakes, oil spill preparedness, and ocean monitoring systems.

Considerations Concerning a Possible Expanded Role for APEC

Since its inception in 1989, APEC has become the primary regional vehicle for promoting open trade and economic cooperation in Asia-Pacific and has established linkages among governments, the private sector, and non-governmental groups. Moreover, with the increased profile created by the annual Economic Leaders meetings, APEC is increasingly looked to as the key forum for regional cooperation on the issues of the day facing the region.

How might APEC contribute to improving preparedness for emergencies in the region? Following the momentum from APEC 1997, APEC Ministers have an opportunity this year to lend strong political support and leadership for immediate action for a specific initiative on emergency preparedness. Ministers could perhaps identify priority areas for attention, and build synergy and linkages with other similar emergency preparedness programs in the Asia-Pacific region which have mutual areas of interest and activity, in order to coordinate programs and maximize resources.

In 1998, smoke / haze / forest fires continue to plague the Southeast Asian region, and have intensified in some areas. There are serious cross-boundary implications affecting the economy, tourism, environment, and health of the people in the region.

APEC could perhaps play a significant role to address this issue by providing an opportunity for member economies to benefit from each other in terms of knowledge, expertise, and technology (e.g. sharing of information and experiences in overcoming bush and forest fires, early warning systems, etc.). Such information exchange should take into consideration the work of existing cooperative mechanisms (e.g. the ASEAN Network, coordination by UNEP, and bilateral programs / Memorandum of Understanding).

Specifically, APEC could bring together specialists from the private, public, and non-governmental sectors who have expertise in capacity building and environmental technologies for a one-off trade exhibition and seminar which would identify specific needs unique to the region, and solutions from the private sector and other groups, to alleviate the deleterious impacts of smoke / haze / air pollution.

Considerations for a Framework of Principles for Emergency Preparedness in APEC

For a longer term initiative on emergency preparedness in APEC, Ministers could create an effective framework for emergency preparedness which could articulate some guiding principles upon which effective emergency preparedness could be based in the region. From these principles could evolve legislative and policy guidelines and proposals for more effective organizational structures to deal with the whole spectrum of emergency management in the region.

Following the articulation of the guiding principles, the evolutionary process could then be encouraged through a series of APEC-sponsored activities such as:

- Exchange of emergency preparedness information through the development of a regional emergency preparedness website on the Internet;¹
- Exchange of emergency preparedness information through existing mechanisms or possibly one-off regional seminars, workshops and symposia.

Such information exchange could be expected to contribute to capacity building through the sharing of best practices on issues to:

- Address forest fires in SE Asia, particularly seeking the views of experts / environmental groups and specialized businesses / private sector;
- Assist in shaping domestic emergency preparedness legislation and government policy in preparation for emergencies;
- Facilitate training and exercise to prepare populations to respond in appropriate and coordinated fashion;
- Encourage 'greening' of infrastructure, use of building codes and other sustainable development practices, particularly in urban areas; and
- Facilitate the discussion on exchange of non-proprietary technology in areas such as advance warning systems in weather forecasting, etc.

Even with the basic scientific understanding of *natural disasters* and 'advance warning systems' technology available, all member economies are faced with having to deal with devastating effects of natural disasters (storms, floods, droughts, earthquakes, etc.) An emergency preparedness capacity building initiative in APEC can facilitate the generic exchange

¹ Although Annex A does include a long list a Internet websites for emergency preparedness, there may be value in establishing a separate APEC website on emergency preparedness. In today's cyber world, ownership of a web site carries with it a certain cachet of expertise and interest. The existence of an APEC site could contribute to APEC assuming more of a regional "sponsorship" role for emergency management. Recognizable political interest in emergency management gives a process impetus, the basis for developing legislation and policies, and sometimes even a source of funding. Without such leadership, emergency management in the region will likely remain a patchwork of local/domestic programs with little basis of common principles and ideals and without a political imperative for cross-border co-operation. Such co-operation in the field of emergency management could also be an effective contributor to enhanced cross-border relations because of its shared humanitarian benefits. Elements of an APEC website could include economy specific information, information on relevant APEC activities, existing emergency preparedness mechanisms / resources; updates of current situation to ensure accurate information is posted to the public, and links to other related sites which address similar issues. An APEC Emergency Preparedness resource website could possibly be linked to the APEC Secretariat and maintained by Program Directors.

of information to effectively prepare for such events and share knowledge on how to alleviate the effects – a particularly challenging task given the wide variance in geographic and economic conditions of the APEC region.

Economic cooperation also includes mutual interest and responsibilities in addressing *industrial accidents* which pollute the land, air, water, and health of people. An APEC capacity building initiative for emergency preparedness could encourage further *cooperation with the private sector* and local communities to preempt and/or prepare for such events (particularly in the area of cleaner production).

Finally, an APEC capacity building initiative for emergency preparedness would encourage more partnerships with existing programs (international organizations, subregional initiatives, bilateral projects) to address areas of mutual interest and maximize resources to more effectively meet the needs of the people in the region. In this context, APEC may need to consider how we can coordinate and share the responsibility with the ASEAN Regional Forum, United Nations, and other international bodies in this field of work.

A chart in Annex C suggests several possibilities for further consideration as APEC initiatives on emergency preparedness within the existing structure. In preparing the chart, attention was placed on themes related to harnessing technologies, developing human resources, promoting research and analysis and promoting trade. Such a listing implies a potential for a broad range of substantial initiatives APEC could pursue. However, it would not be realistic nor practical to begin immediate implementation of all the suggestions in the chart. The establishment of a meaningful role for APEC in the area of emergency preparedness along these lines would also suggest a review of existing mechanisms and mandates of APEC fora.

The APEC niche can come from its promulgation of a set of principles, building on the foundation of existing work, and identifying ways where member economies can draw out the relevant ‘lessons learned’ or ‘advance warning systems’ available, and then apply this information to “cushion” the effects of future emergencies in the region.

Next steps for consideration

- Ministers consider elements of a possible “APEC Framework of Principles for Emergency Preparedness” in Annex D for discussion in November 1998.
- Senior Officials task all APEC fora to identify resources for initiatives and projects they can undertake, including the establishment of an APEC website on emergency preparedness. These initiatives should consider the use of existing mechanisms as appropriate, and work in cooperation with other international / regional / bilateral initiatives.
- Ministers consider the proposal for an APEC Trade Exhibition and Seminar (in partnership with the private and non-governmental sectors) for information sharing and capacity building sessions, and to identify needs and solutions (/ technology) to alleviate the impacts of smoke, haze, air pollution, and forest fires.

ANNEX 7

SOM Report to Ministers on Emergency Preparedness

REPORT TO MINISTERS

Emergency Preparedness in APEC Capacity Building and Institutional Strengthening

The Asia-Pacific area includes 52% of the earth's surface area, 59% of the world's population, and over 70% of the world's natural disasters. Vast distances, diverse cultures and languages, and inadequate telecommunication structures all hamper the coordination of disaster relief efforts.

Since 1990, the impact of natural disasters in the Asia-Pacific region has been estimated at over 200,000 deaths and over US \$5 billion in material damage. These figures do not include impacts of industrial accidents which also have serious trans-boundary implications on the economy, environment, and the health of people in the region.

In 1997, several prominent events (e.g. haze and drought in southeast Asia, unusually damaging storms and floods in North and South America, etc.) prompted APEC Economic Leaders and Ministers to raise the question of whether APEC could usefully involve itself in improving emergency preparedness in the region. In 1998, smoke and haze continue to plague the southeast Asian region, and have intensified in some areas. There are serious cross-boundary implications affecting the economy, tourism, environment, and health of the people in the region.

With the increased profile created by the annual Leaders meetings, APEC is increasingly looked to as the key forum for regional cooperation on the issues of the day facing the region. Moreover, as the primary regional vehicle for promoting open trade and economic cooperation in Asia-Pacific, APEC has established the necessary linkages among governments, the private sector, and non-governmental expert groups to address these issues.

APEC fora are already engaged in a number of emergency preparedness activities on issues such as emerging infectious diseases, earthquakes, and oil spill preparedness. APEC has proven itself to be flexible and pragmatic by recognizing the substantial work of regional organizations such as the Asian Disaster Preparedness Center (ADPC), the ASEAN Regional Forum (ARF), the Pacific Economic Cooperation Council (PECC), and the Asian Development Bank (ADB); and also the work of international organizations such as the Office for Coordination of Humanitarian Affairs (OCHA), the Red Cross, and the World Meteorological Organization (WMO). APEC should continue to build upon existing emergency preparedness initiatives and mechanisms, and to explore cooperation with these organizations in areas of mutual interest.

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Taking into account APEC's capabilities, its existing work on emergency preparedness, and the importance of identifying where it can add value to on-going activities in other fora, Senior Officials recommend that Ministers make a commitment to further develop the emergency preparedness capacity of APEC member economies. This could be done through specific initiatives in existing APEC fora, or through other appropriate mechanisms including in cooperation with international institutions, subregional organizations, and bilateral programs in the region. The objectives would be to: (a) enable economies to take preventive measures to avoid emergency situations, handle emergency situations, and mitigate the effect of disasters through strengthening of economic and technical cooperation; (b) promote expertise, technology, and trade and goods and services related to emergency preparedness; and (c) develop partnerships between the different stakeholders (public / private / non-governmental expert sectors) on these issues. In particular, Senior Officials recommend that Ministers:

- Create a framework for longer-term capacity building cooperation for emergency preparedness in APEC which could focus on the use of science and technology and effective human resource development, and to also include a list of voluntary guiding principles;
- Direct all APEC fora to explore emergency preparedness technical cooperation initiatives either within the APEC structure, or in partnership with other international / regional initiatives of a similar nature through information sharing exercises and the establishment of an Internet website;
- Consider the possibility of bringing together specialists from the private, public, academia and non-governmental sectors who have expertise in capacity building and environmental technologies for a one-off trade exhibition and seminar to identify needs and solutions unique to the APEC region for alleviating the deleterious impacts of smoke / haze / forest fires. *(Such an event could be a "stand-alone" or a small part of another trade exhibition already being planned. Given its theme, such an event should also be coordinated with other international efforts to address the haze in southeast Asia, such as the work of the Association of Southeast Asian Nations (ASEAN), the Office for Coordination of Humanitarian Assistance (OCHA), and the United Nations Environment Program (UNEP)).*

JUNE 1998

ANNEX 8

Action Programme on Skills Development

ACTION PROGRAMME ON SKILLS DEVELOPMENT

BACKGROUND

1. Human resources development is one of the key factors to ensure sustained economic growth. Recognising this, APEC Economic Leaders in Seattle envisioned building a community where improved education and training would provide the skills for improving the well-being of its people.
2. In 1994, Ministers adopted the Human Resources Development Framework which reaffirmed the principles of the Seoul Declaration, namely:
 - Affirm that issues of human resources development and the development of economic growth, employment, and quality of life should be addressed in an integrated and coordinated manner;
 - Affirm the value of, and need for, concerted development of human resources by member economies, the region's business/private sector enterprises, and research, education and training institutions; and
 - Affirm the important role of the public sector in giving guidance to human resources development in both the public and business/private sector.
3. The objective of the Human Resources Development Framework for APEC is to promote the well-being of all people in the region through economic growth and development. This is to be achieved by advancing the design, development, and delivery of practical and appropriate education and training for current and future managers, entrepreneurs, and workers in both the public and private sectors to contribute to economic growth, trade and development in APEC.
4. Priorities identified in the HRD Framework included the:
 - Provision of basic education for all;
 - Analysis of regional labour market;
 - Increasing the supply and enhancing the quality of managers, entrepreneurs and educators/trainers in the areas of the economy central to fostering economic growth and development;
 - Reducing skills deficiencies and unemployment;
 - Increasing the quality of curricula, teaching methods, and instructional materials;
 - Increasing the opportunities in the region for people who seeks to gain skills; and
 - Preparing organisations and individuals to remain productive in the face of rapid economic and technological changes in member economies, the Asia Pacific region and the global economy.
5. The meeting of APEC Human Resources Development Ministers 1997 had emphasised, amongst others, the importance of skills development as one of the instruments for adjusting to the changes in the labour market and economic environment. The strive for sustained growth demands an emphasis on productivity. In facing this challenge, APEC economies require skilled workforce so that wage

increase does not outstrip labour productivity and in the long term, to enable the restructuring of industry towards higher technological capability and value-added. Improved skills level will also enhance the absorptive capacity for technological improvements, enabling member economies to better meet the challenges of a rapidly evolving technological age.

6. In the face of the current economic crisis, APEC has agreed that there is a need to address the social impact of the crisis. In this respect, APEC can demonstrate responsiveness through short-to long-term measures. By incorporating retraining of displaced workers into APEC skills development activities, we can contribute to alleviating the social impact on those affected as well as strengthening the spirit of community in APEC.

OBJECTIVE

7. As APEC progresses towards a decade of regional cooperation, efforts towards achieving the vision of stability, security and prosperity for our peoples will be further strengthened through an APEC action programme on skills development. The objective of the programme is to contribute towards sustainable growth and equitable development while reducing economic disparities and improving the social well-being of the people, through skills upgrading/improvement.
8. The action programme will also seek to encourage greater participation of the private/business sector in skills development in APEC. The programme will identify projects which can be conducted on an on-going basis taking into account the principles of mutual respect and equality, mutual benefit and assistance, constructive and genuine partnership and consensus building. APEC economies will participate in the implementation of the programme on voluntary basis.

STRATEGIC FOCUS

9. In line with the call for ECOTECH outcomes which are more focused, the action programme will bring to focus and encourage **concerted efforts** in activities that contribute directly towards a more rapid building up of the skills base of the region's workforce in four specific areas:
 - ***Upgrading the industrial skills base:*** Upgrading the skills base across APEC economies will contribute towards greater efficiency, enhanced technology flow and increased productivity, resulting in more efficient and effective utilisation of resources;
 - ***Spawning new entrepreneurs:*** Small and medium enterprises form the backbone of our economies. A thriving SME sector is crucial for the successful adjustment to the rapidly changing business environment. As such entrepreneurial skills should be encouraged and their growth promoted;
 - ***Technology skills for the new millennium:*** The workforce must be equipped with new skills to match the rapid pace of transformation from an industrial economy to an economy that is characterised by greater use of new technologies

such as information technology, biotechnology and composite/ advanced materials; and

- ***Strengthening institutional infrastructure to facilitate trade and investment liberalisation:*** The promotion of trade and investment liberalisation must be supported by corresponding efforts to strengthen the institutional capacity required to enable effective response to market demands. This includes the capacity for more effective implementation of facilitation and supervisory measures. Inadequate capacity for regulatory supervision has been attributed as one of the factors leading to the current financial turmoil.

POSSIBLE APPROACHES

10. APEC has undertaken/is undertaking numerous projects related to skills development. These include:
 - Exemplary Models of Skills Upgrading in APEC
 - APEC Industrial and Technical Training Programme of HRD
 - Telecom Training
 - Enterprise Development Programme
 - Business Volunteer Programme
 - Internet E-Commerce Training on Java-based technology
 - Japan-APEC Partnership for Education and Training
 - Multimedia Distance Learning in Asia Pacific Region
 - Training towards improved seafood inspection regimes
 - Training for bank and security industry supervisors/regulators
 - ABAC's PEG Training for E-Commerce
11. Many of these projects are one-off training projects or are designed for implementation over a limited period. APEC could focus on accelerating/intensifying the implementation of these projects to achieve a concerted push to upgrade the skills levels of its work force. To intensify skills development efforts, APEC should encourage implementation of the projects on an on-going basis. APEC projects that could contribute towards focused outcomes on skills development through concerted APEC efforts are listed in **Annex A. Economies are encouraged to undertake APEC action indicated.**
12. Currently, some projects are being implemented on an on-going basis by sponsoring economies e.g. the APEC Vocational Training programme. These are limited in number. Such efforts should be intensified through voluntary sponsorship/joint sponsorship from APEC economies. Contributions from APEC economies could be through the provision of funds, expertise and/or facilities. The Partners for Progress (PPF) approach could be adopted.
13. Funding of projects on a sustained basis is a critical issue. Economies could seek the participation of business, where possible, to undertake in these projects. As principal beneficiaries of TILF activities, the private/business sector should be encouraged to contribute to APEC's longer term capacity building measures such as skills development. For example, business could contribute to the intensification of skills

development efforts by putting in place an APEC internship programme for graduating students. The Japan-APEC partnership for Education and Training could be expanded to become APEC-BUSINESS Partnership for Education and Training. This can be achieved through the involvement of the business sector to undertake similar efforts in other APEC economies. Businesses with interests spread across the region are well-placed to implement this projects.

PUBLIC-BUSINESS SMART-PARTNERSHIP IN SKILLS DEVELOPMENT

14. Another approach is to encourage public-business 'smart partnership' in skills development. Currently, the provision of technical skills is frequently undertaken by the public sector which faces increasing constraints in terms of funds, expertise and equipment. The result is a mismatch between training and the real work environment. A more effective approach is to encourage a market-driven approach to skills training emphasising greater business participation. While the public sector is able to provide training for more generic skills, business involvement is necessary to ensure that the output matches market demand.
15. APEC economies have adopted several successful approaches/models to encourage greater private/ business involvement in skills development. It is proposed that APEC conduct a seminar to enable APEC economies to share their experience and to explore opportunity to value-add to current efforts.
16. Malaysia will share its experience towards greater business participation in skills development through the 'smart partnership' between public-business as demonstrated by the Penang Skills Development Centre (PSDC). Under this model, the skills development centre is established with the initial funding from the public sector while the business sector contributes leadership in the management of the centre, teaching staff and equipment. PSDC operates as a non-profit self-funded organisation.

NETWORKING OF SKILLS DEVELOPMENT CENTRES

17. With several models of public-business partnership in skills development within APEC economies, it is proposed that a network be established to enable mutual support and sharing of experience and resources. An APEC network of skills centres will enable cooperation resulting in benefits in areas such as in programme development, exchange of training modules/instructors and sourcing of instructors/equipment. This will also complement other APEC initiatives on human resource development such as mutual recognition of skills training qualification.

CONCLUSION

18. The Action Programme on Skills Development by drawing out sustained efforts on skills development with direct impact on the beneficiaries can contribute toward achieving focused and concrete outcomes.

APEC ACTION PROGRAMME ON SKILLS DEVELOPMENT

No.	Projects	APEC Action
	<u>Upgrading Industrial Skills Base</u>	
1.	Japan-APEC Partnership for Education and Training (HRD WG) (Existing project)	This project facilitate the employment of foreign students in Japan who come from APEC region and want on-the-job training for 2-3 year after graduating from colleges or other equivalent educational institutions from Japan. Between 1993 - 1997, the number of students employed was 91. <u>Other economies to consider having similar projects.</u>
2.	Business Volunteer Program (BVP) (HRD WG) (Existing project)	Promote HRD to create business, legal and other environments favourable to trade and investment by mutual expert dispatch among private sector entities in the APEC region. BVC coordinating office was established in Thailand in 1997. So far have received three (3) requests for experts. <u>Other economies to consider intensifying cooperation with APEC BVP Coordinating Office in Thailand.</u>
3.	Vocational Training Project in Cooperation with Enterprises (HRD-WG)(Existing project)	To contribute to the community of the Asia pacific region by cooperating with local firms and business groups in providing vocational training to the people who do not work for those firms in the region. 595 trainees were trained in 1997. The project is undertaken by Japan. <u>Other economies to consider similar projects.</u>
4.	APEC Industrial and Technical Training Program of Human Resources Development (HRD WG)(Existing Project)	To expand the supply capacity of technical and skilled manpower of the vocational training institutes in the APEC members, especially in developing members; to support the training of technical and skilled manpower of the APEC members; particularly of the developing economies; to promote technology transfer and exchange between APEC members; to promote the globalization of APEC member industries by resolving the shortage of skilled manpower, which is an enormous obstacles towards inducing greater flows of foreign investment opportunities; to obtain full support and promote participation in the activities of APEC members through active implementation of vocational training program which would benefit all APEC members. Self-funded project by Korea. Total of 87 vocational training instructors trained in Seoul Institute for Vocational Training in Advanced Technology since 1997. <u>Other economies are encouraged to consider similar projects.</u>

No.	Projects	APEC Action
5.	Seminar on Best Practices for Public-Business Sector Partnership in Skills Development. (New project)	New project proposed by Malaysia. To share experience on best-practices in encouraging public-business partnership in skills training. <u>Economies are encourage to participate</u>
6.	Networking of 'best practice' Public-Business Partnership skills Development Centres (New Project)	Following the seminar on best practices for public-business sector partnership in skills development <u>APEC economies are encouraged to participate in establishing a network of skills development centres</u> . This network can be coordinated by the Penang Skills Development Centre.
7.	APEC White-Collar Training Programme on Production and Material Handling Management under the Total Management System (HRD WG) (Existing Project)	The project aims to provide middle managers of APEC economies with systematic training on production and material handling management as practised in Japan. The programme included company-based training, lectures and workshops on corporate management (financial and personnel management inclusive), total quality management, total preventive maintenance, just-in-time production, environment management and occupational safety and health. The first year programme was held in November-December 1997 for 6 weeks with 16 participants from 9 economies. The second-year programme is planned to be implemented in October 1998. The Nikkelren International Cooperation Center (NICC) is in the process of recruiting participants. This project will be continued on a yearly basis as on on-going activity. <u>Other economies are encouraged to consider similar projects.</u>

No.	Projects	APEC Action
	Spawning New Entrepreneurs	
8.	APEC Centre for Entrepreneurship Development for SMEs (PLG SME) (Existing project)	Objective of centre is to foster and promote SME Entrepreneurship and training human resources among SMEs in the APEC region. Project started by Indonesia in 1988. <u>Other economies to consider similar centre to enable networking.</u>
9.	Enterprise Development Program (PLG SME) (Existing project)	Training of Trainers in Enterprise Development. Train a group of about 25 extension and development workers to become trainers in enterprise development. Project is undertaken by ACTETSME.
	<u>Technology Skills for the New Millennium</u>	
10.	Internet and Electronic Commerce Training based on Java Technology (HRD WG) (Existing project)	To develop and disseminate training modules accessible to APEC members for the upgrading of electronic skills in business through the Internet and websites. To conduct short term course on designing Internet and websites based on Java technology including acquiring the knowledge and understanding of security and relevant legal issues such as intellectual property rights. To identify gaps in training in advanced technology training by comparing and contrasting electronic commerce policies and practices across selected APEC economies. <u>To disseminate the training modules, knowledge, and experience gained in these project and make recommendations to Senior Officials on the future training needs in electronic commerce in the region.</u> Project is undertaken by Australia with funding from Australia Aid Agency.
11.	Telecommunication Training Pilot Project (TEL WG)	A 'train the trainer' course on network development. Design and delivery of a one-week course on network management (1999) which will be replicated in other APEC economies in succeeding years <u>by persons who have received the training. Project is led by the US.</u>

No.	Projects	APEC Action
12.	PEG IT Education Initiative (ABAC) (New proposal)	An initiative by ABAC to provide scholarship/loans for IT education. <u>Economies to consider encouraging participation from their business sector.</u>
13.	Electronic Commerce Seminar (TEL WG) (Existing project)	To help SMEs to understand the benefits of doing business electronically. Project is undertaken in collaboration with AOEMA. <u>Encourage continuation of the project.</u>
<u>Strengthening Institutional Infrastructure</u>		
14.	Strengthen financial market supervision (Finance Ministers) (Approved in May 1998)	An action plan to raise the quality of domestic training programmes of APEC banking supervisors and securities regulators and enhance international cooperation in training. <u>The Asian Development Bank has day -to-day responsibility for implementing the plan.</u>
15.	Annual APEC Investment/Exchange of Experience Programme (IEG) (New proposal)	An annual programme to share expertise and advice on development of industrial estates, free trade zones, etc.

ANNEX 9

Next Step on APEC Infrastructure 1998 Initiative

NEXT STEP ON APEC INFRASTRUCTURE 1998 INITIATIVE

“Progress Report on the APEC Infrastructure Initiatives launched at Vancouver”

This note reports on progress made within APEC to follow up on the various initiatives under the general rubric of APEC Infrastructure '97 that were endorsed by Ministers and Leaders at their meetings in Vancouver, November 1997.

Context

Since Ministers and Leaders met in Vancouver, the regional economic and financial crisis has deepened in terms of its impacts on the most effected economies and spread through ripple effects to impact on the global economy in general.

In the initial phases of the crisis, the fiscal and monetary restraint implemented to stabilize currency and equity markets sharply curtailed planned infrastructure development in the region, both through cutbacks in government expenditures and the drying up of liquidity in financial capital markets. However, more recently, infrastructure investment is again being looked to as a means to re-ignite economic growth.

From an economic development perspective, the need for modern economic infrastructure has not lessened and in fact has grown. This reflects the demands of a rapidly evolving information age, the tidal wave of urbanization that is building in the region, and the damaging impact of the crisis in delaying infrastructure that was urgently required in the developing economies of the region to address their pressing economic, environmental and social goals.

The crisis has also emphasized the need to mobilize domestic savings in developing economies to support infrastructure development and, at least temporarily, has also placed a greater requirement on the public sector into the short-term breach left by the withdrawal of private capital. However, in the long run, private sector involvement remains essential.

Accordingly, the changed economic and financial circumstances have not vitiated the need for APEC to press ahead with its infrastructure facilitation agenda, and indeed have made this agenda all the more urgent, not least as a sign of confidence in the resumption of growth in the region.

Background : Overview of the 1997 APEC Infrastructure Initiative

The Vancouver Framework to Enhance Public Private Partnership for Infrastructure Development in APEC: Leaders endorsed 14 commitments, grouped under 4 headings (Core Conditions, Financing and Investment, Improving Public Sector Capacities, and Information and Consultation), aimed at facilitating private sector investment in infrastructure by improving economic framework policies and stimulating the adoption of state of the art techniques in infrastructure planning, design, development and management.

Sectoral Outcomes

- (i) *To make the Asia Pacific Information Society a reality by the year 2001:* This set of initiatives aimed to accelerate the development of the Asia Pacific Information Infrastructure through various measures under both the trade and investment liberalization and facilitation (TILF) agenda and all six priority areas of the economic and technical cooperation (ECOTECH) agenda.
- (ii) *Creating an Integrated and Intelligent Asia Pacific Transportation System:* This set of initiatives aimed to achieve greater efficiencies from existing infrastructure, to promote alternatives to public sector supply of new infrastructure, to foster a more competitive operating environment, and to address the management, operational and technological demands of a safe, integrated, and efficient transportation system.
- (iii) *Economically Viable and Environmentally Sustainable Energy Infrastructure:* This set of initiatives aimed to address the region's power needs in an environmentally sustainable fashion, by (a) facilitation private sector investment in power infrastructure; and (b) reducing environmental impacts of energy generation and use.
- (iv) *Infrastructure for Sustainable Cities:* This set of initiatives aimed to achieve measurable improvement in the sustainability of urban centres in the APEC region, reflecting the role that appropriate infrastructure plays in this regard.
- (v) *Infrastructure to support rural integration and diversification:* This initiative launched consideration of possible ways to address deficiencies in rural infrastructure in the region in order to support viable economic development in rural areas, which in turn would slow the flow of population from rural areas to under-serviced urban areas and help build bigger and wealthier food systems to meet the region's food requirements.

APEC Network of Infrastructure Facilitation Centres: This initiative launched consideration of a possible Network of Infrastructure Facilitation Centres to support APEC's infrastructure initiatives, in particular by facilitating the application of the state of art practices endorsed in the Vancouver Framework.

Progress in 1998

The Vancouver Framework to Enhance Public Private Partnership for Infrastructure Development in APEC

Responsibility for implementation of the Vancouver Framework commitments is shared by several APEC fora. Prime responsibility for the initiatives under the headings of *Core Conditions* and *Financing and Investment* falls to the APEC Finance Ministers process, while prime responsibility for the cross-cutting aspects of the initiatives under the headings of *Improving Public Sector Capacities*, and *Information and Consultation* falls to the Economic Committee's Infrastructure Workshop. Implementation of sector-specific aspects of these initiatives falls, of course, to the relevant APEC Working Group or other fora.

(i) *To establish and maintain a sound macroeconomic environment*

Finance Ministers, at their meeting in Kananaski, Canada, May 23-24, 1998:

- Reviewed the macroeconomic situation in the region, including the causes and consequences of the Asian economic and financial crisis;
- Echoed APEC Economic Leaders call in Vancouver regarding the Manila Framework for Enhanced Asian Regional Co-operation to Promote Financial Stability, and welcomed developments that support that call, including the formation of regional economic surveillance mechanism;
- Endorsed the approach of the IMF, the World Bank and the Asian Development Bank in addressing the financial stability in Asia, and called for the early ratification of the increase of quotas and of the New Arrangements to Borrow to ensure that the IMF has adequate resources to respond to any spread of intensification of the crisis, as well as to handle future crises.

(ii) *To establish stable and transparent legal frameworks and regulatory systems to provide a high level of investor protection*

APEC Finance Ministers welcomed and endorsed the Basic Core Principles on Effective Banking Supervision and urged the International Conference of Banking Supervisors to endorse these. Ministers also endorsed the report on Financial Stability in Emerging Market Economies prepared by the G-10 in collaboration with a number of emerging market economies. Ministers also noted the efforts of the Asian Development Bank in evolving “Sound Practices to Facilitate Development of the Financial Sectors in the APEC Region” that reflect the lessons of the financial stability in Asia, and expressed their interest in seeing the principles for supervision of securities markets being developed by IOSCO.

Ministers also strongly endorsed the idea of enhancing surveillance of financial sector supervisory regimes and urged the international financial institutions and the international regulatory community to work together to study ways in which this can be accomplished, including options for better co-ordination or enhanced forms of collaboration, such as a peer review process, to strengthen or complement existing global or regional arrangements.

(iii) *To adopt sectoral policies that promote, where applicable, competitive and efficient provision of infrastructure services.*

No specific actions were to be taken in this regard at the APEC level, the voluntary principles agreed by APEC Finance Ministers called for member economies, where applicable, to take the necessary steps.

(iv) *To increase the availability of long-term capital required for infrastructure investments by accelerating efforts to broaden and deepen domestic financial and capital markets.*

At Kananaskis, APEC Finance Ministers welcomed the progress achieved so far on their initiative for Developing and Strengthening Financial Markets, and agreed to continue

this work over the next year focusing on three priority areas: capital market development, capital account liberalization, and strengthening international financial systems.

In respect of capital market development, Ministers:

- Examined ways to strengthen clearing and settlement infrastructure within APEC member economies and received a final report on this initiative.
- Received a report on the regional forum that was held in Cancun, Mexico, February 4-20 1998 on the issue of pension fund reform and the role that pension funds can play in mobilizing private savings and broadening the demand base for long-term debt instruments; Ministers also welcomed Chile's offer to host a second forum, to be co-ordinated by Chile and Mexico, which will focus on policy issues in this area;
- Endorsed recommendations supporting the development of asset-backed securitization, including a voluntary action plan which individual economies can implement to support the development of securitization in their markets;
- Welcomed the protocol agreement signed by fifteen Export Financing Institutions and Export Credit Agencies from across the region which provides a framework for co-operation among them to facilitate private financing of infrastructure;
- Recognized that the recent period of financial instability has significantly changed the circumstances for financing infrastructure projects and called on the Asian Development Bank to analyze the impact of the crisis on infrastructure development in the region and to explore strategies to promote private financing for infrastructure over the medium term and to report back to Ministers at their next meeting.
- Received a progress report on the collaborative initiative to support the development of credit rating agencies and strengthening of information disclosure standards; encourage the development of independent rating agencies according to international best practices; examined the current experiences which credit rating agencies in the region to determine how well they are fulfilling their key role in promoting the flow of timely and accurate information across capital markets; encouraged steps to strengthen information disclosure standards in the region consistent with international best practices; and looked forward to further results next year; and
- Agreed to begin work on a new collaborative initiative on the development of domestic bond markets in the region, which will be co-ordinated by Hong Kong, China, to build on the contributions on this subject from the APEC Financiers Group.

In respect of capital account liberalization, Ministers:

- Agreed to continue to implement policies to enable economies to benefit from and minimize the risks of capital account liberalization and reaffirmed their commitment to continue working on designing a Voluntary Action Plan for Supporting the Freer and Stable Flow of Capital;
- Requested Finance Deputies to work with the IMF and the World Bank to compare the experiences of economies in managing the capital market liberalization process, including the results from the use of macro-prudential measures, in order to study how to promote freer flows of capital while maintaining macroeconomic and financial stability, and asked for a report at their next meeting; and
- Asked Finance Deputies to work with the IMF to examine how to monitor effectively capital flows, including short-term capital flows, with a view to providing information to the market and promoting stability.

In respect of strengthening financial systems, Ministers

- Endorsed two action plans for strengthening training of bank supervisors and securities regulator in APEC economies, called for their timely and comprehensive implementation, and thanked the Asian Development Bank for its assistance in developing these plans and for its commitment, together with that of the South East Asian Central Banks Research and Training Centre (SEACEN) and the Asia-Pacific Regional Committee of IOSCO, to assist in their implementation.
- Welcomed other training initiatives launched within the APEC region, including the joint initiative of Canada and the World Bank to establish the Toronto International Leadership Centre for Financial Sector Supervision, the opening of the ADB Institute in Tokyo, the IMF-Singapore Regional Training Institute (STI); and bilateral training assistance provided by individual economies;
- Welcomed the initiative of the APEC Financiers Group to create a private-sector training and education program for financiers across the APEC region and called on Finance Deputies to work actively with the financiers on this initiative; and
- Agreed to launch an initiative to be co-ordinated by Malaysia in conjunction with the World Bank and the Asian Development bank, to examine ways of strengthening corporate governance in the APEC region and, as part of this initiative, welcomed Australia's offer to host a seminar to bring together senior business people from APEC member economies to identify priorities for reform in this area.

(v) *To encourage MFIs to catalyze and support member economies' own efforts in infrastructure development.*

APEC Finance Ministers endorsed the work of the World Bank and the Asian Development Bank in supporting Asian economies affected by the economic and financial crisis to reform and strengthen their financial systems and promote sound corporate restructuring.

(vi) *To promote the development of asset-backed securities in APEC economies which as noted by ABAC, will enhance private investment in large-scale infrastructure projects.*

An international conference on securitization and a workshop for regulators from within the APEC region were held in Kuala Lumpur, Malaysia in December 1997 to address the many structural, regulatory, fiscal and other obstacles that continue to inhibit the further development of securitization as a financial and capital market instrument. A survey on the status of securitization activities in APEC member economies was carried out to gather information on these activities in APEC economies and to identify pertinent developmental issues and regulatory concerns. On the basis of the findings, Ministers encouraged the development of securitization activities through (i) the continued removal of impediments to market development; (ii) enhanced training and technical assistance to facilitate the removal of impediments to market development; and (iii) the continued sharing of expertise among APEC member economies. Ministers adopted a voluntary action plan to assist individual member economies that are interested in accelerating the development of securitization activities in their own markets.

(vii) *Mutual cooperation Protocol signed by participating ECAs and EFIs to enhance the attractiveness of infrastructure investment for private sector participants*

Pursuant to the mutual cooperation protocol, APEC EFIs met in Vancouver on 25 March 1998 to discuss their role and to compare their actions in supporting infrastructure development in the region and trade amongst APEC member economies in the wake of the Asian economic and financial crisis.

- (viii) *To promote the application of state of the art practices in each phase of the infrastructure planning, development, management, use and retirement cycle.*

The Economic Committee's Infrastructure Workshop, at its meeting in Taipei, May 20-22, on the margins of the 1998 APEC Public-Private Sector Dialogue on Infrastructure, agreed that each economy would canvass centres of excellence in various areas of infrastructure design, development or management as regards their interest in developing detailed proposals for implementation of these aspects of the Vancouver Framework; proposals coming from interested centres of excellence in member economies would be reviewed at the next meeting of the Infrastructure Workshop, prior to EC II on the margins of SOM II in September, 1998.

- (ix) *To develop domestic capacities by ensuring that public officials involved in Infrastructure development in agencies dealing with private investors have appropriate expertise and an understanding of commercial approaches to infrastructure investment, and by promoting technological cooperation, including through public-private partnerships.*

Following the Infrastructure Workshop meeting in Taipei, Australia circulated a paper outlining its experience with training in infrastructure-related matters to Workshop members; it was noted that the Australian experience could serve as the basis for considering next steps in this area.

- (x) *To promote the application of state of the art practice in risk mitigation and management, including by promoting the most effective use of private and public sector capacities.*

Risk mitigation and management issues are amongst the issues addressed in the initiative to canvass the interest of centres of excellence in various areas of infrastructure development; proposals for implementation of these aspects of the Vancouver Framework would be reviewed at the next meeting of the Infrastructure Workshop, prior to EC II on the margins of SOM III in September, 1998.

- (xi) *To establish transparent, accountable procedures during bidding and selection processes and to encourage the use of international competitive tendering.*

Bidding and selection processes are amongst the issues addressed in the initiative to canvass the interests of centres of excellence in various areas of infrastructure development; proposals for implementation of these aspects of the Vancouver Framework would be reviewed at the next meeting of the Infrastructure Workshop, prior to EC II on the margins of SOM III in September, 1998.

- (xii) *To ensure that the Infrastructure supports the achievement of economic, environmental and social goals by incorporating sustainable and equitable*

development principles in the design and operation of infrastructure facilitates, including full reflection of environmental costs.

These issues were amongst those addressed in the initiative to canvass the interest of centres of excellence in various areas of infrastructure development; proposals for implementation of these aspects of the Vancouver Framework would be reviewed at the next meeting of the Infrastructure Workshop, prior to EC II on the margins of SOM III in September 1998.

(xiii) To improve the availability of information to support participation in infrastructure investment by the widest possible range of companies, including by SMEs, both on a solicited and unsolicited basis.

At the Infrastructure Workshop meeting in Taipei, Chinese Taipei undertook to carry out a performance audit on its information data base ID**2 with the intent of reviewing its business design to make it more useful to potential users in the private sector, academicians and governments. The review would also reassess the method of maintaining the database so as to make it “sustainable” in the sense that it could be carried forward without undue burdens on the facilitation economy. Chinese Taipei and Japan agreed to continue to consult on how best to integrate the two to maximize efficiency.

(xiv) To consult effectively to ensure that planned infrastructure meets our communities’ needs and to promote investors’ appreciation of and response to community concerns.

In 1998 Public Business/Private Sector Dialogue on Information that was held in Taipei, Chinese Taipei, May 20-22 1998, under the auspices of the APEC Economic Committee and its Infrastructure Workshop brought together over 160 officials, businesspersons and experts in infrastructure related issues, including over 60 international participants, from 14 APEC member economies, to consult on the following issues in particular: Climate for Private Investment; Public/Private Partnership; Infrastructure Partnership for Developing Sustainable Cities and the Rural Economy; and Networks to Facilitate Infrastructure. The involvement of experts from the private sector, including those active in sustainable development, contributed to effective consultation within APEC on the role of infrastructure in meeting communities’ needs and helped to make investors’ aware of community concerns.

Sectoral Outcomes

Consultations on the further development and implementation of the sectoral outcomes on the information highway, integrated transportation systems, and power sector proposals were to be conducted by the Telecommunications Working Group, the Transportation Working Group and the Energy Working Group respectively. Consultations on infrastructure to support sustainable urbanization, and infrastructure for rural integration and diversification were to be coordinated by the Economic Committees’ Infrastructure Workshop.

(i) To make the Asia Pacific Information Society a reality by the year 2001

The Telecommunications Working Group (the TEL WG) has made good progress in advancing the various elements of this initiative that fell within its mandate. In addition, APEC Trade Ministers have supported multilateral efforts for liberalization of trade in information society in the region. As well, the Economic Committee has provided analytical background and support for this exercise in its study, *Towards an Information Society: Developments in APEC*. The following reports on how specific commitments within this initiative (in italics) have been addressed in the course of 1998 by the responsible APEC fora.

To establish at least one point of connection with advanced broadband research networks and test-beds with each member economy, with efforts to be made by developed members in terms of technology transfer to technical co-operation and joint R&D with the developing members.

The TEL WG's Development Co-operation Steering Group (DCSG) is engaged in a number of projects aiming to achieve the goal. Examples of such projects include the Asia Pacific Advanced Network (APAN), test-bed projects, and the APII Technology and Co-operation Centres. At the APEC Ministerial Meeting on Telecommunications and Information Industry, held in Singapore in June 1998, Ministers applauded the efforts of member economies to develop their broadband information infrastructures and encouraged the efforts of the TEL WG to interconnect these networks and test-beds.

To achieve full interconnection of 100 percent of universities in member economies with the APII, beginning with the Internet, as the preliminary realization of the Distance Learning Network for APEC.

At the APEC Ministerial Meeting on Telecommunications and Information Industry, held in Singapore in June 1998, Ministers encouraged the development of linkages between public institutions such as schools, universities, hospitals and libraries, so as to ensure that the benefits of all APII are experienced by citizens of the region. Work has begun within the DCSG on a series of projects to this end; in addition, the Human Resources Development Steering Group has completed a Distance Learning Network pilot project with successful results, and has received APEC Central Fund resources to undertake a second phase beginning in the next budget cycle.

To encourage the connection to the APII beginning with the Internet, of public institutions such as hospitals, museums, galleries and libraries, and specifically to maximize the number of hospitals connected.

The DSCG has begun projects particularly addressing the needs of the medical community as a first step toward realizing this goal.

To increase substantially the number of connections to basic telecommunications services.

Recognizing that this goal can only be achieved through actions engaged in voluntarily by member economies, the TEL WG Chair has requested that all member economies report on progress toward meeting this goal as part of their regular voluntary reports to TEL WG meetings.

Development of a model universal access policy which will encourage all member economies to administer universal and value-added service requirements in a transparent, non-discriminatory and competitively neutral manner.

Achieved. The model policy was reviewed and accepted by the APEC Ministerial Meeting on Telecommunications and Information Industry in Singapore in June, 1998.

Preparation of national reports on the legal responsibilities of telecommunications carriers for illegal activities (e.g., intellectual property right infringement, pornography, telemedicine misdiagnosis, etc.) carried out over their networks.

A joint carrier/content provider submission led the DCSG to adopt this new commitment under the infrastructure initiative. Economies have agreed to make voluntary presentations to explain how they are dealing with this issue.

Based on the Framework for the Development of Mutual Recognition Arrangement (MRA) for Telecommunications Equipment and the Guidelines for Regional Harmonization of Equipment Certification agreed by the APEC TEL WG, member economies will begin to implement, on a voluntary basis, an MRA for certification of telecommunications equipment to the mandatory technical regulations of importing economies.

The MRA for the telecommunications equipment sector has been nominated as a candidate for early voluntary sectoral liberalization. Based on the MRA which was endorsed at the APEC Ministerial Meeting on Telecommunications and Information Industry, held in Singapore in June 1998, member economies will begin to implement, on a voluntary basis, MRAs according to the indicative timetable for each economy set out in the Annex to the Singapore Declaration. A TILF project to assist economies with implementation has been approved by BAC, and work will be well underway in 1998.

Agreement to develop collective and individual action plans to liberalize the information sector, while respecting the diversity of cultures in the APEC region.

At TEL 17 in March 1998, a Task Force report was reviewed and issues were prioritized for work. The TEL WG has agreed upon a series of issues to be addressed, and work will begin at TEL 18.

Implementation of commitments consistent with or surpassing the resulting ITA agreement on the widest possible basis among all APEC WTO member economies.

APEC Trade Ministers, at their meeting in Kuching, Malaysia, in June 1998, recalled APEC's role in ITA I and called for a successful conclusion of the ITA II, with a balanced outcome that takes into account interests and concerns of members.

Implementation of UN/EDIFACT as the standard EDI/Electronic Commerce Data Protocol for customs documents in all member economies.

The CTI's group on Customs Procedures (SCCP) has indicated that it aims to complete the implementation of UN/EDIFACT by 1999.

Incorporation of the OECD guidelines on privacy, security and cryptography policy as the APEC model framework to facilitate the broadest possible use of communications networks for electronic commerce, delivery of government services, and public administration within the region.

APEC Trade Ministers, at their meeting in Kuching, Malaysia, in June 1998, welcomed the report of the Task Force on Electronic Commerce and noted the progress of work in both the Task Force and other APEC fora. Ministers endorsed the second stage of the work program which would include possible development of principles and practical cooperative activities for promoting the use of electronic commerce in the region, recommendations on technical cooperation and capacity-building activities, including in respect of public sector use of electronic commerce, as well as outreach and training programs. Ministers also endorsed the program of information exchange and technical cooperation to address the "millennium bug/Year 2000" problem and to identify impediments to electronic commerce in the region. In advancing the work program, Ministers requested the Task Force to take into account: the views of the private sector, the differing levels of development in member economies, and the need to avoid duplication of work being done elsewhere in APEC and other international fora.

Establishment of a database of information relating to the operation of Certification Authorities in the region and in the rest of the world.

A project to do this is currently underway under the TEL WG in collaboration with the Asia-Oceania Electronic Messaging Association (AOEMA).

As regards the Asia Pacific Information Infrastructure (APII), at the APEC Ministerial Meeting on Telecommunications and Information Industry in Singapore in June 1998, Ministers:

- Encouraged the TEL WG's efforts to make the transition from vision to reality when developing the APII, as seen in the demonstrations on telemedicine, distance learning and electronic commerce applications which Ministers witnessed at Singapore;
- Encouraged the TEL WG to build on the practical work being done by the APII Cooperative Centre in Korea and the APII Technology Centre in Japan to further accelerate the development of the APII;
- Supported the increased role which the business/private has come to play in the TEL WG, and encouraged the TEL WG to continue to work cooperatively with ABAC, PECC and other representatives of the business/private sector with the aim of ensuring long-term sustained investment in the infrastructure required by the region.
- Noted the continuing development gap that exists within APEC and directed the TEL WG to facilitate greater economic and technical co-operation activities to bridge this

gap, including by undertaking a systematic developmental needs assessment, so as to set strategic priorities for further economic and technical cooperation activities; and by identifying and developing applications and projects which will be of particular benefit to developing economies, and to rural and under-served areas in particular;

- Directed the TEL WG to encourage technical cooperation, collaborative R&D, and voluntary technology transfer among member economies through joint APII R&D projects;
- Encouraged member economies to enhance access to the APII, particularly in Internet Infrastructure, by expanding high-bandwidth connectivity among economies, and requested the TEL WG to study how to create sustainable and equitable financing arrangements for the establishment of these links;
- Welcomed the TEL WG's project on universal access to expand the reach of basic telecommunications services and encouraged economies to refer to the "Universal Access Principles" in Annex B of the Singapore Declaration when developing policies in this regard.

(ii) *Creating an Integrated and Intelligent Asia Pacific Transportation System*

Follow-up during the course of 1998 on the actions approved by APEC Ministers responsible for transportation as part of the initiative to create an integrated and intelligent Asia Pacific Transportation System has been as follows:

Follow up to the Congestion Points Study, in particular the "Best Practices Manuals" which provide best practice approaches in relieving and avoiding air and sea transport congestion to facilitate the smooth flow of people and goods through efficient operations and efficient utilization of capital resources in a safe and environmentally sustainable manner.

The Intermodal Task Force of the Transportation Working Group developed an action plan endorsed at the 12th Meeting of the Transportation Working Group. Work on six high priority items has begun, including the drafting a proposal for tasks requiring APEC funding.

Identification of "best practices" and methodologies for privatization or incorporation of transportation infrastructure projects.

A proposal to BAC seeking funding in partial support for a systems analysis project entitled Transportation Shipping, Harmonization and Integration Planning Project (TSHIP) has been prepared. This proposal would entail participation in a demonstration project with partners at the Ports of Seattle and Tacoma, the local areas of Auburn/Kent Valley in the State of Washington, and the areas bordering Canada in the Pacific Northwest. The output of this modeling exercise would demonstrate various options for inter-modal infrastructure investments, and the costs, benefits, and potential impacts associated with these options.

The ITF has undertaken a survey to identify obstacles at intermodality in APEC economies with a view to identify solutions for overcoming those obstacles. A report on solutions is to be completed by spring of 1999. A draft questionnaire on intermodal passenger transport will also be developed.

Possible improvement of port capacity and efficiency in the APEC region.

The Ports Experts Group is continuing its work on 6 themes with a view to identifying relevant port issues in the APEC region and to set up proper actions to address them. An interactive web-based Port Data Base was completed in 1998 and is awaiting input from each economy.

Development of a “best practices” manual to assist economies to address urban congestion-related transportation issues.

A best practices manual will be developed to address urban transport problems in the APEC region based on results of two forums which took place in 1996 and 1997 respectively. Consultations with the APEC Energy Working Group will be undertaken to address possible overlap with activities in that Group, (particularly concerning a recent meeting on urban transport) for inclusion, as appropriate, in the best practices manual.

Implementation of the Model Mutual Recognition Arrangement for Automotive Products to facilitate the trade of autos and automotive products.

Work on the Road Transport Harmonization Project (RTHP) and Model Mutual Recognition Arrangement (MRA) on Automotive Product currently includes completion of Phase IV of the RTHP analysis of the automotive conformity assessment and certification requirements of APEC members; encouragement of member economies to utilize the MRA, endorsed by Transportation Ministers, in support of trade facilitation; and, provision of expertise to the Early Voluntary Sectoral Liberalization proposals for the Automotive Sector on automotive standards/ technical regulations.

Progress on dialogue with the UN/ECE in connection with its proposal to establish a global agreement on road vehicle regulations

An International Road Vehicle Standards Harmonization Seminar was held in conjunction with TPT-WG-13 in Mexico on April 21, 1998, consistent with the directive of Transport Ministers that APEC members engage in dialogue with the UN/ECE. The Seminar provided an opportunity to raise awareness among APEC members of standards harmonization activities in the automotive sector and the function of the UN/ECE WP on Transport. Presentations were made by UN/ECE officials who had received APEC TILF funding to attend the Seminar. International organizations and APEC regulatory agencies and vehicle manufacturers and road users also made presentations.

Report on more competitive air services with fair and equitable opportunity.

The Air Services Group was reconvened in Singapore in Oct 14-16, '97 and 25-26 February '98 to analyze and prioritize the eight options for more competitive air services, with fair and equitable opportunity for all members in the region. The group finalized a report including a recommendation on the options to be developed and how they will be implemented.. The report on options has been endorsed by TPT-WG-13 and has been submitted to Transport Ministers. With regard to monitoring the implementation of the recommendations made by the Air Services Group, the TPT-WG has agreed that Economies could provide progress reports on a voluntary basis. The project is now complete.

The maritime initiative announced in 1997 aimed at promoting an efficient, safe and competitive operating environment for maritime transport.

Endorsement by the TPT-WG-13 of a Mission Statement represents the completion of the first step in promoting an efficient, safe and competitive operating environment for maritime transport in the region.

Framework of standards for the initial application of Intelligent Transportation Systems to vehicle identification, safety, location, and tolling.

Work on the application of Intelligent Transportation Systems currently involves the development of a protocol through which economies will work together to develop and use a framework of standards to ensure interoperability; development of a revised project proposal regarding a framework of standards for the initial application of ITS vehicle identification, safety, location and tolling; and the development of a Ministerial vision statement on APEC-wide development and deployment of ITS which would form part of the report to Ministers.

Progress report on cooperative actions to facilitate implementation of satellite-based navigation and communications systems in the APEC region consistent with ICAO and IMO guidelines.

The Satellite Navigation and Communications Systems Advisory Committee has been established to undertake a series of cooperative actions to facilitate implementation of satellite-based navigation and communications systems in the APEC region consistent with ICAO and IMO guidelines. The work of this group includes development by each economy of a policy statement at the Ministerial level to protect the Spectrum Band width for the sole use of the Global Navigation Satellite System (GNSS) for all transportation modes.

Actions undertaken to promote the networking of institutions to form a virtual center of transportation research, development and education to access, harness and adopt new technologies for transportation.

Work is underway for the establishment of a Virtual Center for Transportation Research on the TPT-WG web site which is currently under development.

(iii) *Economically viable and environmentally sustainable energy infrastructure*

Energy Infrastructure

As a follow-up of the Natural Gas Initiative proposed by USA, Indonesia and PNG, an EWG Steering Committee, co-chaired by USA and Japan and in close cooperation with business, developed a report containing more than 30 recommendations intended to remove the impediments to development of natural gas infrastructure and attract investment to it from the private sector, in order to accelerate investment in natural gas supplies, infrastructure and trading networks in the APEC region. The Energy Ministers endorsed the recommendations of the report in October in Okinawa, Japan. While the implementation should be consistent with the priorities of individual economies and

regularly reviewed, the Energy Ministers agreed to forward the recommendations to APEC Economic Leaders for their consideration in Kuala Lumpur. It was also recommended that pipeline projects in the region be conducted.

As instructed by the Energy Ministers last year, EWG worked out a Work Program on Environmentally Sound Energy Infrastructure in APEC Member Economies designed to minimize the adverse environmental impact of new energy infrastructure development. Energy Ministers in Okinawa endorsed the Work Program and charged the Energy Working Group to develop practical and effective means of implementation.

After endorsement of the non-binding Best Practice Principles for Independent Power Producers (IPPs) last year, Energy Ministers discussed progress in their implementation and directed the Energy Working Group to effectively follow up the implementation of these principles in close communication with the private sector.

Recognizing the role of the energy sector in stimulating the region's economic recovery, Energy Ministers also instructed the Energy Working Group to hold a business/government workshop to develop recommendations for early action to improve investors' confidence, mobilize capital for energy infrastructure development and assist in the region's economic recovery.

(iv) Infrastructure for Sustainable Cities

The initiative on Infrastructure for Sustainable Cities pulls together a number of initiatives endorsed by APEC Environment Ministers under the Program of Action on Sustainable Cities and aspects of the work program of the Economic Committee's Infrastructure Workshop. Follow up during the course of 1998 on the various elements of this initiative has been as follows:

Creation of an APEC Urban Capacity Building Network as called for in the Program of Action on Sustainable Cities

The Economic Committee's Infrastructure Workshop, at its meeting in Taipei in May 1998, accepted Canada's offer to work jointly with the APEC Secretariat and Malaysia to develop the action program on infrastructure for sustainable cities focusing on a decision support system which would include:

- A proposal for a "virtual policy studio";
- The use/improvement of existing infrastructure information systems such as ID2;
- An inventor/map of Urban Centers for Excellence; and
- Computer "future scenario" building tools

The end result envisaged is an Urban Network to support, through improved infrastructure design, development and management, the implementation of the Agenda 21 action plan for Cities.

(v) Infrastructure to support rural integration and diversification

As a complement to promoting infrastructure of sustainable cities, the APEC Infrastructure initiative proposed that APEC consider initiatives to address deficiencies in

rural infrastructure in the region. No specific actions, however, were identified at the time. This issue since has been addressed by the Economic Committee's Infrastructure Workshop which, at its meeting in Taipei in May 1998 agreed in principle to support a USA proposal to host a major Symposium in 1999, on Infrastructure for Rural Integration and Diversification.

The USA has circulated a revised proposal taking into account member comments. Entitled "Infrastructure to Diversify and Integrate Rural Economies", the project proposes to respond to the Ministerial call for improved rural infrastructure by bringing together decision-makers from the public and private sectors of the APEC member economies, together with experts in the various facets of infrastructure development, to identify promising new financing strategies for infrastructure in rural areas. These include long-term debt instruments and securitization of revenue-producing assets that may be applicable to specific rural environments of APEC members.

Following an international symposium to be held in conjunction with the May 23-26, 1999 World Agriculture Congress in St. Louis, Missouri, a pilot project on rural infrastructure integration is proposed. This would ensure under the guidance of an international advisory committee. Rural development authorities in one or more cooperating APEC economies would work with the project to demonstrate how new financing strategies and integrated infrastructure planning can benefit rural areas.

There are many linkages between this initiative and the work underway in a number of areas of Part II of the Osaka Action Agenda and/or APEC Ministerial processes, which would contribute to synergies flowing in both directions. These linkages include:

- Sectoral work on infrastructure development that is conducted in the Transportation Working Group, the Energy Working Group, (in particular, the project on rural electrification) and the Telecommunications Working (in particular, the project on distance learning which the TEL WG is advancing jointly with the Human Resources Development Working Group, by promoting the infrastructure required to make distance learning more easily accessible in rural economies), among others:
- The strengthening of small and medium enterprises (by promoting linkages and information exchanges that will contribute to expand the economic opportunities available to Small-Medium Enterprises (SMEs), particularly those in rural areas)
- The work of the agricultural technology experts group, by expanding the scope to apply modern agricultural technology in rural areas of developing economies, which may be dependent on basic infrastructure services;
- The work of the Economic Committee's Task Force on Food which has highlighted the role of inadequate rural infrastructure in undermining the efficiency of food systems in many developing member economies; and
- The Leaders' FEEEP initiative, by improving capacities to produce, store and trade food to meet the needs of populations as wealth grows and diets become increasingly diversified.

Proposal for an APEC Network of Infrastructure Facilitation Centres

The APEC Infrastructure Facilitation Network concept attracted considerable interest within APEC during the development of the set of infrastructure initiatives that were put to Ministers and Leaders at their meeting in Vancouver in November 1997. The APEC

Economic Committee, through its Infrastructure Workshop, was asked to explore further whether such a Network would indeed be practical and would add value to the region.

The Workshop has concluded that there is a general consensus on the need for the services that such a Network would provide, or to which it would facilitate access. These services include: integrated planning, risk management, financial engineering, environmental design, dispute avoidance/management and information sharing and provision.

For a number of reasons, preference has been expressed for a network approach, rather than an institutional approach. Moreover, bearing in mind the need for explicit linkage back into domestic economies for practical action, a “network of networks” approach suggests itself, with a network at the APEC level, bringing together internationally recognized centres of excellence with expertise in various aspects of infrastructure planning, design, development and management, which in turn would be linked to networks of similar institutions formed at the national level in participating APEC member economies. The individual economy networks, through their links to the APEC-wide network, would have access to the pooled information drawn from around the region; through their knowledge of the particular circumstances of their own economy, they could in turn “interpret” and apply this information most usefully and appropriately.

At its meeting in Taipei in May 1998 the Workshop agreed, as noted above, that each economy would canvass centres of excellence with expertise in various areas of infrastructure design, development or management as regards their interest in developing detailed proposals for implementation of the Vancouver Framework. The Workshop noted that the centres of excellence that respond positively to this invitation would potentially constitute the core of an infrastructure facilitation network and would be encouraged to establish the horizontal links amongst themselves to bring this into effect. The formation of the network would be revolutionary, guided at each stage by the experience gained in earlier phases.

Conclusions

The initiatives launched at Vancouver under the general rubric of Infrastructure '97 are being advanced by the various APEC fora dealing with the individual components.

The initiative is not static: a number of new elements have been added in the course of 1998 and some of the initiatives that were in a rudimentary stage at Vancouver, such as the rural infrastructure initiative have been developed considerably.

Some commitments have already been achieved. However, implementation is in general at a fairly early stage.

ANNEX 10

APEC Agenda for Science and Technology Industry Cooperation into the 21st Century

APEC AGENDA FOR SCIENCE AND TECHNOLOGY INDUSTRY COOPERATION INTO THE 21ST CENTURY

I. INTRODUCTION

One of APEC's specific objectives is to enhance cooperation and thereby reduce the disparities among member economies and enhance the positive gains within the region and the world economy that result from economic interdependence by encouraging the flow of goods, services, capital and technology. APEC's ability to harness technologies for the future and develop the human resources needed for innovation will support sustainable economic growth and complement efforts to facilitate increased investment and trade in the region.

Recognising the growing role of science, engineering and technology in promoting economic growth and their close linkages to trade and investment, the APEC Agenda for Science and Technology Industry Cooperation into the 21st Century will facilitate and further strengthen the economic and technological cooperation needed to achieve the APEC Vision.

II. VISION

APEC's vision for the 21st Century is of a dynamic and prosperous Asia-Pacific region built on the development and application of industrial science and technology which supports economic growth and improves quality of life while safeguarding the environment and the natural resources necessary for economic sustainability.

The successful development, application and commercialisation of industrial science and technology will depend upon the ability of APEC economies to create a strong open innovation systems and to work cooperatively to catalyze the development of strong sustainable regional S&T networks and partnership.

III. PRINCIPLES

Collaboration and joint research activities should be undertaken in accordance with the following principles:

1. Open Access

- All economies should have the opportunity to participate and contribute to regional multilateral S&T collaborative activities, including R&D programmes, on an equal and voluntary basis in accordance with their respective capacities.
- Collaborative activities should be encouraged throughout the full innovation and application cycle from basic research to pre-competitive industrial R&D, and should seek to enhance technology adoption, adaptation and commercialisation.

- Effective collaboration should be based on smart partnerships and mutual benefit, and be built on respect, trust, transparency and fairness.
- Technology exchange and industrial development on the one hand and trade and investment liberalisation on the other, should be mutually supportive.

2. Balanced Benefits

- Joint activities and dialogue should support APEC's goals of common prosperity and narrowing the gap in stages of development and support the vision laid out in Section II.
- Contributions to and benefits from collaboration should be equitable, balanced and in accordance with each partner's level of contribution with appropriate consideration given to the needs of developing member economies.
- Collaborative projects should have industrial relevance and contribute to sustainable economic growth that would benefit all APEC's people, including women and youth.
- Initiatives should include an appropriate balance between the development of new and high-tech industries and the application of appropriate technology to traditional enterprises and between long-term goals and pragmatic needs.

3. Private Sector/Business Participation

- Projects should encourage complementary and collaborative public and private/business sector investments in the development and the diffusion of technologies and related knowledge to industry that will provide the basis for economic growth, accelerate beneficial change and build international partnerships and networks.
- Collaborative activities should ensure, whenever possible, the active participation of private-sector companies, especially SMEs, and other institutions as partners in order to ensure the activities reflect technology trends and business needs.
- Economies should seek to create a favorable and conducive business environment for international private-sector technology cooperation and international technology-based joint ventures, and accelerate appropriate technology exchange that fosters economic cooperation and industrial development.
- Enterprises should take the lead role whenever possible, in cooperation with universities, non-governmental organisations and public research institutions, in establishing goals, planning and structuring collaborative projects in science and technology.
- Projects should promote efficient, cross-sectoral and flexible cooperation among industrial enterprises, academia and public sector organisations.

4. Supportive Regulatory Framework

- Consistent and transparent approaches should be adopted to standards and standard setting activities, in order to facilitate technological exchange and flows.
- Economies and their standards organisations should, whenever possible, apply international standards to facilitate compatibility and market openness while not restraining innovation.
- Partners in collaborative activities should come to an understanding on the protection of intellectual property rights, as well as fair and equitable contributions

to and commercial benefits from projects, dissemination of information and access to and the use of the results of collaboration.

IV. MECHANISMS

Information flow, human resources development and an appropriate business climate are key to building regional innovative capacity and harnessing the technologies of the future. Environmentally and economically sustainable practices, enhancement of the human capital that integrates women and youth, also are essential if we are to maintain long-term economic growth and extend the benefits of higher living standards and better health to all within the region.

The facilitation of networks and partnerships is the principal vehicle through which the Asia-Pacific region can successfully find and implement solutions based on S&T cooperation to the challenges posed by our rapidly changing economies. APEC organisations should initiate industrial science and technology activities that build on these mechanisms to facilitate the creation of networks and partnerships and should seek to avoid duplication and complement existing activities wherever possible.

1. Improved Availability and Access to Information

The availability and access to information is critical for creating sustainable regional S&T networks and partnerships and facilitating technology flows and cooperation. It is particularly important for APEC to work to ensure that scientific and technological information provides direct and tangible benefits to all sectors, especially SMEs. Systems to support effective networks and partnerships will facilitate information access and communication among APEC Fora and all sectors of APEC member economies, including SMEs and relevant business and non-governmental organisations. Existing collaborative activities such as the ASTWeb provide a good foundation to continue to build such systems.

In order to enhance easy access to technological information, it is essential APEC member economies maintain a constant exchange of views and analysis on S&T policies and practices. It is also important that APEC member economies collaborate and commit to collecting, standardising and openly disseminating the statistics and information necessary for policy makers and the private sector to support dialogue and make informed decisions. Collaboration is essential to ensure the interoperability of information exchanged through networks. The continued development of research and factual data needed to create S&T databases and information on technology management practices is important to stimulate technology commercialisation and economic growth.

2. Improved Human Resource Development

In the knowledge-based economy, human resources are the key element of growth. Creative scientific and technical men and women are indispensable not only to fuel innovation but to underpin sustainable industrial productivity and to improve the quality of life. Technological and industrial innovation will not occur at the regional, member economy or firm level if the full human capacity of the workforce,

management, engineering and research sectors is not geared to the needs of a changing industrial and economic context. In conjunction with human resource development, it is important to maintain and improve the capabilities of such organisations as public research institutions, private R&D organisations, and technology training institutes for SMEs.

The Human Resource Development Working Group in coordination and consultation with other relevant APEC fora should continue to optimise the use of existing APEC activities such as the APEC Vocational Training Programme and APEC Regional Education Hubs. It is also critical to develop the full spectrum of human resources relevant to industrial science, engineering and technology including management, research and development, and users. APEC should facilitate the regular exchange of scientists, engineers and technologists among APEC economies, including strengthening efforts on the mutual recognition of professional qualifications. It also recognises the central role private companies play in developing and implementing activities that enhance the human resources of small and medium-sized enterprises, and the importance of long-term industry-wide and multi-firm innovation linkages.

3. Improved Business Climate

Member economies should work to ensure an open business climate, a consistent, transparent and timely legal framework, affecting flows of technology and expertise. Improvements in this area are critical to building innovative capacity in the region, enhancing technology cooperation, accelerating technology commercialisation and developing regional S&T networks and partnerships. Areas important to an improved business climate include, but are not limited to: intellectual property rights; standards and metrology; safety assurance; investment and financing including development of venture capital markets; joint venture operations; environmental protection; and researcher mobility.

APEC recognises the importance of providing effective intellectual property rights protection as a means of encouraging confidence and facilitating the exchange of information. Member economies should encourage dialogues on the development of intellectual property protection regimes that promote and support the development, diffusion and application of industrial science and technology.

All APEC Fora, including the Sub-Committee on Standards and Conformance and the Intellectual Property Experts Group, have an important contribution in enhancing the business climate for science and technology industry cooperation.

4. Enhanced Policy Dialogue and Review

There are major benefits to be gained by sharing information on the efficiency and effectiveness of alternative policy and programme approaches. Member economies are encouraged to develop policies by sharing knowledge and experience in these areas, possibly through the use of foresight methodologies and other techniques. Regular policy dialogues among Ministers and among APEC officials and private sector entities concerned with strengthening science and technology industry

cooperation, including ABAC and the scientific community, is an important source of guidance to APEC Fora in carrying out its work programme.

Regular policy dialogues and reviews among all levels of officials concerned with industrial science and technology provide an opportunity to discuss common concerns, and possible benefits from standardising or rationalising regulations related to the flow of technology. These policy dialogues are also useful for individual member economies as they consider appropriate industrial science and technology policies and activities to enhance their economic growth and will help foster public understanding and acceptance of science, engineering and technology.

5. Facilitation of Networks and Partnership

The accelerated pace of change and increased costs and complexity of science and technology require new approaches in the region to joint research and development, and to other types of collaborative activities which underlie the innovation process. The Industrial Science and Technology Working Group and other appropriate APEC Fora should review existing initiatives and processes and establish new ones as needed to catalyze the creation of regional S&T networks and partnerships and to encourage cooperative R&D projects.

By creating a supportive environment for joint R&D activities based on the principles set out in Section III, APEC can encourage synergistic and complementary flows of technology among partnerships and networks of private companies, non-governmental entities and the public sector. A number of existing activities such as the APEC Network of S&T Industrial Parks and the APEC R&D Leaders Network provide potential models. APEC member economies, in conjunction with the business sector should continue to develop new initiatives, including common use of large-scale facilities.

V. TECHNOLOGY AREAS

While each APEC economy has its own particular interests and priorities, APEC initiatives should focus on areas of widespread interest and mutual benefit. Areas for joint activities could include but are not limited to:

- Biotechnology
- Environmental and Cleaner Production Technologies
- Communication
- Information Technologies/Electronics
- Advanced Materials
- Electronics
- Transportation
- Resource Management Technology
- Energy
- Sustainable Agriculture
- Emergency Preparedness and Climate Prediction
- Exploitation of natural resources

VI. IMPLEMENTATION

All APEC Fora, particularly the Industrial Science and Technology Working Group, should develop and take responsibility for designing and implementing within a reasonable timeframe specific initiatives and activities that support the vision and principles under this Agenda.

APEC member economies are encouraged to announce and implement, on a voluntary basis and in accordance with their capacity, initiatives to strengthen industrial science and technology cooperation. APEC member economies may submit specific proposals that support implementation of this Agenda.

The SOM Sub-Committee on Economic and Technical Cooperation will oversee the implementation and follow-up work on this Agenda. Annual progress in the implementation of the Agenda shall be reported to Ministers with the initial report to be presented at the 11th Ministerial Meeting in 1999.

ANNEX 11

Overview of APEC Activities in Sustainable Development for 1998

OVERVIEW OF APEC ACTIVITIES IN SUSTAINABLE DEVELOPMENT FOR 1998

1. INTRODUCTION

The ministerial meeting on sustainable development held in Manila 11-12 July 1996 recommended that APEC Senior Officials annually review sustainable development work in APEC. Senior Officials tasked the APEC Secretariat to prepare a stocktaking exercise on sustainable development and report back on the findings in 1997.

This overview is to update the stocktaking exercise on sustainable development for 1998.

2. VANCOUVER FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

The Environment Ministers' meeting on Sustainable Development, held in Toronto, Canada, 9-11 June 1997, agreed to advance work in the three areas identified in Manila. They are:

- clean technology/clean production,
- sustainable cities, and
- the sustainability of the marine environment.

The Toronto meeting emphasized that APEC activities in the three areas should be collaborative and mutually reinforcing.

- On clean technology/clean production, the meeting congratulated the Industrial Science and Technology Working Group for completing the Cleaner Production Strategy and commended the strategy to the Leaders' meeting in November 1997.
- On the sustainability of the marine environment, the meeting congratulated the Marine Resources Conservation Working Group for completing their Action Plan, endorsed it and commended it to Leaders.
- On sustainable cities, a fourteen point "Agenda for Cooperation: A Program of Action" was agreed to by minister. The program's objective is to complement activities already going on in international fora and work in those areas where APEC can bring value. Recognizing that, by the 21st century, most of APEC's population will be living in cities, the program sets forth 17 initiatives to address the issues of sustainable urbanization.

The issue of "The Impact of Economic Growth and Expanding Population on Food, Energy and Environment"(FEEEP) was also discussed at the Toronto meeting and ministers urged environment officials to be actively involved in ensuring that environmental considerations be addressed as an important element in the FEEEP exercise.

Overall, the ministers called for improved coordination to integrate the many sustainable development initiatives within APEC.

In November 1997, APEC Economic Leaders' Declaration in Vancouver stated that "Achieving sustainable development at the heart of APEC's mandate. Equity, poverty alleviation and quality of life are central considerations, and must be addressed as an integral part of sustainable development. We have a commitment to advance sustainable development across the entire scope of our workplan".

3. SPECIFIC INITIATIVES RELATED TO SUSTAINABLE DEVELOPMENT BEING CONDUCTED BY APEC FORA.

A. *Committee Initiatives*

The Committee on Trade and Investment (CTI) is responsible for coordinating APEC's work in pursuit of trade and investment liberalization facilitation as outlined in the Osaka Action Agenda. The CTI and its sub-fora assist, where appropriate, in integrating relevant environmental concerns into APEC's TILF activities.

A particular activity this year will be the International Quality Assurance Systems (self-financed) project, co-sponsored by the CTI/SCSC and HRD-WG. The project will include the trainer's training to be held on September 28 to October 2 in Philippines.

The Economic Committee (EC) has undertaken a number of initiatives focussed on sustainable development that will yield results in 1998.

The Committee is responsible for coordinating APEC's response to the Leaders' request to study "The Impact of Economic Growth and Expanding Population on Food, Energy and the Environment" (FEEEP). An interim report on the interlinkages between these issues was presented to APEC Economic Leaders in Vancouver 1997, and the Committee is preparing the final report which will draw on information prepared by the Task Force on Food, the Energy Working Group, the Industrial Science and Technology Working Group and the Senior Environment Officials, amongst others. The final report, setting out options for possible joint actions to respond to FEEEP issues, will be presented to Leaders in Kuala Lumpur in 1998. The Committee will also be publishing the proceedings of the FEEEP Symposium held in Canada in September 1997, which brought together 175 participants, including government officials, businesspersons, experts from non-governmental organizations and representatives of a broad range of APEC fora involved in FEEEP-related work.

The Committee is also working to complete a project launched in 1997 under the leadership of China on "Trade-related Environment Measures and Environment-related Trade Measures". This study will review the practices of APEC economies in this area to provide a first-ever overview of how APEC member policy regimes interact in these important areas. A Workshop was held in July 1998 to discuss the preliminary findings of the survey. The Committee will consider publication of the results of the survey and the proceedings of the Workshop. The project is scheduled for completion in 1998.

Sustainable development initiatives received a high priority in the Committee's 1998 infrastructure work program. The 1998 APEC Public-Business/Private Sector Dialogue held in Chinese Taipei in May focused on the theme of Infrastructure and Sustainable Development, and noted the critical need for sound infrastructure, if pressing economic, environmental and social goals were to be met. The Committee's Infrastructure Workshop commenced work on implementing the Vancouver Framework recommendations and the focused outcomes on Infrastructure for Sustainable Cities and Infrastructure for Rural Integration and Diversification, both of which contribute to advancement of sustainable development objectives.

In March 1998, the Committee published its "Survey Results on the Use of Economic Instruments in APEC Economies", which reviewed APEC member economies' experiences with the use of economic instruments for environmental protection. The instruments included in the survey were environmental user charges, deposit/refund systems, tradable permits/quotas, and financial incentives/environment liability. The section on 'lessons learned' indicated what works and what does not and thus assists members in designing and implementing measures that are suitable for their own particular circumstances.

B. Working Group Initiatives

The Human Resources Development Working Group (HRD WG) has designated a focal point on sustainable development to more efficiently coordinate working group activities in this area, not only within the HRD WG but also in relation to other APEC Fora. Management for sustainable development continues to be one of the priorities of the Business Management Network of the Working Group. The Human Resources for Sustainable project aimed at establishing a sustainable network to share information on education to promote academic collaboration, and to develop a continuing education program has been transformed into a self-funded project with the completion now targeted for the year 2000. A project to develop case studies highlighting 'lessons learned' by companies that have entered into Joint Implementation Projects, a particular approach to responding to global change involving a collaborative approach between producer and user of emissions control technology, is expected to be completed in October this year. Another project, which seeks to promote awareness of the human resource management skills and knowledge required to implement cleaner production principles, specifically in the food industry, will be completed within the year. An ongoing self-funded project is the APEC Sustainable Development Training and Information Network which is designed to promote capacity building for sustainable development. A support office, a home page and an Advisory Group have been established with participation from member economies.

The Industrial Science and Technology Working Group (IST WG) is concerned to ensure that the development and deployment of industrial science and technology contribute to sustainable development. The working group will continue to implement projects in support of the APEC Cleaner Production Strategy. It will support the work of the APEC Center for Environmental Technology Exchange, the APEC Coordinating Center for Good Clinical Practices and the International Molecular Biology Infectious Diseases and seek activities related to disaster mitigation.

The Energy Working Group (EWG) is committed to the sustainable development of the energy sector and to mitigating the environmental impact of energy use. It continues to implement a broad range of programs (symposiums, workshops, seminars, best practices and demonstration projects) to promote adoption in member economies of environmentally-sound policies and technologies.

Current projects focus on clean fossil energy technologies, energy efficiency and conservation, new and renewable energy technologies, and cooperation on energy standards. The EWG is implementing the Osaka Energy Action program, which has as one of its central planks the integration of 14 principles for rational energy consumption into the energy policies of member economies and the uptake of environmentally sound energy technologies and processes. The third meeting of Energy Ministers, which will be held in Okinawa in October 1998, will examine the policy implications of the forecast increased demand for energy in the region. Ministers will be presented with a set of policy recommendations to accelerate investment in natural gas development in the APEC region. Ministers will also consider a work program to promote the development of environmentally sound power infrastructure. In addition, Ministers will consider strengthening policy dialogue with the aim of achieving the sustainable energy production and use in the APEC region.

The Transportation Working Group has established a Steering Committee on Safe and Environment-Friendly Transportation Systems (including new technologies) to deal with projects and activities which pursue the achievements of the overall safety and environment-related goals agreed upon by APEC Transport Ministers. Specific TPT-WG projects which address environmental concerns include the following:

- Completion of an Inventory of Regional Cooperation on Oil Spill Preparedness and Response Arrangements, a summary of which is available in the APEC web site;
- Preparation of a best practice manual to address urban transport problems;
- Preparation by Maritime Safety Expert Group of a summary of maritime safety issues and problems in the region and a set of recommendations for improvements as well as preparing to undertake a project to reduce or eliminate substandard shipping in the APEC region which will, among other things, contribute to decreasing the threat of major environmental incidents and the sustainability of the marine environment;
- Promotion of high quality instruction for seafarers consistent with requirements of the revised provisions of the IMO Convention on the Standard of Training, Certification and Watchkeeping (STCW) which will contribute to greater safety in maritime transport as well as safeguards to the marine environment; and
- Examination of environmental considerations as part of the Ports Experts Group's efforts to identify common issues and recommendations for improved capacity and efficiency of APEC ports is currently underway with the collection of basic data and information (e.g. dredging).

The Telecommunications Working Group (TEL WG) is promoting the development and improvement of information infrastructure among APEC economies. As part of this initiative the TEL WG is developing a model of electromagnetic compatibility which will assist economies to manage the problems of electromagnetic interference and support information systems which facilitate sustainable development. TEL WG is also compiling a Practical Telework Manual that will help

member economies promote Telework, since the promotion of Telework contributes to sustainable development especially because it helps reduce emission of greenhouse gases. Finally, through its work to develop the Asia Pacific Information Infrastructure (APII), many TEL WG projects contribute to the sustainable development of the region. Examples include the APII Test-bed Project, aiming to develop networks and applications supportive of sustainable development, and the Advanced Telecommunications System for Disaster Mitigation and Emergency Management which is helpful to the development of sustainable cities.

The Tourism Working Group (TWG) has developed an action program focused on the long term, environmental sustainability of the industry. Given the growing importance of the tourism industry in promoting economic growth, the TWG is committed to implementing the concepts of environmental sustainability and eco-tourism in tourism development in the region. A report on environmentally sustainable tourism was completed earlier in 1997 promoting 'best practices' in developing tourism models which are environmentally and socially sustainable.

The Marine Resources Conservation Working Group (MRC WG) has implemented a number of workshops to create awareness and obtain commitment from the stake-holders, including government agencies, scientists, private sectors, and non-government organizations. Various goals and action were set up. They include:

- Apply GPA to domestic action to prevent the land-base pollution to the marine environment;
- Work out policy strategy and action plan for preventing ship-base pollution to the environment,
- Make recommendations for applying friendly fishery technology, regulatory and management implication to prevent the impact of destructive fishing practices on the marine environment.

Some projects provided the forum of capability building for:

- Detecting, monitoring, and managing of harmful algal disasters;
- Applying available ocean information systems and ocean models for forecasting the impact of marine environment impacts.

The networks of ocean research and ocean information were established, and task forces were set up to develop common analytical methods and standard for harmful algae.

The Fisheries Working Group (FWG): Sustainable development and growth in aquaculture industry is a major focus of the current Fisheries Working Group (FWG) work program, and this reflected in the current proposed projects relating to development of grouper aquaculture and the training aquaculturalists to focus on the long-term sustainability and environmental integrity of the aquaculture industry.

The FWG has also implemented an *APEC Aquaculture Forum* which provided a forum where economies with an investment and interest in the sustainable development and growth in aquaculture as an industry could share information about new technologies; and discuss and plan initiatives that will progress and improve the industry.

The FWG is continuing to implement a number of projects to address environmental and sustainable development issues. They include the preparation of a draft manual on airshipping live fresh fish to facilitate the sustainable development of seafood industries, as well as continuing to implement its comprehensive regional program of on-site plant training HACCP sessions relating to seafood inspection regimes and quality and safety of fishery products.

Trade Promotion Working Group (TPWG) addressed issues on sustainable development indirectly through its ongoing activities. In this regard, its Third APEC International Trade Fair will focus on *Enhancing Global Competitiveness Through Technology And Human Resource Development* and *Emergency Preparedness in APEC*. The web-site of PAEC WGTP, APECNet, enables the business/private sector to search for business opportunities or post inquiries which cover also energy, chemicals and engineering/technological services.

The Ad Hoc Policy Level Group on Small and Medium Enterprises (PLG-SME) has as one of its priorities the strengthening of the managerial and technical capabilities of SMEs to sustain of the role of SMEs in economic development. In March this year it had completed the project, "Eco-Efficiency in the Small and Medium Enterprises". Through in-depth research, the project gathered the eco-efficient measures that some APEC member have successfully undertaken in different industrial sectors to that SMEs in the region can apply them for their own economical and environmental benefits. The Group is now discussing a proposed SME Plan for Action, which will adopt a holistic approach to SME development in the region by ensuring, among other things, that policies for SME development from an integral part of overall development policy among APEC member economies. The proposed Plan will be presented to the Ministers responsible for SME this September.

The Agricultural Technical Cooperation Experts Group (ATC EG) agreed in 1997 to include sustainable agriculture as a new area of cooperation. The ATC EG identifies a plan of action which include the preparation of Directory of Experts among member economies and institutional networks on sustainable agriculture, preparation of questionnaire and holding a seminar/workshop on sustainable agriculture. The seminar/workshop on sustainable agriculture is scheduled on 28-30 October 1998 in Davao City, Philippines; and will cover the elements of sustainable agriculture in four ecosystems – marine/coastal, aquatic/inland, lowland and upland from the perspective of the member economies.

The Trade and Investment Data Working Group has no specific projects addressing sustainable development issues.

C. EVSL in the Environmental Goods and Services

CTI has been given the responsibility for managing the early voluntary sectoral Liberalisation process. The 15 sectoral initiatives selected by Leaders in Vancouver contain a number of activities that contribute to sustainable development. These will reinforce the market opening and trade facilitation measures included in the EVSL package. Proposed Liberalisation in the environmental goods and services area will expand global trade by enhancing market access and removing impediments, thereby assisting the adoption of environmentally friendly practices in APEC

economies. In the forestry and fisheries sectors, sustainable management programmes aim to ensure that increased trade does not lead to unsound practices. Both sectors benefit from ECOTECH measures which focus on sustainable development measures, such as resource conservation and management and human resource development support.

(Sustainable Cities)

Two initiatives, which were endorsed by Environment Ministers in June 1997, have been implemented:

- *Workshop on Economic Instruments toward Sustainable Cities in APEC* (in cooperation with the EC) held in Chinese Taipei, December 1997
- *APEC Symposium on Environmental Education for Sustainable Cities* (in cooperation with the HRD WG) to be held in Japan, September 1998.

4. COMPENDIUM OF APEC ACTIVITIES RELATED TO SUSTAINABLE DEVELOPMENT

ANNEX 4, Section V (*Promoting environmentally sustainable development*) consists of all the 60 current APEC projects and activities related to “promoting environmentally sustainable development”. The projects and activities have been drawn from the Matrix on Economic and Technical Cooperation prepared by the APEC Secretariat for SOM Sub-Committee on Economic and Technical Cooperation. All the projects and activities have been sub-categorized into five types of projects:

- Study / Research / Report / Publication
- Workshop / Symposium
- Database / Network
- Policy Reform / Standards harmonization
- Training / Technology Exchange

A. Results of the Stocktaking

The projects respond to the Leaders/Ministerial directives to integrate environmental concerns into ongoing APEC activities. The major areas endorsed by Leaders/Ministers in 1996 for intensified work, i.e., clean technology/clean production, sustainable cities, and the sustainability of marine resources. Priority has been given to these three areas but it has not necessarily translated into a significant focusing of activities in these areas. The volume, scope and significance of the activities are significant, indicating that real efforts are being made to comply with Leaders directives. The problem is not with number of projects but with the lack of focussed, consolidated and well-directed work on sustainable development. All of these activities do promote sustainable development and all are good in their own right but these are taking place on ad-hoc uncoordinated basis.

The 60 projects and activities (the number of last year’s was 61 projects and activities) are fairly evenly distributed among the Fora. (IST WG is most active to have 20 projects and activities).

Study/Research/Report/Publication lead with 17; Workshop/Symposium has 14 activities; Policy Reform/Standards Harmonization has 14; Database/network has 11. The category of Training/Technology has the least of 4 projects. A fairly high proportion of the projects (one quarter) has direct policy relevance. There is no apparent duplication or gaps are difficult to identify given the breadth of this priority area and the varied nature of the projects. Business participation takes the form of attendance in training programs, workshops, conferences, studies, development of databases and networks but level of participation is not high (less than half of the projects).

B. Expected 'Outputs' for 1998

(1) Study / Research / Report / Publication

- *“Overview of Trade Flows of Energy – Using Product between APEC Member Economies”* – Examine the trade flows of eight energy-using appliances/equipment between APEC member economies. The report available in the second half of 1998 – EWG.
- *“Study on Environmentally Sound Infrastructure in APEC Electricity Sectors”* – Environmental soundness and efficiency are built into the APEC region’s energy infrastructure as new capacity additions. A work program presented to Ministers in October 1998 – EWG.
- *“Use of Industrial Environmental Indicators by APEC Economies to set Environmental Improvement Objectives and Track Progress”* – Explore a possibility for APEC benchmarks for environmental performance of key industry sectors. Conference scheduled in November 1998 – IST.
- *“Acid Rain Monitoring System”* – Study on development of sensors for measuring the primary components of acid rain. Field test in 1998 – IST.
- *“APEC Joint Research on Bio-diversity and its Bioconversion”* – Identify and initiate joint research projects, symposia. Completion in December 1998 – IST.
- *“APEC Joint Research on Marine Environment”*. A training workshop on trace metals, focusing on sampling and analytical techniques. Completion in December 1998 – IST.
- *“APEC Emerging Infections Disease”* – Development of an APEC action plan on emerging diseases. The project will help to reduce human and economic burden from emerging infectious diseases. Completed in March 1998 – IST.
- *“Promote Best Practice Models for Sustainable Development in the APEC Region”* – Compile and publish tourism and environmental best practice case studies in APEC economies. The electronic version in 1998 – TWG.

- “Promote Best practice models for Sustainable tourism development and local community involvement” – Compile and produce a hard copy publication and a web site on the best practice models on tourism activities. Commenced in 1998 – TWG.
- “*Oil Spills Preparedness and Response*” – Publish an inventory on oil spills preparedness and response arrangement in the APEC region. Inventory has been distributed in 1998 - TPT.
- “*Study of the Impact of Economic Growth and Expanding Population on Food, Energy and the Environment*” – 1998 Report to Leaders on the conclusion of the study and presentation of possible joint activities to be undertaken by APEC. A report presented to Leaders in 1998 – EC
- “*Economic Instruments for Environmental Protection*” – Gather factual information on the use of economic instruments for environmental protection. Results published in March 1998 – EC.
- “*Eco-efficiency in the Small and Medium Enterprises*” – Provide assistance to the SMEs in the APEC region in reflecting environmental concerns and requirements. Publication in March 1998 – SME.
- “*Guide to Phasing Lead Out Gasoline*”. The guide assists such countries in addressing a range of issue, from designing a feasible lead phase-out schedule to developing a list of priority activities. The Guide published October 1998 – SEOM.

(2) Workshop/Symposium

- “*Environmental Cooperation Workshop for Sustainable Development of Mining Activities*” – Review the Environmental impact of mining activities in APEC economies. The workshop scheduled in September 1998. – EWG
- “*APEC Aquaculture Forum*” – Promote the sustainable development of aquaculture and helps to solve common fisheries resource management problems and aquaculture disease control. The workshop held in June 1998 – FWG.
- “*Human Resources Management for Cleaner Production Needs in APEC*” – Conduct workshop/symposium with industry, government and education experts to trial and assess teaching and training materials produced, April 1998 – HRD.
- “*APEC Environmental Technology Verification Workshop*” – Develop a coordinated approach to verify the performance of environmental technology. Workshop held in August 1998 – IST
- “*Enhanced implementation of ISO 14001 Environmental Management System for APEC Economies*” – Develop information and tools to promote implementation of ISO 14001 EMS. Workshop held in September 1998 – IST.

- “*APEC Workshop on the Impact of Destructive Fishing Practices on the Marine Environment*” – Address incidence and impact of destructive fishing practices, the recommendation was developed on legislative and regulatory attains. The report available 1998 – MRC.
- “*The Workshop on the Regional Implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-Based Sources of Pollution*” – Discuss the application of the GPA in the Asia Pacific area. Workshop held in April 1998 – MRC.
- “*Working Together: Regional Workshop on Preventing Maritime Accidents and Pollution in the Asia-Pacific Region*” – Review current initiatives and program which address maritime pollution and accidents in the region. Workshop held in April 1998 – MRC.
- “*Conservation of Plant and Animal Genetic Resources*” – Collaboration on collect of information on plant and animal genetic resources. The workshop held in November 1998 – ATC.
- “*APEC Symposium on Environmental Education for Sustainable Cities*” – Share ideas and experiences on environmental education exchange views between environmental engineers and educators. The symposium held in September 1998 – SEOM.
- “*Workshop on Economic Instruments toward Sustainable Cities in APEC*” – Provide an opportunity to discuss best practices and exchange information on economic instruments – SEOM

(3) Database/Network

- “*Energy Benchmark System Development and Implementation*” – Institute a regularly scheduled, uniform system for energy benchmark data collection and dissemination for use by APEC members. Refinement late 1998 – EWG.
- “*APEC Sustainable Development Training and Information Network*” – Assessment of sustainable development information and training needs – Phase II in 1998 – HRD.
- “*Determination of Priority Needs for Molecular biology and Biotechnology in APEC Economies*” – Enhanced information exchange related to molecular biology and strengthened competency of scientists. Network meeting in June 1998 – IST.
- “*APEC Telecommunications Network for Emerging Infections*”- Provides internet-based information form US National Library of Medicine and other key sites. Operation in 1998 – IST.

- “*Ocean Research Network for the Pacific (CORNEP)*” – A network of centres of excellence in ocean and coastal research. Implemented in 1998 – MRC.
- “*Sustainable Agriculture*” – Identification of suitable mechanisms for information exchange. Workshop held in October 1998 – ATC.

(4) Policy Reform/Standards Harmonization

- “*Energy Efficiency Improvement Initiative*” – Establish the basis for information exchange of energy efficiency in both and technology area. Report prepared for Ministers in October 1998 – EWG.
- “*APEC Cleaner Production Strategy*” – Provide sector-based and cross-cutting information sharing and training for cleaner production technology. Implementation in 1998 – IST.
- “*Cleaner Production Initiative in the Electronics and Computer Services*” – Pursue a dialogue between industry and government officials to explore cleaner production in the electronic and computer sector. The conference held in 1998 – IST.
- “*Adoption and Development of a Multilingual Environmental Thesaurus System*” – Development of a standardized reference language for environmental terminology. Project in 1998 – IST.

(5) Training / Technology Exchange

- “*Training Course on Cleaner Production for Textile Dyeing and Finishing Industry in APEC Member Economies*” – Training of the APEC textile dyeing and finishing industry on various cleaner production technologies. Training spring 1998 – IST.
- “*APEC Virtual Center for Environmental Technology Exchange*” – Establishing the APEC virtual center for environmental technology. Operation in 1998 – IST.