Independent Assessment of the ECOTECH Implementation of APEC Working Groups and SOM Taskforces: Telecommunications and Information Working Group (TELWG)

Report to the APEC SOM Steering Committee on Economic and Technical Cooperation

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TEL Timeline

	1990	Scope: - Human Resource Development - Technology Transfer and Regional Cooperation - Opportunities for On-Site Visits/Observerships/Fellowships - Telecommunications Standardization (involving the compatibility of equipment)	Projects: - DATA COMPILATION of the regulatory environments of economies - EDI: Enable business data to be transferred from one computer application to another. Technical and non-technical business develop recommendations which may be passed to other APEC working groups -HRD: How to approach training within a telecomm organization - TELEPORTS: An access facility involving satellites or other telecommunications media serving a regional community
SOM launches the 7th priority work project: Telecommunications First "polymorphic" computer virus			
People's Republic of China, Hong Kong China and Chinese Taipei become APEC members Archie, WAIS and Gopher: The first search engines (pre-dating WWW)	1991		Projects: - DATA COMPILATION - Complete and standardize answers of the annual survey on regulatory/policy environments - DATA COMPILATION - Format and procedures for collecting data, objective understand telecom in economies and develop recomm for Ministers - EDI: Seminar conducted to show how EDI is being used in AUS, JAP, NZ and US. - EDI: Share practical expertise and awareness of its applications, EDI pilot project(s) to demonstrate the practical benefits, introductory seminars to raise awareness - EDI: Training proposal with a survey to ascertain the educational needs of APEC members and identify existing projects under development within Asia/Pacific area. - HRD- Manual/guideline on how to approach training within a telecommunication organization - PECC TRIPLE-T Task Force (Tourism, Transportation and Telecom) including Infrastructure Assessment and Pacific Information Network Inventory projects - TELEPORTS: Seminar on teleport developments - TELEPORTS: Seminar proposed CAN, US and JAP to share their experiences
Participating economies are requested to give serious thoughts to the Working Group's future priorities, its structure, and specific project undertakings. First mass hysteria due to a computer virus: Michelangelo	1992		Projects: - APECNET(Singapore) and APFNET(Canada): Flexible computer systems providing an electronic medium for the sharing and exchanging of information among members - EDI pilot project with BHP Australia - EDI: Awareness and education seminars TEL-EDICA (Australia) - EDI: Project Proposal for International EDI Training Institute (Korea). EDI World Institute - EDI: The sending of meat quarantine certificates from New Zealand to the US - EDI: The Singapore/USA textile visa project (known as ELVIS) - HRD: A one day workshop on Process Management for HRD managers of the economies

1993

New 6-statement Vision and 6 Priority Objectives

Ministers and SOM instructed TEL to develop a Vision Statement and policy objectives.

TEL will review greater participation of non-APEC organizations in the group.

EDI working group questions the pertinence of its work at TEL and will ask SOM to define the work TEL has to do with regards to EDI.

Mexico and Papua New Guinea become APEC members

Introduction of the Mosaic Web Browser made "the net" accessible for the non-computer-savvy

Broadening of Scope:
- Flow of information
- Harmonization for interconnection and interoperability on network and services
- Efficient-cost-effective telecom services
- HRD primary focus on the formulation of telecom policies and programs
- Compatible procedures for certification of telecom equipment
- Guidelines for the provision of IVANs.

Projects:
- DATA COMPILATION: Second edition of the Regulatory Environment Survey with enhancements. Contract a consultant to review the regulatory regimes of APEC's members and prepare issues papers on telecommunications trends in the APEC region (US)
- EDI: Identification of EDI training facilities in the region
- EDI: The integration of small business into the EDI environment
- EDI: The use of advanced passenger information
- INFRASTRUCTURE (before Teleports): Manual on Network planning
- PECC: Methodology and objective statement for a "Triple T and Urban Development Project"
- PECC: Teleport for the Malaysia Indonesia Thailand (M.I.T.) Growth Triangle
- PECC: Triple T Disaster prevention Systems Research Project"
- Survey on Standards Phase II. Establish a network of standards experts to consult on specific questions

Publications:
- The State of Telecommunications Infrastructure and Regulatory Environment of APEC Economies, Volume 1

1994

Bogor Goals

Chile becomes APEC member

BGP4 routing protocol allows the internet to become truly descentralized

WebCrawler: The first full-text web search engine

Broadening of Scope:
- MRAs
- Conformity Assessment

Projects:
- DATA COMPILATION: Approved RFP of the consultant to develop the Second edition of the Regulatory Environment Survey with enhancements
- DATA COMPILATION: Guidelines for regional harmonization of telecom equipment
- DATA COMPILATION: Standards Survey to Telecommunications Information Sharing Project to promote and enable APEC members' independent participation in the International Telecommunication Union (ITU) standards process through information sharing, preferably by electronic means using ACDS
- HRD: Two/three day seminar under the title "Managing in a Competitive Telecommunications Environment"
- INFRASTRUCTURE: Symposium on "Global Information Highway" held in collaboration with the OECD and PECC
- INFRASTRUCTURE: Telecommunications and Information Infrastructure Project (TII)

Publications:
- The State of Telecommunications Infrastructure and Regulatory Environment of APEC Economies, Volume 2
- HRD Manual/Guidelines: How to Approach Training Within a Telecommunications Organization
- Communications Policy Issues Associated with EDI and Electronic Commerce

1995

Osaka Action Agenda / Osaka Action Plan

APEC Economic Leaders' Objectives

Introduction of APII

NSF-Net final commercial restrictions ended in May 1995 when the USA's National Science Foundation ended its sponsorship of the backbone. Regional and domestic NAPs start to proliferate.
"The Internet" as we know it today is born.

Yahoo! is born.

Broadening of Scope:
- APII Objectives and Core Principles
- APEC Economic Leaders Objectives:
a) Technology and Technical cooperation: joint research, technology transfer, promotion of international standards
b) Telecom network: modernization of telecom infrastructure, development of domestic and global markets for networks, services and applications, pilot projects on administrative information networks, collaborative pilot projects, promotion of interconnectivity and interoperability
c) Content, Information and Applications: Promotion of EDI, joint development of database, test-bed interconnection and information sharing, social and societal implications of the IS, initiatives to make government public information more widely available via electronic means
d) HRD: Development of training and educational programs, exchange of human resources
e) Policy & Regulation: policy dialogs on the Information Infrastructure between developed and developing member economies, policy and regulatory measures to further liberalization, removal of technical and administrative barriers to market access, measures aimed at promoting small and medium scale enterprises

Projects:
- Analysis of Survey Questionnaire Results and Recommendations for further Action
- APEC Telecom HRD Resource Sharing Program
- Development of action plan for harmonisation of equipment certification and the mutual recognition of test data
- Distance Learning Project
- EDI/electronic commerce for small to medium size enterprises
- Equipment Certification Project on a Model Electromagnetic Compatibility (EMC) management procedure
- Guide to Telecommunications Regulatory Environment in APEC member Economies
- Human Resource Exchange Program
- Human Resources Development Training Course
- Implementing electronic commerce seminars throughout APEC
- Integrated Next Generation Electronic Commerce (EC) Environment Project (INGECEP)
- MITI submitted a proposal tailored to APEC/EDI systems (internet oriented)
- Model on bilateral or multilateral MRA.
- Model Vocational Education and Training Framework for Telecommunications
- Practical Manual for Network Planning
- Privatization: Concepts and Perspective on Management and Implementation
- Seminar on Vocational Education Training Project
- Telecommunications information sharing
- Telecommunications Skill Standards Project

Publications:
- APEC EDI Pilot on Electronic Commerce

1996

Manila Action Plan for APEC
Six Organizing Principles (later to become the first 6 of the 10 principles of ECOTECH):
1. Develop human capital
2. Develop stable, safe and efficient capital markets
3. Strengthen economic infrastructure
4. Harness technologies for the future
5. Safeguard the quality of life through environmentally sound growth
6. Develop and strengthen the dynamism of small and medium enterprise

First use of "phishing" in the ICT environment

Nokia 9000 Communicator: The first mobile phone to have internet connectivity

Broadening of Scope:
- Individual charters for each steering group
- Infrastructure and sustainable development
- Capacity building for human resources with technologies of the future
- Initiatives to support SMEs
- Approaches on successful transitions from the learning environment to the work force

Restructure:
Liberalisation (LSG)
Business Facilitation (BFSG)
Human Resource Development (HRDSG)
Development and Cooperation (DCSG)

Projects:
- APII Test Bed Interconnectivity / Interoperability Project
- Collaborative Research Project on Multimedia Human Resource Development System Network Technologies
- Conformance with APEC Guidelines for harmonization of procedures for equipment certification
- Conformance with the APEC Guidelines for trade in international value-added services (IVANS)
- Development and implementation, on an elective basis, of mutual recognition arrangements for conformity assessment
- Development of collective action plans for liberalisation of the telecommunications sector
- Guidelines for the Promotion of Private Investment in the Telecommunications Infrastructure Development
- Joint Study on the Impact of APII
- Train the Trainer at the managment of Distance Learning

Publications:
- Telecommunications Regulatory Environment in APEC Member Economies

Asian Economic and Financial Crisis	1997		Projects: - APEC SME Electronic Commerce Survey - Two seminars on Preparation and Confidence Building for the Familiarization and Mutual Understanding of the Member APEC Economies Equipment Certification Requirements and conformance Assessment Procedures Publications: - Economic and Commercial Effects of Liberalisation of Telecommunications: An APEC Seminar for Industry and Government - Practical Manual for Network Planning
SOM: Contribute to the WTO Information Technology Agreement (ITA II) Ministers: facilitate business travel, encourage business/private sector involvement in APEC work Reference Framework for Action on Electronic Commerce Implementation of the WTO Agreement on Basic Telecommunications Blueprint for Action on Electronic Commerce APEC Agenda for Science and Technology Industry Cooperation into the 21st century Kuala Lumpur Action Programme on Skills Development in APEC Framework for the Integration of Women in APEC Framework for Capacity Building Initiatives on Emergency Preparedness Integrated Plan of Action for SME Development (SPAN) SOM Sub-Committee on Economic and Technical Cooperation First time the word "globalization" is used in a leaders' declaration IANA and InterNIC reorganized under the control of ICANN Google (founded this year), developed new approaches to relevancy ranking in search engines	1998	Broadening of Scope: - Y2K Awareness - LSG: a) Implementing the Mutual Recognition Arrangements for Conformity Assessment b) Content/information policy issues such as regulatory and policy approaches to accommodate convergence, access to internet services, numbering and addressing policies, internet governance (intellectual property rights) - BFSG: a) Promoting electronic commerce in a manner consistent with the Reference Framework for Action on Electronic Commerce agreed by Ministers in Singapore (Singapore Declaration, Annex A). These issues could but need not necessarily include: -Content rating and identification systems; -Rights management systems; -Digital signatures; -Encryption; -Digital transaction laws; -Public key authentication; -Data protection and security. - DCSG: a) -Enhancing the APII by ensuring linkage and expanding bandwidth among economies; -Joint projects for killer applications; -Meeting the needs of less developed economies (basic service connectivity, education services, regulatory assistance) -HRDSG: a) Facilitating a personnel exchange programme among economies. b) Developing Skill standards for key functions. c) [Facilitating development of] human resources capabilities to support the effective implementation of key initiatives by other TEL Steering Groups; d) [Facilitating] effective knowledge sharing among APEC economies; e) [Co-operation to develop] an adequate corps of capable personnel to develop and operate telecommunications network; f) Providing training in new technologies and applications to equip member economies to be better users of technology; g) Providing training to meet the needs of a rapidly changing policy environment; and h) Facilitating the use of the APII to meet the training needs of all sectors of the economy.	Projects: - APEC TEL MRA Implementation Project - Interactive Medical Curriculum Pilot Project - Telecommunication Training Pilot Project - Universal Services Seminar Publications: - Background Report on Electronic Commerce

	1999		
Principles to Enhance Competition and Regulatory Reform APEC Y2K 100 Days Cooperation Initiative NTT DoCoMo in Japan launched the first mobile Internet service: i-Mode	1999	Broadening of Scope: - Implement strategies for e-commerce in cooperation with the private sector	Projects: - APEC Distance Learning Project - APEC MRA-HRD Training Design Project - APEC TEL WG Website - APII Cooperation Center - APII Technology Center - APII Test-bed Project - Collaborative research on Multimedia HRD System Network Technologies - Data Compilation (TEL-07/1999S) - Database of Existing Certification Authorities - Development and Financial Resources Catalog - Disaster Recovery / Contingency Planning Training Course - Educational Seminar on Application of Global Positioning System (GPS) Technologies - Electronic Commerce Seminar - Implementation of WTO Agreement on Basic Telecommunication Project - Integrated Next Generation Electronic Commerce Environment Project (INGECEP/Cyber-Net) - Interconnectivity and Interoperability - Resource and Information Sharing - Spectrum Policy and Management Database - Supporting program for International Joint Research Projects - Survey of Certification Authorities - Symposium for Collaborative Strategies for Multimedia & World Wide Web Skills Development - Telecommunications Techno-Economic Modeling Project - Telework Manual Publications: - APEC SME Electronic Commerce Study
TELMIN-4: -Convergence -APEC Principles of Interconnection -Common Principles for ICAIS -Importance of the digital divide to the work of the APIS -Importance of engaging the business/private sector in the work of the TEL Ministers of Trade: Devote greater attention to user requirements for open standards and systems in government interaction with business and the public to facilitate interoperability. Need for a new action agenda to create programmes for the use of advances in information technology to boost productivity and stimulate growth and extend services to the whole community Digital Divide Blueprint for Action	2000 Continues ▼	Broadening of Scope: - Convergence - Emphasis on preparing young people in ICT which should be a core competency for e-learning and e-teaching - Extend e-health thru ICT	Projects: - Active Partnerships for Internet Connectivity Program/Virtual Community for Software Development - APEC Distance Learning Project on Basic Telecommunications Technology - Digital Divide Seminar - Distance Learning Training Courses Project - E-Commerce Good Practice in the APEC Region - Interconnection Resources Project - MRA-HRD Delivery Project: Orientating and Training Regulators for MRA implementation. - Multilingual International Trade Project - Regulators Round Table on Convergence - Request for Information on Policies to Reduce the Digital Divide - SME Database - TEL Website Maintenance - Vendor Training Project - Workshop: e-Government User Requirements and Interoperability - Workshop: IT&T Manpower Shortages, Gender Issues - Workshop: Wireless Issues

	Contd ▼ 2000		
SOM-ABAC: New Economy / Knowledge based Economy and the Management Reform Process Create policy framework to triple the number of people in the region with individual and community based internet access by 2005 APEC E-Commerce Readiness Initiative		Dot-com bubble burst ILOVEYOU worm appears. As of 2004 it is thought the most costly virus to businesses, causing upwards of 5.5 to 10 billion dollars in damage	Publications: - APEC E-Commerce Readiness Assessment Guide - Domain Name Registration Survey Report - Symposium for Collaborative Strategies for Multimedia and World Wide Web Production Skills Development
2001 Action Agenda of the New Economy e-APEC Strategy for the New Economy Beijing Initiative APEC Cyber Education Cooperation APEC's Communications and Outreach Strategy 9-11 Terrorist Attack in the U.S.A. The Blackberry is launched in U.S.A.		Broadening of Scope: e-APEC Strategy - From APII to APIS: -Use of reliable and secure ICT towards digital society -Universal access -Improved learning and employment -Improved public services and better quality of life Change of name to reflect evolution: Telecommunications and Information Working Group Ad-Hoc Task Force on e-APEC (TEL, EC, ECSG)	Projects: - APEC TEL Mutual Recognition Arrangement (MRA) Outreach Project - APEC TEL Website Maintenance - Distance Learning Strategic Needs Analysis - IITG Seminar - Publication of the e-Security Documents - Virtual Environments for Manufacturing and Training (VEMAT) - Workshop: IT Tools Publications: - APEC E-Business: What Do Users Need? - EC Best Practice for SME's in the APEC Region - Exporting Costs Decreased: A Guide to the APEC TEL Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment for the Telecommunications Industry - Testing Time for APEC Economies: A Guide to the APEC TEL Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment for the Telecommunications Industry
2002 Pathfinder initiatives APEC Transparency Standards APEC Cybersecurity Strategy APEC Trade Facilitation Action Plan APEC Policies on Trade and the Digital Economy Transform Digital-Divide into Digital-Opportunity SOM Committee on Economic and Technical Cooperation (ESC) SARS Pandemic		Broadening of Scope: - Cybersecurity - E-Certification - Counter-Terrorism - Commitment to universal access by 2010 focusing on connectivity for rural areas, MSMEs, women, youth and disabled - Call for the expansion of cyber-education, improve teacher quality, promote language study and facilitate the use of distance learning - Establish a regional public health surveillance network and early warning system to monitor and respond to critical disease outbreaks in the region, and critical threats such as bio-terrorism	Projects: - APEC Distance Learning Project on Telecommunications Technology - APEC TEL Interconnection Training Project - Cross-Country Smart Card-Based Secure Electronic Commerce - Electronic Commerce Capacity Building - IP based WLL - MRA Management System Data Load Facilitation - MRA Management System Launch Outreach Program - Optimal Topology of Testbeds (Research Networks) and Simplified Commercial Networks in APEC Region - Protecting Yourself in Today's Internet Society - Publication of APEC TEL Electronic Authentication Resources - Regulatory Roundtable - Workshop: Broadband - Workshop: CERT - Workshop: Counter Terrorism - Workshop: Interconnection - Workshop: WTO Publications: - E-Commerce Readiness in East Asian APEC Economies - A Precursor to Determine HRD Requirements and Capacity Building - Safety Net

2003

AMM:
- Fighting Terrorism and Promoting Growth
- APEC Cybersecurity Strategy
- A Comprehensive Strategy for IPR Protection
- A Digital Piracy Initiative
- A Five-year Strategic Plan for e-Learning
- Competition Policy and Regulatory Reform
- APEC Policies on Trade and the Digital Economy, Advanced Passenger Information Systems, Electronic Certificates of Origin

AELM:
- A strong statement in support of the WTO Round of trade negotiations
- A renewed commitment to fighting terrorism
- Digital Economy Pathfinder and Transparency Standards
- An Action Plan for Structural Reform
- A movement to reform APEC

Micro-Enterprises Action Plan

SARS Pandemic continues

The simultaneous attacks on network weak points by the Blaster and Sobig worms cause massive amounts of damage up to 2005

Broadening of Scope:
- Structural Reform
- IPR Protection
- Digital Piracy
- Electronic Certificates of Origin

Projects:
- APEC MRA HRD Project: Training Program Design for Phase II implementation
- APEC Symposium on ebXML for Paperless Trading and Collaborative e-Business
- Cybercrime Legislation and Enforcement Capacity Building Project
- E-Mail Practices for a 'Culture of Security'
- Flow-based Internet Traffic Measurement and Analysis
- Overview of Internet Protocol version 6 (IPv6): Bridging the Digital Divide
- Regulatory Roundtable NGNs
- Research into Electronic Commerce Strategies for Rural SMEs in APEC
- Stocktake of Progress Toward the Key Elements of a Fully Liberalised Telecommunications Sector in the APEC Region
- Workshop: APEC Smart Community Development
- Workshop: Broadband (TEL-27)
- Workshop: Broadband (TEL-28)
- Workshop: CERT
- Workshop: e-Government
- Workshop: Incident Response
- Workshop: Liberalisation Stocktake
- Workshop: Online Content
- Workshop: Website Accessibility
- Workshop: WTO
- WTO Telecommunications Capacity Building Workshop

Publications:
- E-Commerce Strategies for Rural SMEs in APEC
- Electronic Authentication: Issues Relating to Its Selection and Use
- Optimal Topology of Testbeds and Simplified Commercial Networks in the APEC Region

2004 Continues ▼

Future of TEL Work on NGNs

APEC Best Practices for RTAs and FTAs

APEC Comprehensive Strategy on Intellectual Property Rights

Santiago Initiative

Leaders Agenda to Implement Structural Reform towards 2010

Pathfinder Initiatives Guidelines

Broadening of Scope:
- NGNs

Projects:
- A comparison of the equivalence of selected telecommunications standards
- APEC Smart Community Development Project
- APEC TEL Asia-Pacific Grid Workshops
- APEC Telecenter Development Program (@TEL-30)
- APEC-Business e-Commerce Dialog
- Computer Emergency Response Team (CERT) Awareness Raising and Capacity Building.
- CSIRT + Wireless Security
- e-University network in HRD for e-Government
- Internet Measurement Analysis
- Regional Cyber-Infrastructure (@TEL-30)
- Regulation of Virtual Private Networks
- Regulatory Training Design
- Safety Wireless
- Smart Community Development (@TEL-30)
- SME Internet Safety Training Program
- WiFi Connectivity

	Contd ▼ 2004		

Indian Ocean Tsunami

Tim Berners-Lee received the Millennium technology prize for developing the network-based implementation of the hypertext concept in 1991

Santy; The first known "webworm". It exploited a vulnerability in php and used Google in order to find new targets. It infected around 40000 sites before Google filtered the search query used by the worm, preventing it from spreading.

Witty worm: Believed to be the first internet worm to carry a destructive payload

MyDoom worm holds the record for the fastest-spreading mass mailer worm. It is estimated that 1 out of every 12 emails in the Internet this year are MyDoom generated

Publications:
- APEC Symposium on ebXML for Internet Paperless Trading and Collaborative e-Business
- Mutual Recognition Arrangement on Conformity Assessment for Telecommunications Equipment (MRA): Training Program Design for Phase II implementation
- Presentations of IPv6 Workshop March 2003: Bridging the Digital Divide
- Stocktake of Progress Toward the Key Elements of a Fully Liberalised Telecommunications Sector in the APEC Region
- Safety Mail

2005

The role of APEC TEL on disaster preparedness

Bussan Business Agenda

Busan Roadmap towards Bogor Goals

Strategic Approach to Capacity Building

Pathfinder Approach

APEC Anti-Counterfeiting and Piracy Initiative

Endorsement in full of APEC's message to WSIS

Broadening of Scope/Refocus:
- Disaster Preparedness
- APEC Fact Sheet – TELWG priorities:
  -Reduce the Digital Divide
  -Next Generation Networks and Technologies
  -E-governance
  -Mutual recognition arrangements
  -Regulatory reform
  -Capacity building
  -Protecting information
  -Communications infrastructure and cyber security
  -Advancing the Asia Pacific Information Society

Restructure:
- 1. HRDSG disappears. HRD functions are incorporated into the charter of each steering group coordinated by the Vice-Chair and Deputy Convenors of each SG.
2. BFSG disappears. BF functions are incorporated into the charter of each steering group coordinated by the Deputy Convenors of each SG.
3. **LSG** remains with the following priority objectives: Trade and investment liberalization; Effective policy; and, regulatory frameworks and Policy and regulatory roundtable.
4. **ICT Development Steering Group (DSG)** is created with the following priority objectives: Advancement and use of ICT infrastructure, services and applications to create digital opportunities (eg. Broadband access, Telecenters, e-Inclusion, e-Government); and, Development, implementation and application of advanced technologies (eg. Ipv6, GRIDs) including knowledge transfer in ICT research.
5. **Security and Prosperity Steering Group (SPSG)** is created with the following priority objectives: Secure and trusted networks (including converged networks), infrastructure, services, technologies, applications, e-Commerce; Cybercrime prevention; Incident response; Malicious use of ICT; Emergency preparedness and response; and, e-Authentication

Projects:
- APEC MRA HRD Project: Training Program for Phase II implementation
- APEC-TEL / OECD-WPIPS on Security
- Asia-Pacific Grid Workshop
- Establishment of Government Chief Information Officer Training Model and Network for e-Government Development
- IT-based Early Warning Systems
- Killer Applications on APEC IPv6 Infrastructure
- Regional Cyber-Infrastructure (@TEL-32)
- Regulatory Training Project
- Wi-Fi Connectivity in Rural and Remote Communities: Bridging the Digital Divide
- Workshop: Dealing with Challenges to Broadband
- Workshop: SPAM
- Workshop: Spyware
- Workshop: Telecenters
- Workshop: Wireless Security

Publications:
- A Comparison of the Equivalence of Selected Telecommunications Standards
- Assessment Report on Paperless Trading of APEC Economies
- APEC Privacy Framework
- Designing and Building Rural Wi-Fi Networks: A Do-it-Yourself Cookbook
- Public Key Infrastructure (PKI) Guidelines: Guidelines for Schemes to Issue Certificates Capable of Being Used in Cross-Jurisdiction eCommerce

2006

APEC Technology Choice Principles

Enhance activities across APEC fora in order to combat socio-economic disparity issues in the region

Ha Noi Action Plan

SOM Steering Committee on ECOTECH (SCE)
4 additional principles:
- Integration into the global economy
- Human security and counter-terrorism capacity building
- Promoting the development of knowledge-based economies
- Addressing the social dimensions of globalization

OSX/Leap: The first-ever malware for Mac OS X, a low-threat trojan-horse

Search engine rankings are so important that an industry has developed: Search Engine Optimizers ("SEO")

Projects:
- APEC e-Government Research Center
- APEC e-Inclusion: Bridging The Digital Divide For People With Disablties
- APGrid Implementation Project
- APII IPv6 R&D Test Bed Project
- Development of Model Government CIO Councils
- Evaluation of Access to Domestic and International Leased Lines in the APEC Region
- Foundation of Asian Speech Translation Reasearch Basis
- Future GRID cooperation in APEC TEL
- Future Vision of the Asia Pacific Information Society
- Information Technology Awareness, Training and Education Materials/Website
- Interconnection Workshop
- Judge and Prosecutor Cybercrime Capacity Building Project
- M-Opportunity for all Workshop
- RFID: Survey on RFID as a tool to facilitate trade in the APEC region
- Strengthening Effective Response Capabilities among APEC Economies
- Telematics Workshop
- WTO Capacity Building On Domestic Regulation

Publications:
- APEC Symposium on Information Privacy Protection in E-Government and E-Commerce
- APECTEL Regulatory Training Program
- APECTEL Regulatory Training Program: Program Resources
- APECTEL Regulatory Training Program: Final Report
- Computer Emergency Response Team Awareness Raising and Capacity Building Final Report
- Development of "APEC Guidance for Electronic Commerce", Using the Best Practices of E-government Procurement Systems
- Establishment of Government CIO Training Model and Network for e-Government Development
- Evaluation of Access to Domestic and International Leased Lines in the APEC Region
- Training Program for Phase II Implementation (APEC MRA-HRD Project) Final Report

2007 Continues ▼

APEC Leaders' Declaration on Climate Change, Energy Security and Clean Development

APEC Trade Recovery Programme

Leaders' Agenda to Implement Structural Reform (LAISR)

Ambitious long-term agenda to strengthen Regional Economic Integration (REI)

Projects:
- APEC Seminar on Community Knowledge Commons
- APECTEL - ASEAN Workshop on Network Security
- APECTEL - OECD Workshop on Malware and Related Threats
- Building a Culture of Security - Corporate Policy and Management Issues (Questionnaire)
- Deployment of GCIO Training Model and Networking for e-Government Development
- Grid as an Enabling Platform
- ICT Products and Services Security Workshop
- Information Grid for Knowledge System
- Information Security Certifications Assessment Guide
- Interconnection Issues

2007 (Cont'd ▼)

Projects (continued):
- Model GCIO Councils
- Universal Service Survey
- Workshop on CIO's Contribution to a Conservation of APEC Region's Heritage/Culture Trhough Digital Content Creation

Publications:
- APEC e-Trade and Supply Chain Management-Presentations
- APEC Guide to Information Security Skills Certification Booklet
- APEC Information Security Certifications Assessment Guide - Project Report
- APEC Research Report on Paperless Trading Capacity Building and Intellectual Property Protection
- A Guide For Conformity Assessment Bodies to the APEC TEL Mutual Recognition Arrangement (2nd edition)
- A Guide for Industry to the APEC TEL Mutual Recognition Arrangement (2nd Edition)

Storm Worm: Identified as a fast spreading email spamming threat. It begins gathering infected computers into the Storm botnet. It is estimated that in just 13 days it had infected 1.7 million computers

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2008 (Continues ▼)

Safe and trusted ICT environment that can effectively respond to cyber threats, malicious attacks and spam

The vital role played by ICT in all phases of emergency preparedness, early warning systems, disaster mitigation, rescue and relief operations, delivery of humanitarian assistance and recovery efforts

2009 Work Plan for the APEC Regional Economic Integration (REI) Agenda

APEC Investment Facilitation Action Plan (IFAP)

Digital Prosperity Checklist as a tool to promote sustained economic growth through the use and development of ICT

Promote Corporate Social Responsibility (CSR) awareness and capabilities in the region

APEC Strategy for Disaster Risk Reduction and Emergency Preparedness and Response

APEC Principles on Disaster Response and Cooperation

Disaster Management Capacity Building Needs

Proposal for a Disaster Risk Reduction Facility

APEC Task Force on Emergency Preparedness

Broadening of Scope/Refocus:
- Early Warning Systems
- Disaster Mitigation
- Rescue and Relief Operations
- Delivery of Assistance
- Recovery Efforts
- APEC Fact Sheet – TELWG priorities:
-Assist developing economies reform policy and regulatory structures and become WTO compliant
-Implement initiatives that encourage greater access to basic communications and build-out of the Internet, and which [SIC] promote greater broadband accessibility, availability and use
-Develop a collaborative approach to cyber-security
-Create sustainable markets through both convergent and new technologies

Revised TEL Terms of Reference:

1. Improve the telecommunications and information infrastructure in the region

2. Facilitate effective cooperation, free trade and investment and sustainable development

3. Goals:
-Continue the progress towards the Brunei Goals through information exchange, projects and workshops
-Share knowledge among TEL member economies to improve telecommunications and information infrastructure in the region
-Strengthen collaboration with other fora
-Create an environment friendly to free trade and investment
-Focus on sustainable development and human capacity building

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Projects:
- 2nd Grid Showcase
- Access Grid for Distance Learning
- APEC Seminar on Using ICT for Rural Community Capacity Building
- APEC-TEL PKI and e-Authentication Training Program
- Bilateral Cyber-Crime Legislative Drafting Workshop
- Cyber Security Exercises Workshop
- Engaging Stakeholders and Consultations (Workshop)
- Guide on Policy and Technical Aproaches Against Botnet
- International Mobile Roaming Charges (Survey and 1/2 day Workshop)
- PC Grid @ APEC
- Seminar on the Protection of Cyberspace from Terrorist Use and Attack by APEC
- Showroom on Advanced Technologies for bridging the digital divide
- Submarine Cable Protection Information Sharing Workshop
- Telecommunications for Disaster Management: Best Practices Workshop
- Voice over IP (VoIP) Security Guidelines
- Workshop on Cyber Security Awareness Raising

Publications:
- APEC Cooperative Response Guidelines in Cross-Border Environment
- Best Practice for Cooperative Response based on Public and Private Partnership
- Guide on Policy and Technical Approaches against Botnet
- Strengthening Effective Response Capabilities among APEC Member Economies - Final Report
- VoIP Security

2008

Cont'd ▼

Revised TEL Terms of Reference (continued):

4. Objectives:
-Provide member economies with opportunities to exchange information, views, experiences and analyses concerning telecommunications and information issues in the APEC region, with a particular emphasis on improving and sharing best practice initiatives
-Take action on the recommendations of the Senior Official Meeting (SOM) as well as direction from Leaders and Ministers that relate to TEL, and/or internationalisation related recommendations that arise within the APEC process
-Provides recommendations to the SCE on ways to coordinate and prioritise the various TEL activities within the APEC process
-Ensure that its work is practical and focused on improving the climate for experts within and among member economies (for example by working closely with business/private sector and inter-related fora)
-Work closely with other APEC fora, including the APEC Business Advisory Council (ABAC), where their activities are closely related and there is mutual benefit
-Ensure that their activities do not duplicate those undertaken by other APEC bodies

2009

Projects:
- APEC Training program for Preventive Education on ICT Misuse
- APEC Workshop on Effective Implementation of Best Practices Concerning Cable and Satellite Signal Piracy and Enforcement
- Broadband Usages to Enhance Networks and Services in Apec Member Economies
- Capacity Building on Telecommunications Elements of RTAs/FTAs for TEL-41
- Demand-based policy approaches to foster universal broadband access
- Development and Guide on Implementation of Intrusion Detection Systems (IPS) for Public Domain Networks
- Enabling Information Communications Technology Investment for Growth and Recovery
- Extension of APEC e-Government Research Center at Waseda University
- Handheld Mobile Device Security Workshop
- ICT Products and Services Security Workshop
- Initiatives Among Member Economies Promoting Safer Internet Environment for Children (Workshop)
- International PKI and e-Authentication Training Program
- Stocktake of Regulatory Convergence in the APEC region
- Workshop on Ipv6: Facing the Future of Internet
- Workshop on Telecommunications Trade Rules and Regulatory Discipline
- Workshop on Universal Access to Broadband Services (follow-up of Universal Service Strategies Survey)
- Workshop(s) for Capacity Building on Telecommunications Trade Rules and Regulatory Disciplines
- WTO Capacity Building

EXECUTIVE SUMMARY

Executive Summary

Asia Pacific Economic Cooperation (APEC) is known as the most dynamic economic region of the world. Its aim to achieve a free and open trade and investment area of the Asia Pacific by 2010 for developed economies and by 2020 for developing economies, has set a reference for the rest of the world on how trade and investment liberalisation, business facilitation, and economic and technical cooperation can be accomplished despite the wide variety of economies and cultures involved.

APEC's challenge is to continue with a rapid economic growth sustained by Regional Economic Integration (REI), Structural Reform (SR) and Economic and Technical Cooperation (ECOTECH). Increasing trade and investment among economies as well as building capacity to assist member economies and its people to gain the necessary skills to meet their economic potential are among its main objectives. Also the protection against economic volatility caused by climate change and different threats for human security is among the priorities of the region. Anti-corruption principles for the public and private sectors and codes of conduct are among other measures to be accomplished to combat corruption.

APEC Telecommunications and Information working group (TEL) has been operating for nineteen years already. It plays a key role in contributing to strengthen its member economies development and improving the welfare of its people. Its original structure has evolved consistently keeping pace with the technological and regulatory transformations of the telecommunications and information sectors on a highly competitive marketplace.

In its years of existence, TEL has always been quite alert and reactive to external factors that could harm economic growth such as, natural disasters, terrorism, cyber-vulnerability, digital gaps, and connectivity and interoperability issues. Other external political impacts have also been addressed by TEL in coordination with other APEC fora and international organisations, among which we can mention the World Trade Organization (WTO) round on basic telecoms and currently the Doha Round, World Summit on the Information Society (WSIS) within the International Telecommunications Union (ITU) and Mutual Recognition Arrangements (MRAs) on telecom equipment with Asia Pacific Telecommunications (APT) and the Inter-American Commission on Telecommunications of the Organization of the Americas States (CITEL, OAS).

With the convergence of telecommunications and information technologies, the TEL rapidly responded to the new economic agenda and restructured its organisation to allow for new information technology and communication challenges. Participation of the academic and private parties has enriched its work. However, there is room for new alliances to foster further collaboration with National Research and Education Networks with the aim to innovate on capacity building techniques.

The first decade of the XXI century has been one of changes and new paradigms. Information technology and communications play a key role in strengthening different economic and social sectors. They are the means to grant equal access and connectivity, without gender inequalities, to reach all kinds of goods and services. Technology has become one of the most important tools to train and build capacity skills of human resources of every economy.

Therefore, 2009 has been an appropriate time to assess TEL's activities, meetings and projects and measure their impact and responsiveness to APEC´s priorities and goals. This TEL working group assessment reviews and assesses the contribution of this working group to APEC goals and objectives. It also assesses TEL's effectiveness in operations, meetings and activities. A thorough review of its projects has been performed to find the focus of TEL in achieving stated goals and objectives and efforts reducing duplication of work, increasing the effectiveness of expertise and skills and being able to collaborate jointly with other APEC and non-APEC fora.

This Independent Assessment Report contains three chapters, the first one has been designed to locate TEL's role from different perspectives, APEC, the member economies, the private sector, the user, and the lead shepherds perspectives. It gives a 360° view of how TEL is perceived by its internal and external environment. This chapter includes inputs from a survey and interviews as well as information retrieved from APEC's and TEL's websites and other relevant information found in the world wide web. The second chapter includes a detailed evaluation of the 84 projects found in the AIMP database and the extra 166 projects found on the Chair Reports of each of the 39 TEL meetings. These projects have been classified against an assessment framework created by the consultant and the ECOTECH priorities and conclusions were drawn regarding their conformance to TEL's and APEC's goals and priorities. The third chapter presents two decision points for SCE and five decision points for TEL on how both can be more effective in achieving APEC goals, outcomes and objectives, how can they collaborate internally and

externally more effectively, and how the information can be used "to make the telecommunications and information sector a 'model' sector in achieving the goals set by the APEC economic leaders at Bogor".

Many very interesting findings were gathered from the analysis and synthesis of all information as well as from responses to the survey, the project database and interviews. These findings are the backbone of Chapter ONE.

Once categorised in order of importance, from the consultants' point of view, Chapter THREE presents in detail seven decision points, two for consideration of SCE and five for consideration of TEL. Further recommendations that are complementary to the decision points for consideration of TEL are included in the same chapter.

SCE's decision points are thought to strengthen its internal communications from/to its working groups. Most of its internal communication happens through indirect communications. SCE's involvement in the wants and needs of Chairs/Lead Shepherds, would surely lead to a better understanding of which areas are of common interest to different fora and which of those areas can jointly be worked out to avoid possible duplication of work and to increase cohesion in the integration of APEC's economic region. SCE participation in the planning committee of its fora will also reinforce insight towards achieving APEC's Economic and Technical Cooperation and Structural Reforms to strengthen focus on the short, medium and long term goals and objectives.

The five decision points are thought to increase TEL's effectiveness in responding to its stake-holders; in raising awareness of its achievements within the APEC's ecosystem and in its outreach to non-APEC fora; and to develop management and communications skills and strategies that will increase the efficiency of its planning. Suggested focus and priorisation will help TEL to build its own roadmap to rapidly respond to emerging and current objectives. TEL could be considered a working group model within APEC for its outcomes and best practices, a series of recommendations complementary to the decision points consider the fine tuning, streamlining and improvement of some of its processes that will reassure its high level of commitment to APEC's Regional Economic Integration.

Chapter ONE
Locating TEL's role in APEC

CHAPTER ONE: Locating TEL's Role in APEC

TEL is viewed by APEC as the creator and developer of the Asia-Pacific Information Infrastructure (APII). Leaders and Ministers consider this infrastructure "play a major role in economic growth and development in APEC economies"[1].

1. The APEC's Perspective

APEC[2] Leaders have set the scope of work[3] for its stake-holders under the umbrella of the Bogor Goals. In its 20 years of existence, Leaders have sought different strategies to strengthen the implementation mechanism of APEC's objectives and goals while also responding effectively to external causes[4] that may weaken or preclude the consolidation of the multilateral trade system. The mission is to achieve the goal of free and open trade and investment in the Asia-Pacific no later than the year 2010 for developed economies and no later than the year 2020 for developing economies.

A strategic roadmap and general principles of the 1995 Osaka Action Agenda (OAA) have been designed. On the basis of the 1996 Manila Action Plan for APEC (MAPA), member economies report on an annual basis progress towards achieving free and open trade and investment goals through Individual Action Plans (IAPs) and Collective Action Plans (CAPs). Many other initiatives complement APEC's instruments to achieve "stability, security and prosperity for [APEC's] peoples"[5].

Since 2003, Leaders have enhanced the original view of the Bogor Goals of free and open trade and investment to pursue a regional economic integration through the examination and adoption of best practices on Regional Trade Agreements (RTAs) and Free Trade Agreements (FTAs). They have also mandated structural reform initiatives to further expand trade and business facilitation while setting economic and technical co-operation priorities.

Bogor Goals revisited:

1. Strengthening open multilateral trading system towards a Regional Economic Integration[6] to
   · reduce tariff and non-tariff barriers to trade and investment;
   · build on open markets;
   · advance measures for bilateral and regional trade agreements; and
   · examine the prospects for a Free Trade Area of the Asia-Pacific.

2. Enhancing trade and investment liberalisation and facilitation with a Structural Reform[7] to
   · reduce the cost of business transactions;
   · improve access to trade information; and
   · align policy and business strategies to facilitate growth, and free and open trade.

3. Intensifying development economic and technical co-operation (ECOTECH)[8] to:
   · provide training and co-operation to build capacities in all APEC economies; and,

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[1] 1994 Leaders' Declaration and Trade Ministers Statement

[2] APEC is a governmental organization of the most dynamic and fastest-growing economies in the world. The Asia-Pacific region was formed to foster economic co-operation and trade among them with a view of enhancing international trade. Its members work together to reduce trade barrier, open investment opportunities, ease the exchange of goods, services, resources and technical know-how, and strengthen economic and technical co-operation among them. Its decisions are taken by consensus and commitments are achieved on a voluntary basis.

[3] http://www.apec.org/apec/about_apec/scope_of_work.html

[4] Such as security threats and terrorism, financial crisis, epidemic or pandemic health threats, emergency and natural disasters threats, etc.

[5] 1993, Blake Island, United States, APEC Leaders meet for the first time and outline APEC's vision. For a quick reference of the different initiatives being adopted by Leaders see http://www.apec.org/apec/about_apec/history.html

[6] Regional Economic Integration Report

[7] Leaders' Agenda to Implement Structural Reform 2010 (LAISR). The agenda covers five areas for structural policy reform: regulatory reform, competition policy, public sector governance, corporate governance, and strengthening economic and legal infrastructure.

[8] In 2006 SCE endorsed, ECOTECH priorities: developing human capital, developing stable and efficient markets through structural reforms, strengthening economic infrastructure, facilitating technology flows and harnessing technologies for the future, safeguarding the quality of life through environmentally sound growth, developing and strengthening the dynamism of small and medium enterprises, Integration into the global economy, human security and counter-terrorism capacity building, promoting the development of knowledge-based economies, and addressing the social dimensions of globalisation.

- assist member economies to gain the necessary skills to meet their economic potential at the institutional and personal levels.

a. TEL in the policy scope of APEC

APEC's structure is a vertical organisation with five levels of hierarchy: 1) Leaders, 2) Ministers – APEC Business Advisory Council – Sectoral Ministers, 3) Senior Officials, 4) Thematic Committees, and 5) Working Groups – Subcommittees – Task Groups. The APEC Secretariat is an administrative office that supports in different ways the APEC structure so the stake-holders can better understand and perform in their operation. Figure 1 shows a chart with APEC's hierarchy. From the observation of this figure, one can imply that there is no evident horizontal communication among all the working groups, subcommittees and task groups.

Figure 1 APEC's Hierarchical Structure
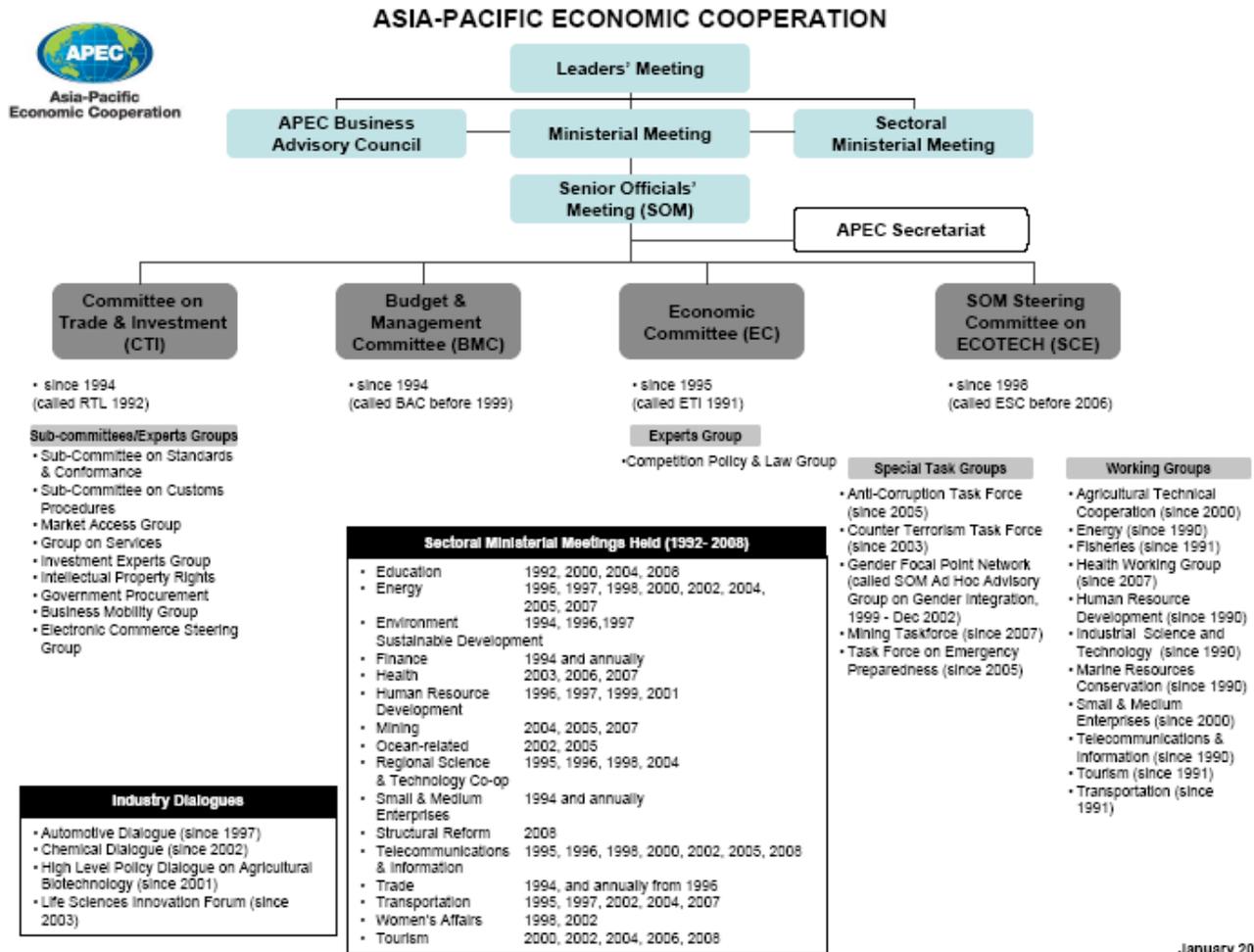
The Telecommunications and Information Working Group (TEL) is highlighted in the fifth level of the structure. Flow of communication from/to TEL and its upper hierarchical levels and the Secretariat is systematic and predictable. Economic Leaders and Ministers meet by the end of every year. They expect from TEL outputs and reports of progress on the collective actions implemented to achieve Bogor Goals. TEL outcomes are reported to SCE and through SCE to SOM, AMM and AELM. Telecommunications and Information Industry Ministers (TELMIN) meet every two to three years to endorse TEL's progress and give directions of future work. The resulting TEL Plan/Program of Action adopted at TELMIN becomes a contribution to the Economic Leaders' Plan of Action that will be endorsed on the same year. The Secretariat secures an effective flow of information. On Figure 2 the black arrows show the flow of information from the upper hierarchies to TEL, the red arrows show the flow of information from TEL to Economic Leaders.

APEC's Business Advisory Council (ABAC) has no direct communication with TEL. Through Leaders groups are requested to take into consideration ABAC's recommendations. Program Director informs TEL of their interests and commitments to APEC. TEL most of the time is already working on issues raised by ABAC, however, the intention is that all working groups, where appropriate, adjust their yearly work plans to incorporate ABACs recommendations.

Committees on the fourth level of the hierarchy have some limited and indirect flow of information with TEL. The Program Director of TEL is generally the channel of communication. For example, the Budget and Management Committee (BMC) responds to all TEL requests for project approval. TEL reports to SCE.

In the fifth level of APEC's hierarchy, at least fourteen other APEC fora could have common interests to jointly collaborate with TEL Steering Groups (Liberalisation Steering Group, LSG, Development Steering Group, DSG and Security and Prosperity Steering Group, SPSG, Mutual Recognition Arrangements Task Force, MRATF). Examples are: Standards & conformance - MRATF; Customs procedures – DSG; Market access – LSG; Group on Services – LSG; Investment Experts – LSG; Intellectual Property Rights – SPSG: Competition Policy/Deregulation – LSG, Electronic Commerce – DSG, Counter Terrorism – SPSG, Gender Focal Point Network – all SGs, Emergency Preparedness – SPSG, Human Resource Development – all SGs, Industrial Science and Technology – DSG, SPSG, Small and Medium Enterprises – DSG. TEL could also serve as the technology partner to other groups such as Mining, Agricultural Technical Cooperation, Energy, Fisheries, Health, Marine Resources Conservation, Tourism and Transportation that could need Information and Communication Technologies (ICT) as a means to develop specific applications taking advantage of the Asia Pacific Information Infrastructure (APII).

Figure 2. TEL's Instruction Flow within APEC
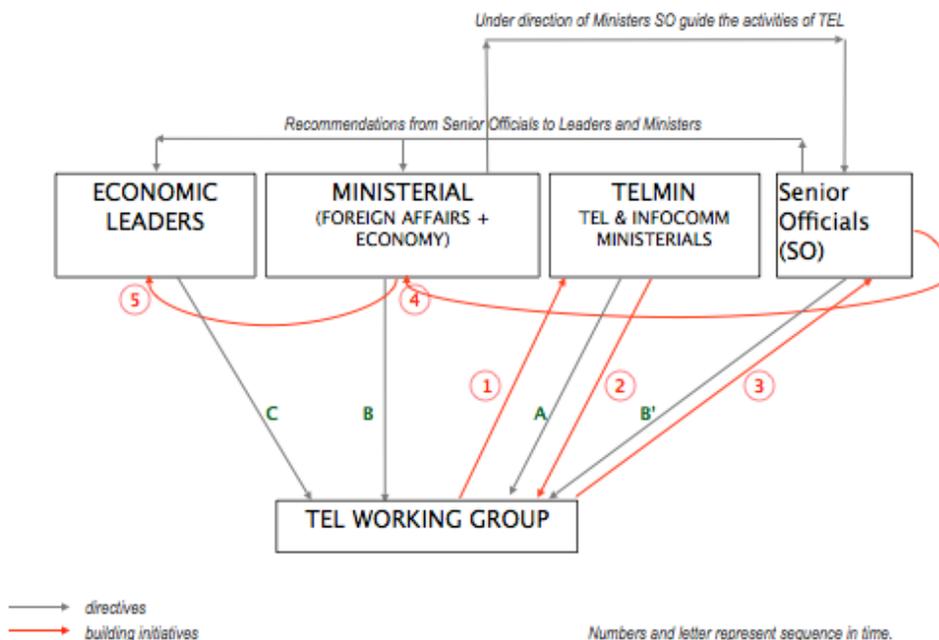
b. The TEL

The Telecommunications and Information sectors have been classified as one of the working groups under the SCE of the Senior Officials' Meeting (SOM) of APEC[9]. This working group is collectively known as TEL. The working group carries out APEC's work as directed by APEC Leaders, APEC Ministers, APEC Telecommunications and Information Ministers and Senior Officials.

TEL was launched in March 1990 by the SOM as the 7th priority work project to contribute to the accomplishment of APEC goals and objectives. By then, SOM prioritised TEL's areas of work in four main areas: a) Human Resource Development (rapporteurs Thailand and Canada); b) Technology Transfer and Regional Co-Operation (rapporteur

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[9] as is shown in http://www.apec.org/apec/about_apec/structure.html detailed structure

New Zealand); c) Opportunities for On-Site Visits/Observerships/Fellowships (rapporteur Japan); and, d) Telecomm Standardisation (rapporteurs Korea, Indonesia and US). Headed by the US as the Lead Shepherd, TEL was organised to develop short, medium and long term projects on the assigned areas of work with rapporteurs responsible for the accomplishment of different co-operation activities and outcomes.

Figure 3 shows the relationship of TEL with the general structure of APEC from a working standpoint.

Figure 3. TEL's Policy Relationship within APEC
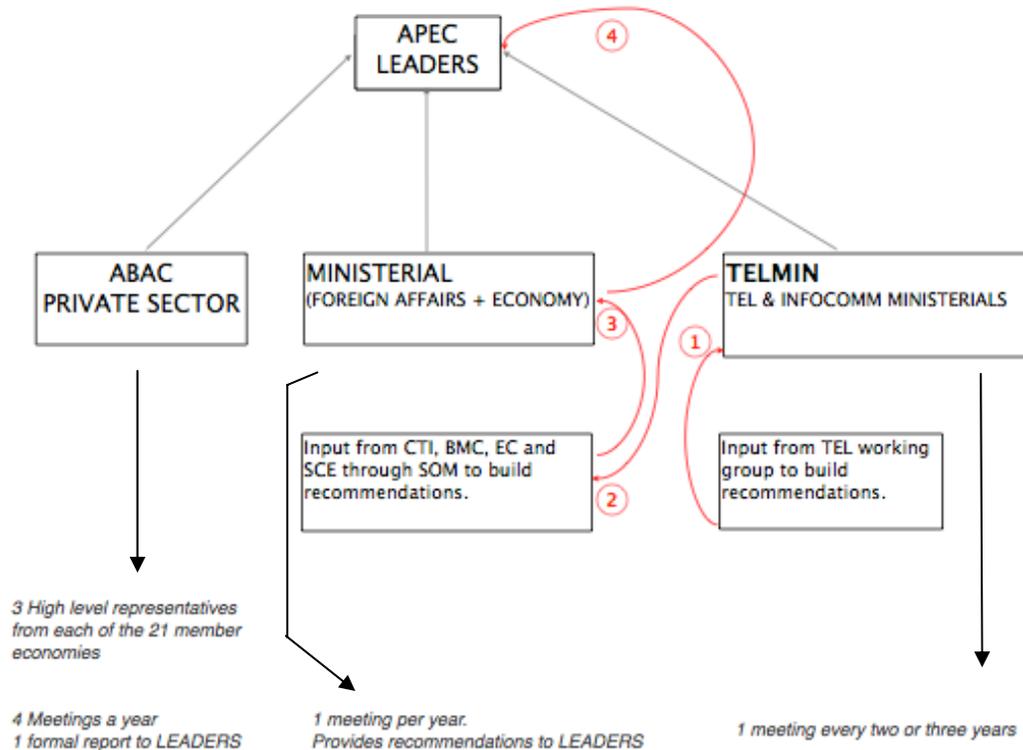
At TEL7 in 1993, Ministers and SOM instructed TEL to Develop a Vision Statement and Policy Objectives[10]. This document was presented to AMM in the same year. Since 1993, the document has remained the same. The content of the document needs to be revisited in light of the evolving nature of the telecommunications and information sector, as well as, the APEC strategies being adopted since the acknowledgement of the Regional Economic Integration and the Structural Reform. Recently TEL issued its Terms of Reference (ToR); they were submitted and approved by SOM/SCE in its February 2008 meeting. TEL's ToR should be aligned with the revision of TEL's Vision Statement and Policy Objectives to reflect the current APEC goals and objectives.

TEL's ToR indicates a Strategic Plan should be developed. This Strategic Plan will guide TEL's work for the next two years. A Work Plan "comprising deliverables, activities, projects and outcomes aimed at advancing the priorities established in the Strategic Plan" indicates advances of the Strategic Plan for interim periods. There is no evidence that a Strategic Plan is already in place[11]. Even though a TEL 2009 Work Plan was submitted to the SCE-COW meeting in February 2009, there is no evidence that this Work Plan was approved by TEL Plennary. The document has valuable information on its section 3 and 4 on how TEL intends to collaborate with other organisations and its approach for coordination with other APEC fora.

Being part of the working groups on ECOTECH, TEL should abide to the following priorities:
• Developing human capital;

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[10] The TEL working group Vision Statement and Policy Objectives can be found on
http://www.apec.org/apec/apec_groups/som_committee_on_economic/working_groups/telecommunications_and_information.html
[11] All Plenary documents from TEL37, TEL38 and TEL39 were reviewed to find evidence. Although, when attending the HODs and EXCOMM meeting during TEL39 they established a group to work intensively during the intersessional period to come up with a medium term Strategic Plan (2010-2015) for TEL. A draft version is intended to be presented at TEL40 in Mexico by September 2009 and will be finalised by December 2009.

• Developing stable and efficient markets through structural reform;
• Strengthening economic infrastructure;
• Facilitating technology flows and harnessing technologies for the future;
• Safeguarding the quality of life through environmentally sound growth;
• Developing and strengthening the dynamism of small and medium enterprises (SMEs);
• Integration into the global economy;
• Human security and counter-terrorism capacity building;
• Promoting the development of knowledge-based economies; and
• Addressing the social dimension of globalisation.

These nine directives must be present when developing the Strategic Plan and Work Plan and it is desirable that they also be aligned with TEL's Vision Statement and Policy Objectives as well as TEL's ToR.

c. TEL stake-holders

TEL stake-holders are participants from the member economies' government institutions; the private sector; the academia; user groups; and, representatives of other APEC fora. It is worth mentioning that TEL appears to be one of the APEC groups with more guests [12]participating in its meetings.

Member economies generally represent the policy and regulatory telecommunications institutions of their governments and sometimes even the private/business sector, the academia or user groups are part of the delegations. Most of the APEC member economies send at least one representative to TEL meetings. The Head of Delegation (HOD) is the higher authority of each member economy's delegation. Delegations vary from one to fifteen representatives with an overall participation of approximately two hundred attendees to each meeting. These meetings take place twice a year around April and September; the average participation is eighteen member economies present at each meeting out of the current twenty one. TEL has developed a public roster to guarantee equitable rotation of venues for TEL and TELMIN meetings. Three benefits result from this initiative: 1) member economies can decide well in advance when they will be willing to host a meeting, 2) it facilitates the negotiation of the TEL Chair with the probable future venues, and 3) member economies participating in the meetings can also plan in advance their budgets.[13]

Member economies' representatives also perform the different organisational roles in TEL's structure. The TEL Chair and Vice Chair are volunteers drawn from a member economy under the *APEC Guidelines for Lead Shepherd/Chair and Deputy Lead Shepherd/Chair of APEC Working Groups and SOM Task Forces*[14]. The TEL Chair whose term is about to end follows an informal process of consultation with the rest of the member economies to be able to announce the new Vice Chair, once the current Vice Chair becomes the TEL Chair during his/her last plenary meeting. The TEL ToRs show the intention to circumscribe TEL Chair's profile and competencies[15]. It is not mentioned in TEL ToRs, however, the Chair could have additional duties, as requested in the ToRs of SCE it is stated that "Chairs/Lead Shepherds of relevant fora will be invited to participate in the first SCE meeting of the year at SOM I as the Meeting of the ECOTECH Committee of the Whole (SCECOW)". From the information available and informal consultations it appears TEL Chair has only attended this duty in few occasions, to present TEL's progress for the rest of the attendants to listen. However, it might be more relevant to guarantee Chairs of different fora meet in a less formal and structured agenda, where they could exchange views and find out if there are real connecting topics among working groups, subcommittees and task groups.

TEL has fourteen positions in its structure as it is shown in Figure 4. An additional position "assistant to the TEL Chair" is provided by the TEL Chair member economy.

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[12] When any private sector company, association, non governmental organization, user group etc. asks to participate in meetings of APEC working groups, after a process of approval they are granted "guest" status. Guidelines can be found at www.apec.org
[13] A copy of the roster can be found at TEL39 plenary session documents
[14] This document is only present at the 2007 APEC Senior Official Report on Economic and Technical Co-Operation (APEC#207-ES-01.1 ISSN 0219-8932) Annex G, it could not be found on APEC's website as a standalone document
[15] Its main duties are: Coordinate the schedule and chair meetings as well as prepare reports of the meetings; Lead the implementation of the action program and other activities to fulfill instructions given by APEC Leaders, Ministers and Senior Officials and report to Senior Officials on the development of these issues; Oversee the development of activities ensuring that the work is responding to Leaders' and Ministers' priorities; Liaise with the APEC Secretariat, other APEC fora and international organisations to enhance the quality of activities including project proposals with well-defined outcomes and track the progress of project implementation; Act as the spokesperson for the relevant working group or APEC fora; The duties of the Deputy Lead Shepherd/Chair will be to assist the Lead Shepherd/Chair to fulfill the mandate and the activities of the working group or other APEC fora.

Figure 4. TEL's Structure
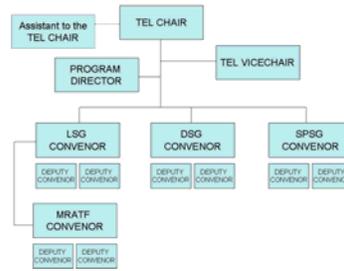
The TEL organises its work in three steering groups plus a task force; there is one Convenor and two Deputy Convenors leading each steering group and task force; these roles follow its internal document of *TEL's Rotation Procedures and Duties of Convenors and Deputy Convenors*. These procedures contain a complete explanation of all the possible situations and a good example of how each role can enhance wider participation and better quality of TEL's work. During TEL33 the current structure was approved, it comprises a new way of achieving capacity building and business facilitation as both topics are cross cutting to liberalisation, development and security and prosperity. Figure 5. shows the scope of work of the steering groups.

Figure 5. Steering Groups Mandates
New Structure of APEC TEL

Considering that the telecommunications sector has always been more populated by men than women, it is important to note that TEL has had seven Chairs, two of which have been women; the Convenors and Deputy Convenors also have had moderate presence of women. The current Vice Chair, the assistant to the Chair, one Convenor and three Deputy Convenors are women, that is, six out of fourteen members of the Extended Committee (EXCOMM) are women[16].

Another type of stake-holder are the observers. Two of the three official APEC observers participate at TEL. The role of the observer is not defined and participation is highly dependent on its interests. For example, Since TEL1[17]

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[16] See figure 4. for a reference of the members of the EXCOMM and http://www.apectelwg.org/ for names and member economies holding those positions

[17] TEL1 is the reference for the first TEL meeting. The following meetings are referred as TEL2, TEL3...etc. TEL1's venue was Singapore on July 5-6, 1990. Nine economies were present Australia; Canada; Indonesia; Korea; Japan; New Zealand; Singapore; Thailand; and, the US. The Lead Shepherd was Richard Beaird from the State Department in the US.

and up to TEL32[18] the Pacific Economic Co-Operation Council (PECC)[19], through its Telecommunications and Information Industries Forum (TIIF) has been one of the relevant official observers actively involved at TEL and TELMIN meetings in the promotion of a permanent dialogue, with the private/business sector, the governments and the academia[20]. PECC also established telecommunications, broadcasting and information roundtable gatherings on the relevant issues of the moment as well as recommendations for future work, and participated with member economies on seven specific projects in practically all areas developed by TEL to identify matters enhancing open trade. The Association of Southeast Asian Nations[21] (ASEAN) has not participated as frequently as PECC in TEL meetings however has been present in the TELMIN meetings and has collaborated in two projects and a joint workshop on Network Security.

The private/business sector is also represented by different individual organisations that have participated in other seventeen projects, as far as the information is available. Two participants have extended their participation for several meetings, the Asia Oceania Electronic Marketplace Association (AOEMA) in eight projects including workshops and seminars on electronic commerce awareness and the development of databases on SME and Business to Business (B2B) interoperability and marketplace, and multilingual international trade as good practices for the region; and the Global Business Dialogue on e-Commerce (GBDe) who has been active on cyber-security, ubiquitous society topics and Internet governance.

The users groups as stake-holders grant a balance to APEC TEL in their dialogue with the private/business sector. Users represented at TEL can express their concerns in the local and international markets. Among their priorities are: open access to global mobile networks; regulatory best practices; liberalisation; leased lines; IP telephony; digital divide; universal access and numbering. Since the creation of the Industry Roundtables, user representatives have been participating in the decision making of the topics selected for dialogue. This is the least represented of the stake-holders but a very participative one. Since TEL25 the International Telecommunications User Group (INTUG) has been attending TEL meetings, participating in all steering groups, in projects and workshops and helping TEL Chair in the development of the Industry Roundtables.

Other APEC fora have participated with TEL since the beginning. Their joint collaboration has focused on specific current or emerging topics. In the early rise of TEL, collaboration was focused on Electronic Data Interchange (EDI) and related matters and has evolved at the rhythm of increased economic and technical co-operation. At first, Trade Promotion, Transportation and Tourism working groups co-operated with TEL to develop a Reference Framework on EDI and electronic commerce (e-C) describing the minimum regulatory procedures and technical characteristics to facilitate its use within the APEC region. Several projects and applications were also part of the collaborative process. Examples of these initiatives are: the identification of EDI training facilities in the region; the integration of small business into the e-C environment; education and awareness projects designed to demonstrate the implementation of EC standards; the conception of different e-C applications such as phytosanitary project designed to implement electronic meat certificates; the textile visa project and the use of advanced passenger information. Since TEL has adopted in its agenda security issues for networks, it has increased its collaboration with the Counter-Terrorism Task Force (CTTF) and Intellectual Property Economic Group (IPEG). A new approach with the Group on Services (GOS) was developed on 2008.

Overlaps are desired to be avoided, however not all are so obvious, Australia has pertinently indicated in its comments to this report that "at TEL39 there are linkages drawn between TEL's work on submarine cable protection and the APEC Fisheries Working group. Therefore, some effort should be made to educate TEL participants about the existence of these other APEC groups". Other two overlaps were mentioned in these same comments, TEL with the Electronic Commerce Steering Group and the APEC Committee on Trade and Investment and its subcommittee on Standards and Performance which oversees the Electrical Equipment Mutual Recognition Agreement.

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[18] Since its inception, PECC has been a mentor to APEC particularly on an open regional co-operation for trade. "The two organizations share the same purpose and are engaged in the same kind of work. So far PECC has been playing a complementary or supporting role for APEC, but such role seems to be on the wane." A Reflection on PECC's 25 years: A story with an evolving future. Nam Duck-Woo, Honorary Chair KOPEC, Former Primer Minister Korea, pp 2. http://www.pecc.org/PECCXVI/papers/Dinner-A-Reflection-on-PECC's-25-years-a-Story-with-an-Evolving-Future.pdf

[19] http://www.meti.go.jp/english/information/downloadfiles/cEC50002Se.pdf

[20] "PECC had been sponsoring 'tripartite' dialogue activities on the need and feasibility of Pacific economic co-operation. The dialogue involved academic experts, businessmen and governmental officials, in studies and discussion of regional economic problems." A Reflection on PECC's 25 years: A story with an evolving future. Nam Duck-Woo, Honorary Chair KOPEC, Former Primer Minister Korea, pp 2. http://www.pecc.org/PECCXVI/papers/Dinner-A-Reflection-on-PECC's-25-years-a-Story-with-an-Evolving-Future.pdf

[21] ASEAN is composed by Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam, Vietnam, Lao PDR, Myanmar and Cambodia. Recently ASEAN+3 include Japan, China and Korea.

Collaboration with other-APEC fora is a key area of opportunity for TEL to become a cross-APEC "advisory group" on ICT related matters.

d. Interested parties

Parties who have complementary work and common interests on telecommunications and information industries are the interested parties, they also participate in TEL meetings, and they are regional and international organisations.

Regional and international organisations provide TEL complementary support to the work being developed at TEL. The intention to search for joint collaboration with other non-APEC fora is two folding 1) to share experiences on issues of mutual interest and develop common outcomes, and 2) to expand TEL's outreach so it can be better known and consulted. Each regional and international organisation has its own agenda with TEL on different topics. The International Telecommunications Union (ITU) interacted with member economies on specific projects on development and capacity building with the Asia Pacific Centre of Excellence and provided insight of relevant work done in other regions that could attract synergies with TEL. The working group became a member of ITU's High Level Experts Group for the Global Cyber-security Agenda. It is important to highlight that TEL is the only APEC fora member of an international group addressing issues of global dimensions. The World Trade Organisation (WTO) has recognised the APEC region as one of the most active ones on telecommunications services. WTO and TEL have developed a series of workshops on capacity building for the understanding of the agreements on basic telecommunications as well as for the GATS. The Organisation on Economic Co-operation and Development (OECD) has jointly collaborated lately with TEL on security and prosperity issues. OECD finds TEL complementary to its work as capacity building can be widely deployed on topics of mutual interest[22].

Stake-holders and interested parties have performed different roles in the 19 years of TEL's existence.

e. The Program Director

The Program Director is a member of the Secretariat and is a key participant to TEL. He/she has a relevant role in the flow of information of TEL within APEC and its outreach, therefore is the natural liaison with APEC stake-holders and interested parties in TEL's work. Since TEL7 in 1993, TEL has had eight different program directors. From the information available in TEL Chair Reports, only three of the eight program directors have performed terms of more than two years with this working group. The program directors appear not to have a fixed term to support any working group or APEC fora and their responsibility is to attend more than one at the same time. On APEC's website, no guideline of when or how these responsibilities may change, or a job description, or subject domain expertise required were found. However, when reviewing the *Guidelines for Lead Shepherd/Chair and Deputy Lead Shepherd/Chair of APEC Working Groups and SOM Task Forces* a detailed section that describes those areas where the Program Director can assist a Lead Shepherd/Chair was found. From conversations with the APEC Secretariat it was known that the Executive Director of the APEC Secretariat wrote to all Chairs and Lead Shepherds in November 2008 to inform that aiming to address a gap in the Secretariat, a comprehensive review of the roles and responsibilities of Program Directors, including synthesizing the numerous and scattered documents existing in the Secretariat was done. The ED provided a fully-reworked job description of Program Directors (PDs) indicating that the paper is meant to be a live document that will be continuously updated as and when the nature of the PDs' jobs evolves. However, it would be relevant to have more transparent information on the website to get this information firsthand. From experience and observation during TEL39 it is noticed that the Program Director's work load is in excess to what they can really accomplish, taking into consideration that the number of fora have increased and the number of Program Directors remain the same. Their responsibility to articulate work for two or more working groups and other APEC initiatives; participate in different activities within the APEC Secretariat; the lack of a full time assistant; the high rotation rate and the need for a continuous training to keep up with the evolving requirements of different fora, makes them difficult to maintain efficiency and effectiveness in their work. The APEC Secretariat could consider reorganising their structure with fixed terms. Those terms could be phased with the terms of the Chairs/Lead Sheperds of the working groups they support. That is, they start in the second year of the Chair and have a fixed term of at least four years or multiples of even years so they are always phased with respect to a Chair. As information and projects increase they should also be able to either have at the most one or two working groups and fora under their responsibility or a full time assistant to help them organise their work effectively.

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[22] Comment of the OECD representative at the SPSG meeting,in TEL39.

f. TEL's Long Term Mandates

TEL has been set-up an ambitious framework by its Telecommunications and Information Industry Ministers at their first meeting (TELMIN1) in 1995, they endorsed the five objectives and ten core principles of the APII.

The five APII objectives are:
1. Facilitating the construction and expansion of an interconnected and interoperable information infrastructure in the region;
2. Encouraging technical co-operation among member economies in the development of the infrastructure;
3. Promoting free and efficient flow of information;
4. Furthering the exchange and development of human resources; and
5. Encouraging the creation of policy and regulatory environment favourable to the development of the Asia Pacific Information Infrastructure.

The ten core principles for the APII as:
1. Encouraging member economies in the construction of domestic telecommunications and information infrastructure based on their own reality;
2. Promoting a competition driven environment;
3. Encouraging business/private sector investment and participation;
4. Creating a flexible policy and regulatory framework;
5. Intensifying co-operation among member economies;
6. Narrowing infrastructure gap between the advanced and developing economies;
7. Ensuring open and non-discriminatory access to public telecommunications networks for all information providers and users in accordance with domestic laws and regulations;
8. Ensuring universal provision of and access to public telecommunications services;
9. Promoting diversity of content, including cultural and linguistic diversity;
10. Ensuring the protection of intellectual property rights, privacy and data security.

TELMIN also instructed TEL to work on the promotion of the development of domestic information infrastructure, the APII and APEC Leaders' objectives in the following areas:

A. Technology
   Joint research, technology transfer, promotion of international standards
B. telecom network
   Modernisation of the telecommunications infrastructure, development of domestic and global markets for networks, services and applications, pilot projects on administrative information networks
   Collaborative pilot projects, promotion of interconnectivity and interoperability
C. content/information and applications
   Promotion of EDI, joint development of databases, test-bed interconnection and sharing information, social and societal implications of the information society, initiatives to make government public information more widely available via electronic means, reduction of gaps between developed and developing economies within the region
D. HRD
   Development of training and educational programs to improve strategic planning and implementation of APII including technology evaluation and regulatory reform for APII Exchange of human resources, resource sharing, distance learning, development of skills standards
E. Policy and regulation
   Policy dialogues on information infrastructure between developed and developing economies, policy co-ordination and harmonisation among member economies to facilitate a competitive and market-driven environment, policy and regulatory measures for further liberalisation, removal of technical and administrative barriers to market access, measures aimed at promoting small and medium scale enterprises. [23]
F. Mechanisms to achieve further co-operation
   Support of international financial institutions for business/private sector participation and investment in the development of technology projects and the information infrastructure in member economies
   Co-operation in projects with APT, ITU, OECD, WTO and G7(G8)
   Linkages with training organisations in the region

After 1995, in the following 14 years, Leaders, Ministers and TEL Ministers have given additional instructions[24] to TEL, these instructions have expanded its original scope of work most of the times with an impact on the short term to attend emergent situations, and a few cases where the impact is reflected in the medium and long term goals (see Figure 6). A brief chronological table of instructions has been attached to this report (Addenda section D.6.2) where it can be noticed that there are more outcomes during the years when a TELMIN meeting takes place (1995,

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[23] TELMIN1, TELMIN2 information compiled from the Joint Statements and Action Plans
[24] The full TEL Environment of Action (Charter) is listed in Section D.6.3 of the addenda

1996, 1998, 2000, 2002, 2005 and 2008). From the analysis of the chronological table there seems not to be a roadmap guiding TEL and setting short, medium and long term goals nor long-term activities to go with it.

Figure 6. Snapshot of TEL's Charter for 2009[25]

2. Member Economies' Perspective

Member economies' perspective is quoted from their survey participation.

On the programme
Member economies' commitment and satisfaction to the TEL's programme is very high. Few respondent economies are in a position to back their commitment with long term funding. Member economies are knowledgeable of the TEL strategic priorities and collective actions and deem them adequate and in alignment to their economy's own and to APEC goals. While most respondent economies would not add, nor eliminate areas of work currently included in the TEL ToR; some members find it important for the group to improve its ToR with more specific goals and objectives, by better eliciting the TEL value and benefits, including more consumer issues and linking with the broader APEC trade liberalisation agenda. Economies believe that, looking into the future, the group's areas of opportunity for improvement, both tactic, as well as, strategic can be brought forward by the existing TEL structure.

There is a need for strategic and tactical measures to define TEL objectives and render its ToR into actionable items in fewer and clearer terms, - more in tune with key objectives, short term actions and long term horizon, priority areas of work and mandates turned into workable instructions-. These would better enable member economies, guest groups and the APEC environment in general to share and materialise their understanding of which projects should be TEL undertaking to maximise its role within APEC.

Economies recognise the TEL in-roads and benefits achieved on members' development, in its consistent work in APII and APIS for the knowledge based economy, in MRA CA for wider and stronger market access, in ICT capacity building and best practices sharing among member economies, in ensuring a trusted, secure and sustainable online environment, in improving policy and regulatory preparedness and in bridging the digital divide. Getting more done is deemed necessary in responding to emergency and natural disasters and other areas that inevitably include and need TEL and other players.

Member economies show concern that TEL is engaging in activities that actually hinder it from achieving its own agreed goals and objectives. For example, tending to over-rated or abused ICT market trends (e-everything).These further dilute TEL resources against internal priorities of perceived greater importance.

On its meetings
Members regard the TEL meetings structure and number as adequate. Current meeting structure is simple, efficient and responsive. Further linking with the SOM/AMM/AELM meetings is deemed beneficial for TEL improved co-ordination and alignment. Keeping all other related activities on the margins of the TEL meeting dates and having fewer and better scheduled workshops/seminars would allow delegations an improved overall attendance, especially for small delegations. There is significant disparity in terms of the number of delegates among delegations. Increased inter-sessional work is welcomed, although some respondents think that "TEL's already busy agenda, together with member economies delegations' difference in number, would render very little, if any,

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[25] The full TEL Environment of Action (Charter) is listed in Section D.6.3 of the addenda

additional outcomes from increasing both presence based activities such as meetings and inter-sessional work". Internal communications is recognised as efficient but stricter deadlines are an area of opportunity since late submissions have a negative impact on meetings' effectiveness and on members' preparation lead time.

On management
Member economies rank the TEL management functions as very effective but believe that improvements to planning and organising would come from better alignment to SOM, greater lead time and discussion among HoD for meetings agenda, as well as a group's longer term vision that spans Leaders' and Ministers meetings for focus and consistency of efforts. More empowerment of the TEL Chair and Vice-Chair roles from APEC Secretariat is believed necessary to improve the leading and co-ordination functions, inside and outside of TEL. This would additionally improve the guidance and motivation for members to fulfil goals and implement plans.

Resource limitations may lead management to focus on internal-to-TEL priorities. Resource availability is seen as an area that needs to be reviewed to better enable priority improvement actions. Economies note that improvements to the co-ordination function would entail better collaboration with Other-APEC fora. Better co-ordination which would result from the TEL Chair and other delegation member's attendance to SOM meetings and by involving sub-fora in the TEL planning cycle. Overseeing improvements require project completion focus and balance between new projects and changing TELMIN directions.

Leading, co-ordinating and overseeing would benefit the most out of setting standard operating processes in place which incorporate current best practices, resolve diversity of interests and provide support for the TEL Chair to maintain the group's strategic vision in alignment to APEC goals. Regarding management functions as applied to annual meetings, best practices sharing, and policy formation, members rank these as "very effective".

Member economies find that annual meeting planning improvement would result from the Chair and convenor providing more updates and inter-sessional discussion with member economies, and by making TELMIN relevant for future 2 years of work (4 TEL meetings timeframe) while more purposeful aligning TEL to the AELM and AMM, and other APEC Agenda. Discussing the development, implementation and follow up of policies could improve by assigning them a higher priority within the TEL agenda. Better leadership of management in creating, identifying and sharing of best practices would increase the group's outreach by having them promoted so that they are widely referenced, such as OECD's.

Care most be taken as the TEL workload focus disperses and makes it difficult to achieve major goals. In the view of member economies, the TEL has still to provide evidence of longer breath (4 TEL meetings), extra Leader's and Ministers' strategic forward planning and focus, better project prioritisation-closure, and workload co-ordination at a tactical or operational level. Other operational decision and budgetary processes would need to be in place to support improvements.

TEL has long-term mandates and goals but no long-term activities to go with them. The group handles infrastructure and applications related projects with the same weight and simultaneously responds to very short term, emerging and long-term agendas.

TEL regulates itself with member input while attending to very different economies' drivers that pose a constant challenge to TEL's management on how to serve developed and developing member economies best. Being everything to everybody is very difficult and cannot be done effectively neither sustained for long.

Economies point out that the use of proven standard documents and procedures is falling behind. Several best practices were identified in the "Leaders', Ministers' and TELMIN Instructions" that are worth recovering (see summary table included under section D.6.2 of this document's addenda).

On collaboration with other fora
Scoring confirms collaboration with other APEC fora is the area of opportunity subject to most improvement of all management functions. This could be accomplished by TEL's shepherds participating on the SOM meetings and involving other fora in the TEL planning cycle, such as ECSG, APEC Group on Services and SME among others. Planning collaboration with other non-APEC fora could be improved by identifying fora where collaboration is based on specific topics of great common interest to all parties and commitment not to duplicate efforts is set in place.

Effectiveness to build capacity for member economies resulting from the collaboration with other-APEC fora is below member expectations. Additional commentary reveals that a "more holistic approach" seems now essential. More collaboration with ABAC, ECSG (e-commerce), CTI (trade), and IPEG are also suggested. Stronger linkage

with the Emergency Preparedness Task Force is necessary since ICT is an enabling technology which can be effectively used for emergency communications and mitigation of natural and manmade disasters and requires closer ties with those who are responsible for emergency programs and services delivery. Members agree that other fora consulting TEL on ICT issues should happen, and would bring benefits, but do not see "mandatory" doing so would be the right approach. This is particularly important considering not only the rate of change of ICT as technology and society enabler, but rather by the way in which its inherent convergence is blurring borders in the field.

Collaboration with international organizations is ongoing and most member economies rank it very or extremely effective. Member economies input reflect more on the fact that there is additional work to be done rather than on the group's effectiveness itself. Improved collaboration with international organizations will result by focusing more in areas of real synergy. Collaboration with the academia is deemed somewhat or not effective and the perception is that the existing arrangement where academia is part of the member's delegation may not be effective enough. Stronger collaboration with the academia is advised, especially for discussions of capacity building and digital divide.

Improvement with private sector collaboration would entail leveraging industry roundtables and extending their duration, as well as, developing stronger linkage with ABAC and guest groups. ABAC's interest is not clear to one surveyed economy. Further civil sector cooperation is suggested by members and reaching out to other civil society groups is also advised. Civil sector collaboration effectiveness is perceived very differently by every member economy. Some members reflect on how, early on in devising projects, their economies' private sector involvement is integral. Reviewing or setting up a single process, that is well known and utilised among member economies, is deemed necessary to promote direct communication with other civil society groups, academia, and other guest parties (such as APNIC & ISOC). This would also enable turning collaboration into specific projects and activities. Some economies are not fully aware of which other non-APEC parties are there to collaborate with, although, the guest/observer list is found to be an adequate mechanism to accommodate other parties at TEL.

On projects
Members indicate that project selection is perceived as effective, especially in project proposals submittal, circulation and, with a few comments that could call for flow improvement, approval. Discussion or concern is more in enabling how to select projects that are more tightly aligned to the TEL priority objectives in the first place. At an operational level the effect of late submissions has to be minimised if not stopped. Members ask of all self and APEC-funded projects to go through the same process and be subject to enforcement of existing guidelines.

Members rank the TEL projects effectiveness in providing best practices and share experiences as very effective. Members see the TEL is very efficient in gathering economies to review best practices through workshops and seminars. Most of TEL projects provide best practices and share experiences of member economies and this has been key for many members, for example in LSG related matters.

Most member economies rank the effectiveness of TEL projects to develop and improve policy and regulatory preparedness as very effective. Work on changing marketplace preparedness is noted since TEL30 in the form of workshops (interconnection and NGNs). The LSG is regarded as doing a good job linked to marketplace issues. Regulatory and industry roundtables and latest capacity building subjects on NGN, convergence, IPv6, etc. provide evidence as to the TEL focus.

To improve the TEL ranking assigned to the effectiveness of its projects, "views from all member economies could be solicited to identify the level of interest they have in the project proposal and priority of importance they consider. The feedback from economies should be taken into account for selecting/approving a project proposal particularly when several project proposals compete for a limited resource of funding over the same period."

To improve the TEL ranking assigned to the effectiveness of its projects, it should be noted that "the actual review of project outcomes is only meaningful if the economies have set very specific standards for them and are willing to frankly assess their success. This is rarely done in the TEL."

To improve the TEL ranking assigned to the effectiveness of its projects, "besides complying with APEC Leaders' and or APEC Ministers' [mandates], it should also pay attention to the developing economies' needs."

Six out of ten survey participant economies rank the effectiveness of TEL projects to address the digital divide either very or extremely effective. Work has been ongoing for several years in Internet penetration monitoring as well as in bridging the digital divide, and member economies collaboration is highly recognised.

There is a need to take additional steps and identify the projects that would initiate a new stage of co-operation and co-ordination with other APEC fora. Frequent and valued outcomes of impact are being achieved though ongoing collaboration projects with international organisations such as OECD. More focus regarding safer internet environment for children is suggested.

Members point out their different views on projects related to the liberalisation of the telecommunications and information markets. Most members rank projects in this category, as being very effective.

Most survey participants rank the effectiveness of TEL projects at building ICT capacity of member economies as very effective. More ICT Capacity Building projects should be performed in developing member economies to bridge existing digital divide and achieve balanced development among economies. Care should be taken for workshops and seminars delivered to developing economies in devising approaches to capacity building to ensure they are linked very well to actual results in this area.

There is still significant interest at the TEL to continue addressing the digital divide The TEL should also do better in integrating this information to allow economies to draw more conclusions on how to include their citizens.

Ranking shows to a great extent, that more projects are yet to be identified and occur so as to improve collaboration with other APEC fora.

Most respondent economies rank the effectiveness of TEL projects either very or extremely effective to develop strategies to ensure a trusted, secure, and sustainable online environment.

On the impact on the ground

Members understand that replicability is not readily possible. Attention should be given to the relatively low impact "on the ground" perceived in general, with some notable exceptions[26].

On gender
Most member economies are being gender aware in their participation in TEL activities, in providing advice for projects their economies attend to or in utilising APEC gender relevant documentation to assist in developing gender aware policies and/or conducts, either within TEL or within their economy. Five out of 6 economies have provided gender considerations advice to projects and proposed gender aware projects. There is an area of opportunity in bringing forward new projects that integrate gender consideration. One member reports having observed gender policy contradiction between rhetoric and practice.

3. Private/Business' Perspective

Private/Business' perspective is quoted from documents found at TEL's website, particularly those documents that explain their interests and joint collaboration in the reports of the different dialogues that took place with the governments and the academia at TEL and TELMIN meetings.

The private sector involvement in TEL has taken the form of loyal attendance at meetings, resource commitment and project participation with focus on market access and trade facilitation as well as in co-operation and development in the region. TEL's success in bringing together the synergy of governments and the private/business sector lies in the offering of short term tangible results. In the document entitled The Role of the Private Sector in TEL presented by the TEL Chair at SOM1 in 1997, he manifested that the experience of TEL working with the private sector could be useful to other APEC fora in "developing and expanding their own co-operation with the private sector".

The findings are that working groups need to:
·   Provide a mixed portfolio of opportunities for industry involvement in their work;
·   Show clear line of decision-making from the working group to the sector's ministerial, to the trade ministerial and to the Economic Leaders meeting.

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[26] See Addenda under item (v) Survey, Programme, impact.

In the first 32 TEL meetings and the related TELMIN meetings that took place within that timeframe, documentation show strong participation from the Pacific Economic Co-Operation Council (PECC) in TEL activities. PECC appears to play the non official role of advisory body of TEL on matters related to the private/business and academic sectors. PECC showed clear interest in helping TEL on matters related to software, hardware and applications development for the build out of the Asia Pacific Information Infrastructure. In the beginning, the triple T[27] Task Force helped TEL to advance on the data compilation of several infrastructures in the region such as teleports, EDI, vSATs, IVANs, GPS. A yearly Roundtable of business leaders helped TEL in focusing its priorities for the coming year. Later, the APEC/PECC Communications and Information Policy Dialogue became the means to help constituents of both organisations better understand "the full scope of the information infrastructure challenge".

The private/business sector also participates in a number of pilot projects, test-beds, seminars and workshops to help TEL build its capacity and skills for the APII. The PECC Statement serves as a framework of commitments made by the private/business sector and the academia to support TEL's projects where there is common interest. PECC also analysed ABAC's industry priorities that affected TEL and prioritised them together with those proposed in PECC Statement.

At TELMIN5 the private/business sector committed to remain engaged in the APEC process if concerns and objectives are common to achieve the potential of the APIS. They asked governments to accelerate efforts to liberalise markets where transparency, universal access, interconnection and interoperability, privacy, security, authentication and bandwidth pricing issues are addressed. TEL Ministers complemented the need for partnership with the private/business sector in technical co-operation, human resource development and training as well as policy setting.

Recently, since TEL33 to date Industry Roundtables have become the means to strengthen the links between the work of TEL and industry participants with two main objectives:

- Present Steering Groups issues and developments in industry relevant to topics under consideration by TEL;
- Show how markets are developing; and,
- Discuss on key topics that require focus to provide inputs for Steering Groups further dialogue and decision on which should become projects.

There is no formal communications channel between ABAC and TEL. Nonetheless, after the TEL Chair attended an ABAC meeting and briefed them about TEL's work, ABAC reacted and sent a representative at TEL33 where ABAC proposed to create a telecommunications and information committee within its own organisation to collaborate in the future with TEL on common issues. TEL should work on this relationship to be able to regain partnership with the private/business sector as was the case of the well conceived public/private partnership developed by PECC in its participated with TEL in the previous 32 meetings.

TEL Ministers have also recognised the important role of the private/business sector and agreed to support:
- the continuation of the APEC/PECC Policy Dialogue within the TEL and expanded involvement by the business/private sector in future Ministerial meetings; (TELMIN2)
- greater business/private sector initiative and investment for successfully implementing the APII to facilitate a competitive and market-driven environment; (TELMIN2)
- the planning and deployment of services and infrastructure capacity by the private/business sector, such as the primacy in the development and use of electronic commerce in the region; (TELMIN3)
- development of the APIS consistent with priorities of member economies as noted in the Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development; (TELMIN 3)
- lifelong learning and skills development, benefiting from cultural diversity of our region, to allow communities, people and businesses access to a reliable and affordable APII and encouraging continuing co-operation on research and development to address the challenges that convergence may pose; (TEMIN4)
- the development of info communications infrastructures and services towards enhanced access, productivity, interoperability and security in the network based economy, with attention to appropriate standards; (TELMIN5)

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[27] Transportation, Tourism and Telecommunications

- opportunities offered by the private/business sector of a continued evolution and introduction of new information and communications technologies and the potential of integration of networks and services; (TELMIN6)
- the combination of innovation with security, and the protection of electronic information systems of essential infrastructure and services. (TELMIN7)
- the undertaking of training and exercises designed to enhance response capabilities and to test continuity and contingency plans in the event of cyber attack.

There is still much to be done regarding the formal assessment of the "impact-on-the-ground" of TEL's activities: "The TEL measures the relevance of its activities to the business/private sector primarily by observing their ongoing and increasing involvement with the WG and its many projects. The TEL has not engaged in a formal evaluation of the benefits, but has received many informal, and often material, votes of confidence for its work"[28]

4. Users' Perspective

Guest user group input is quoted from their survey participation. The point of view of INTUG is captured. INTUG citation refers mainly to their view on the TEL areas of opportunity.

On the programme
TEL should be more focused on practical matters which drive outcomes for trade facilitation, regional integration, security and digital prosperity in the short to medium term rather than the longer term. Availability, affordability, adoption of services, development of competitive markets, consumer protection measures, and encouragement of investment and innovation are areas where focus should be increased.

TEL is not sufficiently focused on end users needs. There is good engagement with industry perspectives but this needs to be balanced with end users interests - whether consumers' or businesses'. Regional integration and trade facilitation are issues that affect businesses in APEC economies and advanced communications services and harmonised regulatory systems are needed to make the use of infocomm services easy and affordable. International roaming prices is a good example of an issue that affects businesses (and travelling consumers) across economy boundaries.

The current structure of Steering Groups reflects "telco" sector issues - not economic and trade issues and not business/consumer end user issues. A new structure, which would go beyond ensuring networks are built out ubiquitously and affordably and beyond effective and contemporary market and regulatory frameworks, would be needed to encompass the core APEC objectives: Regional Integration; Trade Facilitation and Digital Prosperity and Security. A number of TEL activities would be very relevant to these agendas and those activities that are not relevant should be stopped or relocated to groups where their relevance is high.

Goals in the group's current ToR (Draft Lima Feb. 2008) are not very specific: The objectives as written could be shared as ways of working across all APEC fora. Finding the TEL unique contribution to each economy and to the region is needed and should also be highlighted in its ToR.

On meetings
Two meetings a year is manageable. Having meetings less frequently could mean irrelevance given the fast nature of the infocomms market.

On management functions
This is a difficult area because of the very nature of TEL: voluntary participation. If TEL had a clearer shorter list of priorities to address it may be easier for TEL leaders to assist TEL participants to focus on more significant projects and discussion topics. It is also deemed important that more emphasis is given to the outcomes for end users in all TEL discussions.

Regarding best practices, the examples INTUG has been involved in have been efficiently and effectively developed - WTO Guidelines, Enforcement, and Anti-Spam among others. Perhaps further attention should be given to promoting these resources among and outside APEC economies.

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[28] From "Review of the Mandate of the APEC Telecommunications Working Group", TEL/19/PLEN/E/01

On collaboration with other fora
TEL co-ordination is ad hoc but effective, when it happens (e.g. with OECD on Internet security and safety issues). In other examples such as ECSG the co-ordination is not evident but, from our point of view, TEL is more effective as it has a broader base, includes end users and is supported by economy policy makers and regulators.

INTUG does not yet see strong links between TEL and other APEC fora - this may be for many reasons including lack of resources to enable cross sectoral and cross working group co-ordination".

In the future links with other APEC groups will be important as TEL's focus moves, from ensuring infrastructure development, to ensuring it is affordable and adopted by all confidently to drive economic benefits through regional integration and trade facilitation - the core APEC agenda. TEL should move from being a specialist group to an enabler of improved outcomes for all other APEC groups.

On projects
TEL has difficulty "finishing" projects and has a tendency to add projects to an ever increasing list, especially true for DSG. Overall, TEL applies itself to TELMIN directions and works to ensure existing projects and activities "fit" into the TELMIN directions. When directions are changed, existing projects should be given one more meeting to gain "closure" whether by simply finishing or being transferred to another more appropriate APEC group. The timeframe for TEL is in some instances too short, with changes coming quite frequently.

Projects should be very closely and explicitly linked to APEC goals -TELMIN instructions and a reworked ToR- so that all can see a clear link between Projects and Goals/Objectives which have been agreed. The TEL projects underway are all of interest but the question is whether they are driving for the overall goals and objectives of TEL and APEC. Goals need to be fewer and clearer. Projects should be reviewed by a small committee before being presented to Plenary. Links to priority goals should be explained in the presentation and acceptance required of ALL Steering Committee convenors to ensure projects are focused, co-ordinated and support TEL's overall goals.

Regarding APII and APIS, the missing link for us is how such projects assist to reduce economic disparities and provide region-wide opportunity.

It is important for the working group to improve its ToR with more specific goals and objectives and by better eliciting the TEL value and benefits as well as including more consumer issues in linking with the broader APEC trade liberalisation agenda.

5. Shepherds' Challenges

Excerpts from interviews conducted at TEL39.

On the programme
Interviewees perceive that APEC as a whole is a fora to achieve consensus through consultation since it is non-binding. The outcomes are therefore recommendations and guidelines that member economies can consider replicating or not. However, they perceive TEL as a leading working group which has accomplished collective actions and could be seen by other APEC fora as a model to follow.

TEL's ToR reflect a clear mandate as it is focused on ICT itself, different from other fora who are more applications oriented. TEL's challenge lies within its management functions, its products are not perceived as relevant for the non-APEC and better standards and focus need to be addressed in their work.

Interviewees consider that TEL faces an ever changing environment, thus they require greater feedback from member economies to understand their wants and needs. Since ICT potential could serve to reduce the gap and change digital divides into digital opportunities, they believe ICT could be a driver for social relief.

All of the interviewees agree that TEL needs a long term, five to six years, and visionary plan to guide the working group in its activities. Furthermore, they indicated that one of the most challenging issues for TEL is how the shepherds can make TEL's work attractive to both developed and developing economies, to really impact in their economies. Impact "on the ground" may vary since the use of best practices is within the realm of each economy.

TEL needs to keep up with regulatory updates on liberalisation issues to be able to allow technology innovation for the construction of a modern APII respondent to member economies needs. The ToR in this respect needs to be

revisited to show the new environment and new strategic policies. It is also important that TEL raises awareness of the important role ICT plays on development of applications that could lead to cross-cutting issues of other APEC fora with TEL.

All interviewees agreed that TEL has to be further aligned to TELMIN7[29] goals and member economy goals. A closer internal communication both with the Secretariat and the Senior Officials could help this alignment be smoother and effective.

On meetings
Interviewees manifested their desirability to review the timing misalignment of Leaders', TELMIN and TEL's. They believe that the value of meetings is much greater than the travel expenditure to attend those meetings that is why TEL meetings have large audiences. Between meetings, inter-session work has been a good option to advance in the accomplishment of goals and objectives; however they think member economies and other interested parties' presence will always add more value to the outcomes. One of the views was that the opportunity to facilitate attendance by changing TEL meetings to one per year and extending duration of workshop and meetings to three days could be a reasonable alternative.

On projects
There has been great participation of self-funded projects within TEL; however, this does not imply self funded projects are exempted from existing guidelines for compliance with APEC goals and objectives. There is still much to be done with the overseeing of projects so as to make them relevant to TEL's purpose. Interviewees were also concerned about coping with project budget going down and that more attention should be given to capacity building projects.

On joint meetings and projects with other APEC fora
All interviewees agreed that a better link and connection with other fora is needed. They agreed TEL's relationship and collaboration with international organisations works well. Some believe that duplication is sometimes necessary for political reasons. However, some also raised the concern that economies are facing crisis in participating in different fora and should be advised to choose better, check for similar content, scheduling and ask themselves if it is innovative in content and if it address their core concerns.

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[29] Bangkok, Thailand, April 23-25, 2008:
- APEC economies should continue their efforts to expand the reach of networks with the ambitious goal of achieving universal access to broadband by 2015.
- Trade and investment liberalization and facilitation in the telecommunications and information sectors plays an important role in regional economic integration.
- Member economies must continued to collaborate and share information and experiences to ensure a safe and trusted ICT environment that can effectively respond to cyber threats, malicious attacks and spam.
- A trusted and secure online environment is fundamental to facilitate electronic transactions.
- The importance of collaboration with other international organizations such as ASEAN, the ITU and the OECD to share experiences and develop best practice approaches to cyber security and to enhance our collective security.
- The vital role played by ICT in all phases of emergency preparedness, early warning systems, disaster mitigation, rescue and relief operations, delivery of humanitarian assistance and recovery efforts.

Chapter TWO
Project Database Analysis Findings

CHAPTER TWO: Project Database Analysis Findings

From the AIMP projects database 84 entries were identified. From the TEL Chairs' reports other 166 additional projects were actually found. Thus a total of 250 projects were analysed[30].

Due to the very large and continually broadening scope and breath of TEL's environment of action and in order to be able to analyse the group's projects and then be able to synthesise the information into meaningful findings, an Assessment Framework (AF) was developed along with methodology to assess in what proportions projects are addressing APEC's and TEL's goals and objectives.

N.B. This AF and methodology can be found in *Section D.2* of the addenda of this report. It is necessary to read such section for a clear understanding of the following graph results.

a. Classification per Assessment Framework[31]

All Projects

1. CB[32] is by far the largest category of projects, as it is a cross-cutting key priority. Second in line have been projects addressing LBFID[33] consistent with Bogor Goals. Of significant relevance have also been those that have dealt with APII/APIS[34]/DSRRII[35]. The relatively high number of projects in CWOF[36] is also of particular significance. A detailed analysis of these collaboration projects shows that this high number is driven almost entirely on collaboration projects with non-APEC fora, confirming the perceived notion that the TEL has had little project interaction with other APEC fora.

All Projects per Assessment Framework
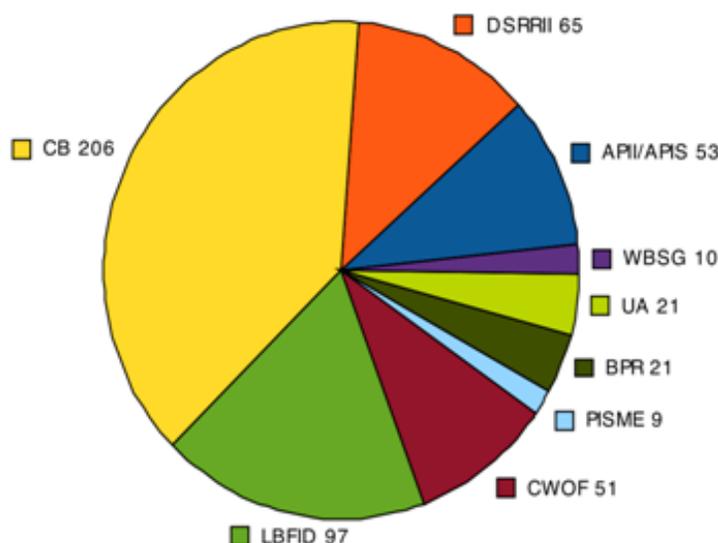
The pie chart shows the classification of all projects per Assessment Framework. The number next to each category represents the number of projects classified as such.

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[30] To see the complete worksheet of analysed projects, refer to section C, of this document's Addenda.
[31] For a larger view of the graphs please see Section B.2 of the addenda
[32] CB: Capacity Building
[33] LBFID: Liberalisation, Business Facilitation, Investment and Development
[34] APII/APIS: Asia Pacific Information Infrastructure / Asia Pacific Information Society
[35] DSRRII: Development of a Safe, Reliable, Resilient Information Infrastructure
[36] CWOF: Collaboration with other fora

2. Projects under PISME[37], BPR[38], UA[39] and WBSG[40] are few compared to the other categories. This is important to note since best practices or recommendations are a key deliverable for APEC.

3. Within Capacity Building, the development of courses, seminars, workshops, and symposia has been a very active area of work, as illustrated by the large orange area in the following graph.

4. In spite of TEL's ever-broadening charter, the group has been careful in maintaining projects addressing the Bogor Goals, as shown by the LBFID bar.

All Projects per Assessment Framework
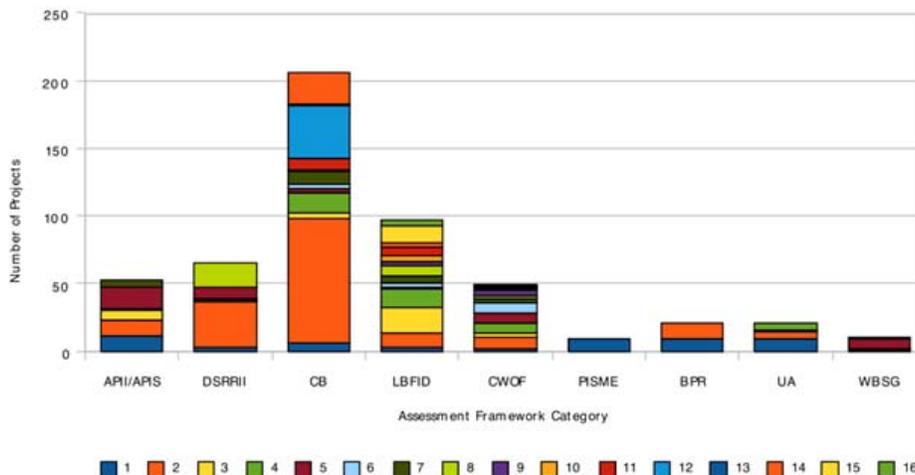
Sub-categorisation within each AF category is shown above. The numbers in the legend refer to the sub-categories described in the "Assessment Framework" section of the report Addenda.

5. LBFID category which was derived from the Bogor Goals shows a balanced mix of sub-categories confirming that TEL has indeed addressed this cornerstone of APEC's mission.

Capacity Building Projects

In the case of Capacity Building projects, a further detailed analysis was performed to identify the areas that were the subject of such capacity building projects, in accordance to the AF. From the list of all the projects which first categorisation was CB, the second, third and fourth categorisations were taken into account to identify the subject or subjects covered by each.

Capacity Building
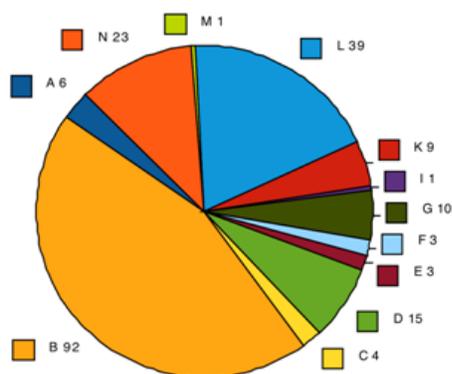
The pie chart shows the classification of all Capacity Building projects per Assessment Framework. The number next to each category represents the number of projects classified as such. For clarity sector A corresponds to AF sub-category 3.1, B to 3.2 and so on.

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[37] PISME: Promotion of Industry and Business sectors with special attention to SMEs
[38] BPR: Best Practices and Recommendations
[39] UA: Universal Access
[40] WBSG: Well-Being, e-Society, e-Government

6. Of all capacity building projects, the vast majority show perfect alignment with Bogor Goals (LBFID) and Seoul Declaration (APII/APIS/DSRRII). It is important to note that third in importance has been done in collaboration with Other Fora.

Capacity Building Projects per Assessment Framework
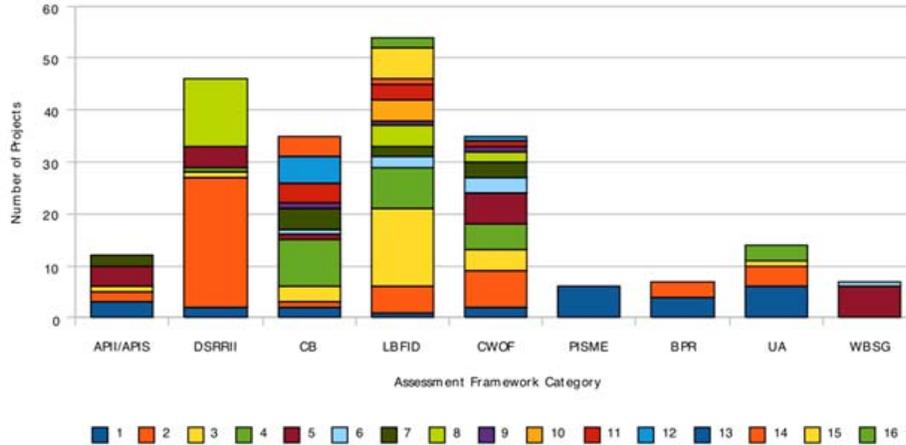
7. Of the LBFID about 25% (see yellow) are projects dealing with capacity building regarding regulation and deregulation. Of the APII/APIS/DSRRII, approximately 50% have dealt with domestic and collaborative security awareness, preparedness and responsiveness.

8. In contrast, very few have had to do with promotion of SMEs (PISME), best practices and recommendations (BPR) and well-being, e-Society, e-Government (WBSG).

Completion Status of Projects
N.B.: The completion status could be determined only for the 84 projects present in the AIMP database. Completion status of most projects identified from TEL Chair reports could not be determined. Thus the large size of the yellow sections of the bar graph that represent the unknown information.

Status per Assessment Framework
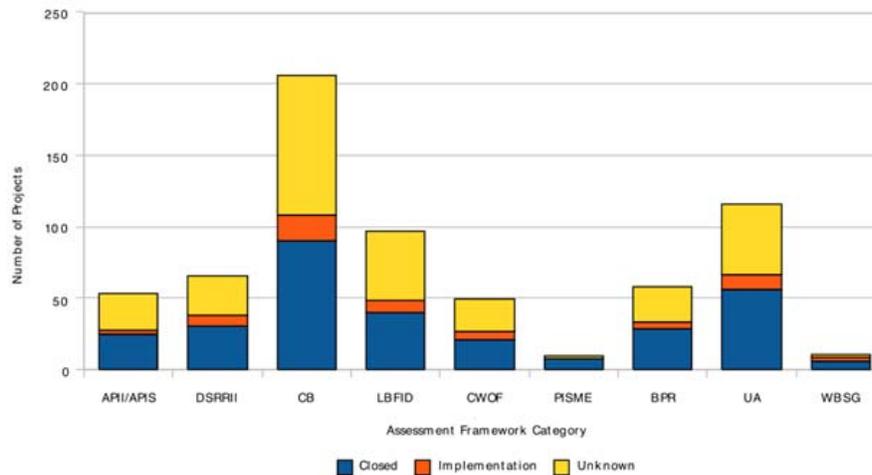
9. The vast majority of projects have attained closure and those under implementation are either longer-term or future projects.

Project Distribution per Year

Distribution per Year
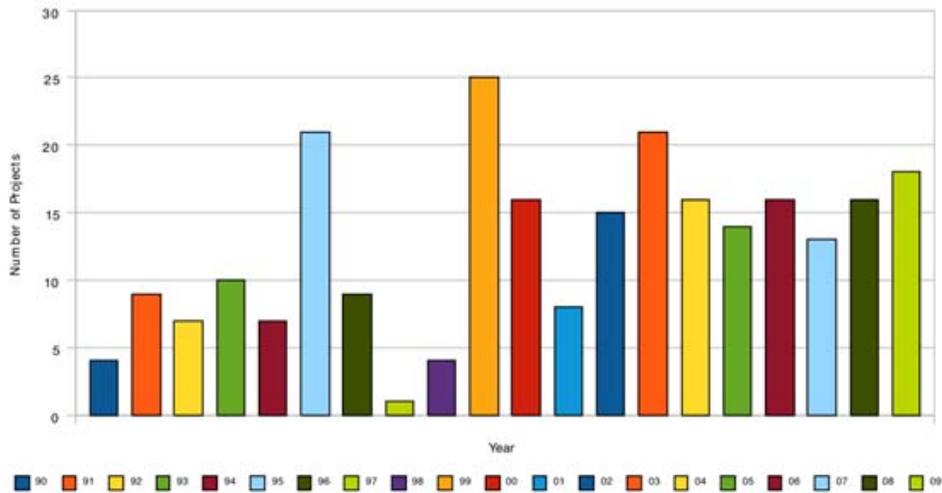
10. In spite of the reduction of budget allocated to projects, as shown in the "APEC approved funds per Year" graph (see further below), the above graph shows the continued effort of TEL to at least maintain the number of projects launched on a yearly basis.

11. The graph below shows that even though TEL has been careful to continually address LBFID related projects, their numbers have been decreasing over time. On the other hand, APII/APIS and DSRRII (the latter having a direct positive impact on APII/APIS) have been steadily increasing.

Distribution per Year per Assessment Framework
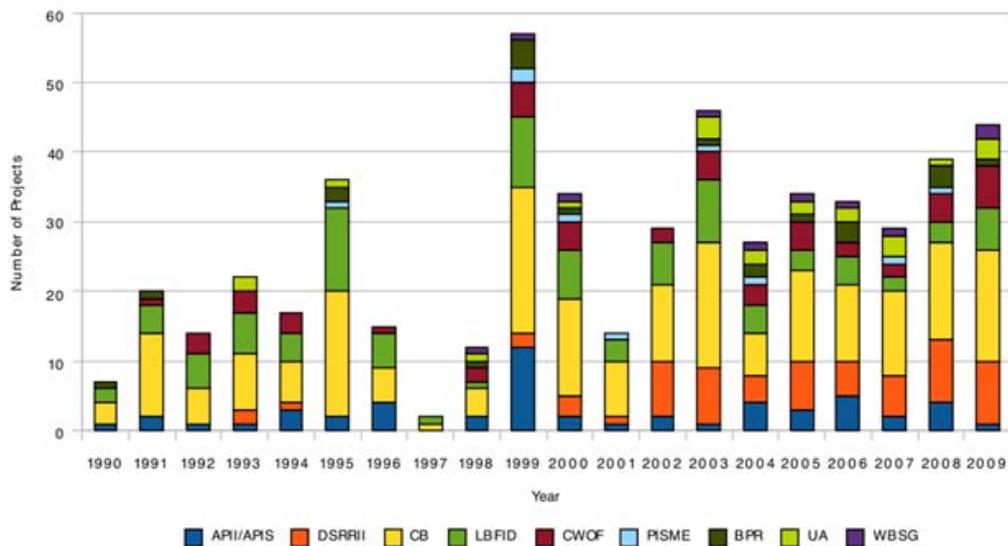
Project Proposing Economies and Co-sponsors

Distribution per Sponsor/Co-sponsor and Status
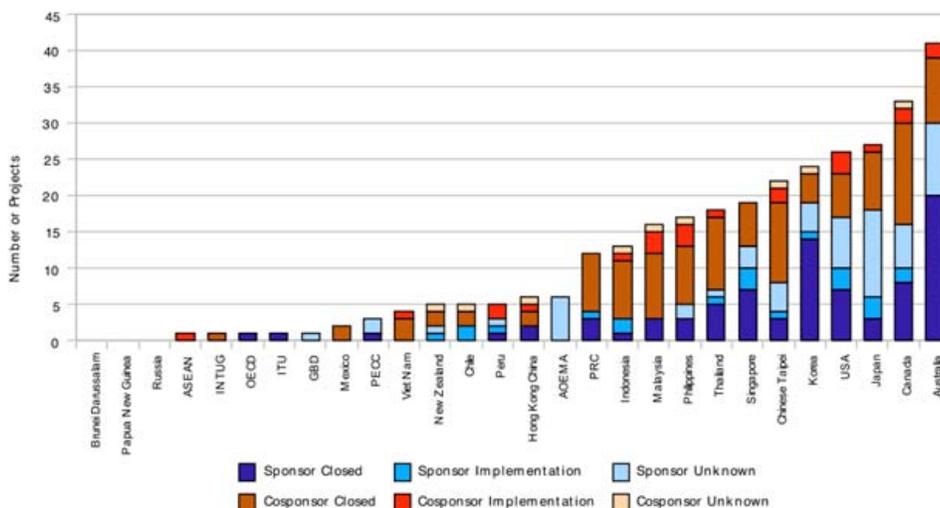
12. Developed economies have proposed more projects than developing economies by a large margin; it is important to note that some non-APEC organisations have been active in proposing or co-sponsoring projects to greater extent than some member economies.

Distribution per Economy

Distribution per Economy and Assessment Framework

The graph fairly mirrors the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status".

13. Korea and Japan economies exhibit a relative larger number of projects dealing with APII/APIS/DSRRII, in contrast with most other economies which show a preference towards capacity building projects.

Project Funding

N.B.: Project funding could be determined for most of the 84 projects present in the AIMP database and for only some of the projects identified from TEL Chair reports.[41]

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[41] Although funding source could not be determined for all projects, it was possible to assess that all categories have benefited from both APEC and non-APEC funding. Of those projects from which the source of funding could be determined, there has been a fairly similar amount of funds coming from the Operational Account and non-APEC sources.

APEC Approved Funds per year for TEL projects
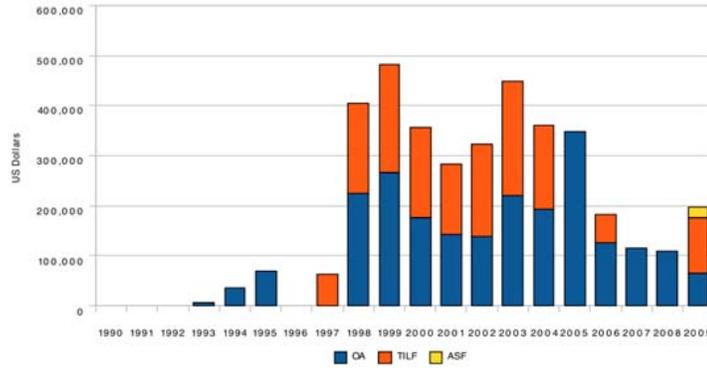
14. Funding for TEL has decreased steadily during the last years in both the OA and TILF funds. Funding in the last four years has been less than half of the average available on a yearly basis during the 1998-2005 periods. There seems to be a recovery during 2009

Project Approved Funds per TEL project Proposing Economy
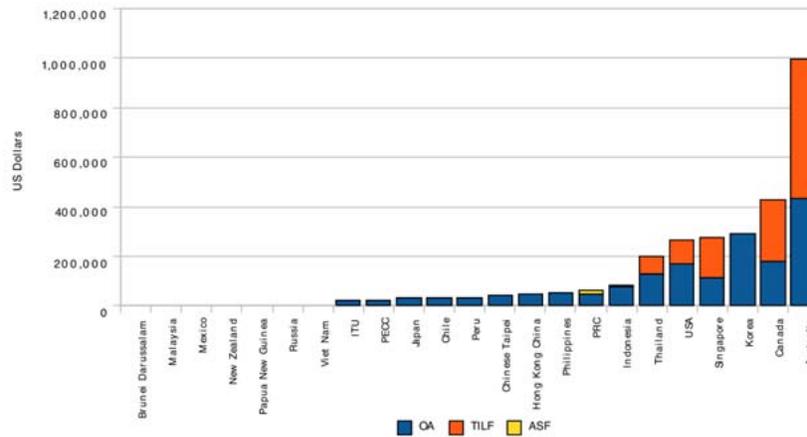
The graph fairly mirrors the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status".

Collaboration with Other Fora

Collaboration with Other Fora
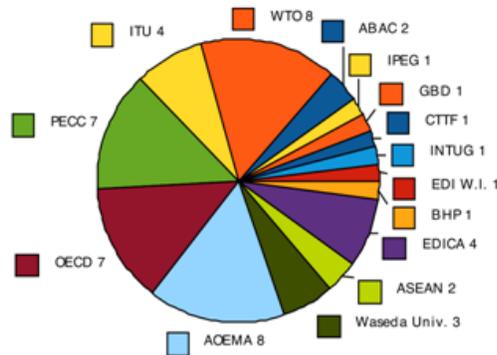
15. Of the 250 analysed projects, 51 were found to have been in collaboration with other fora representing a good 20% of all projects. 48 have been in collaboration with non-APEC fora and only 3 with APEC fora. More than half of all collaboration has been with AOEMA, WTO, OECD, PECC and ITU.

b. Classification per ECOTECH

Classification of All Projects
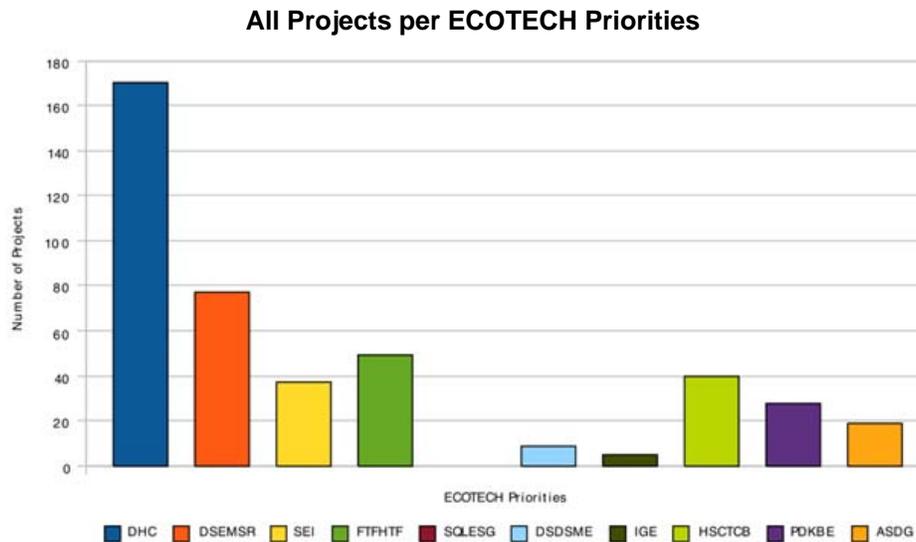
All Projects per ECOTECH Priorities

1. There is a good match between TEL's projects and at least five of ECOTECH's categories. A large number of projects lies among the DHC[42], DSEMSR[43], SEI[44], and FTFHTF[45], mainstays of TEL's work. HSCTCB[46] activity demonstrates TEL's capacity to deal with emerging priorities.

Distribution per Economy

Distribution per Economy and ECOTECH Priorities
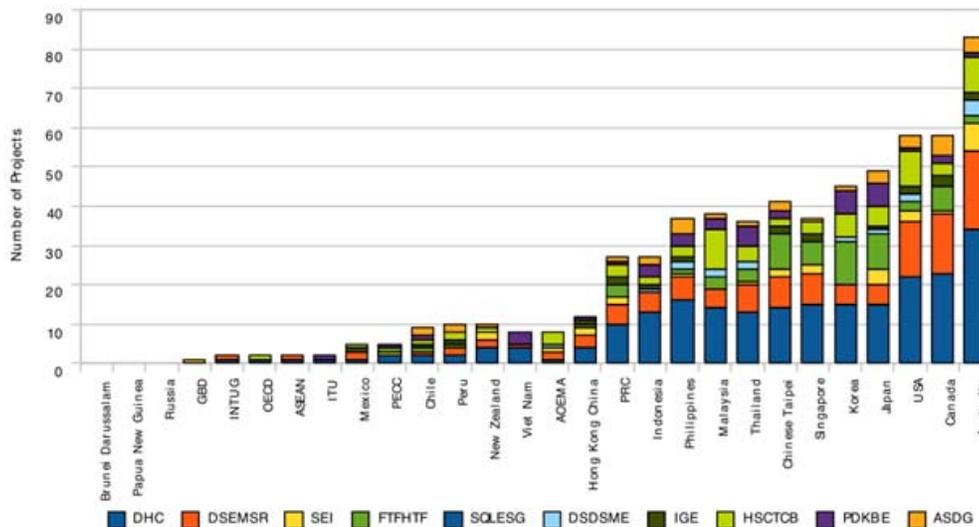
The graph follows the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status" and "Distribution per Economy and Assessment Framework".

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[42] DHC: Development of human capital
[43] DSEMSR: Developing stable and efficient markets through structural reform
[44] SEI: Strengthening economic infrastructure
[45] FTFHTF: Facilitating technology flows and harnessing technologies for the future
[46] HSCTCB: Human security and counter-terrorism capacity building

Chapter THREE
Decision Points

CHAPTER THREE: Decision Points

After locating the role of TEL in APEC and analysing, activities, meetings, projects, survey answers, documentation, and interviews here are two decision points for consideration by SCE and five decision points for consideration by TEL[47].

Decision points for SCE

1. Cohesion : SCE's way to enhance collaboration

APEC's vertical organisation and the dynamics of working groups, subcommittees and task groups make it difficult to communicate with each other to better understand common interests to develop projects and joint collaboration to avoid duplication of work within APEC.

SCE has to summon ad hoc meetings for Chairs/Shepherds

SCE should encourage and engage fora in developing the SCE-COW agenda, and even consult if Chairs/Lead Shepherds would like to brief SCE on a particular area.

From the information available and informal consultations it appears TEL Chair has only attended this duty in few occasions, to present TEL's progress for the rest of the attendants to listen. However, it might be more relevant to guarantee Chairs of different fora meet in a less formal and structured agenda, where they could exchange views and find out if there are real connecting topics among working groups, subcommittees and task groups.

2. Insight : Understanding TEL

Direct communication from SCE to TEL is rarely noticed. Communication flows indirectly through the APEC Secretariat and the Program Director during TEL meetings informing its member economies of the progress made by SCE on different issues.

SCE has to participate in TEL planning meetings

One of the decision points for TEL described below is to create **virtual meetings** (videoconference) for TEL HODs and EXCOMM before every meeting. The purpose is to plan with sufficient time those policy issues that may arise in the preparation of TEL meetings, to adequately review new project proposals and the progress of implementation of already approved projects and to review compliance with TEL's goals and objectives in the short, medium and long terms according to its roadmap. The **virtual participation** (videoconference) of the SCE Lead Shepherd/Chair or a representative would be highly desirable as he/she could help TEL in its decision making when policy issues need support information from higher levels in the hierarchy.

Maintaining regular mechanisms of communication will impact on better articulating Regional Economic Integration, Structural Reforms and Economic and Technical Cooperation within the APEC ecosystem and its outreach to non APEC fora. For example, SCE Chair can write a letter to all APEC fora Chairs highlighting main outcomes of SCE meeting and work that will have an impact on Fora's work, this could also be done during the videoconference of a planning meeting of a fora such as TEL.

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[47] Complementary recommendations to TEL are included in Section A of the addenda.

Decision points for TEL

1. Outreach : Spreading TEL's word

Being one of APEC's main concerns making its work widely known, TEL has not been effective in making the non-APEC ecosystem aware of its work and achievements.

TEL has to develop an outreach strategy

TEL's outreach can be improved by increasing the number of publications from the very large volume of research papers, best practices, guidelines, workshops, and other know-how elements that TEL generates as a result of its diverse and busy working agenda, of which few become published material for extra-TEL reference.

Publications would better position TEL as a key reference source and a best practices and benchmark model for other parties[48]. It would also trigger, and multiply the number of, joint collaboration opportunities.

Utilising mass-media and periodicals via press-releases, insertions, newsletters and other forms of communications would complement the strategy. Also TEL being an active and frequent speaker in other fora will increase its visibility.

TEL's website should be conceived as one of its main communications channels instead of an information repository. This necessarily calls for a thorough rethinking of the way information is organised, structured and presented. Best practices and recommendations should be gathered in a single, accessible, searchable repository to support their outreach.

2. Prioritising : TEL's Achilles heel

TEL has been dealing with a very broad scope of work since its inception. The ever increasing and broadly encompassing APEC goals, objectives, priorities, emerging priorities, action plans, action agendas, leaders' instructions, and ministers' instructions make it fairly easy to fit almost any TEL activity in one, or even several, of APEC's/TEL's main objectives. Thus, the issue is not if the working group activities support the main objectives of TEL and APEC, the real issue is focus and prioritisation of priorities to effectively use available resources.

TEL has to delimit its scope of work

To help in delimiting its scope of work, TEL should consider answering these questions:
- Does TEL have the capacity to tackle such a broad scope of work?
- What are the real priorities?
- Is such a broad scope necessary to achieve Bogor and Seoul Declaration goals?
- Is TEL doing what needs to be done?
- Should TEL continue being everything for everybody?
- Is TEL dedicating capacity to lines of action that are being taken care of elsewhere?
- Should TEL be an infrastructure enabler or an applications developer?

TEL should conduct a thorough introspection exercise to assess its own execution capacity.

Being everything to all is very difficult and cannot be done effectively neither sustained for long.

TEL is viewed by APEC as the creator and developer of the Asia-Pacific Information Infrastructure (APII). While understanding that TEL's responsibility since its 1995 mandate has included both infrastructure and applications, there is great benefit in TEL focusing exclusively in infrastructure development. Applications should be the focus of specialists in other fora and TEL should only deal with the technology enabling aspects of such applications when in line with its telecommunications mandate i.e.: ICT infrastructure and capacity building, and even then only when such applications are aligned with the group's strategic roadmap.

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[48] Compare for example the case of OECD's widely referenced published material.

3. Roadmap : Charting TEL's course

Until now, TEL has tried to adjust its course by modifying its structure. This has been helpful but not enough to cope with its ever-changing and broadening scope of work. And, in the absence of a roadmap, this has lead the working group to wander and be distracted from the real priorities.

TEL has to have its own roadmap

Based on its new delimited scope of work, TEL's goals achievement can be better reached by drawing -and committing to follow- a step by step single roadmap with achievable and specific milestones and middle- and long-term goals. The roadmap should of course address stake-holders' needs. This effort would necessarily call for a TEL's ad-hoc long term vision and planning. Improvements would be brought to shortest-term impact on the ground, longer-breath consistent management of projects and activities, beyond two years, and better handling of emerging priorities without challenging TEL's focus on key longer term ICT projects.

Activities should be prioritised in relation to the roadmap. Ongoing activities would also benefit from this as their relative importance changes through time and revising or closure need to be addressed.

Once the roadmap is drawn, TEL's ToR can be re-drafted to reflect for the new delimited scope and roadmap. The new ToR has to include strategic and tactical measures that describe TEL objectives that render its ToR into actionable items, in fewer and clearer terms, -more in tune with key objectives, short term actions and long term horizon, priority areas of work and mandates turned into workable instructions-. This will better enable TEL to share and materialise its understanding of which activities the working group should be undertaking.

Finding the TEL unique contribution to each stake-holder and to the region is needed and should also be incorporated in its ToR.

It is desirable that TEL seeks clarity and direction from SCE on the relevance of the roadmap to contribute to APEC main goals.

The roadmap will serve as a useful vehicle for clearly articulating medium and longer term tangible outcomes and checking whether they are being achieved.

4. Wants & Needs : Understanding stake-holders' expectations

It is evident from several sources, including the responses to the survey, that different stake-holders have different expectations leading to misconceptions of what TEL is and what it should be doing. These different expectations are driven by the singular wants and needs of each stake-holder. Thus the necessity to understand the benefits sought by each stake-holder when approaching TEL. Recognising stake-holders wants & needs does not imply perfect TEL alignment is possible, but favours dealing with their being different. Finding the TEL unique contribution to each stake-holder is paramount.

TEL has to integrally address stake-holders' needs

The TEL should carry out a wants & needs assessment based on periodic one to one consultations with each stake-holder, to understand and list the drivers, priorities and expectations that regulate the way they relate with the TEL. The opportunity should be also taken to clarify misconceptions, while developing specific TEL-stake-holder milestones that would feed back into the aforementioned roadmap. Impact on the ground and associated benefits would be greatly enhanced as well as the overall stake-holders' perception of value.

The way to perform the consultations will vary depending on the kind of stake-holder; for member economies it can be one-to-one dialogues, or through surveys or roundtables. For the academia, private sector and user groups the consultation could follow TEL's proven mechanisms in place, such as the periodical dialogues and roundtables which have been successful in eliciting these stake-holder's wants & needs.

In particular, understanding and tending to the needs of developing economies will enable TEL to help them achieve their development agendas and increase their perception of value in participating in TEL. The working

group could gain insight when exploring further collaboration with international development agencies and organisations. Once the needs of the different stake-holders have been assessed, these must be used to guide the delimitation of TEL's scope of work and its roadmap. In tending to stake-holders needs, TEL should also take into consideration the stake-holder's execution capacity before committing an entry into TEL's roadmap.

5. Inside TEL : Running smoothly

Most TEL processes work well and some are even considered as best practises or models for other APEC fora, a few other are still subject to improvement, streamlining or fine tuning.

TEL has to further streamline processes

Setting standard operating processes in place, that incorporate current best practices is needed. The best way to do this is by means of reviewing, improving and streamlining TEL's processes and then porting them into intranet web applications that become the single way of doing things. The latter should also address the additional functionality being asked for by members. All processes involving information gathering, submittal, review, follow-up, reference, etc. would be greatly simplified, thus also alleviating the lack of continuity and disconnects resulting from the rotation of people occupying the different roles involved, with the additional benefit of an increased economies' responsiveness and participation.

Project related processes (proposal, evaluation, approval, funding, life-cycle overseeing, adequate project termination reports and publication), meeting co-ordination, programme director functions, information search and retrieval are key processes that lend themselves to the intranet approach. The recently created Project Management Unit (PMU) should also be leveraged.

Due to outcomes of other meetings like TELMIN, and due to late submissions, there is valuable time spent during TEL meetings to analyse and reach agreement on these topics. Thus EXCOMM and HoDs should hold a -virtual- meeting prior to TEL's to ensure that these are gauged against the roadmap.

Creative mechanisms need to be set in place in an organisation as vertical as APEC's, for collaboration to happen among its horizontal working groups. Aligning SOM and TEL through the attendance of TEL's shepherds to SOM meetings is, of all other alignment concerns, that of the most impact regarding joint collaboration and timely awareness of other APEC fora initiatives and of Leaders' and Ministers' forward vision.

An approved job description and additional role empowerment are necessary, as the programme director is key to identify possible duplication of efforts among fora, assess coherence between TEL and APEC working directions and facilitate TEL with APEC resources. It also has a relevant role in the flow of information of TEL within APEC and its outreach, therefore is the natural liaison with APEC stake-holders and interested parties.

TEL's website should be revised, updated and organised in such a way that information can be found easily through advanced search mechanisms. This set-up would allow HoDs and EXCOMM to rapidly compare project proposals with activities already accomplished in previous meetings to avoid duplication or deviation from the goals and objectives.

The project overseer, in conjunction with the project proposing economy, should prepare a final report at the end of each project clearly stating the conclusions attained, the list of participants/attendees, evaluations of the project itself from the attendees, identifiable outcomes, identifiable impact, and suggestions for the betterment of future projects. This information cannot be found at the AIMP, it should be part of the database.

The AIMP database has to be thoroughly reworked and reorganised making sure that all projects and their information are entered. Project information shall also include participating and attending economies and individuals, a comprehensive project completion report, an impact assessment, attendees' feedback, project overseer comments and suggestions, and links to specific project deliverables as well as any additional project info such as the ranking sheet. Full-text search capabilities must be integrated. Furthermore, projects in the AIMP should be classified/indexed to relate them to specific items on TEL's strategic roadmap.

Complementary Recommendations to TEL

Projects

1. While reviewing for compliance of new project proposals against TEL's established processes and procedures, it was observed that none of the APEC TEL39 submittals, as listed in the website, met established deadlines. As indicated in the survey by member economies, "*Economies point out that the use of proven standard documents and procedures is falling behind. Timely handling of the inherently high volume of communications is not helped by this, nor communications happening shortly before meetings as a result of late projects submissions. Thus proposal circulation, agenda discussion (HoDs) and other activities find members hard pressed in time and affect meeting effectiveness, hindering outcome potential.*" TEL should abide by its established processes and procedures.

Gender

2. Even though gender consideration is seemingly taken into consideration, more creative ways are required to promote a much more proactive and integral participation of women in TEL's activities, with particular emphasis from the very inception of projects, by design and not only to comply.

3. A review of most TEL project proposals, in the section where gender applicability is requested, shows "does not apply", "not applicable" or "no impact". Among the steps that TEL activities should take to ensure benefiting gender are: include women in the planning, management, allocation of resources and implementation, making special efforts to disseminate activities results to women and using sex-disaggregated data for activity assessment. Activities have to show how their objectives benefit women and APEC Ministers have indicated that benefits might include increasing the involvement of women in the economy and economic institutions and reducing gender inequalities through education and training.

Internal Communications

4. TEL should approach ABAC again to reactivate ABAC's intention to create a telecommunications and information committee within its own organisation, originally meant to collaborate with TEL, as it could become a formal communication channel of value while clearly eliciting private sector interests.

5. Interest aroused in the GOS Chair by the well received presentation on liberalisation that TEL's deputy convenor on LSG recently made[49] shows a way to trigger other fora collaboration that could become a best practice.

Roadmap

6. The Vision Statement and Policy Objectives TEL's document should be revisited in light of the evolving nature of telecommunications and information sectors, as well as the APEC strategies being adopted since acknowledgement of the REI and SR.

Outreach

7. Making TEL's reports more appealing by leveraging APEC's Secretariat Communications and Press department and learning from OECD's successful experience, would render these better suited for marketing and reference.

Closing remark

Bringing to fruition the above recommendations, TEL will be able to fulfil the "endeavour to make the telecommunications and information sector a 'model' sector in achieving the goals set by the APEC economic leaders at Bogor".[50]

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[49] As reported in TEL 39 LSG report.
[50] Joint Statement TELMIN1, May 29-30, 1995 in Seoul, Korea.

Addenda

A. Bibliography

TEL's website

>All Chair Reports available in APECTEL's website
>All Convenor Reports available in APECTEL's website
>All information documents provided by the APEC Secretariat in TEL meetings
>All TELMIN Declarations, Plan of Action, Joint Statements
>Documents presented by economies at TEL meetings
>All documents presented by the industry at TEL meetings
>All documents presented by guests at TEL meetings
>All TEL projects

Selected documents available in APEC's website

>All information related to the history, structure and organization of APEC
>All documents related to guidelines and procedures
>All Leaders Declarations
>All Trade Ministers Statements
>Leaders' Agenda to Implement Structural Reform 2010 (LAISR)
>2008 Regional Economic Integration
>2007 Senior Official Report on Economic and Technical Cooperation
>SCE reports
>Selected SOM reports

Other documents and websites
>A Reflection on PECC's 25 years: A story with an evolving future. Nam Duck-Woo
>PECC website
>ASEAN website
>APT website
>OECD website
>ITU website

B. Results

B.1 Survey

Introduction

The Independent Assessment of the Telecommunications and Information Working Group (TEL) for the SOM Steering Committee on ECOTECH (SCE) Project SCE 01/2008, recommended the consultant conducting a survey across APEC member economies for an extensive consultation with members.

This section covers the survey findings and is a fundamental input for the consultant to perform this TEL Independent Assessment within the ECOTECH Implementation of APEC Working Groups and SOM Task-forces, and understand member's view of relevant the issues.

Survey questions and format are included for reference in section D.5 of the Addenda. A total of 84 questions were asked in the following categories.

- Economy's Participation
- Meetings and Management
- Management applied
- Strategic priorities and APEC goals
- Projects
- Activities
- Collaboration with Other APEC Fora
- Collaboration with Non-APEC Entities
- Meetings and Activities Attendance
- Gender considerations
- Best Practices
- Assessment of the impact "on the ground"

The survey specific design was made available in March 01, 2009 to all member economies through the Web, as several economies had pointed out the value in using virtual collaboration tools. Completion was originally due March 30 but was extended until April 30 to accommodate Member Economies that had expressed their interest to widen their input or that were in the process of its completion. The consultant appreciates economies' extra effort in replying even as TEL39 meeting activities came across their agendas. Survey data gathering was agreed to be continued until May 10, 2009 as per last input was still delivered by additional members, as per conversations held with the APEC Secretariat.

Survey reach included all member economies, APEC Secretariat and the TEL Chair / Vice Chair.

Survey participant member economies

This survey obtained valuable input from thirteen participants, twelve out of the twenty one member economies and one user's group. Most replied fully and in great depth.

Survey voice

Survey voice comes from the following areas within each participant member economy:

Surveyed economies

38%

62%
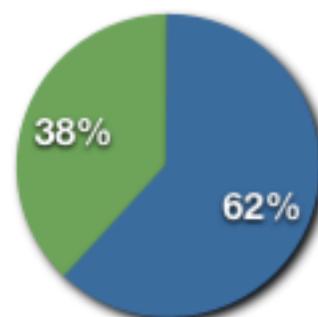
● Participant economies
● No reply

	Policy making authority	Regulatory authority
Australia	Department of Broadband, Communications and the Digital Economy	Australian Communications and Media Authority
Canada	Industry Minister, Industry Canada, Telecommunications Policy Branch	
Chile	Undersecretariat of Telecommunications (SUBTEL)	
Chinese Taipei		National Communications Commission (NCC)
Indonesia	Ministry of Communication and Information Technology	
Japan	Ministry of Internal Affairs and Communications (MIC), Japan	
Malaysia	Ministry of Energy, Water and Communications	
Mexico		Comisión Federal de Telecomunicaciones
Peoples Republic of China	Ministry of Industry and Information Technology	
Singapore		Infocomm Development Authority of Singapore (IDA)
Thailand	Ministry of Communication and Information Technology (MICT)	
United States	U.S. Department of State	

Within the Policy making authority, survey completion involved the sections shown in the graph:

Voice section

- Policy
- International affairs
- Delegation to APEC TEL
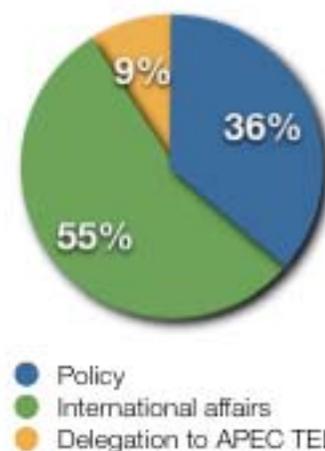
Survey grouping

Survey results were grouped into five categories:

Group	Survey questions
On the Programme	Personnel, Funding 4-6. Impact, replicability, sharing 80-83. Satisfaction 46-49. Projects in/participated 69-73. Strategic priorities & collective actions 21-28.
Meetings	Meetings 7-9, 64-68
Management	Management functions 10-19
Projects	Projects 29-45

Group	Survey questions
Joint collaboration with other fora	Joint meetings / projects with other fora 51-63
Gender	Gender 74-79

The following pages describe survey results as per this grouping.

1. Programme commitment, impact, satisfaction and alignment

Summary
While member economies' commitment and satisfaction to the TEL work is very high, few of the respondent economies are in a position to back their commitment with long-term funding. Members understand that replicability is not readily possible but attention should be brought as to the relatively low impact "on the ground" perceived. Member economies find an adequate TEL strategic priorities and collective actions alignment to their own, and do point out specific areas of opportunity, both tactic as well as strategic looking into the future, that can be brought forward by the existing TEL structure.

Commitment
Three developed economies out of eleven respondent members can commit to providing both long-term hard[1] funding and personnel for the TEL and its projects.

Impact and replicability
One out of six members reports both a specific replicable example as well as clearly identifiable impact "on the ground" in their economy.
Replicability is considered "difficult", "or not readily" possible in four out of six cases. No economy ranks impact "on the ground" as "very significant"; six out of eight members see "some" or "not identifiable impact".

Satisfaction
Two developed member economies out of nine respondents are both very or extremely satisfied with the TEL work and committed to long-term hard funding. Two developed member economies out of eight are very or extremely satisfied with the TEL and note a clear impact "on the ground" in their economies. Seven out of nine economies are very or extremely satisfied.

Strategic priorities and collective actions alignment
Three out of nine member economies find that general focus of TEL meetings, projects and activities meet their expectations and are also knowledgeable and involved with TEL strategic priorities and collective actions to respond to APEC goals.

Eight out of ten respondent economies would not add nor eliminate areas of work currently included in the TEL ToR or Strategic Plan; One developed economy and a survey participant guest group concur in adding more business/consumer issues into the TEL work. Nine out of ten members find that the TEL is responding to its economies' priorities in a closely aligned manner, in current and future needs and also agree on the TEL priorities and direction of future work being appropriate with the evolution of ICT on an economic co-operation environment.

Suggestions as to improving the TEL ToR effectiveness, such as its need for more specific goals and objectives and better eliciting the TEL value and benefits as well as including more consumer issues and linking with the broader APEC trade liberalisation agenda, can be brought forward and facilitated by the TEL existing structure, as five out of eight members agree on.

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[1] Hard funding excludes "in-kind" and "expenses only" as well as "case-by-case" project commitments.

Personnel

Four out of twelve of the surveyed Member Economies are extremely committed to providing long-term support, in the form of personnel, for TEL and its projects; five are very committed.

Not	0
Somewhat	3
Very	5
Extremely	4
Total	12

Three developing economies report a somewhat committed status and keep their participation to meetings. One survey participant guest group declares being extremely committed.

Funding

Member Economies commitment to providing long-term support, in the form of funding, for TEL and its projects had similar weight in number of answers distributed between the "not-somewhat" and "very-extremely" categories.

Not	3
Somewhat	3
Very	5
Extremely	1
Total	12

Economies' comments as to their **type of funding** enabled further understanding and grouping of replies that better discriminated their commitment in relation to this question.

Not able to commit	3
Meetings only	1
In-kind	2
Case by case impact driven	2
Funds change as per value / priorities	2
Meeting and Projects funds committed	2
Total	12

Thus, four out of a total of twelve surveyed economies, are committed to providing long-term funding for meetings and projects; two of them note that these funds can be adjusted as per their economies' priorities and perceived value of TEL's activities. Two member economies make project funding available on a case by case basis; one of these also reports new sources of funding specifically for capacity building projects. Two economies will fund projects with in-kind resources only. Two cannot commit long-term funds at this point in time and one economy can address meeting expenses exclusively. Guest group reports committed to funding its meeting attendance.

Mapping commitment
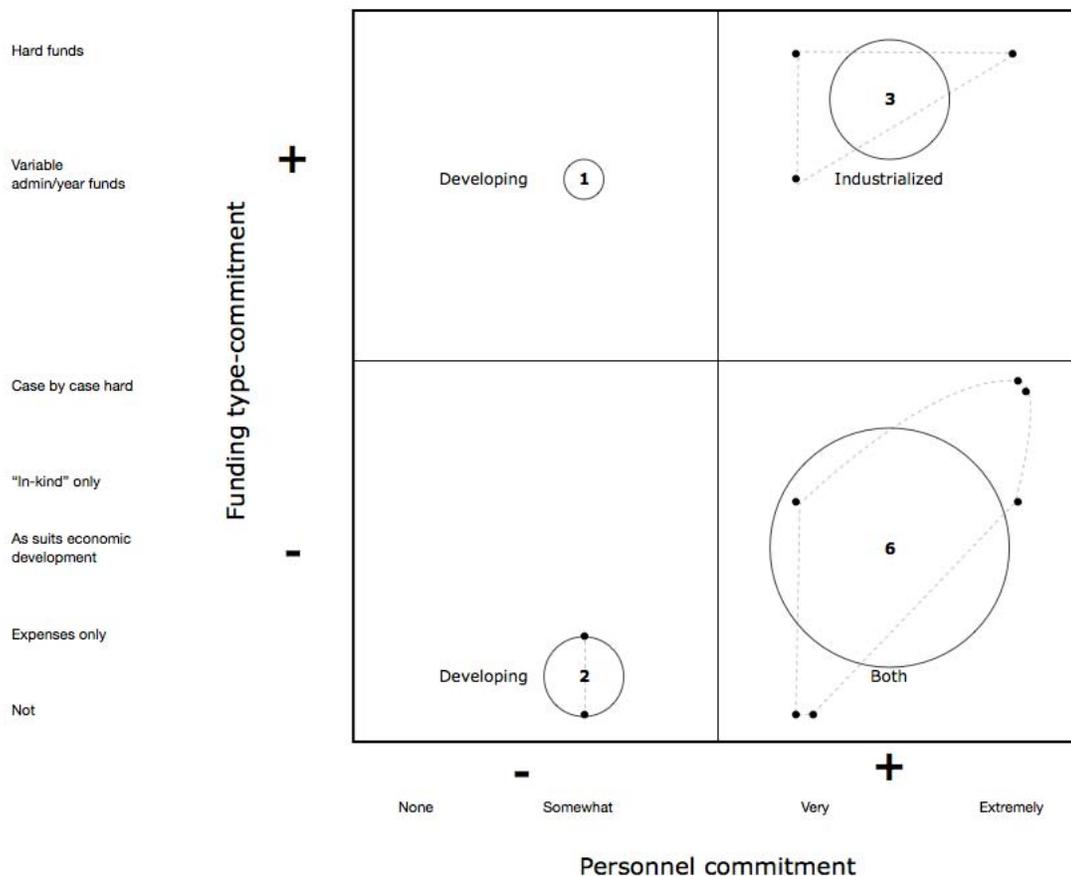
Suggestions

Member economies' suggestions for ways to increase resources, particularly funding and personnel, for TEL activities are:

- *Member economies secondments to APEC Secretariat*
- *Seek corporate sponsorship and public-private sector partnerships.*
- *More industry involvement.*
- *Sell applicable TEL's products and services that come out of meetings, seminars and workshops (publications, best practices, guidelines)*
- *Promote awareness through mass-media.*
- *Increasing co-operation with suitable international forums or organisations can increase participation of speakers, and can potentially reduce funding requirements.*
- *Keep TEL's work focused on priority issues.*
- *Ensure economies that more tangible and measurable outcomes can be achieved through TEL than by other means.*
- *Economies should present project proposals that are practical and offer clear benefits to members for participation.*
- *Project proposals should advance work that is new and original, avoiding duplication.*
- *Improve co-ordination with other fora to bring forward joint projects with wider footprint, impact and make funding efficient.*

A guest participant group suggests that economies could assign a fraction of carrier license fees income to further support their participation in TEL activities.

Replicability

Four out of six respondent economies consider replicability is *"difficult"*, *"not readily"* possible as a result of *"varying levels of development"* or *"substantive diversity in telecom development level"* and since *"TEL is specialised there is little overlap with other APEC activities, including the WTO and trade issues that are technical and unique to the ICT sector."*.

Not available, difficult, some or not readily	4
Lessons learned only, guide for policies	1
Specific example (MRA)	1
Total	6

One out of six comments on the use of project experiences or lessons learned for policy making, as being most replicable.

Only one out of six respondent members cites a specific example (MRA).

Best practices sharing

Suggestions for opportunities to better share best practices among member economies, the private sector, academia, and international organisations, in order to increase the impact of the TEL work, are:

- *Suggest Web tools for internal communication*
- *Make better use of ICT (web video, grid comp,)*
- *Encourage member economies that have successful experience in the implementation of policies, regulatory framework or initiatives in some specific areas to share their experience and showcase their practices and approaches that lead to the success.*
- *Have guidelines endorsed by APEC leaders or ministers such that it will be credible reference material for others.*
- *TEL should attend other fora.*
- *Bring more economy representatives to TEL activities.*
- *Use best practices to demonstrate the importance of technology innovation, investment, regulatory flexibility and end use.*

Impact "on the ground"

Two out of eight economies reported clearly identifiable impact of the TEL "on the ground" in their APEC member economy, as being of assistance in their efforts transmission and international policy co-ordination, or on specific MRA related areas such as conformity assessment for telecommunications equipment which has helped them get access to the markets of APEC member economies in a fast, efficient and cost effective way. No economy ranks impact "on the ground" as "very significant"; six out of eight members see some or not identifiable impact.

Not identifiable	1
Some	5
Clearly identifiable	2
Very significant	0
Total	8

One economy commented on the relevance of taking into consideration the differences in level of development and some distinct local conditions when developing and implementing APEC projects, as a suggestion on how could APEC as a whole, and/or particularly the TEL, improve the "on the ground" impact of the TEL projects and other activities within its member economies.

Mapping commitment
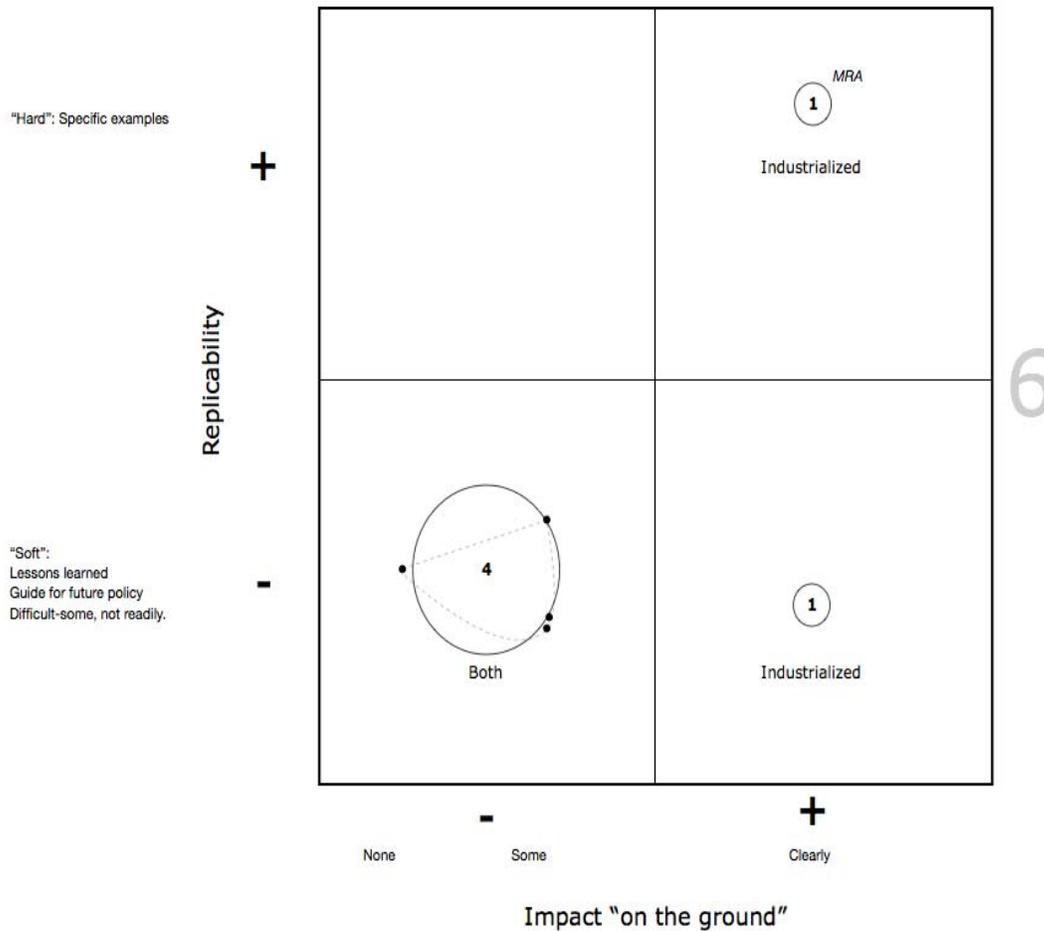
Satisfaction

Six out of nine member economies are very satisfied with the TEL work and one more is extremely satisfied. Two respondent economies are somewhat satisfied. The implementation of MRA for Conformity Assessment of telecommunications equipment is quoted as an example.

Not	0
Somewhat	2
Very	6
Extremely	1
Total	9

The following table depicts aspects of the TEL work that member economies are most / least satisfied with:

Satisfaction	None, n/a	Isolation from rest of APEC	Link to APEC broader trade liberalization agenda & stuck - slow	ICT capacity building	Alignment to Leaders' goals	
"Least" **"Most"**						
NGN, Children safe Web, Digital divide.	1					1
DSG	1					1
Information sharing	2	1				3
LSG, policies and regulatory frameworks				1	1	2
TEL as ICT forum			1			1
	4	1	1	1	1	**8**

Suggestions as to what could be done to increase your level of satisfaction with the TEL work are quoted:

- *APEC could take assertive action with each economy to review and distribute its assistance/consultation to the project/plan implementation under budget support.*
- *Take priority action on emerging economies issues*
- *Efficient project approval*
- *Stronger and better co-ordination within TEL and between APEC Fora.*
- *Connect more directly with the work of other APEC fora.*

- *More relevance to APEC overall work, and AELM and AMM.*
- *Increase directions (as opposed to summary of work done) in TELMIN declarations.*

- *More projects in ICT Capacity Building of member economies, particularly of developing economies, to bridge the existing digital divide in the region and achieve equitable development among economies.*

Mapping satisfaction

Funding type-commitment

Hard funds

2
Industrialized

Variable admin/year funds

+

1
Industrialized

Case by case hard

1
Industrialized

"In-kind" only

As suits economic development

−

5
Both

Expenses only

Not

−   +

Not   Somewhat   Very   Extremely

Satisfaction with TELWG

Knowledge / involvement

Satisfaction with TELWG

Extremely

+

Very

4   Both   2
Industrialized

Somewhat

−   2
Industrialized

Not

−   +

None - Some   Clearly

Impact "on the ground"

All respondent economies are at least somewhat knowledgeable and involved with TEL strategic priorities and collective actions to respond to APEC goals (i.e. those contained in the TEL Terms of Reference (ToR) and APEC TEL's Strategic Plan). Five out of ten member economies describe being somewhat knowledgeable. One of the very knowledgeable/involved economies notes that further linkages with broader APEC goals are required to warrant their economy continued participation in the work of the TEL. A guest group is somewhat knowledgeable of most but not all strategic documents referred to and points out having been unable to find all of them at APEC's Website.

TEL meetings, projects and activities alignment (focus)

When assessing the TEL ToR and TEL's Strategic Plan, six out of ten member economies found that general focus of TEL meetings, projects and activities meet their expectations; four are not sure.

Not sure	4
No	0
Yes	6
Total	10

Commentary offered notes that the ToR development process is weak and more planning and co-ordinating time being needed: *"TEL focuses its time into the implementation of projects; some time can be spent on planning and co-ordination."*

Mapping the TEL focus
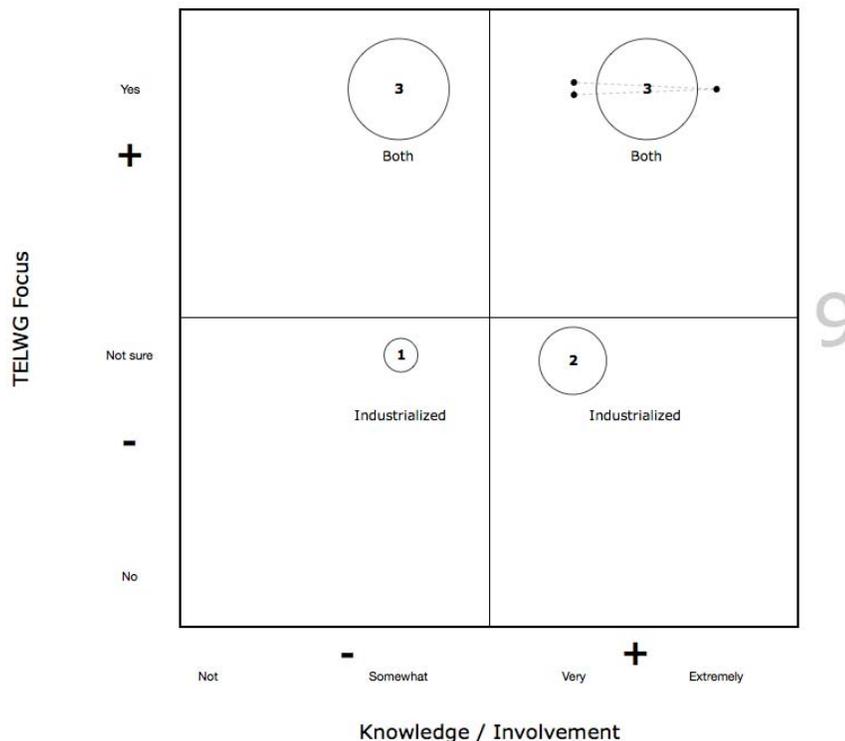
Mapping areas of work alignment to the TEL ToR and Strategic Plan

The following chart summarises respondent member economies' answers:

Areas of work actually included in the TELWG ToR and TEL's Strategic Plan which you think should be eliminated?

No

" the role of ICTs in helping to resolve the crisis"

(1) Industrialized

(8) Both

10

Yes

(1) Industrialized

Elliminate:
eGovernment & CIO support

Add:
1. IPv6
2. Convergence policy
3. Consumer issues.

Yes   **No**

Areas of **work NOT** currently **included** in the TELWG **ToR** and TEL's Strategic Plan which **you think should**.
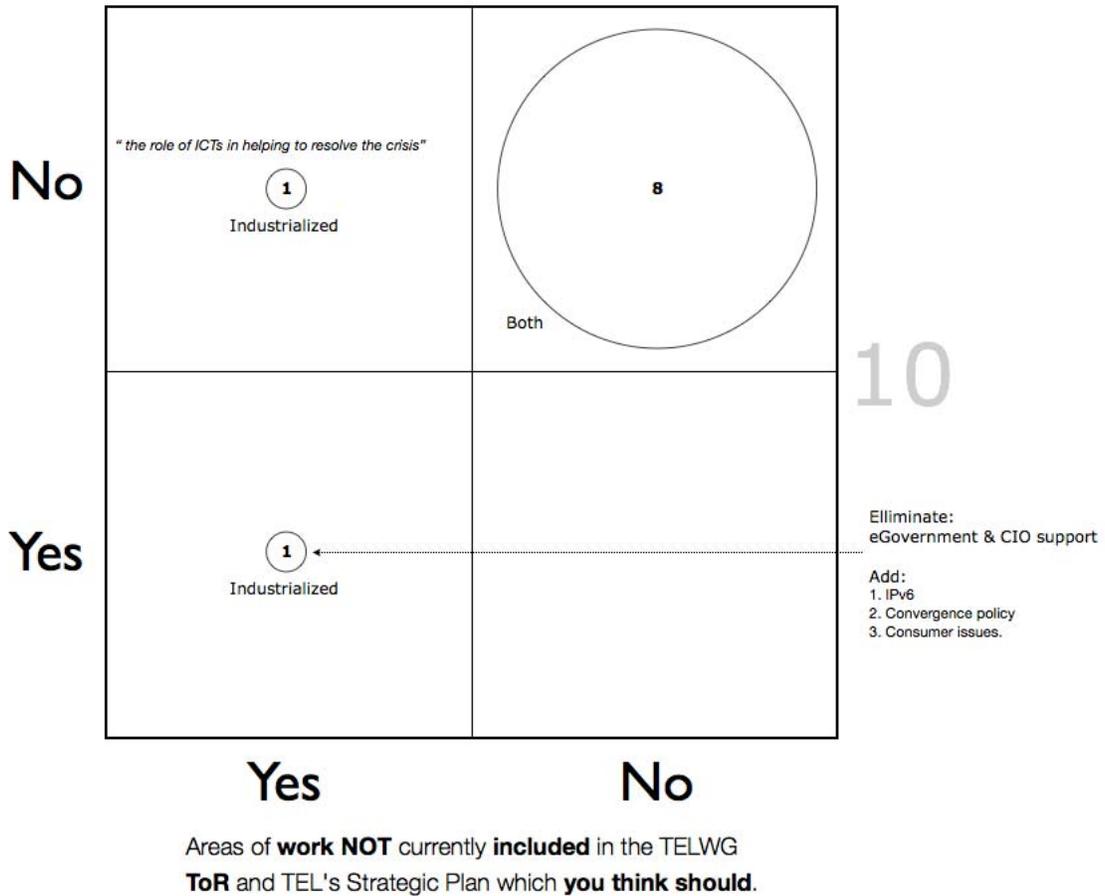
In the opinion of a surveyed guest group, regarding areas of work not currently included in the TEL ToR / Strategic Plan: *"we would like to see more emphasis on benefits of infocomms to business and consumers in the work of TEL. Often such benefits are implicit and the focus is on industry whereas as a User Group we prefer a more explicit focus on benefits to end users e.g. digital prosperity, confidence, service availability, service affordability, adoption strategies".*

The same guest group suggests the following regarding areas of work that should be eliminated: *"There are a number of long-term research projects which should be elsewhere in APEC or the research community. TEL should be more focused on practical matters which drive outcomes for trade facilitation, regional integration, security and digital prosperity in the short to medium term rather than the longer term. Availability, affordability, adoption of services, development of competitive markets, consumer protection measures, and encouragement of investment and innovation are areas where focus should be increased".*

On the TEL strategic priorities and direction for future works being adequate to the evolution of Telecommunications and Information on an economic co-operation environment

- One member economy comments *"I could not see that the TEL strategic plan is the future plan for economies".* Nine out of ten respondent economies find TEL priorities and direction for future work appropriate.
- Yet another member finds the TEL strategic priorities and direction to be adequate, and quotes *"Impact of NGN on economy and trade between APEC, relevance of ICT on discussion on sustainable development and roaming Charges in APEC"* as its rationale.

Suggestions are:
- *"Resolution of digital divide should be discussed more actively".*
- *"Realising that the deployment and use of ICTs is changing rapidly due to innovations, the important thing for TEL is to look creatively for the latest trends and examine them through discussion and projects".*

On the TEL responding to current and future needs closely aligned with the priorities of your member economy

Eight out of ten member economies find TEL is responding to current and futures needs in a closely aligned with their economy priorities. One economy comments that TEL *"could not"* respond to [all] APEC economies' needs.

Five developed economies out of ten members supporting TEL priorities alignment made comments; Two of these members point out to weaknesses in both identifying and sustaining agreed priorities within TEL steering groups and throughout its meetings over a period of time: *"TEL priorities tend to vary over the course of meetings in relation to our own". "Each TEL steering group should select its top priority."* Two other members quote what their economy priorities are as they align with current TEL direction: *"The TEL's priorities such as reducing the digital divide, next generation networks and technologies, mutual recognition arrangements, capacity building, etc. are the issues that concern our economy most." "... [our] area of work is in regulation, competition management, cyber-security, and facilitation of deployment of new ICT technologies; these are the focus areas covered in TEL".*
Yet another of these respondent economies notes that it *"would like to see more flexibility from economies to discuss opening markets and increasing investments through liberalisation of regulatory and legal regimes. There is sometimes a reluctance to view the TEL work as an integral part of the overall Bogor goals."*

Two developing economies also supporting TEL priorities alignment comment: One member reflects on the importance of applying best practices obtained from TEL work for successful use and tracking of ICT emerging trends, while the other member economy celebrates TEL has moved forward into Internet governance as a particular direction of work that is aligned to their own priorities.

A surveyed guest group suggests: *"TEL is not sufficiently focused on end users needs. There is good engagement with industry perspectives but this needs to be balanced with end users interests - whether consumer or businesses. Regional integration and trade facilitation are issues that affect businesses in APEC economies and advanced communications services and harmonised regulatory systems are needed to make using infocomms services easy and affordable. The International Roaming prices issue is a good example of an issue that affects businesses (and travelling consumers) across economy boundaries."*

Mapping TEL responsiveness to needs, priorities and direction of future work on APEC member economies
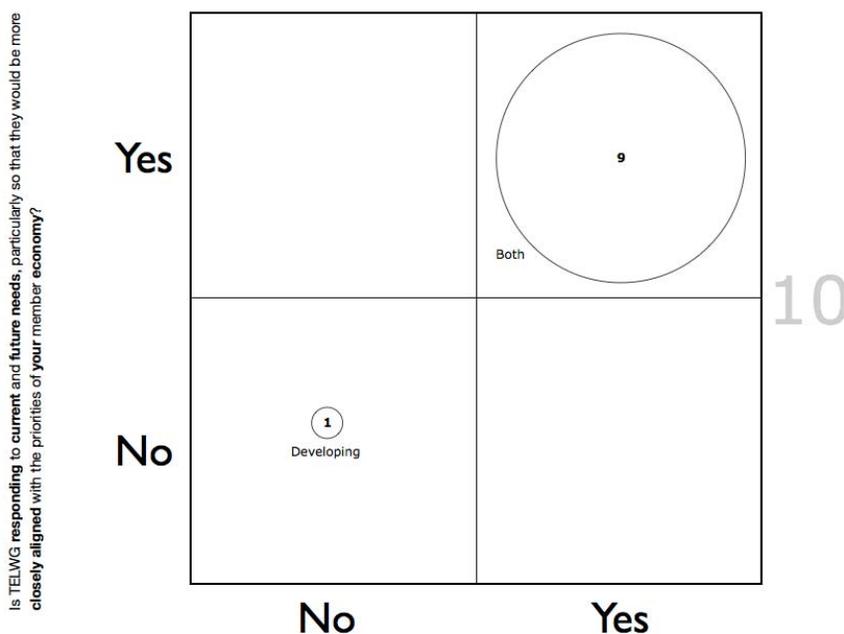
Current structure would be able to improve the TEL ranking assigned for the effectiveness of its ToR by:

Five out of eight respondent economies find that the TEL can improve its ToR effectiveness through its current structure. One member declares it is not sure.

A guest group requests the TEL be more focused into core APEC trade and business/consumer issues and notes that *"... the current structure of Steering Groups reflects telco sector issues - not economic and trade issues and not business/consumer end user issues. A new structure which would go beyond ensuring networks are built out ubiquitously and affordably and beyond effective and contemporary market and regulatory structures. It would encompass the core APEC issues: Regional Integration; Trade Facilitation and Digital Prosperity and Security. A number of TEL activities would be very relevant to these agendas - those that are not relevant, should be stopped or relocated to groups where their relevance is high."*

Suggestions for improving the TEL ToR are:

- *"Post the ToR for each Plenary session, to remind delegates of what they are".*
- *"Include a discussion of the ToR on the Heads of Delegation/Executive Committee meeting agendas on a regular or semi-regular basis".*
- *"TEL HoDs and delegates should devote time to a discussion the TOR at the last meeting of the calendar year. Members should be ready to speak about priorities".*

A surveyed guest group comments *"The ToR (Draft Lima Feb 2008) is very process oriented. The key outcomes are in the Introduction: improving infrastructure; facilitating co-operation etc. It might be better to link TEL ToR to APEC main goals explicitly. **The Goals are not very specific** (only the one reference to Brunei Goals) and all are about information exchange; shared knowledge and collaboration - same for the Objectives which are very much about the process rather than the outputs of the group. **The Objectives as written could be shared as Ways of Working across all APEC Fora**. For business users Goals and Objectives are much more specifically directed - 100% connectivity; 20% reduction in spam; 10% reduction in costs etc. I realise the difficulty of this for TEL but at the moment **the way the ToR is written I am not sure we would miss TEL if it were no longer to operate. We need to find the unique contribution TEL can make to each economy and to the region and highlight this in the ToR.**"*

Projects lists

Members' specific replies to the four projects questions below, allowed for the following summary tables, showing latest or "top-of-mind" projects in their economy, both self as well as APEC-funded. Seven members answered.

Projects-> "APEC Funded" | v "Self-funded"	None	Training MRA	Training Inter-connection	Smart communities	Research Asia-Pacific speech translation	Research e-Government	n/a
Various		Developed	Developed	Developed			
	Developing						
None	Developing						
	Developed						
Information GRID for knowledge system							Developed
Training : PKI e-Auth.							Developed
Workshop: ICT products and services security					Developed	Developed	
Symposium: APEC OECD Safer Internet Children					Developed		

Projects-> "APEC Funded" | v "Self-funded"	None	Training MRA	Training Inter-connection	Smart communities	Research Asia-Pacific speech translation	Research e-Government	n/a
Vision: Asia Pacific Information Soc. (APIS)					Developed		
Cyber-crime legislative drafting	Developed						

Projects-> "APEC Funded" | v "Self-funded"	Workshop on Implementing reference paper	Workshop on Implementing GATS Article VI	Workshop on Implementing WTO Trade Rules
Various			
None			
Information GRID for knowledge system			
Training: PKI eAuth.			
Workshop: ICT products and services security	Developed	Developed	Developed
Symposium: APEC OECD Safer Internet Children	Developed	Developed	Developed
Vision: Asia Pacific Information Soc. (APIS)	Developed	Developed	Developed
Cyber-crime legislative drafting			

- Please provide a list of TEL APEC-Funded Projects carried out in your economy.
- Please provide a list of all TEL APEC-Funded Projects your economy has participated on and the number of people from your economy involved in each. (If possible, please indicate how many women and how many men)
- Please provide a list of TEL Self-Funded Projects carried out in your economy.
- Please provide a list of all TEL Self-Funded Projects your economy has participated on and the number of people from your economy involved in each. (If possible, please indicate how many women and how many men).

2. Meetings

Summary

While the TEL meetings structure and amount is found adequate, linking its schedule to the SOM meetings is seen as beneficial for TEL improved co-ordination and alignment. Keeping all other related activities on the margins of the TEL meeting dates and having fewer and better scheduled workshops/seminars would enable delegations for an improved overall attendance that accommodates their difference of available resources. Increased inter-sessional work is welcomed. Internal communications is recognised as efficient but its timing is an area of opportunity due to the impact that late submissions and large volumes of information concentrated in short advance to meetings have on members' preparation lead time and thus meeting effectiveness.

Meetings: Amount

Eleven out of twelve economies rank the amount of meetings as being enough. The regular schedule of two TEL meetings every calendar year and one ministerial meeting every two years is adequate. Increased inter-sessional work is welcomed and should be encouraged. Related meetings and workshops should take place on the margins of TEL meetings for economies to better source and fund attendance. Benefit is seen from having the actual TEL

meeting scheduling - as opposed to frequency - changed into a flexible calendar that ties into the SOM meeting dates.

Meetings: Structure
Current structure is simple, efficient and responsive; Ten out of twelve respondent economies are very satisfied with it and support keeping it as is. Linking with SOM meetings / process, reviewing each SG work periodically and keeping TEL aligned to the greater APEC/AELM/AMM agenda is found to be important. At a scheduling level, member economies difficulty sourcing attendees to all steering group meetings and related activities could lead into having fewer and better co-ordinated workshops/seminars as an option.

Meetings: Internal Communications
Eight out of eleven member economies are very satisfied with internal communications related to meetings and consider it efficient both for meetings and inter-sessional purposes. Information flows well but members might not be having enough lead time to prepare for the meeting using it: Economies point out that the use of proven standard documents and procedures is falling behind. Timely handling of the inherently high volume of communications is not helped by this, nor communications happening shortly before meetings as a result of late projects submissions. Thus proposal circulation, agenda discussion (HoDs) and other activities find members hard pressed in time and affect meeting effectiveness, hindering outcome potential.

The use of Web based collaboration tools is brought forward by several respondents to aid in timing aspects of meetings internal communications that is an area of opportunity. Members distinguish Web from e-mail. Also, while the TEL on-line papers circulation is interactive and effective, allowing TEL to reference, upload, amend, and share documents in a efficient manner, **project proposals now circulated via e-mail would greatly benefit from a system similar to that of papers circulation that enables easier referencing of specific proposals***.*

Meetings attendance
Most of the respondent economies have attended all TELMIN and TEL meetings since they became APEC members. Regarding TEL sponsored meetings and activities, several members have attended MRA task force meetings and some selected workshops. Out of the compiled answers no member economy maintains seminars attendance records.

Meetings: Amount

Eleven out of twelve economies rank the amount of TEL meetings *("on an annual basis 2 TEL meetings+workshops/seminars, task forces, plus inter-sessional work, workshops/seminars, etc., and every 2 years a Ministerial Meeting")* as being enough; One developing member economy finds the amount excessive and suggests meeting once a year. Economies provided the following suggestions:

Insufficient,	0
Enough	11
Excessive	1
Unmanageable	0
Total	12

- A member finds it "*essential that related meetings and workshops take place on the margins of TEL Meetings, so it will not resource, nor send delegates to meetings that are not on the margins of regular TEL meetings*". It also "*welcomes the growing tendencies towards inter-sessional work, strongly supports more of this*". "*Two years between Ministerial [meetings] is appropriate. Three years is too long*". This member would prefer "*meetings adjust so that at least one TEL meeting takes place in the economy hosting the given APEC Year*", as it was the case for Peru, has been the case for Singapore, and will be TELMIN 8 will take place in Japan.

- Another member economy concurs and adds on the value of inter-sessional work: "*the regular schedule of 2 TEL meetings every calendar year and one ministerial meeting every two years is sufficient as long as inter-sessional work is encouraged and used well.*"

- Recognising that meetings frequency is adequate, two members bring up the need to rethink "*the independent scheduling of TEL meetings that separates the working group from the SOM meetings*" or, for this matter, that "*[meetings scheduling] should be more flexible without being fixed*".

- Yet another respondent economy suggests "*ministerial meetings are [frequent] enough every 2 years but [considering] being flexible to do it in longer period (3 years) [could be an option]*".

- Regarding workshops members comment: *"more thought should be given to using virtual platforms for some kinds of workshops and activities" and "[we would] need to streamline the topics of workshop[s] to ensure that TEL remains on track to achieve the targets set out by our APEC leaders."*

- A survey participant group agrees adding: *"The preparation for TEL to ensure a successful meeting with progress made and outcomes achieved means that two meetings a year is manageable. [Having meetings less frequently could mean irrelevance given the fast nature of the infocomms market"*

Meetings: Structure

Ten out of twelve respondent economies are very satisfied with the TEL meeting structure (3 Steering groups). Current structure is seen as simple and efficient and "still quite adaptive to the latest Telecom / ICT development in the Asia Pacific region" since the "TEL meeting structure has just been put in place since TEL 34 (i.e. October 2006)"; Two members are somewhat satisfied.

Not	0
Somewhat	2
Very	10
Extremely	0
Total	12

Suggestions are:

Keeping the current structure
- *"The existing TEL meeting structure has just been put in place since TEL 34 (i.e. October 2006). It is still quite adaptive to the latest Telecom / ICT development in the Asia Pacific region". "TEL has had a recent revision and has re-structured itself. We should allow more time to try the results of this re-structuring". "The current structure is simple and efficient, which emphasises the priorities of TEL and allows extensive participation of all member economies". "Do not think it is necessary to make any change". "3 steering groups already sufficiently address most of the interest areas."*

Linking to SOM meetings / process, review each SG work periodically and align TEL to greater APEC Agenda.
- *"We would strongly support at least one meeting per year taking place on the margins of the SOM process". "It is to be noted that linkage with SOM relating meeting should be further promoted".*
- *"... to have a more structured way of reviewing the work of each of the Steering Group periodically - a work planning of sorts. Also … oversight to co-ordinate and cross link the steering groups' work, and ... align TEL work to greater APEC/AELM/AMM agenda may be useful."*

But, still finding ways to source attendees to all three steering groups meetings and related workshops / seminars and activities most of which overlap in time.
- *"Three steering groups require different areas of expertise. If an economy sends only one type of personnel, it will not be able to contribute to the two other steering groups". "In terms of the meetings by respective SG, we would appreciate if it is not conducted concurrently. This will exhaust our resources by sending more officers to attend each of them". "The number of workshops and seminars that are planned during an average TEL meeting ... also creates overlaps in meeting times that make it difficult for delegations to attend all of the events. Perhaps fewer and better co-ordinated workshops/seminars might make for a better experience for some economies."*

Meetings: Internal Communications

Eight out of eleven member economies are very satisfied with internal communications related to meetings (e.g. circulation of meeting documents, project proposals, and required documentation). This function is considered efficient both for meetings as well as inter-sessional purposes; Three are somewhat satisfied. The TEL Chair (in table) is extremely satisfied on this management function.

Not	0
Somewhat	3
Very	8
Extremely	1
Total	12

Member economies note the following:

Use of standard documents and procedures is falling behind
- *"The TEL PoC (Points of Contact) list appears to have been disbanded. We recommend re-establishing this list. This would likely address most of the challenges".*
- *"Some of the guidelines (i.e., self-funded project proposals) appear to be slipping, whereby the requirement that they be circulated several weeks in advance, for review by delegations and presentation at the HoD meeting, has disappeared".*

This does not help ease the volume of communications nor their happening shortly before meetings:
- *"Occasionally, the significant amount of information in such circulations, etc., makes it challenging to respond to effectively".*
- *"there is usually a large volume of messages immediately before a meeting. This can make co-ordination of responses somewhat hectic at times. However, this is often due to late submissions of documents by economies".*

Communications can be triggered only once information becomes available (late submissions and large volume of information), leading them into being perceived as not timely enough for member economies to prepare for the meeting. Thus a vicious cycle is completed.
- *"We only receive communications when it is near to a TEL meeting. We propose TEL Chair to be more proactive and probably provide a newsletter to update on progress of TEL activities".*
- *"However, considering that most of the cases the assistant of the Chair has its own duties, [we] would expect more support from the APEC secretariat".*

Economies bring forward the notion of Web based collaboration tools to aid in solving this cycle:
- *"It's preferred that internal communications are consolidated the management by web"*
- *"Could definitely be improved with online tools and more effective push and pull mechanisms".*
Regarding on-line tools, a member makes the following distinctions:
- *"The current method of online, paperless circulation of papers is an interactive and effective way of communications, allows TEL to reference, upload, amend, and share documents in an efficient manner. Project proposals are now circulated through e-mails by the Asst to the Chair at different times. One area to look at is to identify a systematic way in which project proposals can be referenced. (Easily identifiable header etc.)"*

Several economies and a respondent guest group concur in that the structure and flow of documentation is effective and the TEL Chair and its staff are doing a good job in circulating messages within the group.

Mapping meetings
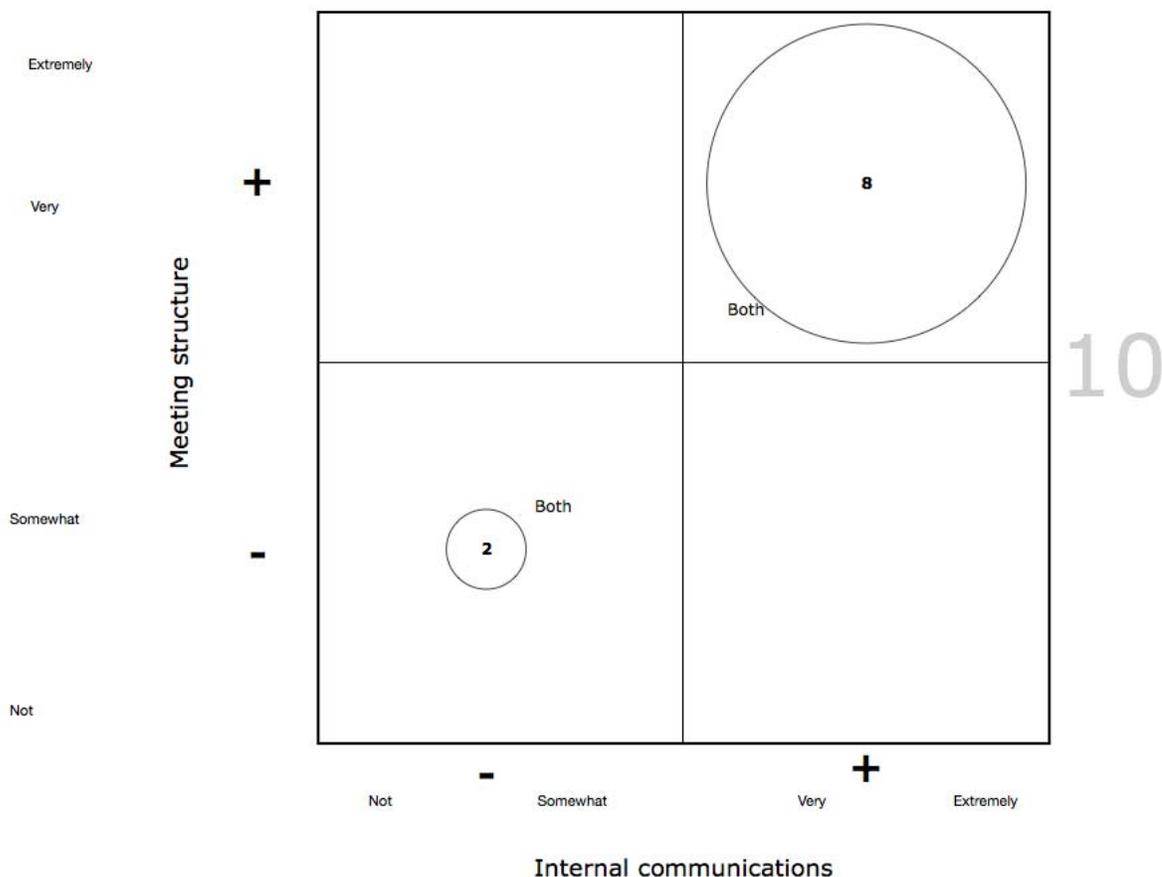
Meetings: additional suggestions

- *"It should be built stronger APEC secretariat's function".*
- *"Each TEL meeting should mean a step forward in complying with leaders and Ministers goals. In due course, it is advisable to measure after each meeting how is the TEL complying with mandates".*
- *"There should be a concerted effort to find a way to synchronise SOM meetings with the TEL meetings to foster cross-cutting work within APEC. This could help other fora draw on the expertise of the TEL for insights into how better to use ICT to create prosperity in the region as well as let TEL delegates better understand the interconnections between their work and the larger goals of APEC".*

Delegations meeting attendance

Most of the respondent economies have attended all TELMIN and TEL meetings since they became APEC members. Regarding TEL sponsored meetings and activities, several members have attended MRA task force meetings and some selected workshops. Out of the compiled answers no member economy maintains seminars attendance records. No gender information was provided and delegation attendees is just an approximate number.

The tables below reflect economies' answers to the survey, as per the following questions, but are not to be taken as an official and complete attendance list for the surveyed activities.

List of all the following meetings your member economy has attended and the number of delegates of your economy that attended each. (If possible, please indicate how many women and how many men):

- TELMIN, TEL,

- TEL sponsored,
- TEL Expert Group and Task Force and Seminars,
- Conferences and Workshops sponsored by TEL Expert Groups and Task Forces.

TELMIN	Chinese Taipei			Japan			Peoples Republic of China			United-States		
	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men
1	Yes	n/a	n/a	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
2	Yes	n/a	n/a	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
3	Yes	n/a	n/a	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
4	Yes	n/a	n/a	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
5	Yes	14	3-11	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
6	Yes	14	5-9	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a
7	Yes	17	5-12	Yes	10-15	n/a	Yes	10-20	n/a	Yes	aprox. 10	n/a

TELMIN	Mexico			HongKongChina			Singapore		
	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men
1	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
2	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
3	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
4	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
5	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
6	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%
7	Yes	aprox. 2	n/a	Yes	n/a	n/a	Yes	5-6	60-40%

TELMIN	Indonesia			Thailand		
	Attended	Delegation Count	Women-Men	Attended	Delegation Count	Women-Men
1						
2						
3						
4						
5						
6	Yes	n/a	n/a	Yes	aprox.3	n/a
7	Yes	n/a	n/a	Host	aprox.3	n/a

TEL	Chinese Taipei	Japan	Peoples Republic of China	United States	Mexico	Hong Kong China	Indonesia	Singapore	Thailand
	10-20 Plenary	ALL	ALL	ALL	All but last 5 yrs.	TEL 5 to 39	Always	Almost all	TEL 26 to 39
	3-5 DSG							2-4 pax	
	3-5 LSG							50-50% w/m	

4-10 SPGS								
1-3 MRA								

TEL other	Canada	Chinese Taipei	Hong Kong China	Japan	Mexico	Peoples Republic of China	Singapore	United States
Workshops	"IPv6 just prior to TEL27"		Question clarification needed	n/a	CERT	None		"seeks to attend all"
Experts/Task		"1-3 MRA"	"All MRA since TEL18 inception"	n/a		All MRA	MRA 1 women	All MRA
Seminars		most	No records	n/a		No records		

3. Management

Summary
Respondent member economies rank the TEL management functions as very effective. The following scoring (% normalised) was prepared out of twelve survey participants input, to gain insight as to the relative performance of each function within the "very effective range" and identify areas of greater opportunity and focus.

Improvements to planning and organising would come from better alignment to SOM, greater lead time and discussion among HoD for meeting agenda and considerations as well as a group's longer term vision that spans Leaders' and Ministers meetings for focus and consistency of efforts. More empowerment of the TEL Chair and Vice-Chair roles from APEC Secretariat is believed necessary to improve the leading and co-ordination functions, inside and outside of TEL. Resources availability have to be reviewed to support priority improvement actions. Co-Ordination area of opportunity entails better collaboration with Other-APEC fora which would result from the TEL Chair and other delegations members' attendance to SOM meetings and involving sub-fora in the TEL planning cycle. Overseeing improvements require project completion focus in balance with new projects and changing TELMIN directions.

Leading, co-ordinating and overseeing would benefit the most out of setting up standard operating processes incorporating current best practices and providing support for the TEL Chair to maintain the group's strategic vision in alignment to APEC goals, among other specific function benefits.

Valuable insight into improving key delivery areas of the management functions is brought forward by member economies as detailed at the end of this section.

Management functions: Planning
Six out of twelve respondent member economies find the TEL planning management function very effective; Six economies rank it as somewhat effective.

Management functions: Organising
Seven out of thirteen respondent member economies find the TEL organising management function very effective; Five economies rank it as somewhat effective. Empowerment, better alignment to SOM and timely meetings preparation by HoD, are suggested to improve organisation. Strategy horizon and plan consistency would improve if the group's vision spans a longer time horizon than Leaders' and Ministers meetings. Care must be taken as the TEL workload dilutes focus and effort and makes it difficulty to achieve major goals.

Management functions: Leading
Seven out of twelve members rank the effectiveness of the TEL Leading management function very effective. Suggestions to improve the guidance and motivation to members of the TEL to fulfil goals and implement plans entail greater empowerment from APEC Secretariat enabling better Chair co-ordination of steering groups among other role strengthening opportunities, as well as a process that replicates best practices in leading onto the next Chair/Vice Chair, resolves diversity of interests, adds transparency to the Chair's candidate selection and helps the TEL Chair to keep the group's strategic vision in alignment to APEC goals.

Management functions: Co-ordinating

Six out of twelve members rank the effectiveness of the TEL co-ordinating management function as very effective; The same number rank it somewhat effective Other-APEC fora co-ordination is an important area of opportunity. Members suggest improvement to synchronise the TEL various activities especially with the work of other APEC fora through the TEL Chair and/or TEL HoD attendance to SOM meetings to learn on Other-APEC fora activities. Co-Ordination should be shared wider across the group; Web collaboration tools could aid at improving overall economies' responsiveness. In a guest group vision "TEL should move from being a specialist group to an enabler of improved outcomes for all other APEC groups".

Management functions: Oversight

Seven out of eleven economies rank the effectiveness of the Oversight TEL management function as very effective; One member finds it not effective. Economies suggestions to improve the TEL monitoring and evaluating of plans, projects and activities include setting up a process to support its effectiveness and longer-term vision and address project completion which is an area of opportunity for oversight; Fewer long-term projects and better project conclusion documents are seen as important steps in this direction. Due to the frequent changes in direction from TELMIN, "allowing affected existing projects enough time to gain "closure" from TEL whether by simply finishing or being transferred to another more appropriate APEC group" would bring the greatest impact.

Management functions Applied

Please see key findings and suggestions summarised under this section below.

Management functions: Planning

Six out of twelve respondent member economies rank the effectiveness of the TEL planning management function as very effective at achieving the group terms of reference, strategic priorities, work plans and implementing projects and activities; The group Chair (in table) ranks it as extremely effective. Six economies rank planning as somewhat effective.

Not	0
Somewhat	6
Very	6
Extremely	1
Total	13

For the purposes of this survey, planning is the process of defining the TEL goals, mandate, and role. Deciding on TEL's strategic plan, tasks and resources to be used, and outlining work plans to meet those goals and priorities set up at TELMIN outlined in the TEL's Strategic Plan, APEC Leaders' Statement and the SOM's directions.

The following suggestion is offered by a member: *"**The structuring of TELMIN declaration [should] be such that it pertains more to instructions and goals for TEL** to achieve in the **next 2 years**. In that respect, instructions and goals should draw relevance to AELM and AMM declarations/statements."*

Management functions: Organising

Seven out of thirteen respondent members rank the effectiveness of the TEL organising management function as very effective at achieving the group strategic priorities, work plans and implementing TEL projects and activities; The group Chair (in table) ranks it as extremely effective. Five economies rank the organising function as somewhat effective.

Not	0
Somewhat	5
Very	7
Extremely	1
Total	13

Organising is the management function concerned with the internal work of the APEC Secretariat, TEL Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors and when applicable, Chairs of Special Groups and Task Forces to plan, assign tasks and responsibility, and allocate resources for TEL efforts.

Member economies offer the following additional suggestions:

Empowerment, SOM alignment and timely meetings preparation by HoD, needed:
- *"It should be built [on a] stronger APEC secretariat's function to aim leading organisation by entrenching the Executive - Director etc., [organisation line]".*

- *"The TEL often does not translate effectively into its unique work the goals of the SOM, Ministers and Leaders Statements into the work of the group. The TEL HoDs should convene in some manner (perhaps virtually) before the first TEL to discuss the overall organisation of the meetings and events."*

A survey participant group finds the organising management function of the TEL very effective, and comments: *"The organisation of TEL is capable and focused. The strategy and plan for TEL need more consistency and links to core APEC goals and a longer time horizon than annual Leaders' meeting and biannual Ministerial meeting provides. If major directions were identified every four years and TEL re-organised around main issues for a four year horizon TEL could work more effectively. Simply adding incrementally to TEL's workload dilutes focus and effort and makes it difficulty to achieve major goals."*

Management functions: Leading

Seven out of twelve members rank the effectiveness of the TEL Leading management function as very effective at achieving the group strategic priorities, work plans and implementing projects and activities. The group Chair (in table) ranks it as very effective. Five economies find it somewhat effective.

Not	0
Somewhat	5
Very	7
Extremely	0
Total	12

Leading is the ability of the managers of the TEL, APEC Secretariat and Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors, and when applicable, Chairs of Special Groups and Task Forces to provide guidance and motivation to members of the TEL to fulfil goals and implement plans.

The following suggestions are made:

Leadership needs empowerment from APEC secretariat:
- *"It should be built [on a] stronger APEC secretariat's function to aim leading organisation by entrenching the Executive - Director etc., [organisation line]".*
- *and achieving "stronger co-ordination between steering groups' lead and planning."*

… a process that handles diversity of interests, adds transparency to the Chair's role candidate selection:
- *"The current and previous Chair and convenors are effective in the discharge of their duties. Maybe there need to be a Standard Operating Procedure to be developed as a reference for future Chair and convenors."*
- *"If leading solves collective action and decision within TEL, it requires more effective mechanisms for the aggregation of different interests. The process of selection of Chairs and public consultations with HOD's have to be more transparent and there is a lot of space for improvement."*

... and supports the TEL Chair strategic vision and alignment to APEC goals:
- *"The TEL must become more strategic in its vision. The Chair should seek to engage more deeply in a discussion of how the TEL connects to APEC in its work."*

A respondent guest group adds: *"This is a difficult area because of the very nature of the process at TEL - voluntary participation. if TEL had a clearer shorter list of priorities to address it may be easier for TEL leaders to assist TEL participants to focus on more significant projects and discussion topics. It is also important from our perspective that more emphasis is given to the outcomes for end users in all TEL discussions."*

Management functions: Co-ordinating

Six out of twelve members rank the effectiveness of the TEL co-ordinating management function as very effective at achieving the group strategic priorities, work plans and implementing projects and activities. The group Chair (in table) ranks it as very effective as well. Six members find the co-ordinating management function to be somewhat effective.

Not	0
Somewhat	6
Very	6
Extremely	0
Total	12

Co-ordinating is the work of the APEC Secretariat and TEL Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors, and when applicable, Chairs of Special Groups and Task Forces to synchronise the TEL various activities with the work of other APEC fora and Non-APEC entities.

The following suggestions are offered by member economies:

While non-APEC fora co-ordination is recognised, Other-APEC fora co-ordination is an important area of opportunity, and could be improved by TEL Chair and/or TEL HoD attendance to SOM meetings to learn on Other-APEC fora activities:

- *It is noted that more and more non-APEC organisations / entities are invited to join TEL meetings. This will definitely inject valuable expertise and professional knowledge into the TEL and helpful in achieving the TEL work plans.*

- *"At this point of time, [we] have not seen any co-ordination with other APEC Fora. Maybe a target can be set by the APEC Leaders on the numbers of co-operation to be proposed and conducted."*
- *"[Co-ordinating] may improve with other APEC fora. Within APEC TEL it works well.*
- *"Co-Ordination between the work of the TEL and other, related, fora is often weak. More efforts must be made to ensure that work done in the TEL links to the larger APEC goals. Very often there is no communication within APEC about what TEL is doing and what other groups are doing. In many cases, opportunities for value-added joint activities are lost. The TEL Chair should attend (or delegate another member economy's HoD to attend) each SOM meeting and ensure the attendance of at least one member economy's TEL delegate at other related APEC events. Those who attend should make reports on the activities of related fora for circulation prior to the next TEL meeting."*
- *"It should be built stronger on co-operation between TEL and SOM-related meetings."*

This management function responsibility should be better shared within the group:
- *"Co-Ordination is on the hands of few. Responsibilities should be shared more widely."*

Web collaboration tools could aid at improving overall economies' responsiveness
- *"An on-line approval format design, such as guest status approval, will be a convenient way for all economies. Some Economies are not very responsive to TEL or its Steering Groups collective work."*

A respondent guest group offers the following comment:

- *"TEL co-ordination is ad hoc but effective when it happens e.g. with OECD on internet security and safety issues. In other examples such as ECSG the co-ordination is not evident but from our point of view TEL is more effective as it has a broader base, includes end users and is supported by economy policy makers and regulators. In the future links with other APEC groups will be important as TEL's focus moves from ensuring infrastructure is available to ensuring it is affordable and adopted by all confidently to drive economic benefits through regional integration and trade facilitation - the core APEC agenda. TEL should move from being a specialist group to an enabler of improved outcomes for all other APEC groups".*

Management functions: Overseeing

Seven out of eleven economies rank the effectiveness of the Oversight TEL management function as very effective at achieving the group strategic priorities, work plans and implementing TEL projects and activities; Three member economies find it somewhat effective and one member finds it not effective.

Not	1
Somewhat	3
Very	7
Extremely	0
Total	11

Oversight is the process of project management, monitoring and evaluating plans, projects and activities to ensure that the TEL goals are being met and plans effectively executed.

Economies bring forward the following suggestions:

Overseeing needs a process to support its effectiveness and longer-term vision:
- *"TEL activities are somewhat residing on existing initiative and not far sighted. There is lack of future planning or initiatives to assess future relevance of TEL."*
- *"Mechanisms to improve transparency and accountability should be put in place.*
- *"TEL lack of a systemic m[e]ch[a]nism of oversight."*
- *"… an oversight role to co-ordinate the work of various Steering Groups for improved co-operation/collaboration and cross linkages."*

Project completion is another area of opportunity for oversight:
- *"[Oversight] may be improved if … a brief document of the project [is prepared at its conclusion]".*
- *"Some many-year projects might not be very effective."*
- *"Many individual economies remain attentive to the ongoing projects and their completion. However, there should be more work done to improve oversight in this area."*

Management functions applied

Summary
In this section, survey participant economies rank the aforementioned management functions as they apply to the TEL annual meetings, formation and implementation of policies, creating, identifying and sharing of best practices and collaboration with other APEC fora and non-APEC entities.

Member economies average rank gives all management functions, as applied to these activities accomplishment, a "very effective" status. Scoring (% normalised) was prepared out of twelve survey participants input, to gain insight as to the relative performance of each function within the "very effective range" and identify areas of greater opportunity and focus.

The following table presents a rank summary of the analysis specifics ahead, and is presented as an aid to establishing opportunity priorities for the TEL management roles to address, while applying the collected actions suggested by member economies as compiled in the following pages to support focus function improvement.

	% very effective	Area of opportunity priority ranking	Focus management function
Collaboration Other APEC fora	39	1	All
Annual Meeting	52	2	Planning
Collaboration Other non-APEC fora	53	3	Planning
Best practices sharing	57	4	Leading
Policy Formation	58	5	Planning

Red = score is less than 50%.   Focus function = individual rank is less than 50%

Annual meetings planning improvement would result from the Chair and convenor providing more updates and inter-sessional discussion with member economies and by making TELMIN relevant for future 2 years of work (4 TEL) while more purposeful aligning TEL to the AELM and AMM, and other APEC Agenda.

Formation and implementation of Policies planning would improve by assigning a higher priority within the TEL agenda to discussing such matters and by more periodical reporting the subject

Better management leading in creating, identifying and sharing of Best Practices would make its focus to increase the group's influence to other APEC fora by having its guides and best practices promoted and widely referenced, such as OECD's.

Scoring confirms collaboration with other APEC fora is the area of opportunity subject to most improvement of all management functions applied. Members suggest improvement by TEL management participating of the SOM meetings and involving target sub-fora in the TEL planning cycle, such as ECSG, APEC Group on Services and SME among others. These actions would also address possible overlapping with ECSG and avoid cost duplication within APEC, from which additional resources to support the group's required cross sectoral and cross Working Group co-ordination could possibly be justified.

Collaboration with other non-APEC fora planning improvements would be brought by identifying fora where collaboration is based in specific topics of great interest to both the parties and commitment not to duplicate efforts is set in place.

Annual meetings
Offered commentary follows:

- *"Chair and convenor should provide more updates and more inter-sessional discussion with TEL members".*
- *"TEL works well, and various stake-holders participate actively. Intensity of work picks up especially for the TEL before TELMIN".*
  Two areas to improve [are]:
  > *to make TELMIN relevant for future 2 years of works. (i.e. 4 TELs)*
  > *to be more purposeful in aligning TEL's works to AELM and AMM, and other APEC Agenda."*

Formation and implementation of Policies
Member economies suggestions are:

- *"There should be periodical reporting in this regard".*

- *"Formation and implementation of policies are not generally a high priority of the TEL and there is usually a "pro-forma" element to much of the discussion of strategic policies. This is due in large part, however, to the basic nature of APEC as voluntary."*

Creating, identifying and sharing of Best Practices
Economies' suggestions are as follows:

While best practices compilation into reports is useful
- *"The report entitled "Best Practice in Decision Making" as presented by USA in TEL39 is a good example demonstrating that TEL is effective in creation, identification and sharing of best practices."*
- *"[We] would suggest a compilation of these best practices."*

… the sharing of TEL Best practices to other APEC fora / sub-fora is an opportunity
- *"Good and relevant work has been done previously e.g. Best Practices for Implementing Reference Paper. One area to consider is on how to disseminate for other APEC sub-fora, other international forums and other readers in general to use. As an example, OECD produces guides and best practices which are widely referenced. How can TEL exert the same amount of influence?*

- *"This varies depending on project and steering group. In general, the TEL's identification of best practices in many areas of information and communication technologies work is probably on par with the rest of APEC. Follow-up and linkage to the rest of APEC's work, however, is less satisfactory."*

A guest group shares the following commentary: *"the examples [we] have been involved in have been efficiently and effectively developed - WTO Guidelines, Enforcement, Anti-Spam among others. Perhaps **further attention could be given to promoting these resources among and outside APEC economies**."*

Collaboration with other APEC fora
Scoring confirms this area of opportunity as subject to most improvement of all.

Members offer the following commentary:

TEL management participating of the SOM meetings is an area of opportunity
- *"SOM process: considerable room for improvement -- we view it as essential that the TEL Chair or Vice Chair participate in, and report back from, one or two SOM meetings per year."*

While there are examples of collaboration under way,
- *"The TEL LSG and CTI have actively collaborated and exchanged agendas, and the LSG has one ongoing project (Progress towards adopting and Implementing the WTO Reference Paper) which is provided to the CTI on an annual basis."*
- *"APEC TEL's participation in APEC Group on Services (APEC GOS) meeting in October 2008 is a good example of [the] TEL collaboration with other APEC fora."*

Members concur in the TEL opportunity to improve collaboration with specific sub-fora: ECSG, APEC Group on Services (following up on last GoS workshop), SME, among others. Collaboration would also address possible overlapping with ECSG and avoid cost duplication within APEC.

- *"Collaboration with the ECSG is present, but could be more active. [We] acknowledge the separate and distinct work undertaken by the two groups; however see benefits to [having] parallel meetings."*
- *"Collaboration with the APEC Group on Services could be more active. Members of the TEL attended a GoS workshop on liberalisation in October 2008. The initial focus of the workshop was on liberalisation in the telecommunications and financial service sectors. While members of the TEL were warmly received, there had been little advance communication on the topic between the GoS and the TEL; TEL members had learned of the workshop through foreign ministry colleagues. Participants noted that collaboration would be valuable, and the groups would seek to remain in closer contact in the future."*
- *"Some overlapping may be observed with the ECSG."*

One way to start improved collaboration is to involve target sub-fora in the TEL planning cycle
- *"TEL is looking more into this area. E.g. invitation of CTI Chair to LSG. Increase participation from other APEC sub-fora (e.g. ECSG, SME) can make TEL's work more relevant to APEC wide. One way to explore is to involve [these] sub-fora in the planning of TEL's work."*

… paving the way to unleashing the group's value horizontally across all APEC,
- *"The TEL is not efficient in its work with other fora. This relates in part to its different schedule of work and its technical focus. Given the increasingly cross-cutting nature of telecommunications work (esp. the impact of the Internet on the economy), the TEL should make a priority in its future work-plan to identify work that it can do jointly with other related fora in APEC".*

… and overcoming possible lack of resources that may have hampered collaboration with other APEC fora so far.
- A guest group shares: *"[We] do not yet see strong links between TEL and other APEC fora - this may be for many reasons including lack of resources to enable cross sectoral and cross Working Group co-ordination".*

Collaboration with other non-APEC fora
The following suggestions are given:

Examples of collaboration are present. The TEL interaction with Other Non-APEC fora is perceived as more effective than with Other-APEC fora.
- *"ITU, OECD, WTO".*
- *"The invitation of more non-APEC fora such as APT and APNIC to participate in TEL39 demonstrates the TEL effectiveness in collaboration with other non-APEC fora."*
- *"This has been particularly good in APEC TEL."*
- *Interestingly, the TEL often interacts with non-APEC fora more effectively than it does with APEC fora. For example, the joint projects with the OECD are valuable to both parties.*

Collaborating with organisations outside of APEC is an area of opportunity, but possible resources limitations point at an internal focus priority on improved co-ordination and planning.

- *"Increasing[ly] more outreach is being done (e.g. collaboration with OECD, sharing by ASEAN etc.), and this is to the benefit of TEL. This is an important area to consider. However, given limited resources, TEL may want [to] place intra-TEL co-ordination / planning, and intra-APEC co-ordination / planning as priorities."*

A guest group comments on success factors of collaboration experiences such as good planning and co-ordination and keeping focus on a single important topic of great interest to both organisations:

- *"The best example [we] know about is the collaboration with OECD on cyber-safety issues. This has been well planned and is now very well co-ordinated etc. within TEL. the success I think is due to the focus on a topic of great interest to both organisations and a commitment to not duplicate effort or confuse messages to industry and consumers."*

4. Projects

Summary

Members indicate that project selection is perceived as effective, especially in project proposals introduction, circulation and, with a few comments that could call for flow improvement, their approval. Discussion or concern is more in enabling how to select projects that are more tightly aligned to the TEL priority objectives in the first place. At an operational level the effect of late submissions has to be minimised if not stopped and it is asked of all self or APEC -funded projects to go through the same process and be subject to enforcement of existing guidelines.

Strategic and tactical measures that describe TEL objectives and render its ToR into actionable items, in fewer and clearer terms, - more in tune with key objectives, short term actions and long term horizon, priority areas of work and mandates turned into workable instructions- , would better enable member economies, Guest groups and the APEC environment to share and materialise their understanding of which projects should be TEL undertaking and approving of to maximise its role within APEC, both existing and known as well as a TEL controlled (as is preferred) cross APEC ICT selective advisory function to other fora within the current TEL structure. This is particularly important considering not only the rate of change of ICT as technology and society enabler, but rather by the way in which its inherent convergence is blurring borders in the field and at the same time bringing about the challenge to revise objectives and being able to elicit them clearly to non ICT-savvy environment entities within and outside APEC.

Economies recognise the TEL in-roads and very specific milestones and benefits achieved in members' development, in its consistent work in APII and APIS for the knowledge based economy, MRA CA for wider and stronger market access, ICT capacity building and best practices sharing among member economies, ensure trusted, secure and sustainable online environment, improve policy and regulatory preparedness and bridge the digital divide. Continuing or renewing these efforts is important, as is getting more done in responding to emergency and natural disasters, and other areas that inevitably include and need for both the TEL and other players, to take the additional steps and identify the projects that would initiate a new stage of co-operation and co-ordination with other APEC fora. Frequent and valued outcomes of impact are being achieved though ongoing collaboration projects with international organisations.

Members finally point out their different views on projects related to the liberalisation of the telecommunications and information markets, where the common denominator that allows the TEL sensible and continued support of this is within its engaging of economies in capacity building and productive discussion, rather than in its enforcement or imposition.

Project selection process

Member economies rank the project selection as very effective (six out of eleven), with sufficient and proven process and criteria in place, new mechanisms being tried (rank sheet) and not in need of improvement. Economies distinguish at least two stages of "project selection": the actual circulation of project information to members and the project "funding approval" stage. Some respondent economies point to the latter when speaking of areas of opportunity. Beyond selection itself, members and guests show concern and see opportunity in approving projects with objectives that are more tightly aligned to the TEL priority goals and ToR; The wide diversity, mix of sectors and volume of projects is a challenge for the TEL and its available resources. Timely submission of project proposals is important. All self-funded and APEC-funded projects need to adhere to the same selections process and well enforced guidelines. the actual reviews of project outcomes need very specific standards for them and are willing to frankly assess their success

Projects alignment to APEC Bogor goals and Osaka Action Agenda

Seven out of nine respondent economies rank this alignment as very or extremely effective. Members reflect that while projects are aligned and can be linked clearly to APEC Bogor and Osaka goals in general, a "more purposeful alignment" of projects to come can be aided through a single compiled reference framework attached to the project proposal form. In this direction, a Guest group stresses the importance of having "fewer and clearer" goals to compare each project proposal for specific alignment that can be elicited when evaluating approval.

Promoting leadership and improved regional co-ordination and co-operation for the implementation of APII and APIS as the new knowledge-based economy

Six out of nine survey participant members rank the TEL in this regard as being very or extremely effective. APII and APIS are since TEL35 an approved and fundamental TEL goal seeking member economies' preparedness, transition and development into knowledge-based economies, as a direct response to TELMIN6 mandate. Recent and operational examples, such as Republic of Korea, are available and have had benefits to its development. Members point to more infrastructure, as opposed to security content in meetings. Guest groups should be aided into understanding "how such projects assist to reduce economic disparities and provide region wide opportunity."

Developing, promoting, implementing, and / or complying with international law, regulations, and enforcement mechanisms for the liberalisation of the telecommunications and information markets

Seven out of nine respondent economies rank the TEL projects in this aspect to be very effective. Members' point of view stresses that being non-binding, the group's strength at enabling liberalisation "is in capacity building and co-operative discussions." such as best practices. Thought is "that it should not impose on each economy in developing, promoting, implementing, complying with international law, regulations, and enforcement mechanisms, because each economy's situation is different." The Liberalisation Steering Group (LSG) is seen "particularly [effective]" in this regard.

Improving and strengthening market access by implementing MRA conformity assessments

Most if not all (eight out of nine members) rank TEL projects regarding market access to be very or extremely effective. The MRA effort has been in place for long, proliferated into bilateral arrangements and has had clear impact and replicability facilitating market access by reducing the burden of product conformity assessment on equipment manufacturers. the "TEL has now to re-inject energy into this initiative to further facilitate the implementation of MRAs", as the following steps - remaining commitment and implementation of phase I economies', and phase II implementations - are taken, as led by the MRA TF latest efforts and surveyed economies' benefits.

Engaging relevant sectoral and stake-holder interests

Six out of nine respondent economies rank the TEL projects very effective at engaging relevant sectoral and stake-holder interests, but members recognise this as an area of opportunity as well. Improvement is seen by "more purposefully aligning the TEL work to AELM, AMM and other APEC Agenda" "and "membership of [new] associated guests.". Other members reflect on how to their economies private sector involvement is integral and thus stake-holders engagement, early on in devising projects.

improving the co-operation and co-ordination between APEC fora

Six out of nine survey participant economies rank TEL projects as somewhat or not effective at improving the co-operation and co-ordination between APEC fora with respect to telecommunications and information activities. The ranking shows to a greater extent that more projects are yet to be identified and occur so as to improve collaboration with other APEC fora, as the joint activities section of this survey report also describes.

Projects at ICT Capacity Building of member economies

Eight out of nine survey participants rank the effectiveness of TEL projects at building ICT capacity of member economies as very effective. Most of the TEL work is in ICT capacity building projects for member economies. A thorough project review is to be included in the independent assessment of the TEL currently underway. More ICT Capacity Building projects should be performed in developing member economies to bridge existing digital divide and achieve balanced development among economies. Care should be taken for workshops and seminars delivered to developing economies in devising approaches to capacity building to ensure they are linked very well to actual results in this area.

Projects at providing best practices and share experiences of member economies to reach the Bogor Goal

All nine of the respondent member economies rank the TEL projects effectiveness in providing best practices and share experiences of member economies to reach the Bogor Goal as very effective. Members see the TEL is very efficient in gathering economies to review best practices through workshops and seminars. Most of TEL projects provide best practice and share experiences of member economies and this has been key for many members, for example in LSG related matters.

Projects to address the digital divide

Six out of ten survey participant economies rank the effectiveness of TEL projects to address the digital divide either very or extremely effective. Work has been ongoing for several years in Internet penetration monitoring as well as in bridging the digital divide, and member economies collaboration is highly recognised. Several workshops in capacity building, best practices on implementation and lessons learned have been given to member economies with high regards and concrete outcomes. There is still significant interest at the TEL to continue this work. New projects were to be tabled at TEL39 on broadband and universal broadband services. The TEL should also do better in integrating this information to allow economies to draw more conclusions on how to include their citizens.

Projects to prepare for and respond to emergency and natural disasters

Five out of nine members ranks the TEL projects as very effective to prepare for and respond to emergency and natural disasters. Stepping up the ongoing work is considered important and stronger linkage with the APEC Emergency Task Force is necessary since ICT is an enabling technology which can be effectively used for emergency communications and mitigation of natural and man-made disasters but also requires closer ties with those who are responsible for emergency programs and service delivery. Capacity building workshops' impact is believed to be greater if the following activities are undertaken by the DSG, due to the nature of their attendees. Members note that the TEL has been involved with alert warning workshop activities at least since TEL32.

Projects to develop strategies to ensure trusted, secure and sustainable online environment

Eight out of nine respondent economies rank the effectiveness of these TEL projects either very or extremely effective. Relevant work - projects and workshops- has been done since the formation of SPSG, in a wide range of subjects both at technical as well as subject matter expertise backed legislation and enforcement efforts practices for member economies to benefit. Collaboration with OECD and other international fora is recognised. More focus regarding safer internet environment for children is suggested.

Projects oriented to develop / improve policy and regulatory preparedness to respond to the changing marketplace and to Industry demands

Seven out of nine survey participant economies rank the effectiveness of these TEL projects as very effective. Work on changing marketplace preparedness is noted by members since TEL30 in the form of workshops (interconnection and NGNs). The LSG is regarded with doing a good job linked to marketplace issues; regulatory and industry roundtables are in place at TELs and latest capacity building subjects on NGN, convergence, IPv6 etc., provide evidence as to the TEL focus.

Project selection process

Six out of eleven survey participants rank the effectiveness of the project selection process as very effective. Four find it somewhat effective. APEC Secretariat's sees room for improvement as it ranks it not effective.

Not	1
Somewhat	4
Very	6
Extremely	
Total	11

Member economies commentary distinguishes at least two stages of "project selection": the actual circulation of the project's information to members and the project "funding approval" stage. Some respondent economies point to the latter when speaking of areas of opportunity. Beyond the project selection process, members and guests show concern and see opportunity in improving the approval of projects with objectives that are more tightly aligned to the

TEL and APEC goals; The wide diversity, mix of sectors and volume of projects is a challenge for the TEL and its available resources.

Suggestions and examples are grouped below:

The TEL has sufficient process and criteria available for an effective project selection:
- *"The "Policy Criteria for Project Funding in 2009" is adopted inter-sessionally to strengthen the capacity of the APEC Secretariat and BMC to assess projects and to allocate APEC-managed project funds strategically. The criteria seems to be reasonable and looks after the interest of majority member economies."*
- *"The project selection is very effective. TEL has sufficient procedure information on that."*
- *"Project proposals are firstly discussed within relevant steering groups before they are submitted to the plenary for approval by TEL. This process ensures effectiveness of project selection in TEL."*
- *"The project has the process [where] everyone can give [its] opinion prior to submitting and the steering group can also rank them before the approval of TEL"*

New procedures are being tried out and improvement is not considered necessary with the selection process; Members point to APEC Secretariat's for possible additional areas of opportunity. Timely project proposals submittal is an important enabler of effectiveness.

- *"The completion of a ranking sheet by each member economy at TEL39 for the selection of project proposals is a good and effective approach."*
- *"It seems that the existing procedures / criteria are quite effective. Improvement may not be required at this point."*
- *"Project selection process within APEC TEL is effective. [We] would rather refer to project approval in APEC Sec."*
- *"Project approvals are based [in] the funding source; if it is self-funding, the TEL mostly approves it. On the other hand, if the projects seek APEC funding support, it takes a long bureaucracy to have approval."*
- *"It is not very efficient, but it is effective, considering scarce resources and the alignment of projects to goals."*
- *All projects should be circulated to members, including self-funded ones"*
- *"Encourage project [the submittal of] proposals earlier so as to allow member economies more time to consider before TEL meetings."*

Other comments are:
- *"TEL projects are a very eclectic mix, including academic, industry-led and government-led initiatives. While they often link to overall TEL and APEC priorities, some tend to drift away from the original intent and/or from the new evolutions in the telecommunications field."*

A Guest group shares:
- *" [We] think projects should be very closely and explicitly linked to APEC goals, TELMIN instructions and a reworked ToR for TEL so that all can see a clear link between Projects and Goals/Objectives which have been agreed."*
  "The TEL Projects underway are all of interest but the question is whether they are driving for the goals and objectives of TEL and APEC overall."
- *"Goals need to be fewer and clearer. Projects should be reviewed by a small committee before being presented to Plenary. Links to priority goals should be explained in the presentation and acceptance by ALL Steering Committee convenors to ensure projects are focused, co-ordinated and support TEL's overall goals."*

Projects alignment to APEC Bogor goals and Osaka Action Agenda

Seven out of nine respondent economies rank the effectiveness of TEL projects at contributing to APEC Bogor Goals and the Osaka Action Agenda as very or extremely effective. Two find it somewhat effective

Not	
Somewhat	2
Very	5
Extremely	2
Total	9

Suggestions are:

While projects are aligned and can be linked clearly to APEC Bogor and Osaka goals in general...

- *"The recent "Workshop for Capacity Building on Telecommunications Trade Rules and Regulatory Disciplines" held in Singapore prior to TEL39 was a good project that helped promote the APEC Bogor Goals of achieving free trade and investment in the Asia-Pacific."*
- *"TEL has considered a wide range of issues relating to policy and regulatory frameworks for communications which is outlined in the Bogor Goals."*
- *"Most TEL projects can be linked very easily and solidly to the various economic and development goals of APEC. ICTs are fundamental to economic growth and dynamism globally. This is certainly the case for the APEC region."*

… a "more purposeful alignment" of projects to come can be aided through a single compiled reference framework attached to the project proposal form.

- *"Framework also comes from different areas, and meetings. One way to improve TEL's contribution is to have all the relevant frameworks/references etc. listed or consolidated. If needed, this can be explicitly provided in project proposal form.*

Meeting the actual goals is specific to each member economies' policy

- *"While many TEL projects focus on capacity building and information sharing among member economies, the accomplishment of APEC Leaders' instructions, such as the Bogor Goal, might depend more or less on [every] economies' domestic policy and promotion".*

A guest group comments as in previous question:

- *"Goals need to be fewer and clearer. Projects should be reviewed by a small committee before being presented to Plenary. Links to priority goals should be explained in the presentation and acceptance by ALL Steering Committee convenors to ensure projects are focused, co-ordinated and support TEL's overall goals".*
-

Promoting leadership and improved regional co-ordination and co-operation for the implementation of APII and APIS as the new knowledge-based economy

Six out of nine survey participant members rank the effectiveness of TEL projects at promoting leadership and improved regional co-ordination and co-operation for the implementation of APII and APIS as the new knowledge-based economy as very or extremely effective; Three find it somewhat effective.

Not	
Somewhat	3
Very	5
Extremely	1
Total	9

Suggestions are as follows:

APII and APIS are since TEL35 an approved and fundamental TEL goal seeking member economies' preparedness, transition and development into knowledge-based economies, as a direct response to TELMIN6 mandate.

- *"Based on the Program of Action at TELMIN6, Ministers considered developing a clearer vision of the APIS and the new knowledge-based economy on which it is built, and identifying those areas in which the TEL could contribute most effectively. APIS workshop at TEL 34 was organised to respond to Ministers and APIS vision [and] got the approval of TEL at TEL35. APIS is a society - a ubiquitous network society -, where digital divide issues are resolved by information and communication infrastructure developed throughout the APEC region and, regardless of time and location, that everyone can create, disseminate, access, and utilise variety of information."*

A most recent and operational example is brought forward

- *"The APII project undertaken by Republic of Korea did help and facilitate the co-operation among economies for the implementation of APII and APIS. Most of the planned objectives for the project have been well achieved. According to the project report presented at TEL39, the KR-JP APII Testbed (10Gbps, NIA-NICT) has been well maintained and used for research activities including tele-medicine, e-learning, and network measurement. Besides, a total of 12 research projects and 10 working groups have been supported by the test bed continuously in 2008."*

On current focus

- *"Security issues, which are of course part of the agenda for APII and APIS, occupy a great part of the agenda. [We] would recommend allowing more time to infrastructure development issues in all groups."*

A Guest group shares:

- *"The missing link for [us] is how such projects assist to reduce economic disparities and provide region wide opportunity."*

Developing, promoting, implementing, and/or complying with international law, regulations, and enforcement mechanisms for the liberalisation of the telecommunications and information markets

Seven out of nine respondent economies rank the TEL projects in this aspect to be very effective; Two members find it somewhat effective.

Not	
Somewhat	2
Very	7
Extremely	
Total	9

Member suggestions offered allow the following rationale:

"Being non binding in its outputs, [the] TEL strength is in capacity building and co-operative discussions." "[We] think that it should not impose each economy on developing, promoting, implementing, complying with international law, regulations, and enforcement mechanisms, because each economy's situation is different." The *"TEL plays an important role in encouraging liberalisation in ICTs by sharing experiences and best practices. The Liberalisation Steering Group (LSG) leads the TEL's work on liberalisation and competition, and is "particularly [effective]."*

"The recent "Workshop for Capacity Building on Telecommunications Trade Rules and Regulatory Disciplines" held in Singapore prior to TEL39 was a good TEL project that served the above mentioned objectives." "WTO workshops for capacity building in the telecom area are also helpful. In addition, the various TEL workshops linked to regulatory best practices are important."

A Guest group comments:
- *"This question begs another question for [us]. Should [the TEL] be so focused on TEL and INFO markets? The direction for infocomms is as an enabler across the whole economy and for sectors outside the ICT sector e.g. health, education, energy and climate change etc."*

Improving and strengthening market access by implementing MRA conformity assessments (CA)
Eight out of nine members rank TEL projects regarding market access to be very or extremely effective; One member regards it to be effective as a framework of reference and ranks it as somewhat effective only in terms of its economy's characteristics that do not allow for such initiative at present time.

Not	
Somewhat	1
Very	7
Extremely	1
Total	9

Commentary and suggestions are:

MRA effort has been in place for long, has been proliferated into bilateral arrangements and has had clear impact and replicability facilitating market access by reducing the burden of product conformity assessment on equipment manufacturers.

- *"APEC TEL had two projects in orienting and training of the regulators and conformity assessment bodies (CABs) for the implementation of MRA CA. One for the implementation of Phase I and the other for the implementation of Phase II. MRA CA was a forward looking MRA and when it was endorsed by the APEC telecom ministers in 1998, every economy was required to implement domestic changes and develop new procedures before it could implement the MRA. These two projects provided the regulators and CABs with information and training so that they could commit to the implementation in a consistent manner. Feedback from the economies was very positive. One of the indicators on the effectiveness of these projects is the results of the implementation. To date, 18 out of 21 economies have either committed to or are already implementing Phase I of the MRA and 5 economies are implementing Phase II of the MRA. Regular updates by the economies to the MRA Task Force indicate that the implementation of the MRA is running effectively and smoothly with concrete benefits to the economies on the trade of telecom equipment within the APEC region."*

"TEL has to re-inject energy into this initiative to further facilitate the implementation of MRAs", as the following steps - remaining commitment and phase I economies' implementation, phase II implementations - are taken, as led by MRA TF latest efforts and surveyed economies' benefits.

- *"The project "Stock-take of MRA for Conformity Assessment implementation and benefits", currently undertaken by MRA Task Force, includes a survey that requests participating economies to survey CABs that they have recognised under the MRA for Conformity Assessment to request information on the types and number of equipment tests and/or certifications that they performed. USA and Republic of Korea presented their survey results which indicated that the MRA for Conformity Assessment was beneficial for the CABs in multiple ways such as faster access to multiple markets and a reduction in time and cost in getting products to market. This survey, which is part of the MRA TF project, may help push the implementation of MRA in some economies which have not yet implemented."*

- *"The MRA for Conformity Assessment is working very effectively to improve and strengthen market access. The MRA for equivalence of technical requirements will increase and ease market access when it is completed and operational."*

Engaging relevant sectoral and stake-holder interests

Six out of nine respondent economies rank the effectiveness of TEL projects at engaging relevant sectoral and stake-holder interests as very effective; Three as somewhat or not effective.

Not	1
Somewhat	2
Very	6
Extremely	
Total	9

Offered suggestions are:

Stake-holders have been involved ...

- *"Many TEL projects were able to engage relevant sectoral and stake-holder interests. For instance, the "Workshop on Policy and Technical Approaches Against Botnet" held at TEL37 was well attended by regulators, private sector and civil society. Many presentation / speeches were delivered by stake-holders at the meeting."*

- *"The TEL projects involve both public and private partnership and engage relevant sectoral and stake-holders"*
- *"Some members of TEL strive to include other stake-holders in the activities linked to projects; others are less enthusiastic about this. For [us] the private sector is very important in discussing approaches to challenges and in devising projects."*

but furthering efforts is an area of opportunity and can be sought by
- *"More purposeful aligning of the TEL work to AELM, AMM and other APEC Agenda is needed." "...and "membership of associated guests."*

improving the co-operation and co-ordination between APEC fora

Six out of nine survey participant economies rank the effectiveness of TEL projects at improving the co-operation and co-ordination between APEC fora with respect to telecommunications and information activities as somewhat or not effective.

Not	1
Somewhat	5
Very	3
Extremely	
Total	9

Offered suggestions and examples are:

Projects are yet to occur to improve collaborations with other APEC fora
- *"TEL does not yet engage effectively with other fora to enhance mutual understanding of how ICT can better bring about economic prosp[e]rity. It should be noted, however, that other fora of APEC are also not particularly active in engaging with the TEL."*

- *"It seems that, in recent years, TEL did not undertake any projects that could achieve the above-mentioned objectives".*

- *"Not so many project that has the co-operation between the APEC Fora, the one that I[we] found is with APEC ECSG".*

- *"It should be built on stronger co-operation between the TEL and SOM meetings."*

Reference to work done or examples
- *TEL is co-operating with APEC's Human Resource Development Working Group (HRDWG), Small Medium Enterprise Working Group (SMEWG) and APEC Business Advisory Council (ABAC) and with international organisations such as the OECD and the ITU.*
- *"GoS Liberalisation Workshop November 2008, TEL/CTI Progress Towards Adopting & Implementing the WTO Reference Paper."*

Projects at ICT Capacity Building of member economies

Eight out of nine survey participants rank the effectiveness of TEL projects at building ICT capacity of member economies as very effective.

Not	
Somewhat	1
Very	8
Extremely	
Total	9

The following examples and suggestions are offered:

Some examples are mentioned.
- *Most of the projects in APEC TEL include some form of capacity building.*
- *Most of TEL projects are involved with the capacity building of member economy*

- *"TEL implemented several projects for serving the aforesaid objectives such as the "Seminar on Using ICT For Rural Community Capacity Building" and the "Workshop on Telecommunications Trade Rules and Regulatory Disciplines" held at TEL37 and TEL39 respectively."*
- *"Broadband, Regulatory structures, WTO activities"*

On getting more done.
- *"TEL shall bring forward more projects in ICT Capacity Building of member economies, particularly of developing economies, to bridge existing digital divide in the region and achieve balanced development among economies."*

- *"Some workshops and seminars are very helpful to developing economies in devising approaches to capacity building. Others are not linked very well to actual results in this area. For example: [enabling] writing laws on cyber-crime is a direct capacity building effort."*

Projects at providing best practices and share experiences of member economies to reach the Bogor Goal

All nine of the respondent member economies rank the effectiveness of TEL projects in providing best practices and share experiences of member economies to reach the Bogor Goal as very effective.

Not	
Somewhat	
Very	9
Extremely	
Total	9

Comments are as follows:

- *"TEL is very efficient in gathering economies to review best practices through workshops and seminars. Building links among officials and creating fora for information exchanges are very valuable."*
- *"Most of TEL projects provide best practice and share experiences of member economies."*
- *"This has been a key subject for our participation. The work performed at the LSG is a good example of this task. Projects rely pretty much in sharing best practices."*

- *"The TEL project on "Best Practices in Decision Making" is close to completion. The deliverable of this project will be a guide which aims to help economies establish practical procedures that assist in effective stake-holder consultation, effective review of decisions, and timely and transparent complaint resolution. It is a good TEL project where member economies can effectively share practices and experience in formulating policy framework and addressing consumer complaints."*

Projects to address the digital divide

Six out of ten survey participant economies rank the effectiveness of TEL projects to address the digital divide such as APEC e-Inclusion, people with disabilities, indigenous communities, etc., either very or extremely effective. Three members and APEC Secretariat's input (in table) rank it somewhat effective.

Not	
Somewhat	4
Very	5
Extremely	1
Total	10

The following rationale is provided:

- *"Representatives from various APEC member economies collaborated and worked together effectively on these topics.*
  Internet penetration:

The TEL continuously measured the statistics on Internet penetration of each economy so that TEL could report on when the Brunei Goal of tripling Internet subscribers in Asia Pacific would be achieved. Each economy reported and supplied relevant information so that the database could be constantly updated. Because of the success, this activity was extended to include broadband penetration.

Bridging the Digital Divide:

The TEL undertook to organise a series of initiatives, study and workshops on e-inclusion, broadband for indigenous and under-served communities. In 2003, a discussion paper was written to raise the issue of web site accessibility and usability. As a follow up to the discussion paper, a workshop was proposed and held in 2003. As a result of the workshop, a set of recommendations were prepared for APEC economies to follow when developing web sites. This was followed by numerous workshops. The objectives of these workshops were to share information on policies and programs, capacity building, best practices on implementation and lessons learned. Some of these workshops were:

- *Next generation networks that could better address the needs of all citizens*
- *Broadband workshops on improving the quality of life, and socio-economic development for indigenous and under-served communities*
- *Tele-centres workshops that addressed the needs of disadvantage in rural and remote areas*
- *Smart Community workshop that addressed issues of community-based economic development, government services, health and education.*
- *e-Inclusion workshop that addressed the needs of people with disabilities and had identified ways to assist their use of ICT technology*

Because of the significant contribution by nearly all economies, all the above workshops were successful with reports and recommendations as concrete outcomes.

To this date, there is still significant interest in Tel to continue with this work. At least three to four projects proposals will be tabled at TEL 39 on the subject of broadband and universal broadband services."

- *"TEL had conducted a number of workshops aiming to address the aforesaid issues such as the "e-Inclusion for People with Disabilities Workshop" and the "Broadband for Rural and Indigenous Communities Workshop" held at TEL33. Although attending these workshops might not enable member economies to completely resolve the issues within a short period of time, it did effectively raise awareness and generate initiatives among member economies to address the issues."*

- *"A series projects and workshops have been launched through the ICT Development Steering Group (DSG) to address the digital divide."*

- *"Much work has been done on universal service, internet and broadband penetration."*

- *"… The TEL must do better in integrating this information to allow economies to draw more conclusions on how to include their citizens."*

Projects to prepare for and respond to emergency and natural disasters

Five out of nine members ranks the TEL projects as very effective to prepare for and respond to emergency and natural disasters; Four rank it somewhat effective.

Not	
Somewhat	4
Very	5
Extremely	
Total	9

Members share the following comments and suggestions:

"it should step up"

"The following improvements are recommended:
1. Stronger linkage with the APEC Emergency Task Force.
> *Rationale: ICT is an enabling technology which could be effectively used for emergency communications and mitigation of natural and man-made disasters but would require closer ties with those who are responsible for program and service delivery.*

2. The two workshops were processed through SPSG, however the impact would be greater if this topic is undertaken by DSG because of the people and organisations attending DSG."

On work done
"Over the years, TEL had conducted a couple of workshops to help prepare for and respond to emergency and natural disasters such as the "Disaster Early Warning System Workshop" and the "Telecommunication of Disaster Management Best Practice Workshop" held at TEL32 and TEL38 respectively. These workshops effectively alerted member economies to the fact that they should do something to prepare for and respond to the unexpected disasters or emergency situation. "Canada contributed to the workshops held at TEL 32 and TEL 38. Information from both workshops was useful for national application such as on new technology forms, best practices and lessons learned". "TEL [also] held the workshop "IT-based Disaster Warning Systems" in TEL36…"

Projects to develop strategies to ensure trusted, secure and sustainable online environment

Eight out of nine respondent economies rank the effectiveness of TEL projects to develop strategies to ensure trusted, secure and sustainable online environment, built cyber incident response capabilities and e-Authentication, cyber crime and its legal framework, etc., either very or extremely effective.

Not	
Somewhat	1
Very	7
Extremely	1
Total	9

Comments and suggestions are:

- *"In recent TEL meetings, a number of workshops were conducted to serve the aforesaid objectives including the "Workshop on Network Security", the "Workshop on Cyber Security" and the "Cyber security Awareness raising workshop" held at TEL35, TEL36 and TEL38 respectively. These workshops have effectively raised awareness of cyber crime and promoted the development of secure cyber environment among the member economies."*

- *"… TEL projects contribute to promote above issues. However it should be set up regarding safer internet environment for children."*

- *"Relevant work done since the formation of SPSG." "The SPSG has worked to build cyber incident response capability, offered training courses on International PKI and e-Authentication, examined the problems of malicious software, and considered wireless and VoIP security. In addition, the SPSG is continuing projects on cyber crime Legislation and Enforcement Capacity Building Project, and Judge and Prosecutor Cyber Crime Enforcement Capacity Building Project. The TEL also co-operates with the OECD and ASEAN on a number of topics. "The SPSG has been quite effective in discussing and making economies aware of the cyber security challenges… this is an exemplary area for co-operation with other international fora, especially with the OECD."*

Projects oriented to develop / improve policy and regulatory preparedness to respond to the changing marketplace and to Industry demands.

Seven out of nine survey participant economies rank the effectiveness of TEL projects oriented to develop/improve policy and regulatory preparedness to respond to the changing marketplace and to Industry demands, as very effective; Two members rank it somewhat effective.

Not	
Somewhat	2
Very	7
Extremely	
Total	9

Offered suggestions are:

- *"It seems that all TEL WG projects contribute to above issues. However, [we] think that it should not impose each economy on developing/improving policy and regulatory preparedness to respond to the changing marketplace, because each economy's situation is different."*

- *"Some workshops / meetings held in the margins of previous TEL meetings have effectively provided economies with the relevant information and message for their consideration in preparation for the changing marketplace. In particular, the "Next Generation Network Brainstorming Session", the "Workshop on Interconnection" and the "NGN Regulatory Roundtable" held at TEL30, TEL35 and TEL39 respectively were very effective to alert member economies to the need to develop their regulatory preparedness for NGN and interconnection framework in the NGN era."*

- *"There is always a regulatory and an industry roundtable. The LSG is doing an excellent job." "The LSG holds regular workshops and conferences linked to marketplace issues."*
- *"Policy and regulatory reviews are regular agenda items in the plenary to respond to the changing marketplace."*
- *"Work on NGN, Convergence, IPv6 show the TEL preparedness to address current concerns."*

Suggestions of ways in which TEL could improve the rankings assigned to the effectiveness of its projects

- *"Views from all member economies may be solicited to identify the level of interest they have in the project proposal and priority of importance they consider. The feedback from economies should be taken into account for selecting / approving a project proposal particularly when several project proposals compete for a limited resource of funding over the same period."*

- *Besides complying with APEC Leaders' and or APEC Ministers' [mandates], it should also pay attention to the developing economies' needs."*

- *"TEL shall bring forward more projects in ICT Capacity Building of member economies, particularly of developing economies, to bridge existing digital divide in the region and achieve balanced development among economies."*

- *"The approval process for the TEL projects is relatively good from the standpoint of introduction, circulation and ultimate approval. However, the actual review of project outcomes is only meaningful if the economies have set very specific standards for them and are willing to frankly assess their success. This is rarely done in the TEL."*

Examples of member economies having adopted or implemented the outcome of the TEL projects

Electronic Authentication
- *APEC TEL produced guidance on electronic authentication that is being implemented in various APEC economies. Notably, Canada adopted this guidance in the development of its Principles for Electronic Authentication. The guidance also served to inform the work of OECD in this area (which culminated in an OECD Council Recommendation on Electronic Authentication). The APEC authentication guidance it also serving as the basis for ongoing work by Chinese Taipei on a training program aimed at raising awareness of the need for effective authentication solutions generally and, more specifically, capacity building in the use of public key infrastructure approaches. This is just one example. There are various others, including the guidance on spam developed by APEC TEL. In the development of this guidance, Canada worked closely with its APEC partners to ensure the guidance complemented that developed in various other fora (including OECD) with the aim of having harmonised frameworks with global coverage.*

MRAs
- *"On a regular basis, we have companies from APEC economies requesting Canada for recognition under the MRA as Certification Bodies and/or Test Labs. Recent requests came from countries like USA, Korea, Chinese Taipei, Australia. Conversely, we have Canadian companies requesting recognition from other APEC economies as CBs and Test Labs."*
- *"China started implementing the first phase of APEC TEL MRA in 2004."*
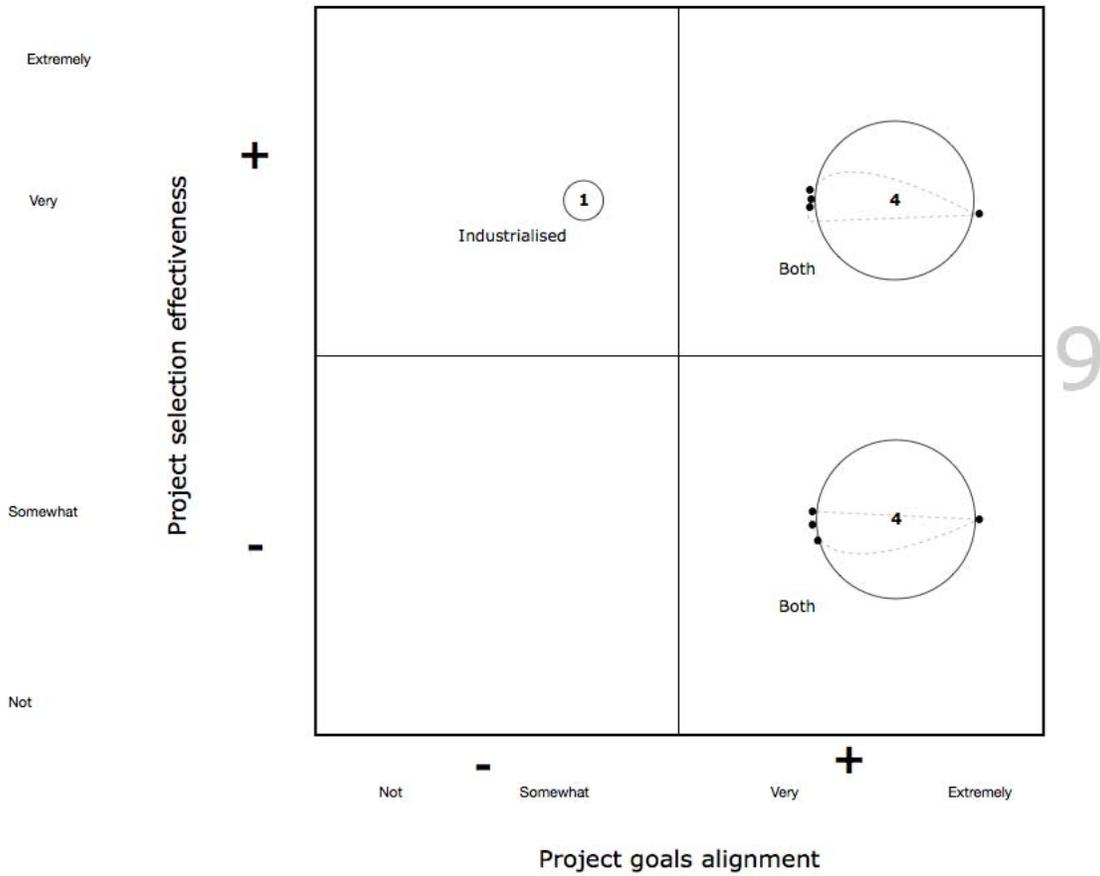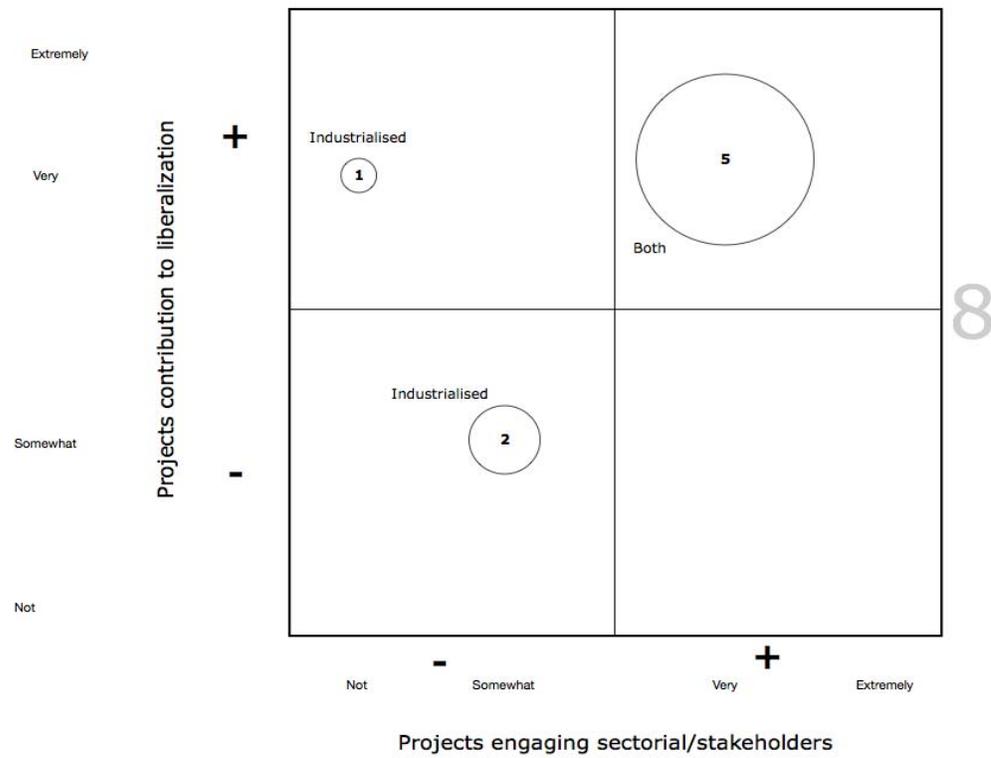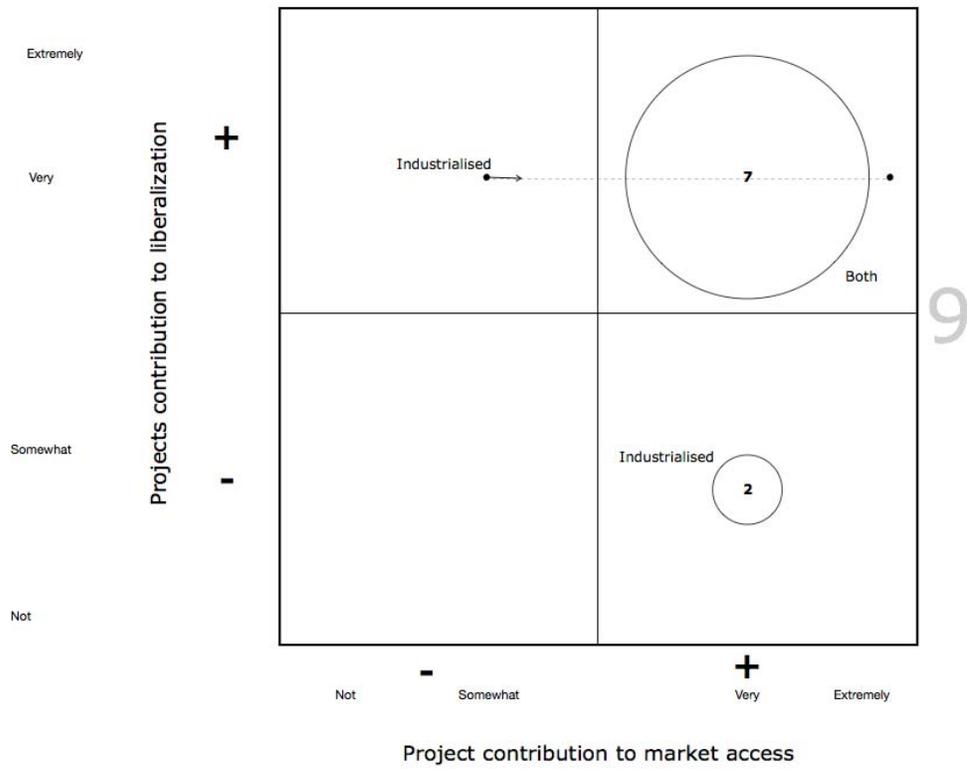
APII
- *"Japan has connected to the APII test bed, which is an APEC project proposed and overseen by the Republic of Korea."*
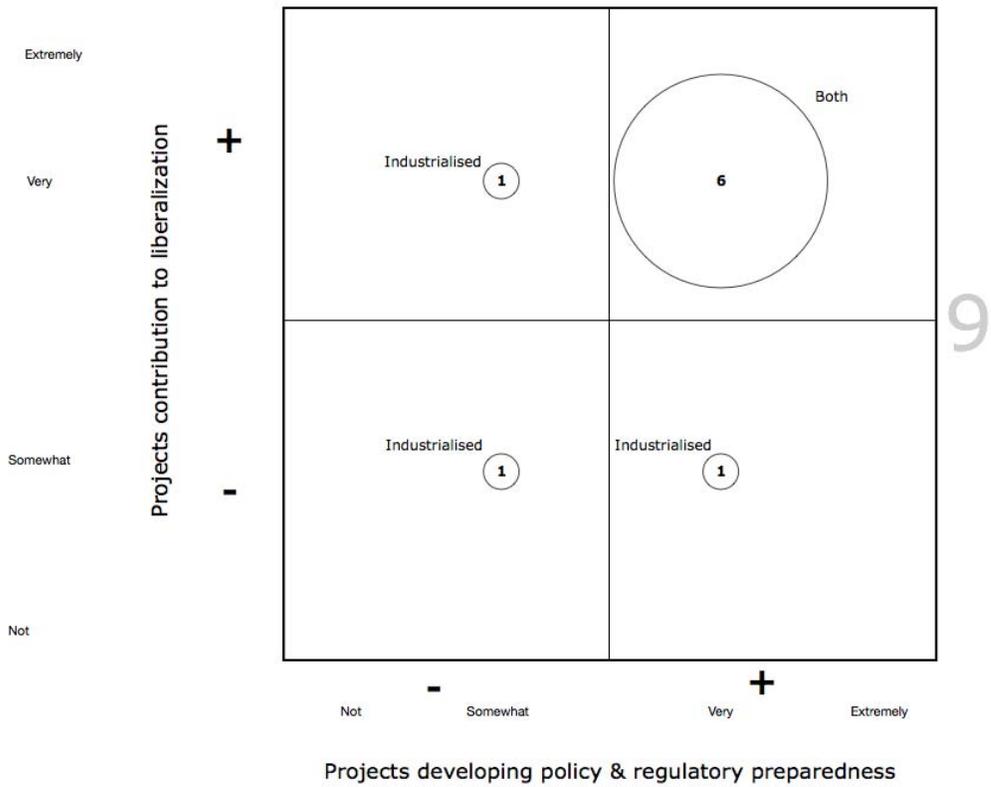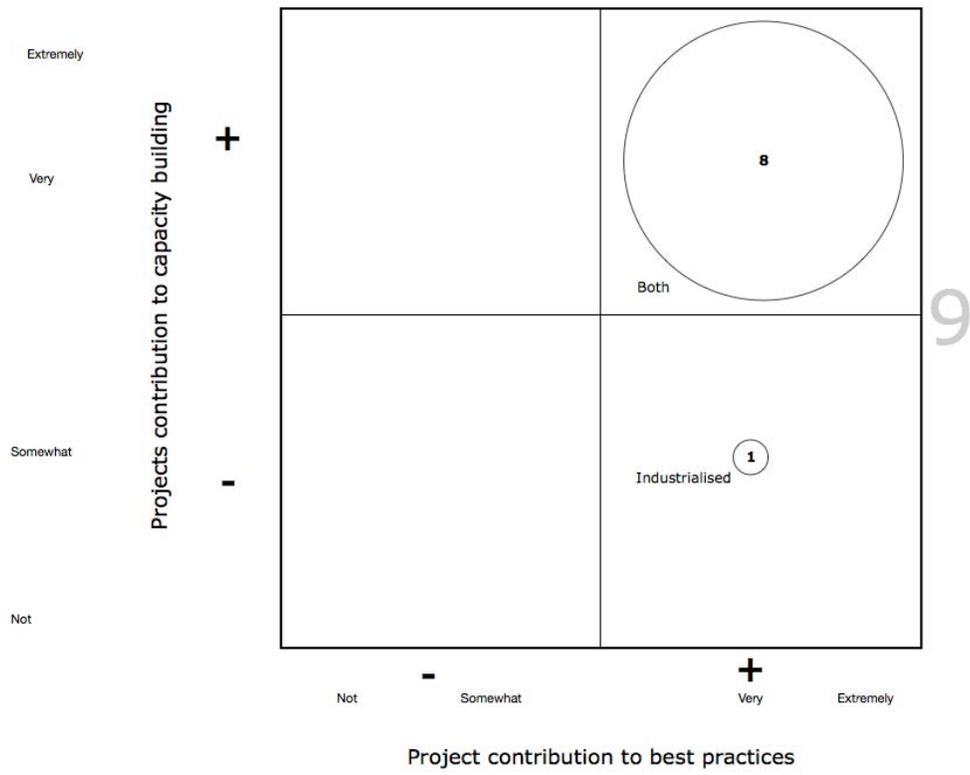
Other
- *"e-Gov. Bridging digital divide"*
- *"Outcomes of workshops and regulatory roundtables are always considered. There is no one size fits all solution, but in any case best practices are always useful."*

Mapping projects survey section

Project contribution to market access

Projects engaging sectorial/stakeholders

Projects contribution to capacity building

Extremely

Very

+

Both

8

−

Somewhat

Industrialised

1

Not

9

−

+

Not   Somewhat   Very   Extremely

Project contribution to best practices

Projects contribution to liberalization

Extremely

Very

+

Both

Industrialised

1

6

Somewhat

−

Industrialised

1

Industrialised

1

Not

9

−

+

Not   Somewhat   Very   Extremely

Projects developing policy & regulatory preparedness

5. Joint meetings / projects with other APEC fora

Summary
Collaboration with other-APEC fora is a key area of opportunity for the TEL to develop as a cross-APEC "advisory group" at full potential. Member economies input reflect more on the fact that there is additional work to be done rather than on the group's effectiveness itself which was asked for in the survey. Improvement suggestions call on:

(a) Empowering through improved co-ordination support from APEC GoS; Early awareness of potential collaboration through SOM meetings participation, linkage and follow-up.

*(b) More outreach but not without an evaluation of past efforts made (ABAC), present potential and limitations of ongoing collaboration (INTUG, OECD, WTO, ITU, CITEL) or a clear **plan** on who to have short-term high impact synergies with (ECSG, CTI, IPEG).*

*(c) Reviewing or setting up a **single** "messaging and exploration supporting process", that is well known and utilised among member economies, is required both to promote **direct** messaging and meetings invitations to actors such as new civil society groups, academia, and other Guest parties (such as APNIC & ISOC), as well as to find joint identification and planning of desired collaboration opportunities and best work instances, such as the successful industry roundtables with the industry, to turn collaboration into projects and activities.*

(d) Confidence building from the TEL management to its member economies, that effectively addresses their concerns of a collaboration pattern that actually hinders the TEL from achieving its own agreed goals and objective in lieu of (i) having to fulfil mandatory consultation from all other APEC fora instead of attending to consultations from the latter that are core to TEL (ii) attending to over-rated or abused ICT market trends (e-everything), (iii) apparently challenging agendas (thought of IPEG proposal by some members), (iv) already limited TEL resources diluting with extra TEL, extra APEC efforts against internal priorities of perceived greater importance.

*To get to this point TEL has still to provide evidence of longer breath (4 TELs), extra Leader's and Ministers' strategic forward planning and focus, and better project prioritisation-closure and workload co-ordination at a tactical or operational level; **Other operational** decision and budgetary **processes** would need to be in place for support as well as **simple rules of consultation engagement** by other fora.*

Agenda process for the Joint Meetings / Joint Projects
Member awareness of the exact process is low within the sample respondent economies 3 out of 8). Furthermore, there is no single process contained among the three economies answers. Some recognise not having attended any joint activity at all. Other point to concerns or challenges.

Effectiveness in avoiding overlaps
Avoiding overlaps is seen "somewhat effective" by six out of eight survey participant economies, at present condition. While members see benefits and quote examples, others have yet to participate or show concern for such joint activities if distracting from the TEL focus.

Suggestions to improve Joint Meetings / Joint Projects effectiveness
Better co-ordination of calendars through APEC and increasing information exchange with other pertinent fora and organisations to identify co-operation opportunities are the economies' most useful suggestions associated with ways to improve effectiveness.

Effectiveness to improve the co-operation and co-ordination between APEC fora
Five out of eight members rank the TEL effectiveness to improve co-operation and co-ordination between APEC fora, as not or somewhat effective. While stronger TEL - SOM meetings interaction and improved co-ordination support from APEC GoS would facilitate such improvement, as would advanced joint scheduling, collaboration with other fora is below expectations and the perception of group's efforts is not the same for all members.

Effectiveness to build capacity of member economies
Effectiveness to build capacity for member economies resulting from the TEL collaboration with other-APEC fora is below member expectations. While three out of eight respondent economies rank it to be somewhat effective, some members have yet to become aware of any example at all. In replying the TEL own capacity building achievements are extrapolated to result from collaboration with other-APEC fora, which in turn is recognised to be scant.

On the TEL being mandatory consulted by all other APEC fora
Members agree that consultation should happen and would bring benefit, but do not see that "mandatory" doing so would be the right approach. It could render the TEL ineffective by dragging it into different priorities more in tune with fashionable trends in the ICT world or that should be dealt with somewhere else within APEC. Other-APEC fora should be advised to consult with the TEL as needed. The group's awareness would come from SOM meetings linkage. Several members believe the TEL to be an "expert advisory group".

Other APEC fora that the TEL should collaborate with
ABAC, ECSG / e-commerce, CTI / trade, and IPEG are mentioned.
Additional commentary reveals that "regular basis" collaboration can be "once a year", deal with "knowledge / capacity building" workshops and that a "more holistic approach" seems now essential.

Effectiveness of collaboration with the private sector
Five out of eight respondent economies rank it to be very effective. Suggestions are to improve by leveraging industry roundtables and extending their duration, as well as developing stronger linkage with ABAC and mentioned Guest Groups. ABAC's interest is not clear to one survey participant economy.

Effectiveness of collaboration with the civil sector
For six out of ten respondent economies the civil society participation is and has been INTUG. Further co-operation is suggested by members, while reaching out to other civil society groups is also advised. Civil sector collaboration effectiveness, beyond INTUG, is perceived very differently by every member economy.

Effectiveness of collaboration with other international organisations
Collaboration with International organisations is ongoing and eight out of nine surveyed member economies rank it very or extremely effective. Focus should be directed towards synergy areas. Members recognise good collaboration with OECD and WTO; ITU collaboration is seen limited although ITU participates of the TEL meetings and others like CITEL have still few collaboration touch points.

Effectiveness of collaboration with the academia
Six out of nine economies find it somewhat or not effective. Although the TEL " has ongoing projects that include universities in their work", there is "minimal engagement at the moment" and "the existing arrangement may not be effective enough for the collaboration between TEL and the academia. TEL may consider inviting the academia directly to attend TEL meeting instead of relying on member economies to extend the invitation to them." Stronger collaboration is advised "… especially [for] discussions of capacity building and digital divide."

Effectiveness of collaboration with other non-APEC Parties
While members recognise collaboration and improvement (APNIC & ISOC at TEL39), other economies are not fully aware of what other non-APEC parties are there. The Guest / Observer list is found to be an adequate mechanism to accommodate other parties at the TEL.

Agenda process for the Joint Meetings / Joint Projects
Regarding the process through which the agenda for the Joint Meetings of the TEL with other APEC working groups or fora is developed, out of a total of eight respondent economies, three members described their process understanding, three recognised not being familiar with it or not having attended any joint activity and two economies commented on something different than a process.

Economies offered the following suggestions or commentary:

Regarding awareness
- *"We have no idea about the process through which joint meetings / projects is developed."*
- *"[We are] not particularly aware on how this work."*

There is no process [single definition]
- *"Normally the agenda is drafted by the organiser / overseer of the meeting / project and then it will be circulated to member economies for comments and contributions before it is finalised."*
- *"The Chair circulates draft agendas prior to the meetings and invites input. This process is useful."*
- *"The proposer submits a project proposal to different APEC fora at the same time and then seek support and approval from those fora."*

… and concerns and challenges lead examples

- *"APEC-OECD joint symposium on initiatives among member economies promoting safer Internet environment for children etc."*
- *"Note challenges with IPEG proposal."*
- *"Note concerns with Digital Prosperity Checklist."*

Effectiveness in avoiding overlaps

Six out of eight survey participant economies rank the current effectiveness of the TEL Joint Meetings / Projects as "somewhat effective" as a way to avoid overlaps and inefficiencies for projects affecting both groups.

Not	0
Somewhat	6
Very	1
Extremely	1
Total	8

Members provide the following examples and suggestions:

While some members see benefits and quote examples

- *"The main joint activities currently comprise work done in SPSG with the OECD counterpart organisation Working Party on Information Security and Privacy. Due to distance and calendar considerations, most work must be done virtually. This has not proved to be a barrier to interesting work."*
- *"The TEL carried out many joint meetings such as Joint APEC-OECD workshop on Malware. These joint meetings are very effective."*
- *"… work with the OECD on malware, spam and - currently - online child protection … are important to raise awareness of global cyber-security."*
- *"APEC-OECD joint symposi[a] … are very meaningful co-operat[ions]".*

… Others have yet to participate or show concern for such joint activities if distracting from the TEL focus.

- *"Have not attended joint meetings."*
- *"No idea on the joint meetings / joint projects that were held or conducted before."*
- *"Not many projects doing so".*
- *"[We] strongly support the principle, [but] are concerned when TEL is asked to explore projects outside its mandate."*
- *"[Note] IPEG proposal re: TEL."*

Suggestions to improve Joint Meetings / Joint Projects effectiveness

Out of six respondent members, three provided input as to how could the effectiveness of the Joint Meetings / Joint Projects of the TEL and other groups be improved. Two economies did not know how yet and one member did not reply fully.

The following commentary is given:

- *"So far, [we] don't quite know."*
- *"Providing joint reports of the meetings."*
- *"Strengthening information exchanges with other APEC fora and relevant international organisations ... to identify possible co-operation opportunities."*
- *"The TEL must make more co-ordinated efforts with APEC to co-ordinate joint meetings and projects. This requires co-ordination of calendars."*

Effectiveness to improve the co-operation and co-ordination between APEC fora

Three economies out of eight survey respondents rank the overall effectiveness of the TEL to improve co-operation and co-ordination between APEC fora, as "very effective"; five members rank it not or somewhat effective.

Not	1
Somewhat	4
Very	3
Extremely	
Total	8

Economies' commentaries are:

While stronger TEL - SOM meetings interaction and improved co-ordination support from APEC GoS would facilitate such improvement, as would advanced joint scheduling.

- *"Co-Ordination not always happening at the APEC level (i.e., GoS) but good informal contacts."*
- *"It should be built stronger co-operation between TEL and SOM-related meetings.*
- *"As different APEC fora usually hold their respective meetings at different time in different places, it is in nature not easy for them to co-ordinate."*
- *"Instead of co-ordinating maybe deciding which group should deal with what issue is best."*

… collaboration with other fora is below expectations and perception of group's efforts is not the same for all members

- *"The collaboration of APEC TEL with other APEC fora is less effective than what we expect. Maybe there is a need for APEC TEL to explore [this] opportunity[.]"*
- *"[We have] not attended [joint activities]."*
- *"The TEL must make more efforts to integrate its work with the rest of APEC and the rest of APEC must also be open to integrating work plans with the TEL."*
- *"TEL makes strong and consistent efforts ..."*

Effectiveness to build capacity of member economies
Seven out of eight economies rank the overall effectiveness of TEL collaboration with other APEC fora to build capacity of member economies as somewhat effective.

Not	0
Somewhat	7
Very	1
Extremely	0
Total	8

Offered commentary follows:

Again, SOM meetings linkage would help
- *"It should be built [on] stronger co-operation between TEL and SOM-related meetings."*

Collaboration is below expectations or not known of
- *"… It seems that TEL has more collaboration with non-APEC organisations than other APEC fora. For instance, the recent "CAPACITY BUILDING WORKSHOP ON TELECOM TRADE RULES & REGULATORY DISCIPLINES" held prior to TEL39 was a joint project between APEC and WTO."*
- *"[We are] not aware of any."*

Capacity building at member economies resulting from collaboration of the TEL with other APEC fora is perceived differently (or the TEL own capacity building achievements are being extrapolated to resulting from the scant perceived collaboration with other-APEC fora).
- *"Current collaboration are focused mainly on information and experience sharing, but has weakness in building capacity of member economies."*
- *"The TEL strives to accentuate capacity building in many of its projects. For example, the projects linked to universal access to broadband (UAB) looks for ways to increase Internet access in rural areas."*

On the TEL being mandatory consulted by all other APEC fora

Five economies are either not sure or would not promote the TEL being mandatory consulted by all other APEC fora for harmonisation, standardisation, best practices, and avoidance of duplication of unnecessary infrastructure. Four members would.

Not sure	2
No	3
Yes	4
Total	9

The following commentaries and suggestions are brought forward:

- *"It is necessary … especially with HRD, SME etc."*
- *"Clearly. [But] concerns about avoiding "e-everything" syndrome. i.e., Project with Agricultural Technologies Working Group i.e., work on e-government."*
- *"It is not sure whether mandatory consultation with TEL is the best approach. Nevertheless, APEC TEL should offer advice to other APEC fora … when it is consulted by other APEC fora. Maybe the other APEC fora should be advised to consult TEL on matters related to ICT."*
- *"Mandatory consultation adds more process into clearance and may affect TEL's effectiveness."*
- *"TEL work is specialised and TEL's domain is relatively well recognised within APEC, so unlikely that other APEC forums will proceed on ICT work without drawing [attention] to TEL. Also there is little duplication of work detected."*
- *"… TEL should probably rethink its manner of doing business. … the first step is to be more aware of the various ongoing projects that include a significant ICT component and generate more collaborative efforts within APEC that recognise the role that TEL can play as an "expert advisory group."*
- *"It should be built [on] stronger co-operation between TEL and SOM-related meetings".*

Other APEC fora that the TEL should collaborate with
Other APEC fora TEL should collaborate with, as per following suggestions are:
ABAC, ECSG / e-commerce, CTI / trade, and IPEG.

Other
- *"TEL may try to collaborate with other APEC fora on a regular basis (e.g. once a year) for conducting some capacity building or knowledge / experience sharing workshops."*
- *"It should be built stronger co-operation between TEL and SOM-related meetings. TEL projects should have further linkage with SOM-related meetings."*
- *"Given the most recent Leaders Statement regarding the Digital Prosperity Checklist, a more holistic approach to collaboration now seems essential. In particular, the ECSG, CTI and IPEG seem to be major candidates for integrated collaborative efforts…."*

Effectiveness of collaboration with the private sector
Five out of eight respondent economies rank the overall effectiveness of collaboration between the TEL and the Private Sector as very effective. Three members find it somewhat effective.

Not	
Somewhat	3
Very	5
Extremely	
Total	8

Suggestions are:

Leverage industry roundtables and extend their duration
- *"industry roundtables"*
- *"The Industry Roundtable, held at each TEL meeting, is a good and effective collaboration between TEL and the private sector. To attract more participation from the industry or private sector, TEL should try to make the duration of the Industry Roundtable at least one-day long."*
- *Good engagement with private sector especially with the initiation of industry roundtable in every TEL. Industry speakers also participate in almost every workshop."*

and develop stronger linkage with ABAC and Guest Groups
- *"Perhaps improve linkages with ABAC… not clear whether ABAC is interested."*
- *"… [build] stronger co-operation with ABAC."*
- *"Active participation from Guests, including INTUG, APNIC and GBDe, TTC(Chinese Taipei)."*

- *"TEL [should] encourage participation by the private sector.*
- *"The TEL's collaboration with the private sector is basically good, but it takes the efforts of individual economies to make the co-operation richer…"*

Effectiveness of collaboration with the civil sector

Six economies out of ten respondent members rank the overall effectiveness of collaboration between the TEL and the Civil Society as very or extremely effective; Three economies rank it as somewhat or not effective. APEC Secretariat's input finds it not effective.

Not	2
Somewhat	2
Very	5
Extremely	1
Total	10

Suggestions and feedback are as follows:

For most economies the civil society participation is and has been INTUG and further co-operation is suggested with it, while also reaching out to other civil society groups is advised.
- *"INTUG, which represents the civil society, is a regular attendee of TEL meeting." "INTUG always plays a very active role in each TEL meeting. It is evident that the collaboration between TEL and the civil society is quite effective."*
- *"It should be built [on] further co-operation with INTUG."*
- *"INTUG has been an active participant for so many years. Outreach is also recommended."*
- *"INTUG participate actively in all TEL."*
- *"TEL includes consumer groups in its deliberations and they provide a good and necessary counterpoint to industry groups so that economies can understand the balance on economic issues linked to ICT."*

Effectiveness of collaboration with other international organisations

Eight members out of nine survey participant economies rank the overall effectiveness of collaboration between the TEL and Other International Organisations as very or extremely effective.

Not	
Somewhat	1
Very	7
Extremely	1
Total	9

Offered suggestions are:

Collaboration with International organisations is ongoing. Focus should be directed towards synergy areas. Members recognise good collaboration with OECD and WTO; ITU collaboration is seen limited although ITU participates of the TEL meetings, and others like CITEL have still few collaboration touch points.

- *"The collaboration between the TEL and ITU, WTO, OECD, APAN is very effective."*
- *"Increased engagement with OECD … engagement should be done in area of relevance [and] synergy."*
- *"- OECD: Collaboration is very good on some TEL issues.*
- *- ITU: Collaboration is ongoing, but limited. ITU observes at many TEL meetings.*
- *- WTO: There are good ongoing programs that seek to provide capacity building to economies.*
- *- CITEL: The MRA Task Force gets a CITEL update at each meeting from the Chair of the equivalent group at CITEL. As CITEL doesn't have any operational MRA's at this time there isn't much co-operation on issues."*

… but more is to be done and expected
- *"It seems that there is very little collaboration between TEL and international organisations such as ITU, CITEL, APT and APAN etc. APEC TEL may consider inviting these organisations to attend TEL meeting to develop collaborating with them."*
- *"...further co-operation with international organisations and share knowledge closely."*

Effectiveness of collaboration with the academia

Most respondent economies rank the overall effectiveness of collaboration between the TEL and the Academia as somewhat or not effective. Three out of nine find it very effective.

Not	1
Somewhat	5
Very	3
Extremely	
Total	9

Members' suggestions allow for the following rationale:

Although the TEL "has ongoing projects that include universities in their work", there is Minimal engagement at the moment" and "the existing arrangement may not be effective enough for the collaboration between TEL and the academia. TEL may consider inviting the academia directly to attend TEL meeting instead of relying on member economies to extend the invitation to them." Stronger collaboration is advised "… especially [for] discussions of capacity building and digital divide."

Effectiveness of collaboration with other non-APEC Parties

Six out of eight members rank the overall effectiveness of collaboration between the TEL and Other Non-APEC parties (NGO, observers), as very or extremely effective.

Not	
Somewhat	2
Very	5
Extremely	1
Total	8

Comments are:
- *"The collaboration between the TEL and other non-APEC parties was not so evident in previous meetings. However, it is [good] to see a few more non-APEC parties like APNIC and ISOC were invited to attend the TEL39. TEL should keep on inviting more guests from non-APEC parties so as to add more expertise and experience to the meeting."*
- *"What kind of "other" non APEC parties exist?"*
- *Each TEL has healthy guest/observer list. At TEL 39, there was APNIC etc. Guest/Observer list can be obtained from APEC Sec or Asst to TEL Chair.*

- *The TEL often allows non-APEC parties as guests to observe and take part in workshops and other work of the TEL.*

Mapping joint meetings / projects

Economies' capacity building with APEC fora
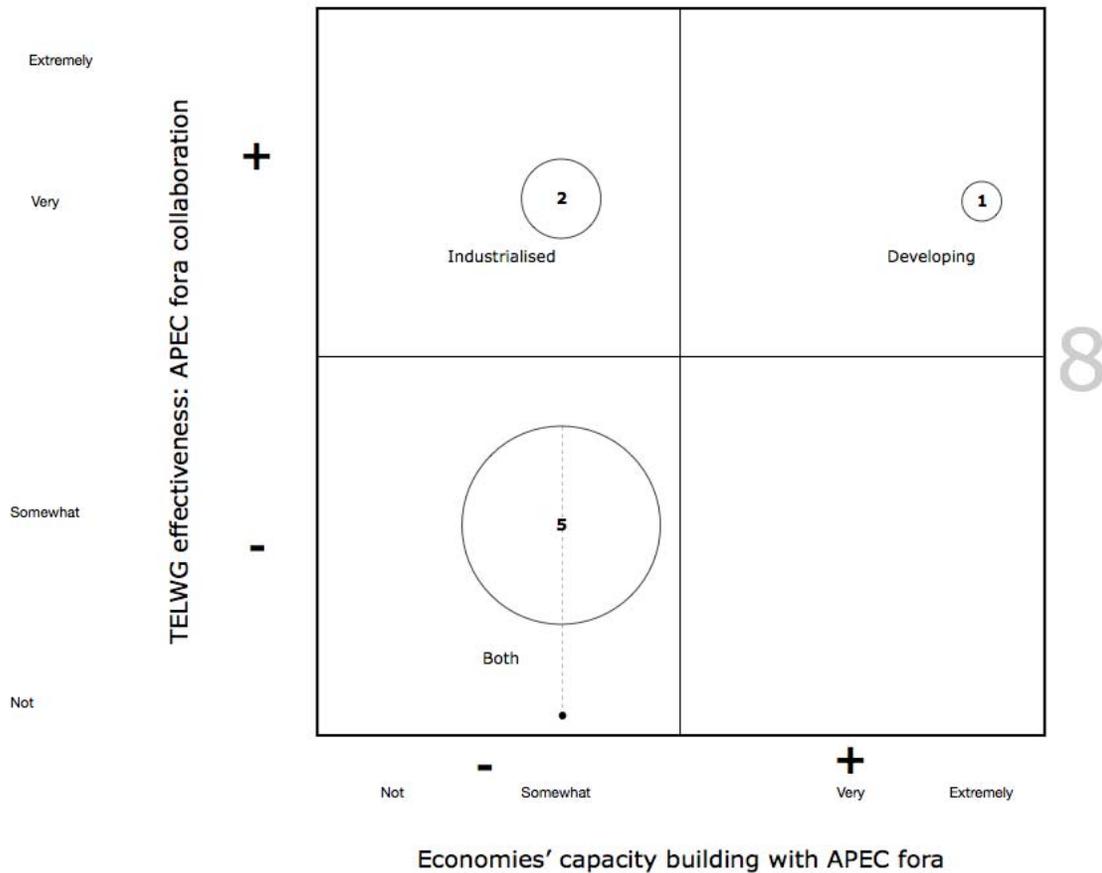
6. Gender

Summary
Most of the respondent member economies are being gender aware on their participation in providing advice for projects their economies attend to or in utilising APEC gender relevant documentation to assist in developing gender aware policies and/or conducts, either within TEL or within their economy. Five out of 6 economies have provided gender considerations advice to projects and proposed gender aware projects.
Members bringing forward new projects that integrate gender consideration and having more members involved into better publicising APEC gender criteria to projects and activities, are areas of opportunity. The consultant wishes to stress the importance of looking further into the single gender policy contradiction report observed by a member economy between rhetoric and practise, to address and use it as a learning experience moving forward.

Member's advice on gender considerations to projects
Six out of eight respondent members have provided advice or input on gender considerations to the TEL projects their economies attend to.

Members proposing projects integrating gender considerations
Five out of eight economies acknowledge proposing a TEL project and/or activity that integrated gender considerations.

Members utilising APEC gender relevant documentation

Eight out of eleven respondent economies use specific APEC gender document areas to assist in developing gender aware policies and/or conducts, either within TEL or within their economy. The most frequent selection was "gender-related projects". Three economies replied using other references for this purpose.

Members offering their own models and expertise in gender equality to projects

Two out of eight economies have offered models, expertise and/or experience from their own economy in the area of gender equality to inform TEL projects and other activities. Five members recognise they have still not done so.

Suggestions to better promote APEC gender criteria to projects and activities

One respondent economy out of six had specific suggestions to better publicise and promote APEC gender criteria to TEL projects and activities. The remaining five offered no suggestions.

Members observing gender policy contradiction between rhetoric and practice

Eight out of nine economies report never having observed any contradiction between the rhetoric and the practice in TEL, regarding APEC's gender policy; One member reports having done so "on a few occasions"

Member's advice on gender considerations to projects

Six out of eight respondent members have provided advice or input on gender considerations to the TEL projects their economies attend to; One economy has not, and one member found the question not applicable since *"Women are very active in TEL. This has historically been the case".*

n/a	1
No	1
Yes	6
Total	8

Members proposing projects integrating gender considerations

Five out of eight economies acknowledge proposing a TEL project and/or activity that integrated gender considerations; Two members recognise they still have to bring forward such a project. The "not applicable" reply has the same connotation as above.

Although this question did ask for specific examples, only one member economy was able to include any: *"Workshop on implementation WTO trade rules"*

n/a	1
No	2
Yes	5
Total	8

Members utilising APEC gender relevant documentation

Out of eleven respondent economies, five of APEC gender document areas were mentioned as being used to assist in developing gender aware policies and/or conducts, either within TEL or within their economy. While the most frequent selection was "gender-related projects" (3 out of 9), APEC Framework for Integration of Women, Gender-related policy documents, training material and Gender expert list were mentioned also.

APEC:	
Framework for the Integration of Women	2
Gender-relevant policy documents	1

Gender-related projects	3
Gender training materials	1
Gender evaluation criteria	0
Gender experts list	1
None of the above	3
Total	11

Three economies replied using other references for this purpose. Members offering their own models and expertise in gender equality to projects

Members offering their own models and expertise in gender equality to projects
Two out of eight economies have offered models, expertise and/or experience from your their own economy in the area of gender equality to inform TEL projects and other activities. Five members recognise they have still not done so. The "not applicable" reply has the same connotation as above.

n/a	1
No	5
Yes	2
Total	8

No example of such models, expertise and/or experience brought into projects was described.

Suggestions to better promote APEC gender criteria to projects and activities
One respondent economy out of six had specific suggestions to better publicise and promote

No	5
Yes	1
Total	6

APEC gender criteria to TEL projects and activities:

- *"More opportunities to attend all APEC meeting for gender issues (e.g. AGGI, MMW, WLN and GFPN, PASC)."*

Five members out of six offered no further suggestions to better promote APEC gender criteria to projects and activities.

Members observing gender policy contradiction between rhetoric and practice
Eight out of nine economies report never having observed any contradiction between the rhetoric and the practice in TEL, regarding APEC's gender policy; One member reports having done so "on a few occasions", but no specific example is included.

Never	8
On a few occasions	1
On several occasions	0
Total	9

Mapping gender

7. Survey Cross-Findings per Recommendations Framework[2]

a. Workgroup management and co-ordination within

Programme
While member economies' commitment and satisfaction to the TEL work is very high, few of the respondent economies are in a position to back their commitment with long-term funding. Member economies find that the alignment of TEL strategic priorities and collective actions to their own is adequate, both current and future. Most respondent economies would not add, nor eliminate areas of work currently included, in the TEL ToR or Strategic Plan.

Meetings
Eleven out of twelve economies rank the amount of meetings as being enough. The regular schedule of two TEL meetings every calendar year and one ministerial meeting every two years is adequate. Current structure is simple, efficient and responsive; ten out of twelve respondent economies are very satisfied with it and support keeping it as is. Member economies are very satisfied with internal communications and consider it efficient both for meetings and inter-sessional purposes. Most of the respondent economies have attended all TELMIN and TEL meetings since they became APEC members.

Management
Resource limitations may lead management to focus on internal-to-TEL priorities. Most member economies rank the TEL management functions effective, but with room for improvement.

Projects
Discussion or concern is more in enabling how to select projects that are more tightly aligned to the TEL priority objectives in the first place.

At an operational level the effect of late submissions has to be minimised if not stopped and it is asked of all self or APEC -funded projects to go through the same process and be subject to enforcement of existing guidelines.

This is particularly important considering not only the rate of change of ICT as technology and society enabler, but at the same time bringing about the challenge to revise objectives and being able to elicit them clearly to non ICT-savvy environment entities within and outside APEC.

More is needed to take additional steps in identifying the projects that would initiate a new stage of co-operation and co-ordination with other APEC fora.

Frequent and valued outcomes of impact are being achieved through ongoing collaboration projects with international organisations.

Members point out that the TEL should be sensible and support the engaging of economies for capacity building and productive discussion, rather than in enforcement or imposition.

Eight out of nine survey participants rank the effectiveness of TEL projects at building ICT capacity of member economies as very effective. Eight out of nine respondent economies rank the effectiveness of TEL projects either very or extremely effective to develop strategies to ensure trusted, secure and sustainable online environment.

Relevant work - projects and workshops- has been accomplished since the formation of SPSG in a wide range of subjects both at technical, as well as expertise backed, legislation and law enforcement efforts and practices.

Seven out of nine survey participant economies rank the effectiveness of TEL projects to develop and improve policy and regulatory preparedness, very effective. Work on changing marketplace preparedness is noted by members since TEL30 in the form of workshops (interconnection and NGNs). The LSG is regarded as doing a good job linked to marketplace issues; regulatory and industry roundtables and latest capacity building subjects on NGN, convergence, IPv6, etc. provide evidence as to the TEL focus.

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[2] For the descritpion of the Recommendations Framework see section D.3 of this addenda

Improvement suggestions: management and projects effectiveness

To improve the TEL ranking assigned to the effectiveness of its projects, "views from all member economies could be solicited to identify the level of interest they have in the project proposal and priority of importance they consider. The feedback from economies should be taken into account for selecting / approving a project proposal particularly when several project proposals compete for a limited resource of funding over the same period."

To improve the TEL ranking assigned to the effectiveness of its projects, it should be noted that "the actual review of project outcomes is only meaningful if the economies have set very specific standards for them and are willing to frankly assess their success. This is rarely done in the TEL."

To improve the TEL ranking assigned to the effectiveness of its projects, "besides complying with APEC Leaders' and or APEC Ministers' [mandates], it should also pay attention to the developing economies' needs."

Gender

Most of the respondent member economies are being gender aware on their participation in providing advice for projects their economies attend to or in utilising APEC gender relevant documentation to assist in developing gender aware policies and/or conducts, either within TEL or within their economy. Eight out of nine economies report never having observed any contradiction between the rhetoric and the practice in TEL, regarding APEC's gender policy

b. Workgroup Co-ordination with Other Fora

Collaboration with other-APEC fora is a key area of opportunity for the TEL to develop as a cross-APEC "advisory group" at full potential.

Empowering through improved co-ordination support from APEC GoS and early awareness of potential collaboration through SOM meetings participation, linkage and follow-up is recommended.

The following are raising concern among member economies and are hindering, or could hinder, actual collaboration opportunities and:
- Having to fulfil mandatory consultation from all other APEC fora instead of attending to consultations from the latter that is core to TEL;
- Attending to over-rated or abused ICT market trends (e-everything);
- Apparently challenging agendas (thought of IPEG proposal by some members); and
- Already limited TEL resources diluting with extra TEL, extra APEC, efforts against internal priorities of perceived greater importance.

Other operational decision and budgetary processes would need to be in place for support as well as simple rules of consultation engagement by other fora.

Members agree that other fora consulting TEL on ICT issues should happen and would bring benefit, but do not see that "mandatory" doing so would be the right approach.

Collaboration with International organisations is ongoing and most member economies rank it very or extremely effective. Collaboration with OECD and WTO is recognised; ITU collaboration is seen limited although ITU participates of the TEL meetings and others like CITEL have still few collaboration touch points.

Most economies find collaboration with the academia somewhat or not effective. There is "minimal engagement at the moment" and "the existing arrangement may not be effective enough".

While members recognise collaboration with non-APEC parties, some economies are not fully aware of which other non-APEC parties are there to collaborate with.

The Guest / Observer list is found to be an adequate mechanism to accommodate other parties at the TEL.

Most surveyed participant economies rank TEL projects as somewhat or not effective at improving the co-operation and co-ordination between APEC fora with respect to telecommunications and information activities.

All nine of the respondent member economies rank the TEL projects effectiveness in providing best practices and share experiences of member economies to reach the Bogor Goal as very effective.

Most of TEL projects provide best practice and share experiences of member economies and this has been key for many members, for example in LSG related matters.

Six out of ten survey participant economies rank the effectiveness of TEL projects to address the digital divide either very or extremely effective. Work has been ongoing for several years in Internet penetration monitoring as well as in bridging the digital divide, and member economies collaboration is highly recognised. Several workshops in capacity building, best practices on implementation and lessons learned have been given to member economies with high regards and concrete outcomes.

Collaboration with OECD and other international fora is recognised as to developing strategies to ensure a trusted, secure and sustainable online environment.

c. Project formulation, management and co-ordination

See under "Areas of opportunity in ToR, Structure, Strategy and direction of future work" section ahead.

d. Areas of opportunity for joint collaboration

See under "Areas of opportunity in ToR, Structure, Strategy and direction of future work" section ahead.

e. Better use of resources to avoid duplication of projects and work

Overlap avoidance is seen "somewhat effective" by six out of eight survey participant economies, at present condition.

f. Areas of opportunity in ToR, Structure, Strategy and direction of future work.

f.1 Workgroup management and co-ordination within

Programme
Replicability is considered "difficult", "or not readily" possible in four out of six cases. No economy ranks impact "on the ground" as "very significant"; six out of eight members see "some" or "not identifiable impact".

Meetings
Some favour increased inter-sessional work.

Internal communications is recognised as efficient but its timing is an area of opportunity due to the impact of late submissions: Information flows well but members might not be having enough lead time to prepare for the meeting

Keeping TEL aligned to the greater APEC/AELM/AMM agenda is found to be important. Reviewing each SG work periodically is recommended.

Economies point out that the use of proven standard documents and procedures is falling behind. Timely handling of the inherently high volume of communications is not helped by this, nor communications happening shortly before meetings as a result of late projects submissions. Thus proposal circulation, agenda discussion (HoDs) and other activities become hard pressed in time and affect meeting effectiveness, hindering outcome potential.

Tools and meetings
The use of Web based collaboration tools is brought forward by several respondents to aid in the timing aspects of meetings. Members distinguish Web from e-mail. Also, while TEL on-line papers circulation is interactive and effective, project proposals now circulated via e-mail would greatly benefit from a system similar to that of papers that enables easier referencing of specific proposals.

Management

Greater empowerment from APEC Secretariat enabling better Chair co-ordination of steering groups is believed necessary to improve the leading and co-ordination functions, inside and outside of TEL. This would additionally improve the guidance and motivation for members to fulfil goals and implement plans.

Leading, co-ordinating and overseeing would benefit the most out of setting up standard operating processes incorporating current best practices and providing support for the TEL Chair to maintain the group's strategic vision in alignment to APEC goals.

Strategic and plan consistency would improve if the group's vision spans a longer time horizon than Leaders' and Ministers meetings.

Care must be taken as the TEL workload disperses focus and effort and makes it difficulty to achieve major goals.

The group's strategic vision in alignment to APEC goals would benefit from processes that replicate best practices, resolve diversity of interests and add transparency to the Chair's candidate selection.

Economies suggestions to improve the TEL monitoring and evaluating of plans, projects and activities include setting up a process to support its effectiveness and longer-term vision and address project completion which is an area of opportunity for oversight. Fewer long-term projects and better project conclusion documents are seen as important steps in this direction.

Annual meetings would benefit from better planning which would result from the Chair and convenor providing more updates and inter-sessional discussion with member economies and by making TELMIN relevant for more than 2 years of work while more purposeful aligning TEL to the AELM and AMM, and other APEC Agenda.

Best practices sharing would benefit from better leading. Policy formation would benefit from better planning.

Planning on formation and implementation of policies would improve by assigning a higher priority within the TEL agenda to discussing such matters and by more periodical reporting the subject

Tools and management

Web collaboration tools could aid at improving overall economies' responsiveness.

Projects

Engaging relevant sectoral and stake-holder interests is as an area of opportunity. Improvement is seen by "membership of [new] associated guests."

Some members reflect on how, early on in devising projects, their economies' private sector involvement is integral and thus stake-holders engagement.

More ICT Capacity Building projects should be performed in developing member economies to bridge existing digital divide and achieve balanced development among economies. Care should be taken for workshops and seminars delivered to developing economies in devising approaches to capacity building to ensure they are linked very well to actual results in this area.

There is still significant interest at the TEL to continue addressing the digital divide The TEL should also do better in integrating this information to allow economies to draw more conclusions on how to include their citizens.

f.2 Workgroup co-ordination with other fora

Management

These actions would also address possible overlapping with ECSG and avoid cost duplication within APEC, from which additional resources to support the group's required cross sectoral and cross working group co-ordination could possibly be justified.

Projects

Stepping up the ongoing projects work is considered important and stronger linkage with the APEC Emergency Task Force is necessary since ICT is an enabling technology which can be effectively used for emergency communications and mitigation of natural and man-made disasters, but requires closer ties with those who are responsible for emergency programs and service delivery.

Projects to develop strategies to ensure trusted, secure and sustainable online environment should have more focus regarding safer internet environment for children.

f.3 Areas of opportunity for joint collaboration

Joint collaboration with Other APEC fora
Members' commentary reveals that "regular basis" collaboration can be "once a year", deal with "knowledge / capacity building" workshops and that a "more holistic approach" seems now essential.

Improvement of private sector collaboration would entail leveraging industry roundtables and extending their duration, as well as developing stronger linkage with ABAC and mentioned guest groups. ABAC's interest is not clear to one surveyed economy.

Further civil sector co-operation is suggested by members and reaching out to other civil society groups is also advised. Civil sector collaboration effectiveness is perceived very differently by every member economy.

Improved collaboration with International organisations would result by focusing more in areas of real synergy.

Collaboration the academia could be improved by inviting them directly to TEL meetings, instead of relying on member economies to extend the invitation to them." Stronger collaboration is advised "… especially [for] discussions of capacity building and digital divide."

Projects
Most survey participant economies rank TEL projects as somewhat or not effective at improving the co-operation and co-ordination between APEC fora with respect to telecommunications and information activities. Ranking shows to a greater extent that more projects are yet to be identified and occur so as to improve collaboration with other APEC fora, as the joint activities section of this survey report also describes.

B.2 Project Database

Introduction

From the AIMP projects database 84 entries were identified. From the TEL Chairs' reports 166 additional projects were actually found. Thus a total of 250 projects were analysed[3].

Due to the very large and continually broadening scope and breath of TEL's environment of action[4] and in order to be able to analyse the group's projects and then be able to synthesise the information into meaningful findings, the following Assessment Framework (AF) was developed.

N.B. This AF and methodology can be found in *Section D.2* of the addenda of this report. It is necessary to read both sections for a clear understanding of the following graph results.

The AF[5] categories are:

(APII/APIS)	Construction of APII towards APIS
(DSRRII)	Development of a Safe, Reliable and Resilient Information infrastructure
(CB)	Capacity Building
(LBFID)	Facilitate effective co-operation, free trade, liberalisation, facilitation and investment, and sustainable development
(CWOF)	Collaboration with other APEC and non-APEC fora
(PISME)	Promote industry and business sector with special attention to SMEs
(BPR)	Identification and Sharing of Best Practices
(UA)	Universal Access
(WBSG)	Well-being, e-Society, e-Government

For the classification of projects according to the AF only the 84 projects in the AIMP database contain descriptions, thus the classification of the remaining 166 was done using only the project name, as it is the only description present in the TEL Chairs' reports.

Projects were classified into up to four of the AF categories. If a project could be classified in several categories, only the four most relevant categories were used.

For example, the project "Voice over IP (VoIP) Security Guidelines" (TEL04 /2007) was classified, per Assessment Framework categories, as follows:

7.2   Recommendations / Models / Guidelines
2.2   Domestic and Collaborative Security Awareness, Preparedness and Responsiveness (Natural Disasters, Terrorism, Cyber-Terrorism, Cyber-Security, etc.)
2.8   Harness leading edge and future technologies
6.1   Encourage private sector investment and participation (the classification under this category, even though not evident from the project name, was chosen from the project description: "This project will produce a set of tools, a booklet -backed by an interactive website- to inform SMEs about the security risks associated with the use of VoIP technologies").

Since projects were classified under one or more categories, in the following graphs the project count adds up to more than the 250 projects analysed.

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[3] To see the complete worksheet of analysed projects, refer to section B.2, of this document's Addenda.
[4] For a complete list of the Environment of Action see Section D.6.3 of the addenda
[5] During the analysis one category was deemed unnecessary thus in the worksheet, projects classified as "9.x" refer to "8" of the Assessment Framework described in this page, "10.x" refers to "9" and "11.x" refers to "10".

Classification per Assessment Framework

Classification of All Projects

Classification of all projects per Assessment Framework
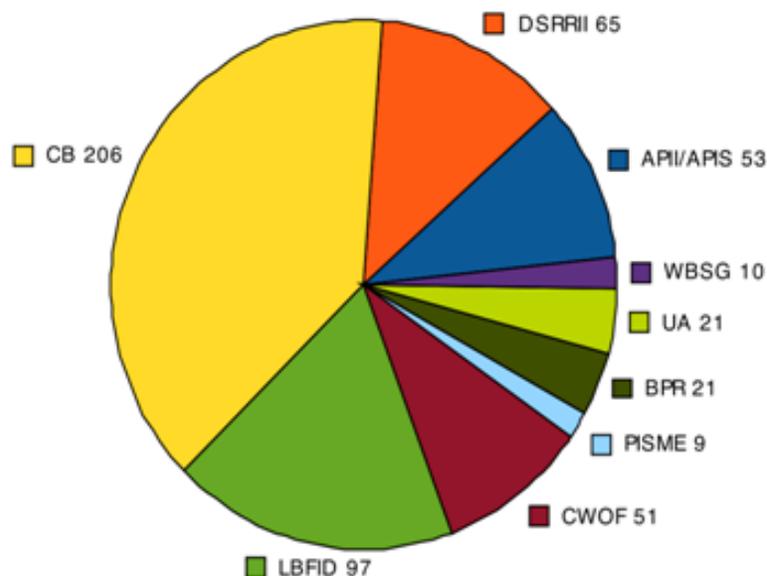
The pie chart shows the classification of all projects per Assessment Framework. The number next to each category represents the number of projects classified as such.

1. Capacity building is by far the largest category of projects, as it is a cross-cutting key priority. Second in line have been projects addressing the Liberalisation, Business Facilitation, Investment and Development (LBFID), consistent with Bogor Goals. Of significant relevance have been those that have dealt with APII/APIS/DSRRII. The relatively high number of projects in Collaboration with Other Fora is also of particular significance. A detailed analysis of these collaboration projects shows that this high number is driven almost entirely on collaboration projects with non-APEC fora, confirming the perceived notion that the TEL has had little project interaction with other APEC fora.

2. Projects under PISME, BPR, UA, and WBSG are few compared to the other categories. This is important to note since best practices or recommendations are a key deliverable for APEC.

Classification of all projects per Assessment Framework
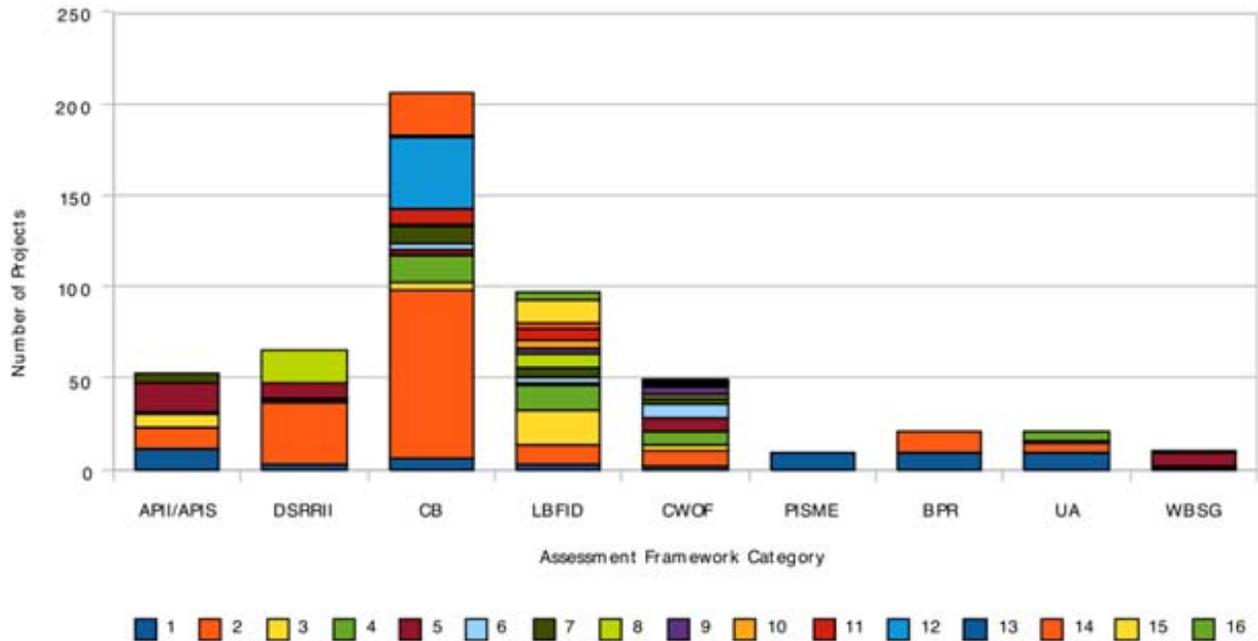
Sub-categorisation within each AF category is shown above. The numbers in the legend refer to the sub-categories described in the "Assessment Framework" section of this document's addenda.

3. Within Capacity Building, the development of courses, seminars, workshops,   and symposia has been a very active area of work, as illustrated by the large orange area.

4. In spite of TEL's ever-broadening charter, the group has been careful in maintaining projects addressing the Bogor Goals, as shown by the LBFID bar.

5. LBFID category which was derived from the Bogor Goals shows a balanced mix of sub-categories confirming that TEL has indeed addressed this cornerstone of APEC's mission.

Classification of Capacity Building Projects

In the case of Capacity Building projects, a further detailed analysis was performed to identify the areas that were the subject of such capacity building projects, in accordance to the AF. From the list of all the projects which first categorisation was CB, the second, third and fourth categorisations were taken into account to identify the subject or subjects covered by each.

For example, the project "Cyber-crime Legislation and Enforcement Capacity Building Project" (TEL04/2003) was classified as:

3.2 Courses, Seminars, Workshops, Symposia (taken from the project description "5 day conference")

2.2 Domestic and Collaborative Security Awareness, Preparedness and Responsiveness (Natural Disasters, Terrorism, Cyber-Terrorism, Cyber-Security, etc.)

4.3 Regulation / Deregulation

Thus, in the Classification of Capacity Building Projects graphs, this project is counted under AF categories 2.2 and 4.3.

Capacity Building
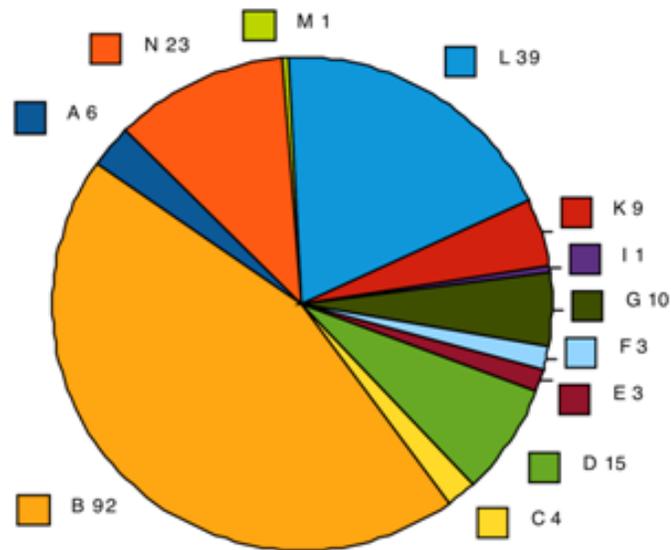
The pie chart shows the classification of all Capacity Building projects per Assessment Framework. The number next to each category represents the number of projects classified as such. For clarity sector A corresponds to AF sub-category 3.1, B to 3.2 and so on.

**Classification of Capacity Building Projects per Assessment Framework**
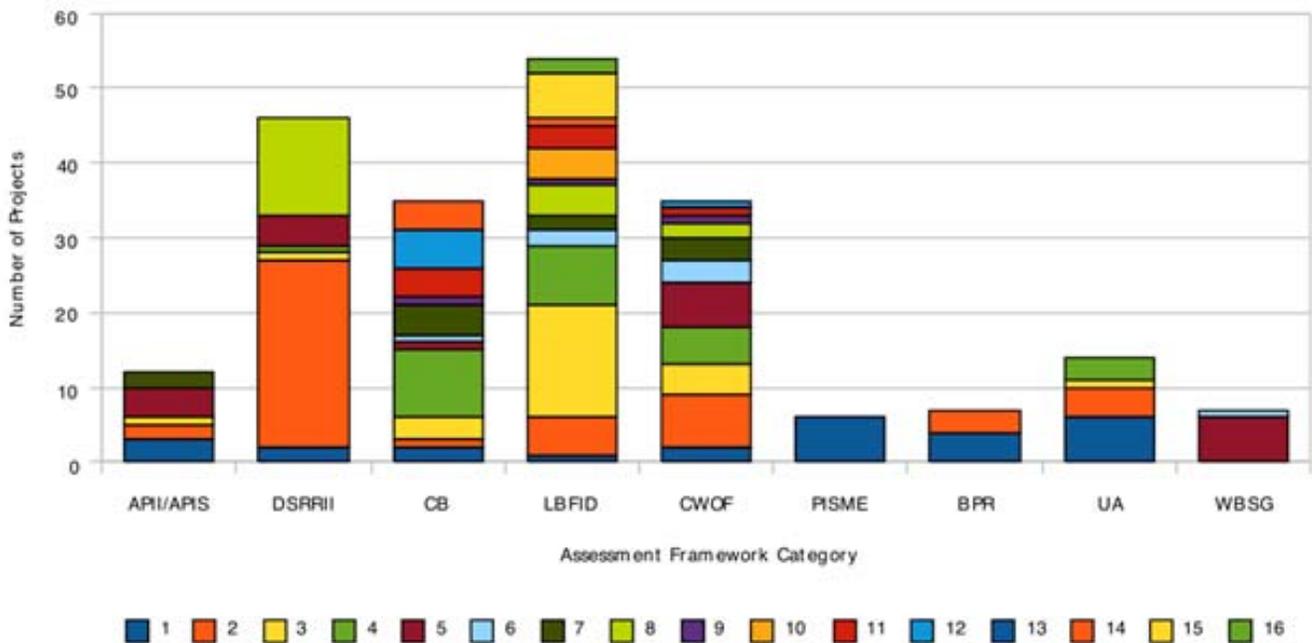
1. Of all capacity building projects, the vast majority show perfect alignment with Bogor Goals (LBFID) and Seoul Declaration (APII/APIS/DSRRII). It is important to note that third in importance has been done in collaboration with Other Fora.

2. Of the LBFID about 25% (see yellow) are projects dealing with capacity building regarding regulation / deregulation and of the APII/APIS/DSRRII, approximately 50% have dealt with domestic and collaborative security awareness, preparedness and responsiveness.

3. In contrast, very few have had to do with promotion of SMEs (PISME), best practices and recommendations (BPR) and well-being, e-Society, e-Government (WBSG).

Completion Status of Projects

N.B.: The completion status could be determined only for the 84 projects present in the AIMP database. Completion status for most of the projects identified from TEL Chair reports could not be determined. Thus the large size of the yellow sections of the bar graph.
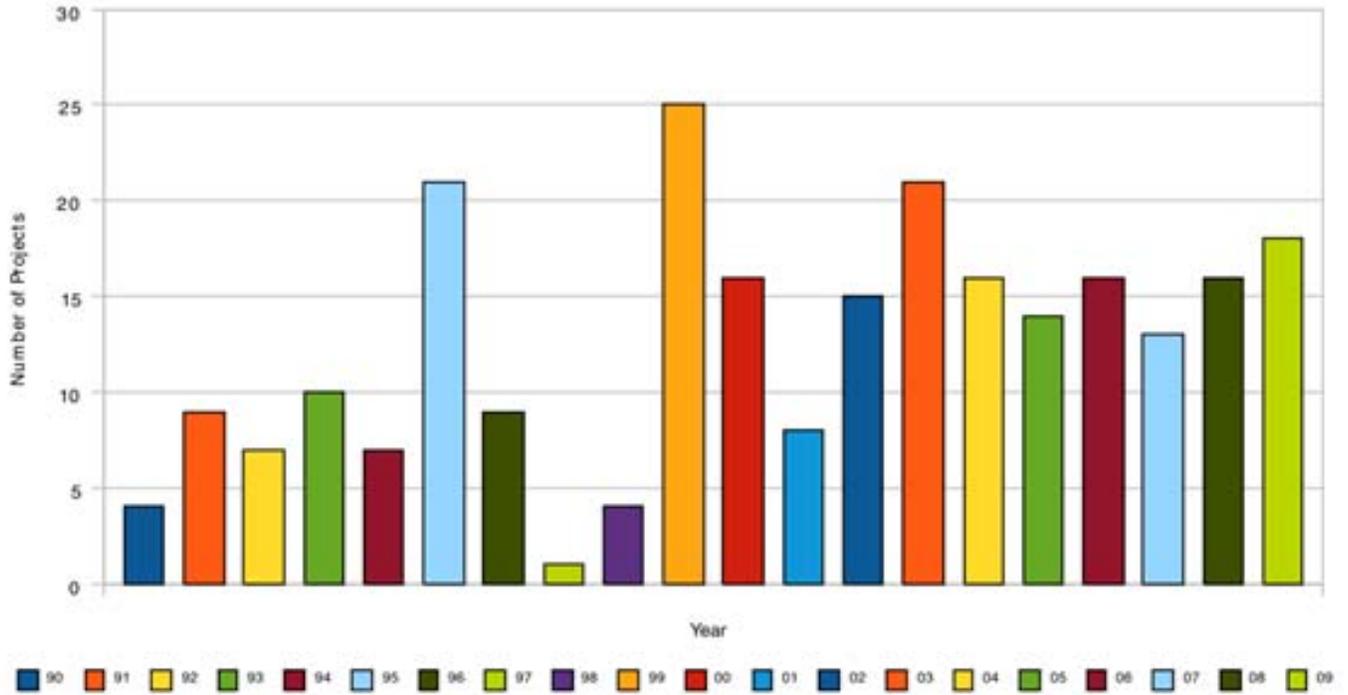
Status per Assessment Framework
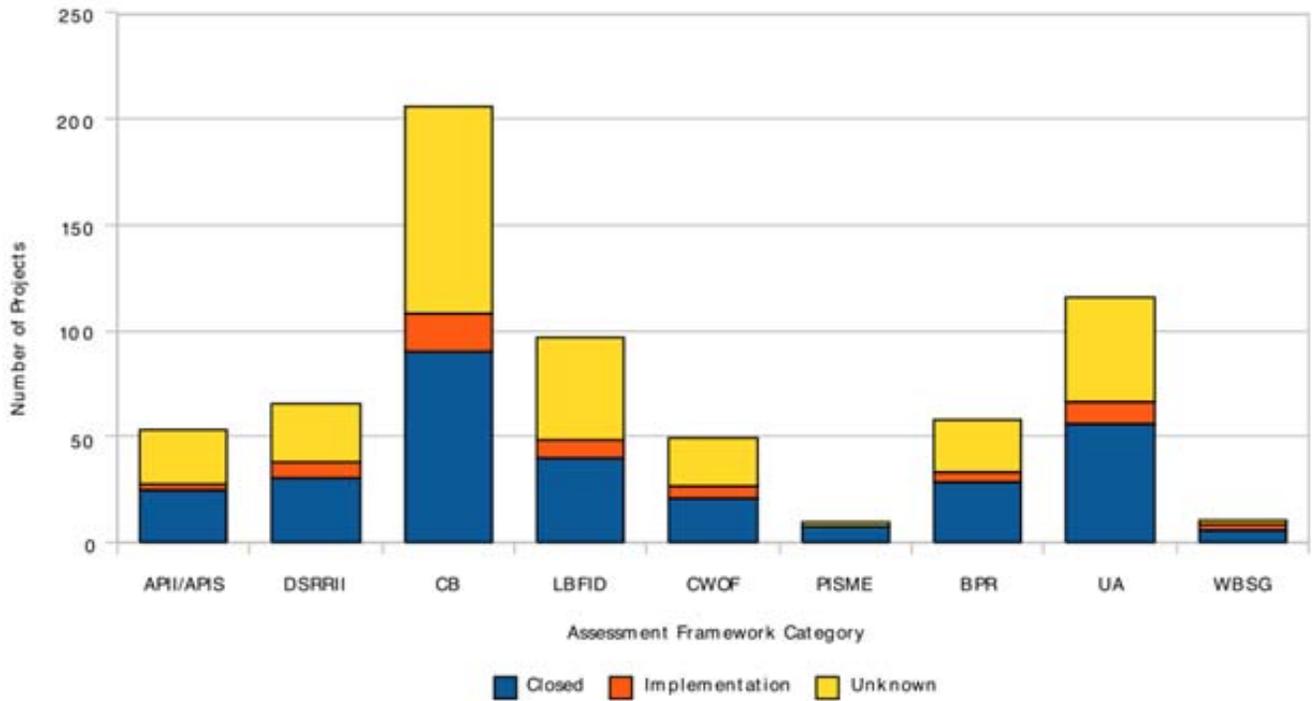
9. The vast majority of projects have attained closure and those under implementation are either longer-term or future projects.
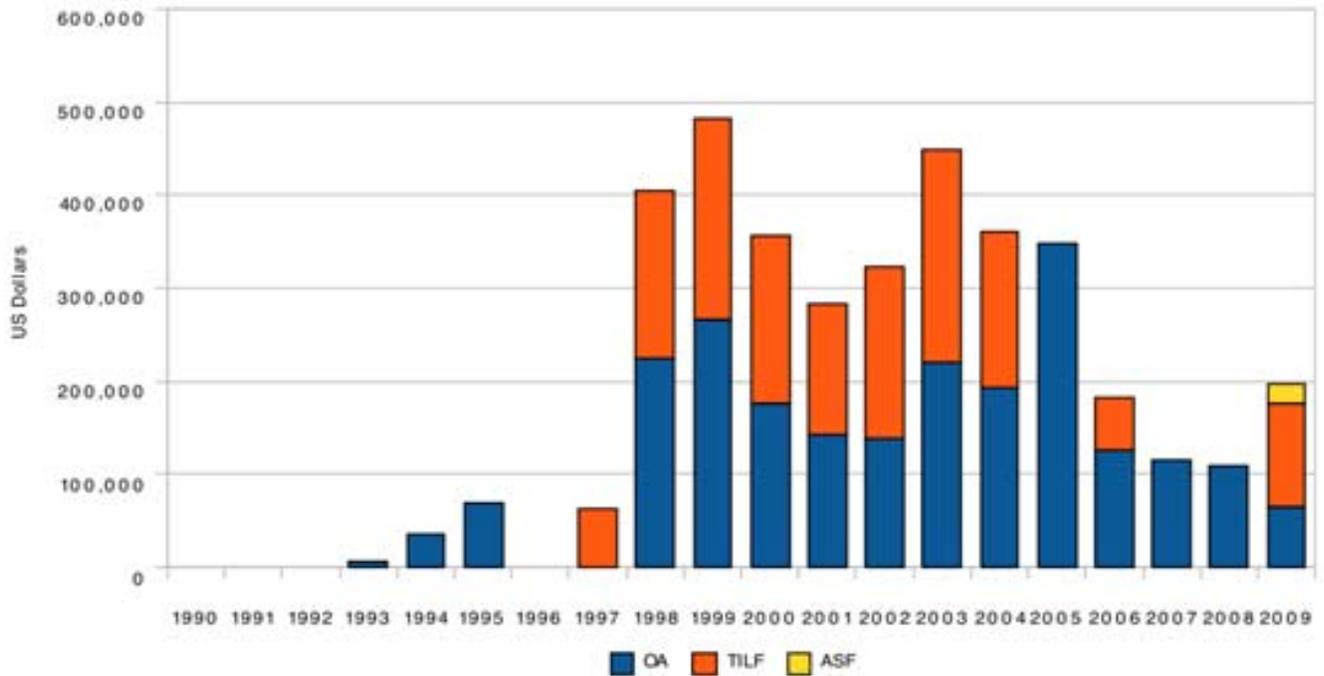
Project distribution per year
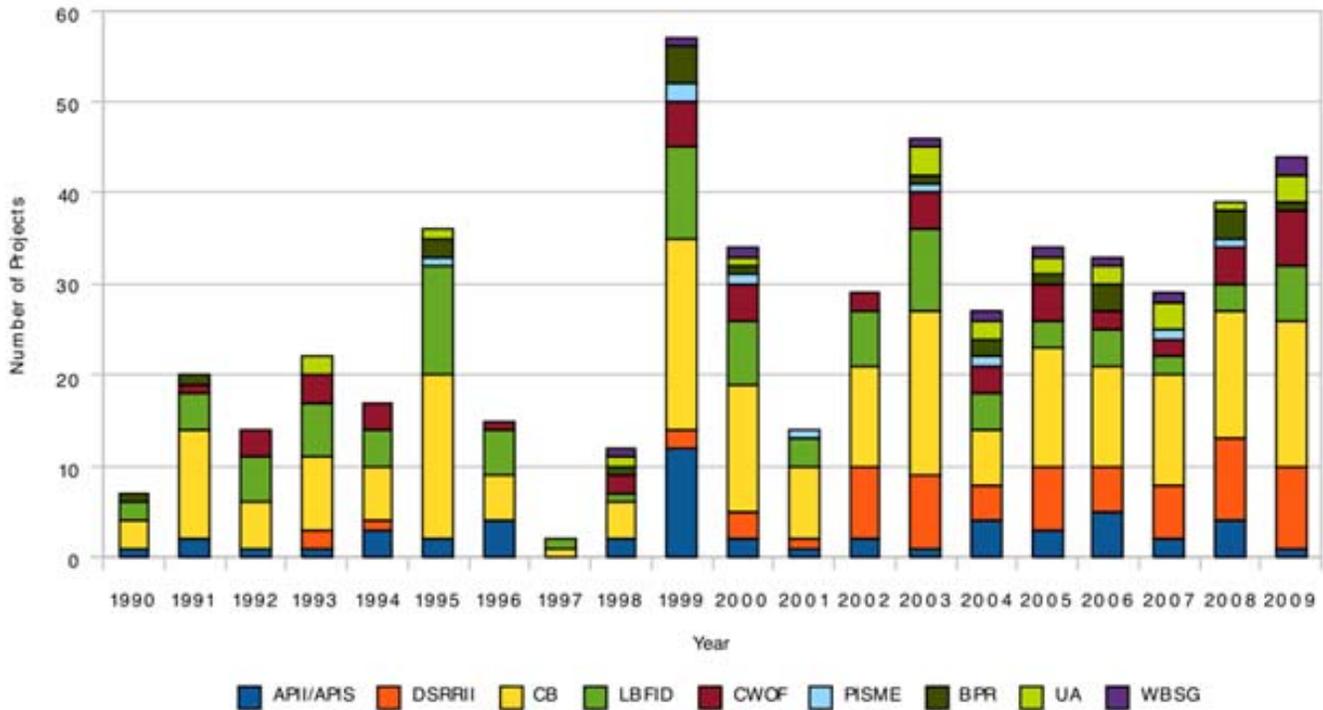
Distribution per Year

9. In spite of the reduction of budget allocated to projects, as shown in the next graph, the above graph shows the continued effort of TEL to at least maintain the number of projects launched on a yearly basis.

**APEC Approved Funds per Year for TEL projects**

Distribution per Year and Assessment Framework

11.   The above graph shows that even though TEL has been careful to continually address LBFID related projects, their numbers have been decreasing. On the other hand, APII/APIS and DSRRII (the latter having a direct positive impact on APII/APIS) have been steadily increasing.
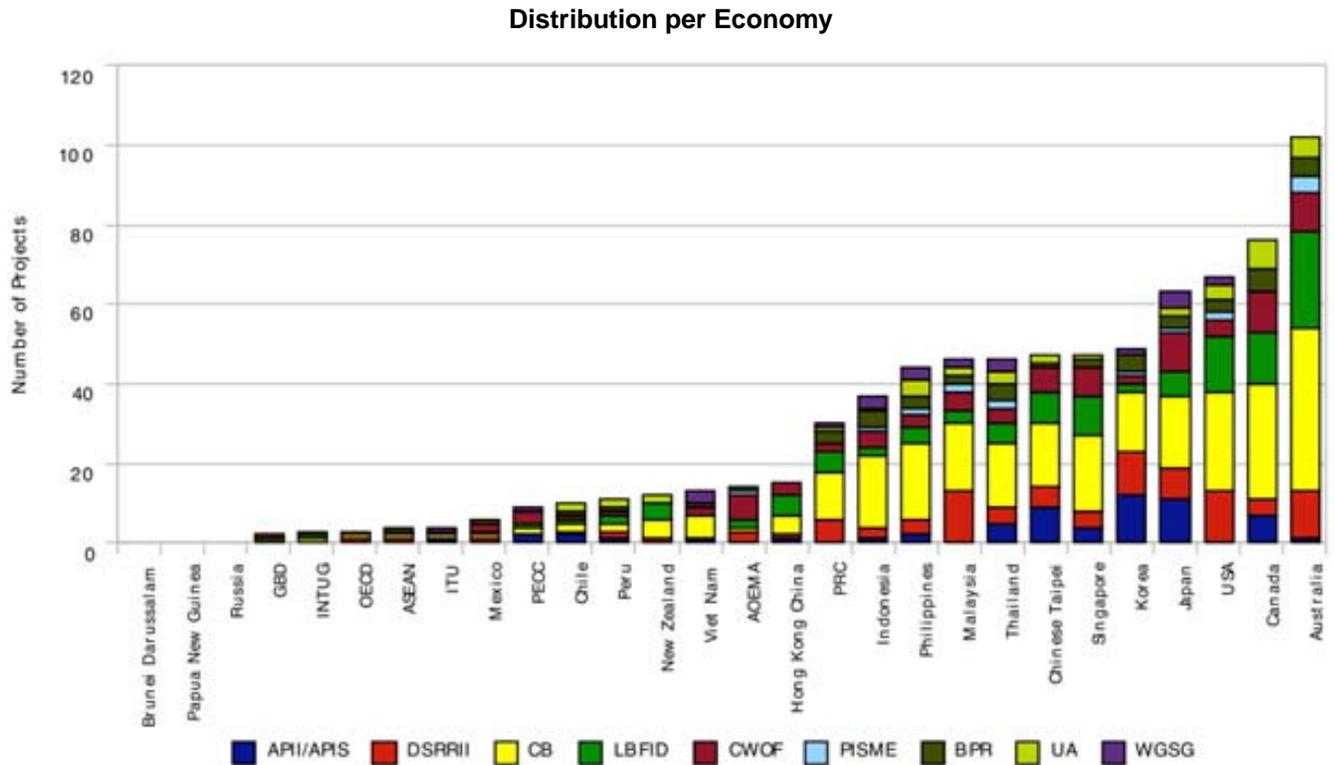
Project Proposing Economies and Co-sponsors

Distribution per Proposing Economy (Sponsor) and Co-sponsor
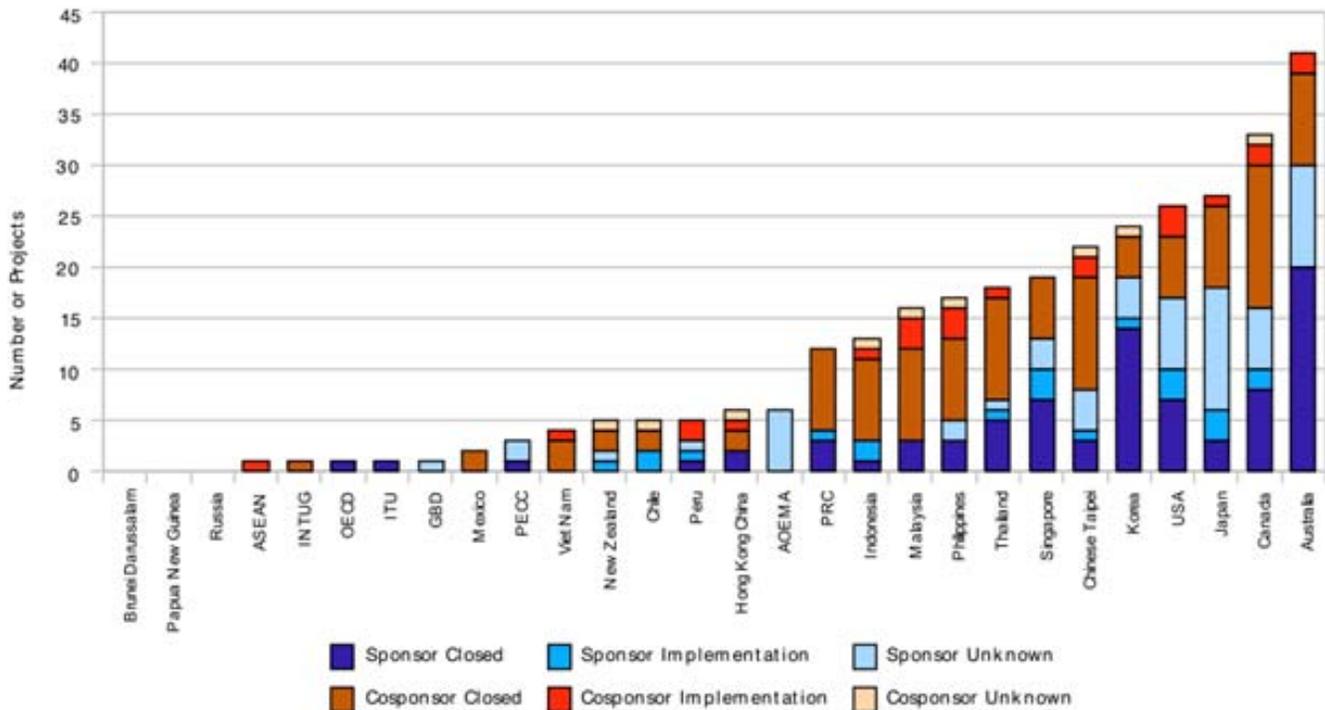
12. Developed economies have proposed more projects than developing economies by a large margin; It is important to note that some non-APEC organisations have been active in proposing or co-sponsoring to greater extent than some member economies.

Distribution per Economy

Distribution per Economy

The graph fairly mirrors the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status".

13. Korea and Japan economies exhibit a relative larger number of projects dealing with APII/APIS/DSRRII, in contrast with most other economies which show a preference towards capacity building projects.

Project Funding

N.B.: Project funding could be determined for most of the 84 projects present in the AIMP database and for only some of the projects identified from TEL Chair reports.[6]

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[6] Although funding source could not be determined for all projects, it was possible to assess that all categories have benefited from both APEC and non-APEC funding. Of those projects from which the source of funding could be determined, there has been a fairly similar amount of funds coming from the Operational Account and non-APEC sources.

**APEC Approved Funds per Year for TEL projects**
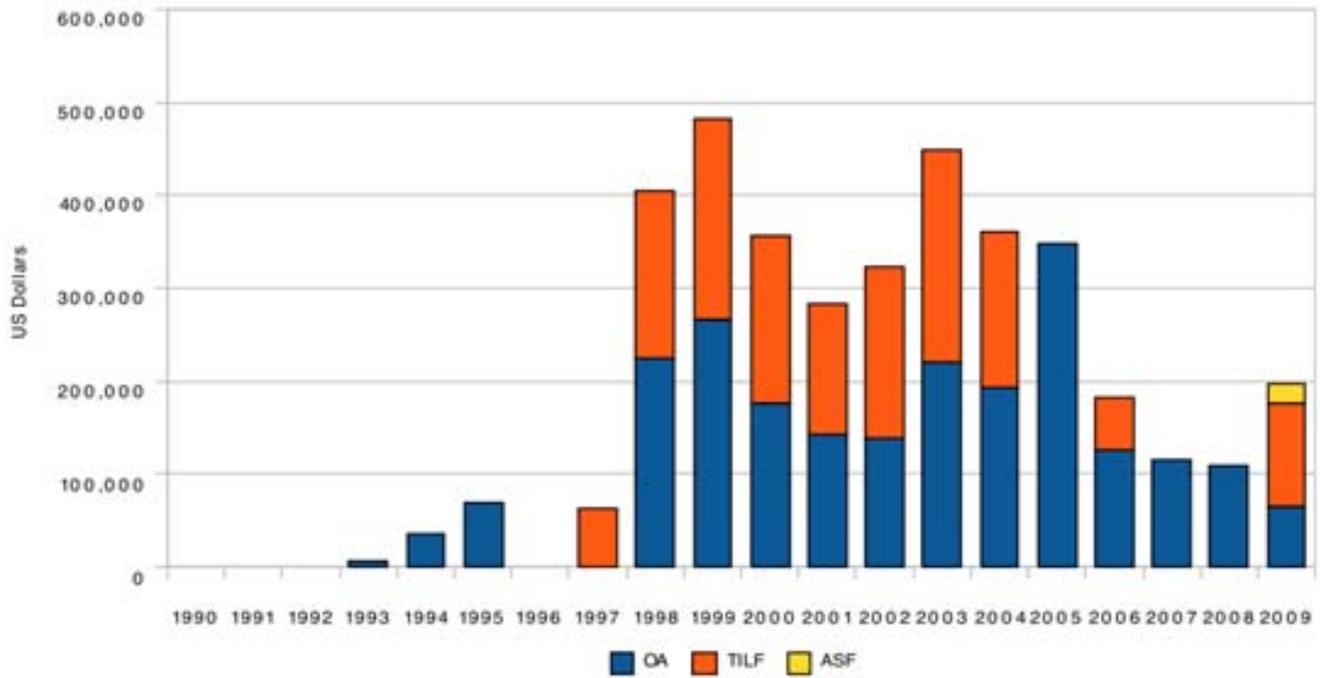
14. Funding has decreased steadily during the last years in both the OA and TILF funds. Funding in the last four years has been less than half of the average available on a yearly basis during the 1998-2005 periods. There seems to be a recovery during 2009.

Project Approved APEC Funds per TEL project Proposing Economy
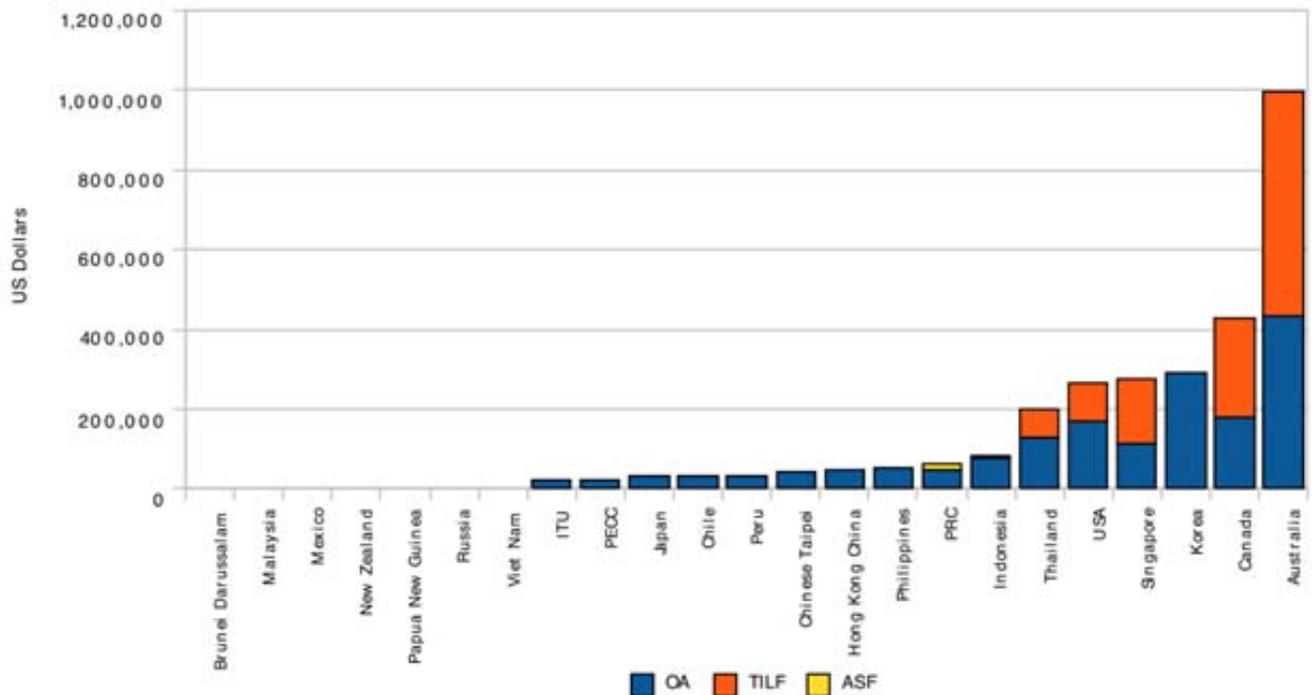
The graph fairly mirrors the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status".

Collaboration with Other Fora

Collaboration with Other Fora
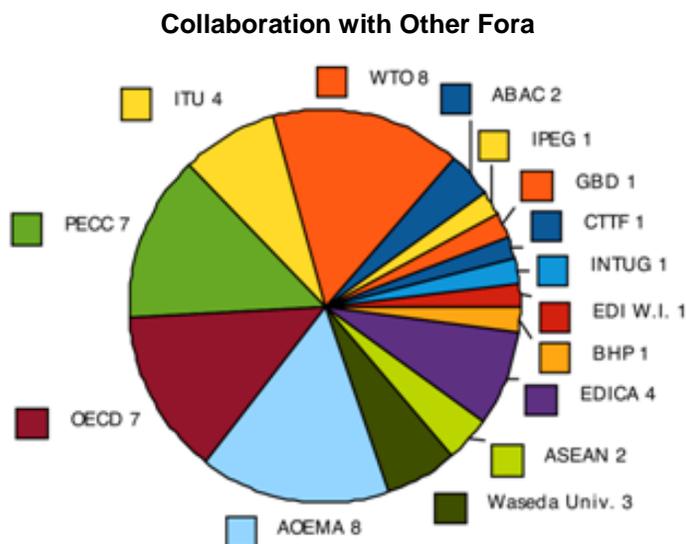
15. Of the 250 analysed projects, 51 were found to have been in collaboration with other fora representing 20% of all projects. 48 with non-APEC fora and only 3 with APEC fora. More than half of all collaboration has been with AOEMA, WTO, OECD, PECC and ITU.

Classification per ECOTECH

ECOTECH's principles were also used as a second reference framework to analyse the group's activities and projects.
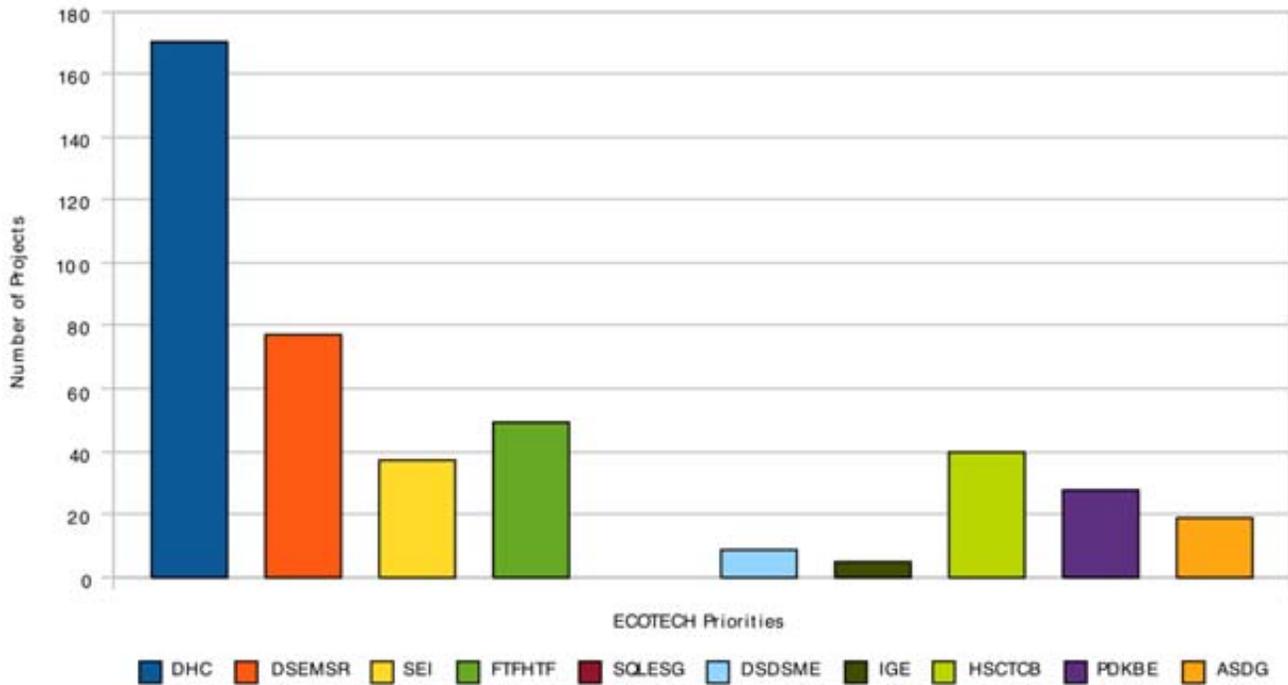
ECOTECH categories are:

(DHC)   Developing human capital
(DSEMR   Developing stable and efficient markets through structural reform
(SEI)   Strengthening economic infrastructure
(FTFHTF)   Facilitating technology flows and harnessing technologies for the future
(SQLESG)   Safeguarding the quality of life through environmentally sound growth
(DSDSME)   Developing and strengthening the dynamism of small and medium enterprises
(IGE)   Integration into the global economy (IGE)
(HSCTCB)   Human security and counter-terrorism capacity building (HSCTCB)
(PDKBE)   Promoting the development of knowledge-based economies (PDKBE)
(ADSG)   Addressing the social dimensions of globalisation (ASDG)

For example, the project "Voice over IP (VoIP) Security Guidelines" (TEL04 /2007) was classified, per ECOTECH priorities, as follows:

10.2 Developing stable and efficient markets through structural reform
10.8 Human security and counter-terrorism capacity building
10.4 Facilitating technology flows and harnessing technologies for the future
10.6 Developing and strengthening the dynamism of small and medium enterprises

Classification of All Projects

Classification of All Projects per ECOTECH Categories

1. There is a good match between TEL's projects and at least five of ECOTECH's categories. A large number of projects lies among the DHC, DSEMSR, SEI, and FTFHTF, mainstays of TEL's work. HSCTCB activity demonstrates TEL's capacity to deal with emerging priorities.

Distribution per Economy

Distribution per Economy and ECOTECH categories
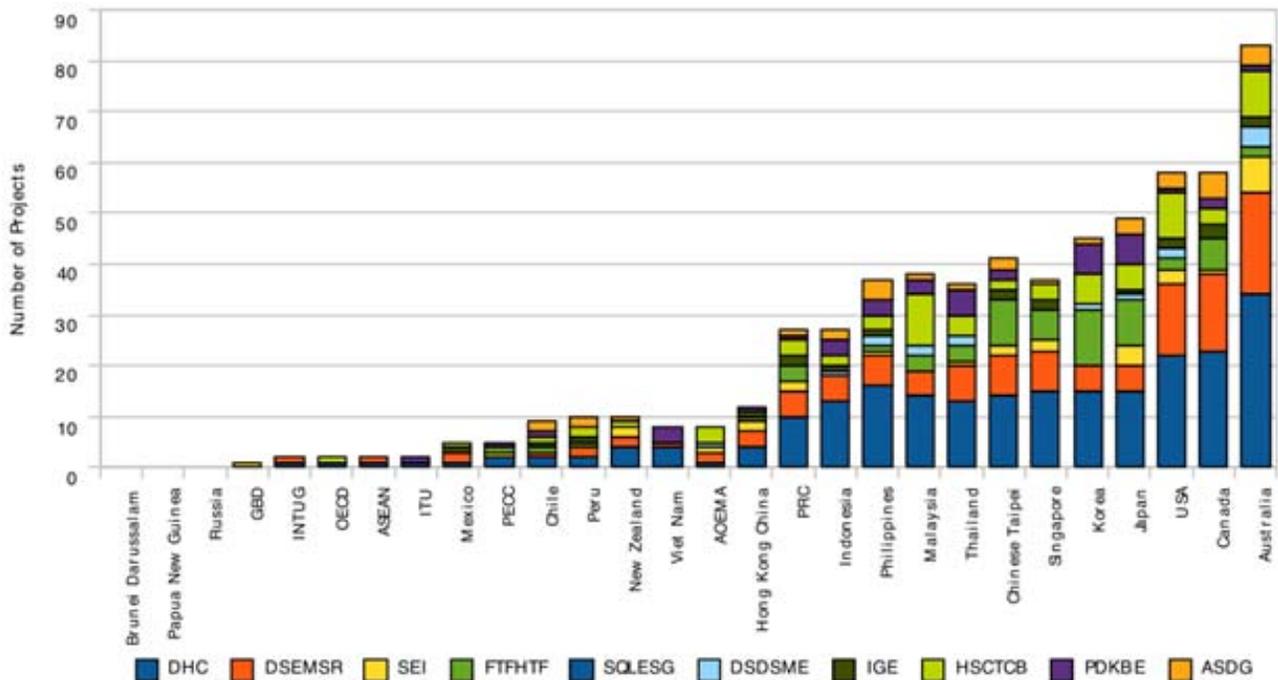
The graph follows the pattern of the previous "Distribution per Sponsor/Co-Sponsor and status" and "Distribution per Economy and Assessment Framework".

Additional Graphs

APII / APIS

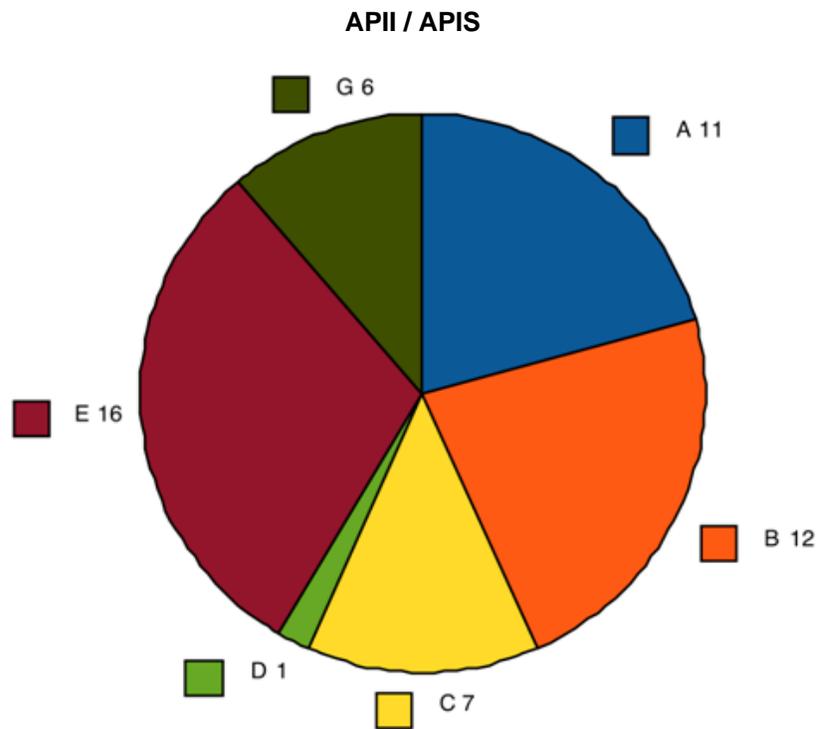The pie chart shows the classification of all projects per Assessment Framework. Letter "A" corresponds to AF category "1.1", letter "B" to AF category "1.2", etc. The number next to each category represents the number of projects classified as such.

DSRII
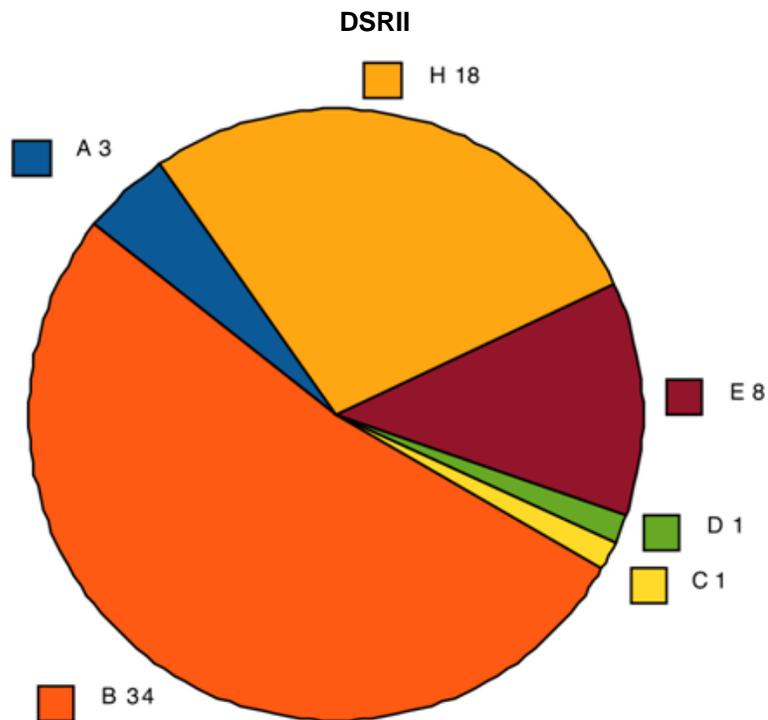
The pie chart shows the classification of all projects per Assessment Framework. Letter "A" corresponds to AF category "2.1"; letter "B" to AF category "2.2", etc. The number next to each category represents the number of projects classified as such.

Liberalisation / Business Facilitation

The pie chart shows the classification of all projects per Assessment Framework. Letter "A" corresponds to AF category "4.1"; letter "B" to AF category "4.2", etc. The number next to each category represents the number of projects classified as such.

Best Practices / Recommendations

The pie chart shows the classification of all projects per Assessment Framework. The number next to each category represents the number of projects classified as such.

Universal Access

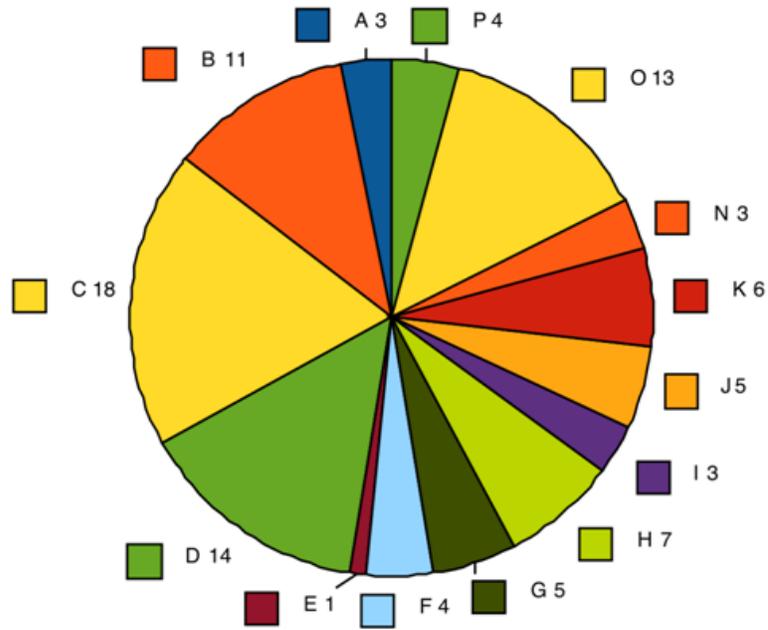

The pie chart shows the classification of all projects per Assessment Framework. Letter "A" corresponds to AF category "8.1" letter "B" to AF category "8.2", etc. The number next to each category represents the number of projects classified as such.
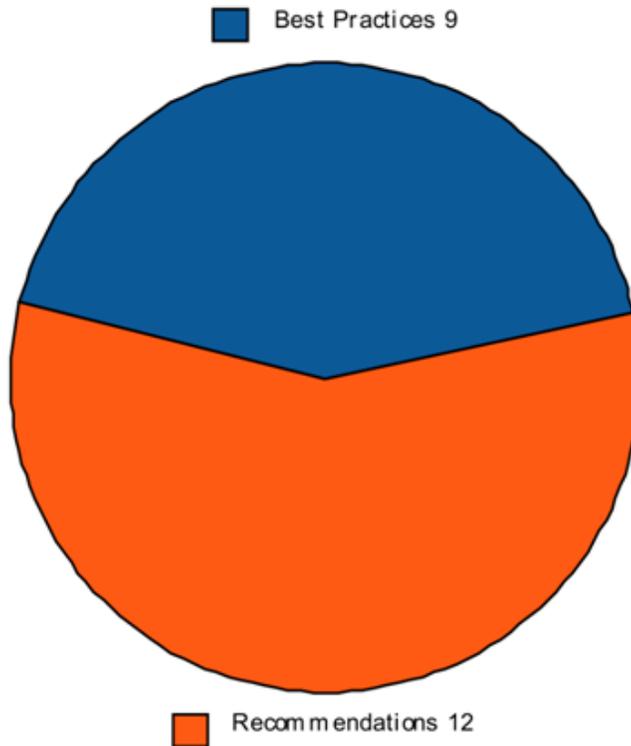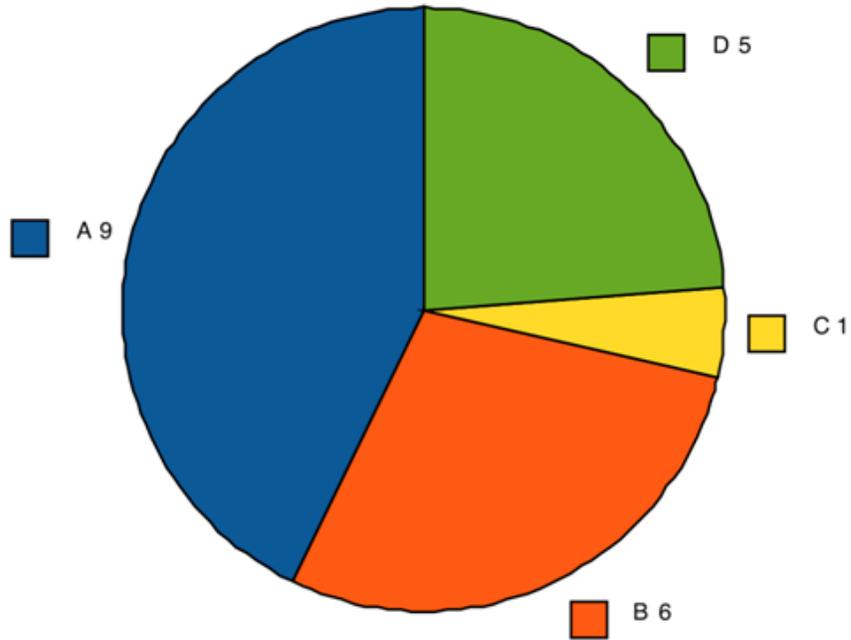
Well-being / e-Society / e-Government

The pie chart shows the classification of all projects per Assessment Framework. Letter "A" corresponds to AF category "9.1" letter "B" to AF category "9.2", etc. The number next to each category represents the number of projects classified as such.

C. Complete projects worksheet
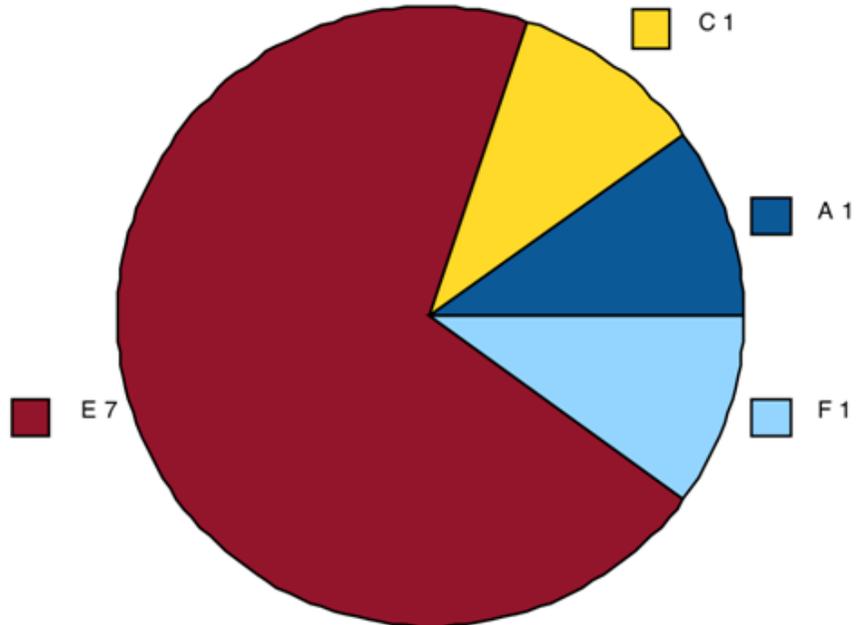
See accompanying file Projects.xls

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Judge and Prosecutor Cyber-crime Capacity Building Project	TEL 04/2006	APEC Funded	Implementation
APII Test-bed Project	TEL 09/1999S	Self-funded	Closed
Collaborative research on Multimedia HRD System Network Technologies	TEL 02/1999S	Self-funded	Closed
Regulatory Training Project	TEL 03/2005	APEC Funded	Closed
Evaluation of Access to Domestic and International Leased Lines in the APEC Region	TEL 01/2006T	APEC Funded	Closed
Voice over IP (VoIP) Security Guidelines	TEL 04/2007	APEC Funded	Closed
Two seminars on Preparation and Confidence Building for the Familiarization and Mutual Understanding of the	TEL 04/1997T	APEC Funded	Closed
APEC TEL Asia-Pacific Grid Workshops	TEL 01/2005	APEC Funded	Closed
Educational Seminar on Application of Global Positioning System (GPS) Technologies	TEL 04/1999	APEC Funded	Closed
Integrated Next Generation Electronic Commerce Environment Project (INGECEP/Cyber Net)	TEL 18/1999S	Self-funded	Closed
MRA-HRD Delivery Project: Orientating and Training Regulators for MRA implementation.	TEL 01/2000T	APEC Funded	Closed
Survey of Certification Authorities	TEL 17/1999S	Self-funded	Closed
APEC TEL MRA Implementation Project	TEL 01/1998T	APEC Funded	Closed
Overview of Internet Protocol version 6 (IPv6): Bridging the Digital Divide	TEL 03/2003	APEC Funded	Closed
APEC Distance Learning Project on Basic Telecommunications Technology	TEL 04/2000	APEC Funded	Closed
Spectrum Policy and Management Database	TEL 12/1999S	APEC Funded	Closed
Workshop(s) for Capacity Building on Telecommunications Trade Rules and Regulatory	TEL 01/2009T	APEC Funded	Implementation
APEC â€" MRA HRD Project: Training Program Design for Phase II implementation	TEL 03/2004T	APEC Funded	Closed
Stocktake of Progress Toward the Key Elements of a Fully Liberalised Telecommunications Sector in the APEC	TEL 01/2003T	APEC Funded	Closed
Practical Manual for Network Planning	TEL 03/1996	APEC Funded	Closed
Guide to Telecommunications Regulatory Environment in APEC member Economies	TEL 06/1995	APEC Funded	Closed
Database of Existing Certification Authorities	TEL 13/1999S	Self-funded	Closed
APEC TEL Mutual Recognition Arrangement (MRA) Outreach Project	TEL 06/2001	APEC Funded	Closed
Cybercrime Legislation and Enforcement Capacity Building Project	TEL 04/2003	APEC Funded	Closed

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Electronic Commerce Capacity Building	TEL 01/2001T	APEC Funded	Closed
APEC â€' MRA HRD Project: Training Program for Phase II implementation	TEL 06/2005	APEC Funded	Closed
Telecommunications for Disaster Management: Best Practices Workshop	TEL 01/2008S	Self-funded	Closed
Wi-Fi Connectivity in Rural and Remote Communities: Bridging the Digital Divide	TEL 02/2005	APEC Funded	Closed
Information Security Certifications Assessment Guide	TEL 01/2007	APEC Funded	Closed
Supporting program for International Joint Research Projects	TEL 10/1999S	Self-funded	Closed
MRA Management System Data Load Facilitation	TEL 06/2002	APEC Funded	Closed
Development of Model Government CIO Councils	TEL 02/2006	APEC Funded	Implementation
Telecommunications Techno-Economic Modeling Project	TEL 05/1999	APEC Funded	Closed
MRA Management System Launch Outreach Program	TEL 05/2002	APEC Funded	Closed
Virtual Environments for Manufacturing and Training (VEMAT)	TEL 05/2001	APEC Funded	Closed
Computer Emergency Response Team (CERT) Awareness Raising and Capacity Building.	TEL 02/2003T	APEC Funded	Closed
APEC SME Electronic Commerce Survey	TEL 05/1997T	APEC Funded	Closed
Human Resource Exchange Program	TEL 05/1999S	Self-funded	Closed
Telecomminucations and Information Infrastructure Project	TEL 01/1995	APEC Funded	Closed
APEC Seminar on Using ICT for Rural Community Capacity Building	TEL 01/2008	APEC Funded	Closed
Human Resources Development Training Course	TEL 02/1995	APEC Funded	Closed
Regulatory Training Design	TEL 04/2003T	APEC Funded	Closed
APEC MRA-HRD Training Design Project	TEL 03/1999T	APEC Funded	Closed
Interactive Medical Curriculum Pilot Project	TEL 03/1998	APEC Funded	Closed
Implementation of WTO Agreement on Basic Telecommunication Project	TEL 02/1999T	APEC Funded	Closed
Interconnection Resources Project	TEL 02/2000	APEC Funded	Closed
APEC TEL Interconnection Training Project	TEL 03/2001T	APEC Funded	Closed
Development and Financial Resources Catalog	TEL 11/1999S	Self-funded	Closed

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
WTO Telecommunications Capacity Building Workshop	TEL 03/2003T	APEC Funded	Closed
Cross-Country Smart Card-Based Secure Electronic Commerce	TEL 03/2001	APEC Funded	Closed
Flow-based Internet Traffic Measurement and Analysis	TEL 01/2003	APEC Funded	Closed
APII Cooperation Center	TEL 06/1999S	Self-funded	Closed
Disaster Recovery / Contingency Planning Training Course	TEL 02/1999	APEC Funded	Closed
APEC Smart Community Development Project	TEL 03/2004	APEC Funded	Closed
WTO Capacity Building On Domestic Regulation	TEL 02/2006T	APEC Funded	Closed
Development of action plan for harmonisation of equipment certification and the mutual recognition of test	TEL 05/1995	APEC Funded	Closed
Strengthening Effective Response Capabilities among APEC Economies	TEL 01/2006	APEC Funded	Closed
Data Compilation	TEL 07/1999S	Self-funded	Closed
Deployment of GCIO Training Model and Networking for e Government Development	TEL 03/2007	APEC Funded	Closed
A comparison of the equivalence of selected telecommunications standards	TEL 01/2004T	APEC Funded	Closed
Distance Learning Training Courses Project	TEL 03/2000	APEC Funded	Closed
Telecommunications Information Sharing Project	TEL 03/1995	APEC Funded	Closed
APEC Distance Learning Project on Telecommunications Technology	TEL 02/2002	APEC Funded	Closed
Publication of APEC TEL Electronic Authentication Resources	TEL 04/2002	APEC Funded	Closed
APEC e-Inclusion: Bridging The Digital Divide For People With Disablities	TEL 03/2006	APEC Funded	Implementation
Interconnectivity and Interoperability	TEL 08/1999S	Self-funded	Closed
Research into Electronic Commerce Strategies for Rural SMEs in APEC	TEL 02/2003	APEC Funded	Closed
APEC TEL Website Maintenance	TEL 01/2001	APEC Funded	Closed
Resource and Information Sharing	TEL 01/1999S	Self-funded	Closed
APEC Distance Learning Project	TEL 01/1999	APEC Funded	Closed
TEL Website Maintenance	TEL 01/2000	APEC Funded	Closed
APII Technology Center	TEL 04/1999S	Self-funded	Closed

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Electronic Commerce Seminar	TEL 16/1999S	Self-funded	Closed
Establishment of Government Chief Information Officer Training Model and Network for e-Government	TEL 05/2005	APEC Funded	Closed
SME Internet Safety Training Program	TEL 01/2004	APEC Funded	Closed
e-University network in HRD for e-Government	TEL 02/2004	APEC Funded	Closed
Universal Services Seminar	TEL 01/1998	APEC Funded	Closed
APEC TEL WG Website	TEL 14/1999S	Self-funded	Closed
Symposium for Collaborative Strategies for Multimedia & World Wide Web Skills Development	TEL 03/1999	APEC Funded	Closed
Distance Learning Strategic Needs Analysis	TEL 02/2001	APEC Funded	Closed
Telecommunication Training Pilot Project	TEL 04/1998	APEC Funded	Closed
Telework Manual	TEL 15/1999S	Self-funded	Closed
Killer Applications on APEC IPv6 Infrastructure	TEL 04/2005	APEC Funded	Closed
Optimal Topology of Testbeds (Research Networks) and Simplified Commercial Networks in APEC Region	TEL 01/2002	APEC Funded	Closed
2nd Grid Showcase	TEL-38	Self-funded	
International Mobile Roaming Charges (Survey and 1/2 day Workshop)	TEL-38	Self-funded	
Initiatives Among Member Economies Promoting Safer Internet Environment for Children (Workshop)	TEL-38	Self-funded	Closed
Bilateral Cyber-Crime Legislative Drafting Workshop	TEL-38	Self-funded	
Submarine Cable Protection Information Sharing Workshop	TEL-38	Self-funded	
Workshop on Universal Access to Broadband Services (follow-up of Universal Service Strategies Survey)	TEL-38	Self-funded	Closed
APII IPv6 R&D Test Bed Project	TEL-34 at least		
Access Grid for Distance Learning	TEL-36		
Information Grid for Knowledge System	TEL-36 at least		
PC Grid @ APEC	TEL-37	Self-funded	
Engaging Stakeholders and Consultations (Workshop)	TEL-37		Closed
Interconnection Issues	TEL-36		

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Workshop on Cyber Security Awareness Raising	TEL-37	Self-funded	Closed
Building a Culture of Security - Corporate Policy and Management Issues (Questionnaire)	TEL-36		Implementation
APEC-TEL PKI and e-Authentication Training Program	TEL-34		Closed
Guide on Policy and Technical Aproaches Against Botnet	TEL-35	Self-funded	Closed
Cyber Security Exercises Workshop	TEL-35	Self-funded	Closed
ICT Products and Services Security Workshop	TEL-36		Closed
Handheld Mobile Device Security Workshop	TEL-36		Closed
Showroom on Advanced Technologies for bridging the digital divide	TEL-37	Self-funded	
Foundation of Asian Speech Translation Reasearch Basis	TEL-35		Implementation
Regulation of Virtual Private Networks	TEL-30		Closed/Ongoing
Universal Service Survey	TEL-35 at least		Closed
Seminar on the Protection of Cyberspace from Terrorist Use and Attack by APEC	TEL37	self-funded	Closed
Grid as an Enabling Platform	TEL36	self-funded	Closed
Workshop on CIO's Contribution to a Conservation of APEC Region's Heritage/Culture Trhough Digital Content	TEL36	self-funded	
APEC Seminar on Community Knowledge Commons	TEL35	APEC Funded	
Model GCIO Councils	TEL-34 at least		Closed
APGrid Implementation Project	TEL-34 at least		
APEC e-Government Research Center	TEL-34 at least		Closed
Future GRID cooperation in APEC TEL	TEL-34 at least		
Future Vision of the Asia Pacific Information Society	TEL-33		
APECTEL - OECD Workshop on Malware and Related Threats	TEL-34		Closed
APECTEL - ASEAN Workshop on Network Security	TEL-34	Self-funded	Closed
Information Technology Awareness, Training and Education Materials/Website	TEL-34 at least		
RFID: Survey on RFID as a tool to facilitate trade in the APEC region	TEL-33 at least	Self-funded	Closed

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Interconnection Workshop	TEL-34	Self-funded	Closed
M-Opportunity for all Workshop	TEL-33	Self-funded	Closed
Telematics Workshop	TEL-33	Self-funded	Closed
Broadband Usages to Enhance Networks and Services in Apec Member Economies	TEL-39	APEC Funded	Implementation
Workshop on Ipv6: Facing the Future of Internet	TEL-39	APEC Funded	Implementation
Development and Guide on Implementation of Intrusion Detection Systems (IPS) for Public Domain Networks	TEL-39	APEC Funded	Implementation
Workshop on Telecommunications Trade Rules and Regulatory Discipline	TEL-39	APEC Funded	Implementation
Demand-based policy approaches to foster universal broadband access	TEL -39	Self-funded	Implementation
WTO Capacity Building	TEL-39	Self-funded	Implementation
Capacity Building on Telecommunications Elements of RTAs/FTAs for TEL-41	TEL-39	Self-funded	Implementation
Stocktake of Regulatory Convergence in the APEC region	TEL-39	Self-funded	Implementation
APEC Workshop on Effective Implementation of Best Practices Concerning Cable and Satellite	TEL -39	Self-funded	Implementation
Enabling Information Communications Technology Investment for Growth and Recovery	TEL -39	Self-funded	Implementation
Extension of APEC e-Government Research Center at Waseda University	TEL -39	Self-funded	Implementation
APEC Training program for Preventive Education on ICT Misuse	TEL -39	Self-funded	Implementation
ICT Products and Services Security Workshop	TEL -39	Self-funded	Implementation
International PKI and e-Authentication Training Program	TEL -39	Self-funded	Implementation
HRD: How to approach training within a telecomm organization	TEL-1		
EDI: Enables business data to be transferred from one computer application to another. Technical and	TEL-1		
TELEPORTS: An access facility involving satellites or other telecommunications media serving a regional	TEL-1		
DATA COMPILATION of the regulatory environments of economies	TEL-1		
HRD- manual/guideline on how to approach training within a telecommunication organization with eight chapters with	TEL-2		
EDI: share practical expertise and awareness of its applications, EDI pilot project(s) to demonstrate the	TEL-2		
TELEPORTS: seminar proposed CAN, US and JAP to share their experiences	TEL-2		

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
DATA COMPILATION - format and procedures for collecting data, objective understand telecom in	TEL-2		
PECC TRIPLE-T Task Force (Tourism, Transportation and Telecom) including Infrastructure Assessment and	TEL-2		
EDI: seminar conducted to show how EDI is being used in AUS, JAP, NZ and US, they discribed the different types	TEL-3		
TELEPORTS: May 30-31 seminar on teleport developments	TEL-3		
DATA COMPILATION - Complete and standardize answers of the annual survey on regulatory/policy	TEL-3		
EDI: training proposal with a survey to ascertain the educational needs of APEC members and identify	TEL-4		
EDI: Awareness and education seminars TEL-EDICA (Australia). Complete the survey on the identification of	TEL-5		
EDI: Project Proposal for International EDI Training Institute (Korea). EDI World Institute	TEL-5		
APECNET(Singapore) and APFNET(Canada) : flexible computer systems providing an electronic medium for the	TEL-6		
HRD: A one day workshop on Process Management for HRD managers of the economies	TEL-6		
EDI pilot project with BHP Australia	TEL-6		
EDI: the Singapore/USA textile visa project (known as ELVIS)	TEL-6		
EDI: the sending of meat quarantine certificates from New Zealand to the US	TEL-6		
Survey on Standards Phase II. establish a network of standards experts to consult on specific questions	TEL-7		
EDI: identification of EDI training facilities in the region	TEL-8		
EDI: the integration of small business into the EDI environment	TEL-8		
EDI: the use of advanced passenger information	TEL-8		
INFRASTRUCTURE (before Teleports): Manual on Network planning:examine the policies and plans of the	TEL-8		
Data Compilation: Second edition of the Regulatory Environment Survey with enhancements. Contract a	TEL-8		
PECC: Teleport for the Malaysia Indonesia Thailand (M.I.T>) Growth Triangle." The project will cover northern	TEL-8		
PECC: methodology and objective statement for a "Triple T and Urban Development Project". In this project the	TEL-8		
PECC: Triple T Disaster prevention Systems Research Project". This project will undertake a study to draw up	TEL-8		
INFRASTRUCTURE: Telecommunications and Information Infrastructure Project (TII) with possible pilot	TEL-9		
Data Compilation: Standards Survey to Telecommunications Information Sharing Project as the	TEL-9		

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Data Compilation: guidelines for regional harmonization of telecom equipment, Singapore develops Guidelines to	TEL-9		
HRD: two/three day seminar under the title "Managing in a Competitive Telecommunications Environment"	TEL-10		
INFRASTRUCTURE: Symposium on "Global Information Highway" held in collaboration with the OECD and PECC	TEL-10		
Data Compilation: Approved RFP of the consultant to develop the Second edition of the Regulatory	TEL-10		
Development of an action plan for harmonization of equipment certification and the mutual recognition of test	TEL-11		
Telecommunications information sharing	TEL-11		
The third module of the telecommunications human resource development training program	TEL-11		
Privatization: Concepts and Perspective on Management and Implementation	TEL-11		
Model Vocational Education and Training Framework for Telecommunications	TEL-11		
Telecommunications Skill Standards Project	TEL-11		
Distance Learning Project	TEL-11		
APEC Telecom HRD Resource Sharing Program	TEL-11		
EDI/electronic commerce for small to medium size enterprises	TEL-11		
Practical Manual for Network Planning	TEL-11		
Analysis of Survey Questionnaire Results and Recommendations for further Action	TEL-11		
Seminar on Vocational Education Training Project (supply and demand on skilled labour, etc.)	TEL-12		
Implementing electronic commerce seminars throughout APEC	TEL-12	Self-funded	
MITI submitted a proposal tailored to APEC/EDI systems (internet oriented)	TEL-12	Self-funded	
Integrated Next Generation Electronic Commerce (EC) Environment Project (INGECEP) is to induce economic	TEL-12	Self-funded	
Eq. Cert. Project on a Model Electromagnetic Compatibility (EMC) management procedure	TEL-12		
Model on bilateral or multilateral MRA.	TEL-12		
Conformance with the APEC Guidelines for trade in international value-added services (IVANS)	TEL-13		
Conformance with APEC Guidelines for harmonization of procedures for equipment certification; work towards	TEL-13		
Development and implementation, on an elective basis, of mutual recognition arrangements for conformity	TEL-13		

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Development of collective action plans for liberalisation of the telecommunications sector	TEL-13		
Guidelines for the Promotion of Private Investment in the Telecommunications Infrastructure Development,"	TEL-13		
APII Test Bed Interconnectivity / Interoperability Project	TEL-13		
Train the Trainer at the managment of Distance Learning	TEL-13		
Collaborative Research Project on Multimedia Human Resource Development System Network Technologies	TEL-13		
Joint Study on the Impact of APII	TEL-13		
SME Database	TEL-22	Self-funded	
E-Commerce Good Practice in the APEC Region	TEL-22	Self-funded	
Multilingual International Trade Project	TEL-22	Self-funded	
Request for Information on Policies to Reduce the Digital Divide	TEL-22	Self-funded	
Active Partnerships for Internet Connectivity Program/Virtual Community for Software Development	TEL-22	Self-funded	
Workshop: e-Government User Requirements and Interoperability	TEL-22		
Vendor Training Project	TEL-22	Self-funded	
Workshop: IT&T Manpower Shortages, Gender Issues	TEL-22		
Digital Divide Seminar	TEL-22		
Workshop: Wireless Issues	TEL-22		
Regulators Round Table on Convergence	TEL-22		
Publication of the e-Security Documents	TEL-23	APEC Funded	
Workshop: IT Tools	TEL-23		
IITG Seminar	TEL-23		
IP based WLL	TEL-25	Self-funded	
Protecting Yourself in Today's Internet Society	TEL-25	Self-funded	
Workshop: Counter Terrorism	TEL-25		
Workshop: CERT	TEL-26		

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Workshop: Broadband	TEL-26		
Workshop: Interconnection	TEL-26		
Workshop: WTO	TEL-26		
Regulatory Roundtable	TEL-26		
APEC Symposium on ebXML for Paperless Trading and Collaborative e-Business	TEL-28	APEC Funded	
E-Mail Practices for a 'Culture of Security'	TEL-28	Self-funded	
Workshop: e-Government	TEL-28		
Workshop: APEC Smart Community Development	TEL-28		
Workshop: Incident Response	TEL-28		
Workshop: Broadband	TEL-28		
Regulatory Roundtable NGNs	TEL-28		
Workshop: Website Accessibility	TEL-27		
Workshop: Online Content	TEL-27		
Workshop: CERT	TEL-27		
Workshop: WTO	TEL-27		
Workshop: Liberalisation Stocktake	TEL-27		
Workshop: Broadband	TEL-27		
Regional Cyber-Infrastructure (@TEL-30)	TEL-29	APEC Funded	
WiFi Connectivity	TEL-29	APEC Funded	
APEC Telecenter Development Program (@TEL-30)	TEL-29	Self-funded	
CSIRT + Wireless Security	TEL-29		
Regional Cyber-Infrastructure (@TEL-32)	TEL-29	APEC Funded	
Smart Community Development (@TEL-30)	TEL-29		
Safety Wireless	TEL-30	Self-funded	

PROJECT NAME	PROJECT NUMBER	TYPE OF FUNDING	STATUS
Internet Measurement Analysis	TEL-30		
APEC-Business e-Commerce Dialog	TEL-30		
APEC-TEL / OECD-WPIPS on Security	TEL-31		
IT-based Early Warning Systems	TEL-31		
Workshop: Spyware	TEL-31		
Asia-Pacific Grid Workshop	TEL-31		
Workshop: Telecenters	TEL-31		
Workshop: Dealing with Challenges to Broadband	TEL-32		
Workshop: Wireless Security	TEL-32		
Workshop: SPAM	TEL-32		

D. Methodology

D.1. Consultancy Terms of Reference (ToR)[7]

Review TELWG meetings, projects and activities and assess their outcomes;

Evaluate how these activities are supporting the main objectives of the TELWG and APEC;

Explore how TELWG can better take into account the APEC commitment to give gender greater consideration;

Assess the impact of the TELWG work program "on the ground" in APEC member economies;

Identify ways to develop synergies among the work of various relevant APEC fora;

Identify the TELWG opportunities for greater collaboration with non-APEC parties, including the private sector, civil society and other international organizations.

Identify ways to tap resources for programs; opportunities to profile and share programs or projects;

Identify ways to strengthen the TELWG strategic priorities and direction for future works.

Evaluate whether the TELWG is operating effectively or whether its Terms of Reference should be changed to better respond to its priorities and APEC goals.

Provide recommendations on how the forum can better focus and more efficiently and effectively manage its tasks and assure that its capacity building activities are providing benefits according to the Leaders' and Ministers' priorities.

Include recommendations from relevant business, NGO and/or academic representatives, who attend meetings of the specific group under review, on how best to encourage and leverage private sector partnerships and engage non-member multilateral organizations.

Finalize an array of recommendations on the above-mentioned areas. Recommendations are to be provided in two lists: The first list entailing (no more than) 5 decision points for consideration by the SCE to provide further instruction to the group, and the second list covering those recommended actions that can be further discussed for implementation by the group itself.

Provide a draft report on initial findings, of no more than 30 pages, written clearly and containing robust analysis to be conveyed to the Project Overseer and the APEC Secretariat; the SCE and TELWG members.

Analyse member economies' responses to the draft report on initial findings

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[7] REQUEST FOR PROPOSAL / SCE 01/2008
"Independent Assessment of the Telecommunications and Information Working Group (TELWG)"

D.2. Assessment framework (AF)

TEL's Environment of Action[8] defines the key elements and priorities of the group's current scope of work. TEL's Environment of Action was compiled from the analysis of APEC's and TEL's published[9] goals, statements, declarations, Leaders' Declarations, Ministers' Declarations, TEL Chairs' Reports, Meetings' Reports, Fact Sheets, Terms of Reference, and other related documents.

Due to the very large and continually broadening scope and breath of TEL's Environment of Action, in order to be able to analyse the group's activities and projects, and then be able to synthesise the information into meaningful and comparable findings, this reference Assessment Framework (AF) was developed.

The AF consists of ten[10] categories that classify and contain and group together all the topics, objectives, goals, etc. of TEL's Environment of Action, as follows:

1. Construction of APII towards APIS	**(APII/APIS)**

    1.1 Information Sharing and Free Flow
    1.2 Academic and Research GRIDs
    1.3 Technical Co-Operation/Development
    1.4 Promote co-operation among member economies
    1.5 Harness leading edge and future technologies
    1.6 Encourage innovation
    1.7 Promote co-operation, collaboration and interaction of academia, government, industry, etc.

2. Development of a Safe, Reliable and Resilient Information infrastructure	**(DSRRII)**

    2.1 Development and expansion of telecommunications infrastructures
    2.2 Domestic and Collaborative Security Awareness, Preparedness and Responsiveness (Natural Disasters, Terrorism, Cyber-Terrorism, Cyber-Security, etc.)
    2.3 Intellectual Property Protection
    2.4 Safer Internet Environment / Content control based on users' age
    2.5 Protection of Privacy / Authentication
    2.6 Data Integrity
    2.7 Standards based infrastructure
    2.8 Harness leading edge and future technologies

3. Capacity Building	**(CB)**

    3.1 Study/Research Centres
    3.2 Courses, Seminars, Workshops, Symposia
    3.3 Development of curricula for ICT positions
    3.4 Improvement of Managerial and Technical Skills
    3.5 Development and exchange of human resources
    3.6 Development of Train the Trainer programmes
    3.7 Distance Learning

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[8] For the complete Environment of Action see Section D.6.3 of this addenda
[9] As of May 2009.
[10] During the analysis one category was deemed unnecessary, thus in the worksheet projects classified as "9.x" refer to "8" of the Assessment Framework described in this page, "10.x" refers to "9.x" and "11.x" refers to "10.x".

3.8   Life-long skills development

3.9   Align professional standards

3.10 Successful transitions from the learning environment to the work force

3.11 Knowledge, expertise transfer

3.12 Manuals, Handbooks, Guides, Guidelines, Models, Catalogues, Databases, Training Materials

3.13 e-University

3.14 Questionnaire, Survey, Stocktake

4. Facilitate effective co-operation, free trade, liberalisation, facilitation and investment, and sustainable development	(LBFID)

4.1 Promotion via ICT

4.2 e-Commerce

4.3 Regulation/Deregulation

4.4 MRAs and Conformity Assessment

4.5 Co-Operation in science and technology (including technology transfer)

4.6 Interconnection & interoperability

4.7 Promote a competition driven environment

4.8 Promote a flexible, transparent and predictable policy and regulatory framework

4.9 Reduction of trade barriers

4.10 Align national standards with international standards

4.11 Certification/e-Certification

4.12 Anti-Counterfeiting and Piracy

4.13 Lower end-user prices

4.14 Tariffs

4.15 EDI

4.16 Stimulate private sector participation in infrastructure development

5. Collaboration with other APEC and non-APEC fora	(CWOF)

5.1 ABAC

5.2 WTO

5.3 ITU

5.4 PECC

5.5 OECD

5.6 AOEMA

5.7 Waseda University

5.8 ASEAN

5.9 EDICA

5.10 BHP

5.11 EDI World Institute

5.12 INTUG

5.13 IPEG

5.14 GBDe

5.15 IPEG

5.16 CTTF

6. Promote industry and business sector with special attention to SMEs	(PISME)

6.1 Encourage private sector investment and participation

7. Identification and Sharing of Best Practices	(BPR)

7.1 Best Practices

7.2 Recommendations / Models / Guidelines

8. Universal Access (UA)

    8.1 Promote domestic telecommunications and information infrastructures

    8.2 Narrow the domestic digital divide

    8.3 Narrow the digital divide among member economies

    8.4 Promoting diversity of content, including cultural and linguistic diversity

9. Well-being, e-Society, e-Government (WBSG)

    9.1 e-Health

    9.2 Integration of Women and Youth and elimination of gender/age inequalities

    9.3 Use of advances in information technology to boost productivity and stimulate growth

    9.4 Establish a regional public health surveillance network and early warning system

    9.5 e-Government

    9.6 Telecommuting

ECOTECH's principles were also used as a second reference framework to analyse the group's activities and projects:

10. ECOTECH (ECOTECH)

    10.1 Developing human capital

    10.2 Developing stable and efficient markets through structural reform

    10.3 Strengthening economic infrastructure

    10.4 Facilitating technology flows and harnessing technologies for the future

    10.5 Safeguarding the quality of life through environmentally sound growth

    10.6 Developing and strengthening the dynamism of small and medium enterprises

    10.7 Integration into the global economy

    10.8 Human security and counter-terrorism capacity building

    10.9 Promoting the development of knowledge-based economies

    10.10 Addressing the social dimensions of globalisation.

D.3. Recommendations framework (RF)

A Recommendations Framework (RF) was built from the Consultancy ToR[11] items and from central concerns described in the RFP document.

The following six horizontal categories that comprise the structure of this recommendations framework are :

1 Workgroup management and co-ordination within
2 Workgroup co-ordination with other fora
3 Project formulation, management and co-ordination
4 Areas of opportunity for joint collaboration
5 Better use of resources to avoid duplication of projects and work
6 Areas of opportunity in ToR, Structure, Strategy and direction of future work.

Framework usage

The compilation of all assessment findings, especially those associated with the survey, was transcribed vertically on a matrix along the following main subjects:

    Strategic,
    Management functions,
    Meetings,
    Projects,
    Collaboration, and
    Gender.

and horizontally across the Recommendations Framework applicable rows.

After all findings were compiled and entered, a horizontal reading was performed for each of the recommendations categories, across all subjects (columns). This allowed summarisation and identification of patterns within all findings.

The following diagram depicts the "vertical-then-horizontal" process:

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[11] For the summarised version of the Consultancy ToR see Section D.1 of this addenda

Findings in

"Projects" cross reading

D.4. Survey analysis considerations

Data gathering
Member economies' input from the survey was gathered via an ad-hoc consultant developed software extracting tool and counted into histograms per question.

Insufficient,	0
Enough	11
Excessive	1
Unmanageable	0
Total	12

Further analysis, graphing and scoring was performed manually utilising spreadsheet and associated software tools. Text commentary input was summarised by question, read and analysed to identify patterns and elements in common that gave way to additional interpretation categories within the survey original categories, indicated below.

- Economy's Participation
- Meetings and Management
- Management applied
- Strategic priorities and APEC goals
- Projects
- Activities
- Collaboration with Other APEC Fora
- Collaboration with Non-APEC Entities
- Meetings and Activities Attendance
- Gender considerations
- Best Practices
- Assessment of the impact "on the ground"

Survey summary
Collected answers to the survey were regrouped into analysis categories to aid in obtaining a first comprehensive look on how member economies see the programme overall and how do they relate with it in general. Other categories remained much the same as those in the survey design. The following six analysis groupings of the survey were:

1. Programme
   i. Commitment
   ii. Impact, replicability, sharing
   iii. Satisfaction
   iv. Projects in your economy / you economy has participated in
   v. Strategic priorities & collective actions
2. Meetings
3. Management functions & management functions applied
4. Projects
5. Joint collaborations with other APEC fora
6. Gender.

A survey section was prepared for each of these analysis groupings, and can be found in the addenda of this Independent Assessment report.

Survey and Recommendations Framework

Utilising the six categories described above, a vertical view of members' feedback is rendered along the programme, meetings, management, projects, collaboration and gender themes.

For this Independent Assessment a Recommendations Framework (RF) was built   from the established engagement ToR items and central concerns described in the RFP document. Enhancing the TEL impact and strengthening its work processes can be represented by the following six horizontal categories that comprise the structure of this framework of reference for :

8. Workgroup management and co-ordination within
9. Workgroup co-ordination with other fora
10. Project formulation, management and co-ordination
11. Areas of opportunity for joint collaboration
12. Better use of resources to avoid duplication of projects and work
13. Areas of opportunity in ToR, Structure, Strategy and direction of future work.

Further insight and analysis of the survey input is gained from mapping the vertical categories view, to the horizontal framework categories in a working matrix.

Survey suggestions (RF) matrix: Economies

	Personnel, Funding 4-6 Impact, replicability, sharing 80-83 Satisfaction 46-49 Projects in/participated 69-73 Strategic priorities & coll. actions 21-28	Meetings 7-9, 64-68	Management functions 10-19	Projects 29-45	Joint meetings / Joint projects with Other fora 51-63	Gender 74-79
1. Workgroup management and coordination within	Sell applicable TEL's products and services that come out of meetings, seminars and workshops	Increased inter-sessional work is welcomed and should be encouraged	"The TEL often does not translate effectively into its unique work the goals of the SOM, Ministers and Leaders Statements into the work of the group. The TEL HoDs should convene in some manner (perhaps virtually) before the first TEL to discuss the overall organisation of the meetings and events."	"Encourage project [the submittal of] proposals earlier so as to allow member economies more time to consider before TEL meetings."		n/a
2. Workgroup coordination with other fora	Improve coordination with Other fora to bring forward joint projects with wider footprint, impact and make funding efficient		"At this point of time, [we] **have not seen any coordination with other APEC Fora.** Maybe a target can be set by the APEC Leaders on the numbers of co-operation to be proposed and conducted."		"We have no idea about the process through which joint meetings / projects is developed." "[We are] not particularly aware on how this work." "Have not attended joint meetings." "No idea on the joint meetings / joint projects that were held or conducted before." "Not many projects doing so". [We have] not attended [joint activities]." "[We are] not aware of any." "What kind of "other" non APEC parties exist?"	More opportunities to attend all APEC meeting for gender issues (e.g. AGGI, MMW,WLN and GFPN, PASC).
3. Project formulation, management and coordination	Present project proposals that are practical and offer clear benefits to members for participation		"[Oversight] may be improved if … **a brief document of the project [is prepared at its conclusion]**".	"The "Policy Criteria for Project Funding in 2009" is adopted inter-sessionally to strengthen the capacity of the APEC Secretariat and BMC to assess projects and to allocate APEC-managed project funds strategically. The criteria seems to be reasonable and looks after the interest of majority member economies."		n/a
4. Areas of opportunity for joint collaboration	More industry involvement		It is noted that more and more non-APEC organisations / entities are invited to join TELWG meetings. This will definitely inject valuable expertise and professional knowledge into the TELWG and helpful in achieving the TELWG work plans.	Stronger linkage with the APEC Emergency Task Force. [disaster r]		n/a
5. Better use of resources to avoid duplication of projects and work	Project proposals should advance work that is new and original, avoiding duplication.					n/a
6. Areas of opportunity in ToR, Structure, Strategy and direction of future work.	Take priority action on emerging economies issues		"The structuring of **TELMIN declaration [should] be such that it pertains more to instructions and goals for TEL** to achieve in the **next 2 years.** In that respect, instructions and goals should draw relevance to AELM and AMM declarations/ statements."	"More purposeful aligning of the TELWG work to AELM, AMM and other APEC Agenda is needed." "...and "membership of associated guests." [inv. stake-holders]	"The Industry Roundtable, held at each TELWG meeting, is a good and effective collaboration between TELWG and the private sector. To attract more participation from the industry or private sector, TELWG should try to make the duration of the Industry Roundtable at least one-day long."	n/a

Survey and grids

In summarising survey input while identifying important topics, areas of dissent or consensus, and exploring relations among subjects, such as economies' satisfaction to commitment, a plot of pertinent member input was drawn on a 2 by 2 grid. Circle radii in each quadrant represent the number of member inputs to allow for

comparison. Individual economy names are kept anonymous, although their detailed position within the grid is indicated by a black dot.
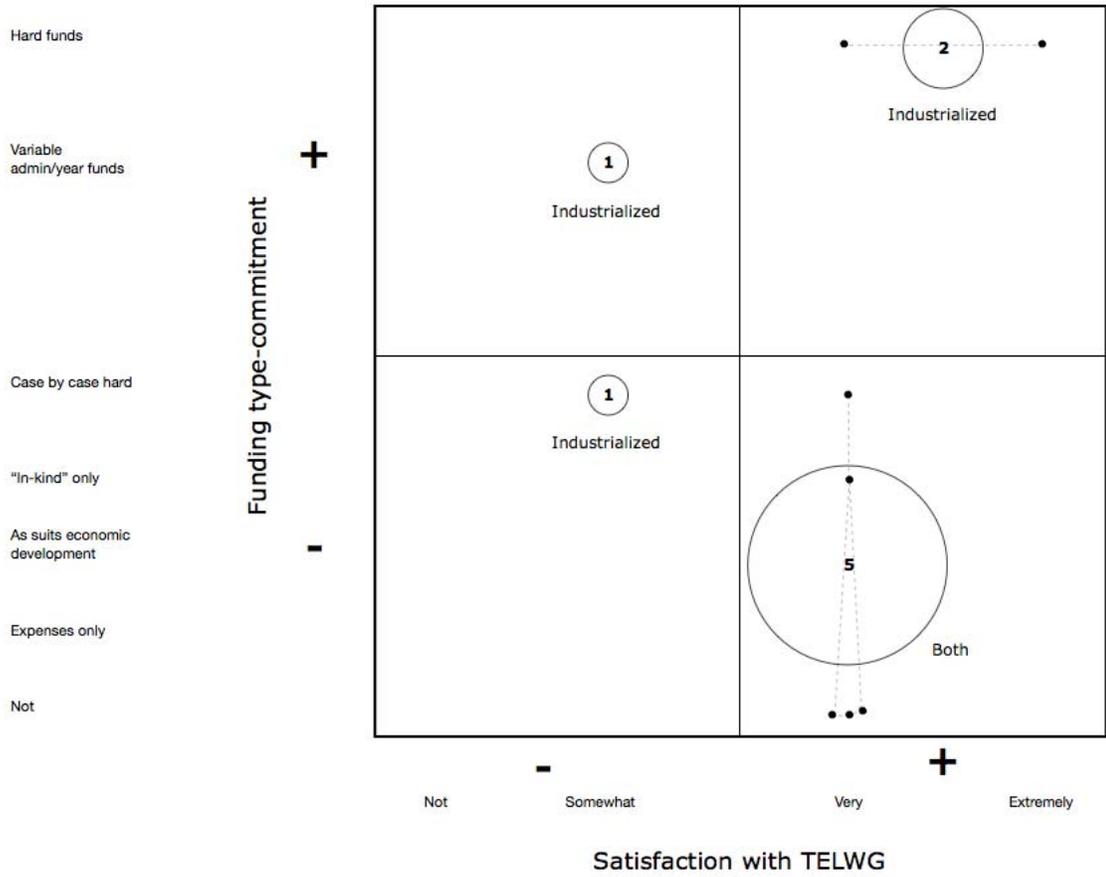
A number to the right indicates the total number of respondent members that made input available for such a grid.

D.5. Survey questions and format

As part of the data gathering process, an on-line (web) survey consisting of 84 questions was developed to capture the point of view of each individual respondent with respect to all aspects of TEL's endeavours:

Survey Question List

1. Please write down the Name, Position, Organisation, e-Mail, Telephone and Fax of all the persons involved in answering this questionnaire.

2. Please describe the regular conformation of your economy's delegation to attend TEL (select all that apply). Also, please describe the elements you take into consideration to decide the procedence, type and number of delegates of your economy's delegations that attend TEL related meetings.

    Representatives of the regulatory authority
    Representatives of the policy maker authority
    Representatives of the competition authority
    Representatives of the industry
    Representatives of the academia
    Representatives of the consumers and/or civil sector
    Representatives of NGOs/observers
    Other, (please specify)

3. How many of the representatives of each type in the previous question perform an active role in the structure of TEL? (for example, Head of Delegation, policy maker authority, Convenor DSG, regulatory authority, etc.)

4. How committed is your member economy to providing long-term support, in the form of personnel, for TEL and its meetings and projects? Please provide a rationale for your answer and, if you chose 'Somewhat' or 'Not committed', please explain what could be done to increase the commitment of your member economy.

    Not committed
    Somewhat committed
    Very committed
    Extremely committed

5. How committed is your member economy to providing long-term support, in the form of funding, for TEL and its projects? Please provide a rationale for your answer and, if you chose 'Somewhat' or 'Not Committed', please explain what could be done to increase the commitment of your member economy.

    Not committed
    Somewhat committed
    Very committed
    Extremely committed

6. Do you have suggestions for ways to increase resources, particularly funding and personnel, for TEL activities?

7. From your economy's perspective, how would you rank the amount of TEL meetings proposed on an annual basis (2 TEL meetings+workshops/seminars, task forces, inter-sessional work, workshops/seminars, etc., and every 2 years a Ministerial Meeting). Please explain your answer.

    Insufficient
    Enough
    Excessive
    Unmanageable

8. Please rank your perception of the TEL meeting structure. Please explain the rationale for your answer and provide suggestions on how to improve the meeting structure.

Not satisfied
Somewhat satisfied
Very satisfied
Extremely satisfied (exceeds expectations)

9. Please rank your perception of TEL internal communications (e.g. circulation of meeting documents, project proposals, required documentation, etc.). Please explain the rationale for your answer and provide suggestions on how to improve the internal communication processes.

Not satisfied
Somewhat satisfied
Very satisfied
Extremely satisfied (exceeds expectations)

10. Understanding PLANNING as "the process of defining TEL's goals, mandates, roles, strategic plans, tasks and resources to be used, and outlining work plans to meet the goals and priorities set up at TELMIN, outlined in TEL's Strategic Plan, APEC Leaders' Statement and SOM's directions":

Please rank the effectiveness of TEL's PLANNING as it applies to achieving TEL terms of reference, strategic priorities, work plans and implementing TEL projects and activities. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TEL management function.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

11. Understanding ORGANISATION as "the internal work of the APEC Secretariat, TEL Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors and when applicable, Chairs of Special Groups and Task Forces to plan, assign tasks and responsibility, and allocate resources for TEL efforts":

Please rank the effectiveness of TEL's ORGANISATION as it applies to achieving TEL strategic priorities, work plans and implementing TEL projects and activities. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TEL management function.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

12. Understanding LEADING as "the ability of the managers of the TEL, APEC Secretariat and Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors, and when applicable, Chairs of Special Groups and Task Forces to provide guidance and motivation to members of the TEL to fulfil goals and implement plans":

Please rank the effectiveness of TEL's LEADING as it applies to achieving TEL strategic priorities, work plans and implementing TEL projects and activities. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TEL management function.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

13. Understanding Co-Ordination as "the work of the APEC Secretariat and TEL Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors, and when applicable, Chairs of Special Groups and Task Forces to synchronise the TEL's various activities with the work of other APEC fora and Non-APEC entities.":

Please rank the effectiveness of TEL's Co-Ordination as it applies to achieving TEL strategic priorities, work

plans and implementing TEL projects and activities. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TEL management function.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

14. Understanding OVERSIGHT as "the process of project management, monitoring and evaluating plans, projects and activities to ensure that TEL's goals are being met and plans effectively executed."

Please rank the effectiveness of TEL's OVERSIGHT as it applies to achieving TEL strategic priorities, work plans and implementing TEL projects and activities. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TEL management function.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

15. Using the definitions given in questions 10 through 14, please rate each management function as it applies to TEL's Annual Meetings. Please explain your rationale and provide examples to illustrate. Also, please provide suggestions to improve these management functions as it applies to TEL's Annual Meetings.

	PLANNING	ORGANISATION	LEADING	Co-Ordination	OVERSIGHT
Not effective					
Somewhat effective					
Very effective					
Extremely effective (exceeds expectations)					

16. Using the definitions given in questions 10 through 14, please rate each management function as it applies to TEL's formation and implementation of Policies. Please explain your rationale and provide examples to illustrate. Also, please provide suggestions to improve these management functions as it applies to TEL's formation and implementation of Policies.

	PLANNING	ORGANISATION	LEADING	Co-Ordination	OVERSIGHT
Not effective					
Somewhat effective					
Very effective					
Extremely effective (exceeds expectations)					

17. Using the definitions given in questions 10 through 14, please rate each management function as it applies to TEL's creation/identification and sharing of Best Practices. Please explain your rationale and provide examples to illustrate. Also, please provide suggestions to improve these management functions as it applies to TEL's creation/identification and sharing of Best Practices.

	PLANNING	ORGANISATION	LEADING	Co-Ordination	OVERSIGHT
Not effective					
Somewhat effective					
Very effective					
Extremely effective (exceeds expectations)					

18. Using the definitions given in questions 10 through 14, please rate each management function as it applies to TEL's collaboration with other APEC fora. Please explain your rationale and provide examples to illustrate. Also, please provide suggestions to improve these management functions as it applies to TEL's collaboration with other APEC fora.

	PLANNING	ORGANISATION	LEADING	Co-Ordination	OVERSIGHT
Not effective					
Somewhat effective					
Very effective					

Extremely effective (exceeds expectations)

19. Using the definitions given in questions 10 through 14, please rate each management function as it applies to TEL's collaboration with other non-APEC fora. Please explain your rationale and provide examples to illustrate. Also, please provide suggestions to improve these management functions as it applies to TEL's collaboration with other non-APEC fora.

        PLANNING   ORGANISATION   LEADING   Co-Ordination   OVERSIGHT
Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

20. Do you have any further suggestions to improve TEL meetings?

21. Please rank your knowledge/involvement with TEL strategic priorities and collective actions to respond to APEC goals (i.e. those contained in the TEL Terms of Reference (ToR), APEC Declarations, Regional Economic Integration, Manila Framework, TEL Strategic Plan, TEL Work Plan, etc.). Please explain your answer.

    Not knowledgeable/involved
    Somewhat knowledgeable/involved
    Very knowledgeable/involved
    Extremely knowledgeable/involved

22. Assessing the TEL ToR and TEL's Strategic Plan, does the general focus of TEL meetings, projects and activities meet your expectations? Please explain the rationale for your answer and provide examples to illustrate.

    Yes
    No
    Not sure

23. Has your economy identified areas of work NOT currently included in the TEL ToR and TEL's Strategic Plan which you think should, and/or you would like to be, included in the future? If you answered YES, please provide details of your proposed new areas of work.

    Yes
    No

24. Has your economy identified areas of work actually included in the TEL ToR and TEL's Strategic Plan which you think should be eliminated? If you answered YES, please provide details of the reasons why you think they should be eliminated or are no longer needed.

    Yes
    No

25. You consider TEL strategic priorities and direction for future works appropriate with the evolution of Telecommunications and Information on an economic co-operation environment? Please explain your answer.

    Yes
    No

26. In your opinion, is TEL responding to current and future needs, particularly so that they would be more closely aligned with the priorities of your member economy? Please explain your answer.

    Yes
    No

27. With the current structure, would TEL be able to improve the ranking you assigned for the effectiveness of

its ToR? Please explain your answer.

28. Do you have other suggestions for improving TEL's ToR?

29. Please rank the effectiveness of the project selection process. Please explain the rationale for your ranking.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

30. Please provide specific examples to illustrate your ranking of the effectiveness of the project selection process.

31. What could TEL do to improve the effectiveness of the project selection process?

32. Please rank the effectiveness of TEL projects at contributing to APEC Bogor Goals, the Osaka Action Agenda, Manila Framework, and Regional Economic Integration. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

33. Please rank the effectiveness of TEL projects at promoting leadership and improved regional co-ordination and co-operation for the implementation of APII and APIS as the new knowledge-based economy. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

34. Please rank the effectiveness of TEL projects at developing, promoting, implementing, and/or complying with international law, regulations, and enforcement mechanisms for the liberalisation of the telecommunications and information markets. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

35. Please rank the effectiveness of TEL projects at improving and strengthening market access by implementing MRA for equivalence of technical requirements for telecommunications equipment and conformity assessments. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective

    Very effective
    Extremely effective (exceeds expectations)

36. Please rank the effectiveness of TEL projects at engaging relevant sectoral and stake-holder interests. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

37. Please rank the effectiveness of TEL projects at improving the co-operation and co-ordination between APEC fora with respect to telecommunications and information activities. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

38. Please rank the effectiveness of TEL projects at ICT Capacity Building of member economies. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

39. Please rank the effectiveness of TEL projects at providing best practices and share experiences of member economies. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

40. Please rank the effectiveness of TEL projects at addressing the digital divide such as APEC e-Inclusion, universal service, internet penetration, people with disabilities, indigenous communities, etc. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

41. Please rank the effectiveness of TEL projects to prepare for and respond to emergency and natural disasters. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

42. Please rank the effectiveness of TEL projects to develop strategies to promote/develop/ensure: A trusted, secure and sustainable online environment; build cyber-incident response capabilities; enable e-Authentication; and develop awareness of and preparedness for cyber-crime and its legal framework, etc. Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective
   Extremely effective (exceeds expectations)

43. Please rank the effectiveness of TEL projects at developing/improving policy and regulatory preparedness to respond to the changing marketplace (e.g. NGNs, interconnection, tariffs, etc.) and to Industry demands (e.g. spectrum harmonisation, regulatory flexibility, etc.). Please explain the rationale for your ranking and provide examples to illustrate.

   Not effective
   Somewhat effective
   Very effective

Extremely effective (exceeds expectations)

44. Please provide suggestions of ways in which TEL could improve the approval, implementation and outcomes of TEL projects and the rankings you assigned to the effectiveness of TEL projects.

45. Please provide evidence or examples of your economy (or other member economies) having adopted or implemented the outcome of the TEL's projects.

46. Please rank how satisfied, in general, are you and/or your economy with the TEL work. Please explain the rationale for your ranking.

    Not satisfied
    Somewhat satisfied
    Very satisfied
    Extremely satisfied (exceeds expectations)

47. Which aspects of the TEL work are you MOST SATISFIED with?

48. Which aspects of the TEL work are you LEAST SATISFIED with?

49. What could be done to increase your level of satisfaction with the TEL work?

50. Are there other TEL activities which you are familiar with that have not been covered by this survey?

51. Please describe the process through which the agenda for the Joint Meetings / Joint Projects of the TEL with other APEC working groups or fora is developed. Do you have recommendations for improving this process?

52. Please rank the effectiveness of the Joint Meetings / Joint Projects of the TEL with other groups. For example, how effective are the Joint Meetings / Joint Projects as a way to avoid overlaps and inefficiencies for projects/issues affecting both groups. Please explain the rationale for your ranking.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

53. Please provide examples to illustrate your ranking of the effectiveness of the Joint Meetings / Joint Projects.

54. How could the effectiveness of the Joint Meetings / Joint Projects of the TEL and other groups be improved?

55. Please rank the overall effectiveness of TEL collaboration with other APEC fora to improve the co-operation and co-ordination between APEC fora. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

56. Please rank the overall effectiveness of TEL collaboration with other APEC fora to build capacity of member economies. Please explain the rationale for your ranking and provide examples to illustrate.

    Not effective
    Somewhat effective
    Very effective
    Extremely effective (exceeds expectations)

57. Since ICTs have become essential for the conduction, and an integral part, of all economic activity, do you

think TEL should be mandatory consulted by all other APEC fora for harmonisation, standardisation, sharing, best practices, and avoidance of unnecessary duplication of telecommunications and information infrastructure? Please explain the rationale of your answer.

Yes
No
Not sure

58. Please indicate, in your opinion, with which other APEC fora should TEL collaborate and provide suggestions of ways TEL can improve collaboration with Other APEC fora.

59. Please rank the overall effectiveness of collaboration between the TEL and the Private Sector. Please explain your ranking rationale and/or provide examples to illustrate and provide suggestions for improving collaboration between TEL and this sector.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

60. Please rank the overall effectiveness of collaboration between the TEL and the Civil Society. Please explain your ranking rationale and/or provide examples to illustrate and provide suggestions for improving collaboration between TEL and this sector.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

61. Please rank the overall effectiveness of collaboration between the TEL and Other International Organisations (e.g. ITU, WTO, OECD, CITEL, APT, APAN, etc.). For each international organisation, please explain your ranking rationale and/or provide examples to illustrate and provide suggestions for improving collaboration between TEL and these other organisations.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

62. Please rank the overall effectiveness of collaboration between the TEL and the Academia. Please explain your ranking rationale and/or provide examples to illustrate and provide suggestions for improving collaboration between TEL and this sector.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

63. Please rank the overall effectiveness of collaboration between the TEL and Other non-APEC Parties (e.g. NGOs, observers, etc.) not included in the previous questions. Please explain your ranking rationale and/or provide examples to illustrate and provide suggestions for improving collaboration between TEL and these other parties.

Not effective
Somewhat effective
Very effective
Extremely effective (exceeds expectations)

64. Please provide a list of all the TELMIN meetings your economy has attended and the number and level of delegates of your economy that attended each. (If possible, please indicate how many of them are women and how many men.) Also, if there have been TELMIN meetings to which your economy's Minister was no

able to attend, please indicate the main reasons that prevented him/her from attending (e.g. Lack of substantial meeting agenda, lack of adequate communication, etc.)

65. Please provide a list of all the TEL meetings your economy has attended and the number and level of delegates of your economy that attended each. (If possible, please indicate how many of them are women and how many men.)

66. Please provide a list of all other TEL sponsored meetings your economy has attended and the number and level of delegates of your economy that attended each. (If possible, please indicate how many of them are women and how many men.)

67. Please provide a list of all the TEL Expert Group and Task Force meetings your economy has attended and the number and level of delegates of your economy that attended each. (If possible, please indicate how many of them are women and how many men.)

68. Please provide a list of all the Seminars, Conferences and Workshops sponsored by TEL Expert Groups and Task Forces your economy has attended and the number and level of delegates of your economy that attended each. (If possible, please indicate how many of them are women and how many men.)

69. Please provide a list of all TEL APEC-Funded Projects carried out in your economy.

70. Please provide a list of all TEL APEC-Funded Projects your economy has participated on and the number and level of people from your economy involved in each. (If possible, please indicate how many women and how many men)

71. Please provide a list of all TEL Self-Funded Projects carried out in your economy.

72. Please provide a list of all TEL Self-Funded Projects your economy has participated on and the number and level of people from your economy involved in each. (If possible, please indicate how many women and how many men)

73. Please provide a list of all other TEL activities carried out in, or by, your economy.

74. Do your economy provide, or has provided, gender considerations, advice or input on the TEL projects your economy attends or has attended? Please provide examples of such projects.

75. Has your economy proposed a TEL project and/or activity that integrate gender considerations? Please provide a list of such projects and/or considerations.

Yes
No

76. Please check, if any, which of the following have you used to assist in developing gender aware policies and/or conducts, either within TEL or within your economy.

APEC Framework for the Integration of Women
APEC gender-relevant policy documents (e.g. APEC gender mainstreaming good practices, APEC register of best practices on gender integration)
APEC gender-related projects
APEC gender training materials
APEC gender evaluation criteria
APEC gender experts list
Non of the above

77. Have you offered models, expertise and/or experience from your own economy in the area of gender equality to inform TEL projects and other activities? Please provide examples of such models, expertise and/or experience.

Yes
No

78. Do you have any specific suggestions to better publicise and promote APEC gender criteria to TEL projects and activities? If you answered YES, please provide such suggestions.

    Yes
    No

79. Regarding APEC's gender policy, have you observed any contradiction between the rhetoric and the practice in TEL?

    Never
    On a few occasions
    On several occasions

80. Please describe the overall replicability of TEL's programs. For example, comment on the development of programs throughout member economies based on successful TEL pilot projects or the implementation of lessons learned from TEL projects. In your opinion what makes TEL activities replicable or not?

81. Do you have suggestions for opportunities to better share best practices among member economies, the private sector, academia, and international organisations, in order to increase the impact of TEL's work?

82. Please rank the impact "on the ground" of TEL's projects and other activities in your member economy. Please explain your ranking rationale and provide as many examples as possible to illustrate.

    No identifiable impact
    Some impact
    Clearly identifiable impact
    Very significant impact (exceeds expectations)

83. How could APEC as a whole, and/or particularly TEL, improve the "on the ground" impact of the TEL projects and other activities in your APEC member economy?

84. Please provide any comments and suggestions you might have to make this independent assessment of the TEL as representative and as effective as possible.

Screen captures of the Survey Home Page and of the four different question formats:

Survey Home Page

Example of a "free text" question

Example of a multiple choice "radio-button" question

Example of a multiple choice "radio-button" plus "free-text" question

Test1 - Sun Jun 7 22:45:07 UTC 2009   Logout

APEC
Asia-Pacific
Economic Cooperation

APEC TEL WORKING GROUP
Asia-Pacific Economic Cooperation Telecommunications and Information Working Group

SOM Steering Committee on ECOTECH (SCE)

Independent Assessment of the
Telecommunications and Information Working Group (TELWG)

13. Understanding COORDINATION as "*the work of the APEC Secretariat and TELWG Lead Shepherd/Chair, Vice Chair, Convenors and Deputy Convenors, and when applicable, Chairs of Special Groups and Task Forces to synchronize the TELWG's various activities with the work of other APEC fora and Non-APEC entities.*":

Please rank the effectiveness of TELWG's COORDINATION as it applies to <u>achieving TELWG strategic priorities, work plans and implementing TELWG projects and activities</u>. Please explain your ranking rationale and provide examples to illustrate. Also, please provide suggestions to improve this TELWG management function.

○ Not effective

○ Somewhat effective

○ Very effective

○ Extremely effective (exceeds expectations)

Save

< Prev   Next >

Quick links to questions (green=answered): 1 2 3 4 5 6 7 8 9 10 11 12 **13** 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84

Example of a multiple choice "checkbox" question

Test1 - Sun Jun 7 22:48:01 UTC 2009   Logout

APEC
Asia-Pacific
Economic Cooperation

APEC TEL WORKING GROUP
Asia-Pacific Economic Cooperation Telecommunications and Information Working Group

SOM Steering Committee on ECOTECH (SCE)

Independent Assessment of the
Telecommunications and Information Working Group (TELWG)

76. Please check, if any, which of the following have you used to assist in developing gender aware policies and/or conducts, either within TELWG or within your economy.

☐ APEC Framework for the Integration of Women

☐ APEC gender-relevant policy documents (e.g. APEC gender mainstreaming good practices, APEC register of best practices on gender integration)

☐ APEC gender-related projects

☐ APEC gender training materials

☐ APEC gender evaluation criteria

☐ APEC gender experts list

☐ Non of the above

Save

< Prev   Next >

Quick links to questions (green=answered): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 **76** 77 78 79 80 81 82 83 84

D.6. Documentation analysis and synthesis

The consultant conducted a detailed review and analysis of all TEL as well as TEL related APEC information available through their web site. Other web information concerning international organisation was also researched. Information was gathered into tables for summarisation and comparing, along a timeline that spans from TEL's own inception.

Some of the information reviewed and analysed is summarised as follows:

D.6.1 TEL Working Group Meetings & TELMIN Meetings

D.6.2 Leaders', Trade Ministers', TELMIN Instructions to TEL and Collective Actions

D.6.3 TEL Environment of Action as of May 2009

D.6.1 TEL Working Group Meetings & TELMIN Meetings

Mtg	Prog. Dir.	Chair's Name	Ec	ViceChair	Ec	Host	EP	MEMBERS	APEC Fora and Non-APEC	TP
TEL 1	n/a	Richard Beard	US	n/a	n/a	Singapore, July 5-6, 1990	9	Australia, Canada, Indonesia, Japan, New Zealand, Korea, Singapore, Thailand and The Philippines	PECC, APT,	33
TEL 2	n/a	Richard Beard	US	n/a	n/a	KL Malaysia, January 10-11, 1991	11	Australia, Canada, Indonesia, Japan, Malaysia, New Zealand, Korea, Philippines, Singapore, Thailand, United States	PECC	56
TEL 3	n/a	Richard Beard	US	n/a	n/a	Tokyo Japan, May 28-29, 1991	n/s	n/a	PECC	n/a
TEL 4	n/a	Richard Beard	US	n/a	n/a	Jakarta, Indonesia, October 1-2, 1991	11	Indonesia, Australia, Canada, Japan, Malaysia, New Zealand, The Republic of Korea, Philippines, Singapore, Thailand and the United States	PECC	92
TEL 5	n/a	Richard Beard	US	n/a	n/a	Seoul, Korea, March 25-27, 1992	13	Australia, Canada, Hong Kong, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Chinese Taipei, Thailand, and the United States	PECC	90
TEL 6	n/a	Richard Beard	US	n/a	n/a	Honolulu, USA July 27-29 1992	14	Australia, Canada, People's Republic of China, Hong Kong, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Chinese Taipei, Thailand, and the United States	PECC	90
TEL 7	Merry Wickes	D. Clark Norton on behalf of Richard Beard	Senior Counselor for APEC and Bilateral Relations	n/a	n/a	Broadbeach, Australia, March 22-24, 1993	15	Australia, Canada, Hong Kong, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Chinese Taipei, Thailand, and the United States	ASEAN, Transportation WG, Tourism WG	n/a
TEL 8	Merry Wickes	Richard Beard	US	n/a	n/a	Manila, Philippines, September 13-16, 1994	14	n/a	PECC, EDI World Institute	143
TEL 9	Merry Wickes	Richard Beard	US	Indonesia and The Philippines (as additional Sheperds)	n/a	Hong Kong, China February 28-March 3, 1995	14	Australia, Canada, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, The Philippines, Singapore, Chinese Taipei, Thailand, the United States of America	PECC, EDI World Institute	146
TEL 10	Merry Wickes	Richard Beard	US	n/a	n/a	Chiang Rai, Thailand, August 1-3, 1994	16	Australia, Canada, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, Chinese Taipei, Thailand, the United States of America	SPF, Chile	130
TEL 11	n/a	Richard Beard	US	n/a	n/a	Vancouver, Canada, February 20-21, 1995	18	Australia, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, the Philippines, Singapore, Chinese Taipei, Thailand and the United States of America	PECC, SPF	150
TELMIN 1	n/a	Richard Beard	US	n/a	n/a	Seoul, Korea, May, 1995		Australia, Brunei Darussalam, Canada, Chile, the People's Republic of China, Hong Kong, Indonesia, Japan, the Republic of Korea, Mexico, New Zealand, Papua New Guinea, the Republic of the Philippines, Singapore, Chinese Taipei, Thailand and the United States of America	PECC	n/a
TEL 12	Claudio Rojas	Richard Beard	US	n/a	n/a	Shangai, China, September 5-8, 1995	18	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, New Zealand, Papua New Guinea, the Philippines, Singapore, Chinese Taipei, Thailand and the United States of America	PECC	150
TEL 13	Claudio Rojas	Richard Beard	US	n/a	n/a	Santiago, Chile, March 18-21, 1996	16	Australia, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, Chinese Taipei, Thailand and the United States of America	PECC	146
TEL 14	Claudio Rojas	Richard Beard	US	n/a	n/a	Chinese Taipei, July 23-26, 1996	17	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, Chinese Taipei, Thailand, U.S	n/a	n/a
TELMIN 2	Claudio Rojas	Richard Beard	US	n/a	n/a	Gold Coast, Australia, September, 5-6, 1996	17	Australia, Brunei Darussalam, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, Chinese Taipei, Thailand and the US	PECC	

TEL15	Claudio Rojas	Richard Beaird	US	none		Mexico, March 5-6, 1997	18	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New guinea, Philippines, Singapore, Chinese Taipei, Thailand, U.S	PTC, APT, PECC	
TEL16	Claudio Rojas	Keith Chang	CAN	Valerie D'Costa	SGP	Wellington, New Zealand, September 24-27 1997	18	Australia; Brunei; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Philippines; Singapore; Chinese Taipei; Thailand; and the United States of America	PECC, SPF, APT, Russian Federation	
TEL17	Claudio Rojas	Keith Chang	CAN	Valerie D'Costa	SGP	Bandar Seri Begawan, Brunei Darussalam, March 11-13, 1998	17	Australia; Brunei; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Philippines; Singapore; Chese Taipei; Thailand; and the United States of America	PECC, Vietnam, APT, two Co-chairs of the APEC Senior Officials' Task Force on Electronic Commerce (Australia and Singapore)	
TELMIN3	Claudio Rojas	Keith Chang	CAN	Valerie D'Costa	SGP	Singapore, 3-5 June, 1998	18	Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Philippines; Singapore; Chinese Taipei; Thailand and US	PECC, SPF, ASEAN, Peru, Russia, Vietnam	600
TEL18		Keith Chang	CAN	Valerie D'Costa	SGP	Port Moresby, Papua New Guinea, September 9-11, 1998	17	Australia; Brunei Darussalam; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Philippines; Singapore;Chinese Taipei; Thailand; and the United States of America	PECC, SPF, Peru, Vietnam, APT, ITU, Colombia	
TEL19		Keith Chang	CAN	Valerie D'Costa	SPG	Japan, March 10-12 1999	20	Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong,China; Indonesia; Japan; Korea; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; United States of America; and Vietnam	APT, ITU	
TEL20		Valerie D'Costa	SGP	Richard Twaites	AUS	Lima, Peru, September 22-24, 1999		Australia; Brunei Darussalam; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Singapore; Chile; Chinese Taipei; Thailand; the United States of America; and Viet Nam	PECC, ITU	
TEL21	Mr Chirachai Punkrasin	Valerie D Costa	SGP	Richard Twaites	AUS	Honolulu, USA, March 21-24, 2000	18	Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Singapore; Chinese Taipei; Thailand; the United States of America; and Viet Nam	PECC, ITU, APT	
TELMIN4	Mr Chirachai Punkrasin	Valerie D Costa	SGP	Richard Twaites	AUS	Cancún, México, 24-26 May, 2000				
TEL22	Mr Chirachai Punkrasin	Valerie D Costa	SGP	Richard Twaites	AUS	Bali, Indonesia, October 9-13, 2000	15	Australia; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Mexico; Papua New Guinea; the Philippines; Singapore; Chinese Taipei; Thailand; the United States of America; and Viet Nam	PECC, ITU Centre of Excellence, ADEMA, Colombia	
TEL23	Mr Chutintorn Gongsakdi	Valerie D Costa	SGP	Richard Twaites	AUS	Canberra, Australia, March 12-16, 2001	21	Australia; Brunei; Canada; Chile; China; Hong Kong China; Indonesia; Japan;Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; USA and Vietnam	PECC, APLAC, ADEMA, Columbia, GTAC	
TEL24	Mr Chutintorn Gongsakdi	Richard Twaites	AUS	Salma Jalife	MEX	Jeju, Korea, September 19-21, 2001	16	Australia; Canada; People's Republic of China, Hong Kong China; Indonesia; Japan; Republic of Korea; Malaysia; New Zealand; Philippines; Russia; Singapore; Chinese Taipei; Thailand; USA and Vietnam		
TEL25	Mr Chutintorn Gongsakdi	Richard Twaites	AUS	Salma Jalife	MEX	Hanoi, Viet Nam, 11-15 March, 2002	19	Australia; Brunei; Canada; People's Republic of China, Hong Kong China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; USA and Vietnam	PECC, GTAC, ITU, ADEMA, INTUG, Macao, China	
TELMIN5	Mr Chutintorn Gongsakdi	Richard Twaites	AUS	Salma Jalife	MEX	Shangai, China, May 29-30, 2002				
TEL26	Mr Chutintorn Gongsakdi	Richard Twaites	AUS	Salma Jalife	MEX	Moscow, Russia, 19-23, 2002	17	Australia; Canada; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Philippines; Russia; Singapore; Chinese Taipei; Thailand; USA and Vietnam	PECC, ADEMA, INTUG, Macao, China	

TEL27	Mr. Chutintorn Gongsakdi	Richard Twaites	AUS	Salma Jalife	MEX	Kuala Lumpur, Malaysia, 24-28 March, 2003	19	n/a	PECC, APLAC, ADEMA, INTUG, Macao, China	
TEL28	Mr. Bruce Bennett	Salma Jalife	MEX	Inuk Chung and Amon Tubtiang	KOR, THAI	Chinese Taipei, October 8-10, 2003	17	Australia; Brunei Darussalam; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Singapore; Chinese Taipei; Thailand; United States of America and Viet Nam	A P L A C , ADEMA, GBDe, INTUG	
TEL29	Mónica Ochoa	Salma Jalife	MEX	Inuk Chung and Amon Tubtiang	KOR, THAI	Hong Kong, China, March 24-26, 2004	18	Australia; Brunei Darussalam; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Russia; Singapore; Chinese Taipei; Thailand; United States of America and Viet Nam	PECC, APLAC, ADEMA, GBDe, INTUG, Macao, China	
TEL30	Mónica Ochoa	Salma Jalife	MEX	Inuk Chung and Amon Tubtiang	KOR, THAI	Singapore, September 22-24, 2004	18	Australia; Brunei Darussalam; Canada; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; United States of America and Viet Nam	PECC, APLAC, ADEMA, GBDe, INTUG, Macao, C h i n a , Colombia	
TEL31	Mónica Ochoa	Salma Jalife	MEX	Inuk Chung and Amon Tubtiang	KOR, THAI	Bangkok, Thailand, April 7-9, 2005	19	Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; United States of America; and Viet Nam	PECC, SMEWG Chair; APLAC, ADEMA, GBDe, INTUG, Macao, C h i n a , Colombia	
TELMIN6	Mónica Ochoa	Inuk Chung	KOR	Amon Tubtiang	THAI	Lima, Peru, June 1-3 , 2005				
TEL32	Mónica Ochoa	Inuk Chung	KOR	Amon Tubtiang	THAI	Seoul, Korea, September, 7-9, 2005	19	Australia; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; US; and Viet Nam.	PECC, ADEMA, GBDe, INTUG, Macao, China	
TEL33	Mónica Ochoa	Inuk Chung	KOR	Amon Tubtiang	THAI	Canada, April 2006	18	Australia; Canada; China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; US; and Viet Nam.	ADEMA, APT, A P C E R T , GBDe, INTUG, Macao, China, ITU, OECD, WTO, ABAC	
TEL34	Mónica Ochoa	Inuk Chung	KOR	Amon Tubtiang	THAI	New Zealand, October 2006	18	Australia; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; New Zealand; the Philippines; Singapore; Chinese Taipei; Thailand; US; and Viet Nam.	A D E M A , A P C E R T , GBDe, Macao, China, INTUG; PIF, OECD, ABAC	
TEL35	Mónica Ochoa	Inuk Chung	KOR	Amon Tubtiang	THAI	Philippines, April 2007	18	Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; NZ; PNG; Philippines; Singapore; Chinese Taipei; Thailand; US; and Viet Nam	A P L A C , A P C E R T , Colombia, INTUG, GBDe, OECD, Council of Europe	n/a
TEL36	Mónica Ochoa	Amon Tubtiang	THAI	Liu Ziping	CHINA	Chile, October 2007	18	Australia; Canada; China; Chile; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; US; and Vietnam	INTUG	
TEL37	L u i s Tsuboyama	Amon Tubtiang	THAI	Liu Ziping	CHINA	Japan, March 2008	18	Australia; Canada; China; Chile; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; New Zealand; Papua New Guinea; Peru; Philippines; Singapore; Chinese Taipei; Thailand; US and Vietnam	INTUG, GBDe	n/a
TELMIN7	L u i s Tsuboyama	Amon Tubtiang	THAI	Liu Ziping		Bangkok, Thailand, April 23-25, 2008				
TEL38	L u i s Tsuboyama	Amon Tubtiang	THAI	Liu Ziping	CHINA	Peru October 2008	19	Australia; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; United States of America and Vietnam.	I N T U G , A P C E R T , ABAC-Malaysia	n/a
TEL39	Susan Natividad	Amon Tubtiang	THAI	Liu Ziping	CHINA	Singapore April 16-18, 2009	20	Australia; Brunei; Canada; Chile; People's Republic of China; Hong Kong China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; United States of America and Vietnam.		

D.6.2 Leaders', Trade Ministers', TELMIN Instructions to TEL and Collective Actions

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
1996	MAPA ITA by 2000	Joint activities to address cross-cutting issues within APEC	Collaborative services on business, education health and rural development, environment protection Broadest participation in WTO and improved offers for the conclusion of the group on Basic Telecom Agreement (BTA) Importance of promoting research and development by co-operation among researchers from industry, government and academia of member economies to advance the APII Telemedicine, distance education and multimedia communications Task group on MRA Study group on Transparent funding of universal delivery of basic telecom services under conditions of a liberalized market Task group to develop appropriate indicators to measure the benefits of liberalization to users and a proposal on the use of such indicators by TEL	APII pilot project criteria Reference List of elements of a fully liberalized telecom service sector Report on telecom structural and regulatory arrangements APEC/PECC policy dialogue Practical Manual for Network Planning APII Test-bed Forum Annex 3 of the Plan of Action contains APII co-operative activities and pilot projects
1997	Leadership of APEC in WTO	Full implementation of WTO BTA Work together on ITA TEL to implement actions to make APIS a reality		WTO BTA concluded MRA in telecom eq

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
1998			include convergence	APEC Guidelines for trade in IVANs
			formulate strategic priorities	
				Criteria to assist in evaluating project proposals
			ABAC, PECC - long term sustained investment in infrastructure needs co-operation	
				APEC Reference Framework for Action on Electronic Commerce
			TEL coordinate APEC EC work plan with other fora	
			BF	Universal Access Principles
			Harmonize EC policies, legal and regulatory practices	
				Indicators to Measure the Benefits of Liberalization
			Electronic delivery of government services	
				APEC MRA on Conformity Assessment for telecom equipment
			Study ICAIS	
			Consumer use on EC (access, affordability, privacy and security)	
			DC Use work from APII Co-Operation Centre in Korea and APII Technology Centre in Japan	
			systematic assessment to set strategic priorities for further economic and technical co-operation	
			Interconnect broadband networks and test-beds beginning with linkages between public institutions (schools, universities, hospitals and libraries) so benefits of APII are experienced by citizens of the region.	
			Voluntary technology transfer among member economies through joint APII research and development projects	
			How to create sustainable and equitable financing arrangements for the establishment of high-bandwidth links	
			HRD Incorporate other's fora knowledge and techniques on training for APII.	
			Coordinate with AP Centre of Excellence of the ITU for sustained training programs	
			Liberalization assist non WTO APEC member economies in working toward the establishment of policies consistent with its principles, support their prompt accession to the WTO, play a leading role in the next round of negotiations	
			help implement on a voluntary basis the MRA on CA for Telecom Eq. on each economy	

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
1998	APEC Blueprint for Action on EC	Economic infrastructure: call for further progress on the APIS EC Steering group created Y2k experts group		
1999	APEC Y2k 100 days co-operation initiative	e-commerce readiness consider UNCITRAL as the model law in developing regulatory frameworks SMEs Consumer protection by using information sharing, benchmarking and best practices		
2000	The new economy: Triple the number of people within the region with individual and community based access by 2005 Japan provides $15 billion US dollars for addressing the digital divide – a significant portion will be mobilized in the APEC economies.	APEC should promote strong asset management practices to ensure legal and proper use of software and other IP assets by users Officials to examine ways to enhance interaction among IT professionals using existing APEC for a Ensure everyone in the APEC region has access to the opportunities presented by ICT networks	Review TEL functions, structure and activities on the impact of convergence, including where appropriate widening the scope of its participation and functions TEL pursue explanatory work to define concepts, to measure the extent of domestic, regional and international digital divides, and to assess economic and cultural reasons for divides with a view to develop technology neutral approaches to encourage greater access Explore opportunities arising from wireless technologies in the expansion of basic telephony and convergent services Information sharing on government initiatives, spectrum access issues, internet services and critical protection information TEL to reach out other regional groupings and organizations interested in developing MRAs TEL to co-operate with OECD on electronic authentication	APEC Principles on International Charging Arrangements for Internet Services APEC principles on interconnection APEC e-commerce readiness indicators Issues on the Preparation of Electronic Authentication Policies

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
2001	e-APEC Strategy for the development of the New Economy to build a digital society taking advantage of advanced, reliable, and secure ICT and networks and by promoting universal access.

Effective competition frameworks

Information Security

Standards Conformance

Statement on Counter Terrorism | Commend TEL to develop the Digital Divide Blueprint for Action, and its implementation | | |

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
2002	APEC Trade Facilitation Action Plan: Cut transaction costs by 5% in the APEC region by 2006 Implementation of the e-APEC strategy, …promote broadband networks and programs to ensure APEC people have access to the Internet and the skills to use it. Universal access by 2010 – connectivity for rural areas; MSMEs, women, youth and disabled.	Pathfinder Statement to Implement APEC Policies on Trade and the Digital Economy	Need to establish a legal basis for combating Criminal misuse of information technologies Promoting the deployment of advanced, secure and reliable information infrastructure especially in remote and underserved areas in order to provide access to information services for all at affordable prices; and as part of this effort monitoring access to ICT by different socio-economic and user groups, in particular by gender, age and income, and considering alternative policies and technologies for reaching unserved and underserved areas Greater buildout of Internet through NAPs to promote greater broadband accessibility, availability and use including SMEs R&D activities of technologies such as NGN, IPv6, mobile internet, broadband satellite TEL to enhance work on the new WTO round Further work on ICAIS to improve traffic measurement and charging arrangements models e-Government increased efficiency and transparency exchange and co-operation e-security collaboration among relevant expert groups and support capacity building promote a gender and youth perspective in every aspect of TEL's work set priorities of Human capacity building addressing concerns of developing economies for inclusion	Statement on the Security of Information and Communications Infrastructures Stocktake of progress towards a fully liberalized telecom sector in the APEC region Policy/regulatory roundtables on transparency, decision-making, processes, regulatory structures, convergence, competition safeguards, telecom network interconnection and new technologies APEC Cyber-security Strategy
2003	Stop optical disk piracy Allow technology of choice for business	Development of the international CERT network Economies to report progress to TEL on adopting WTO BTA Reference Paper		Report to Address Cybercrime and Cyber-security

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
2004	APEC Privacy Framework APEC's Strategies and Actions Towards a Cross-Border Paperless Trading Environment APEC Digital Opportunity Canter (ADOC) TEL instructed to issue the APEC's contribution to WSIS APEC Best Practice Guide for RTAs/FTAs			

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
2005	Russia and VietNam accessed WTO	Commend TEL on the second phase of WSIS to undertake the input for WSIS II APEC Digital Opportunity Centre (ADOC)	Open source software and commercial software both, play an important role to ensure marketplace choice and competition, promote security, encourage innovation, affirm transparent technology neutral balanced policies Life-long human capacity development for all age groups and genders as well as for people with disabilities or special needs Security and integrity of the APEC communications infrastructure in particular the Internet Computer Security Incident Response Teams (CSIRTS) international network Enact comprehensive sets of laws relating to cyber-security and cybercrime consistent with UN General Assembly Resolution 55/63 (2000) and the Convention on Cybercrime (2001) Regional co-operation to support communication networks and ICT applications for disaster mitigation and relief operations (early warning information and providing medical and humanitarian assistance in disasters and emergencies) Review of the structure of TEL particularly in light of changes posed by the rapid advancement of new technologies and the changing regulatory and security environment. Develop a clearer vision of APIS and the new knowledge based economy and identify areas in which TEL could contribute most effectively Review of the Principles of Interconnection in light of NGN, including interoperability of services and networks Create information resources for consumers to increase consumer awareness and confidence in a changing technical environment; and consider the development of information to address the definition of service characteristics and their communication to consumers Explore work on the emerging challenges to numbering and addressing especially in the context of NGN and transitional environments MRA Phase II Innovation and competition in the use of spectrum (NGN + legacy networks) share info with other for a and international organizations, the regulatory framework on spectrum	APEC's contribution to WSIS through TEL Best practices on Implementing the WTO Reference Paper Guidelines on Conformity Assessment Procedures for Telecom Eq. Compliance and Enforcement Principles (to create an environment of investor certainty and consumer confidence) Key Principles for Broadband Development in the APEC region (new objective of universal broadband access) Guiding Principles for PKI-based Approaches on Electronic Authentication Stocktake of Progress Towards the Key Elements of a Fully Liberalized Telecommunications Sector in the APEC region APEC principles for Action Against Spam APEC implementation guidelines for Action Against Spam APEC Strategy on Response to and Preparedness for Emergency and Natural Disasters APEC i-DWS (disaster warning systems) Development Strategy and APEC Guide on i-DWS Report From APII to APIS: a contribution to the World Summit of the Information Society APEC Strategy to Ensure a Trusted, Secure and Sustainable Environment OECD-APEC Workshop on e-Security and Spyware

YEAR	LEADERS	MINISTERS	TEL MINISTERS	TEL collective actions
2006	APEC Technology Choice Principles as a new pathfinder initiative to spur the cycle of innovation and opportunity and to promote economic development across the region	TEL to address the issue of ITA being outdated when product coverage cannot support technological development, improvements, innovation /agree on duty free treatment of Multi-Chip Packages (MCPs) as a complement to the ITA		Model Government Chief Information Officer
2007	Regional Economic Integration FTA/RTA Improve economic efficiency and the regional business environment including capital markets Integrate telecom Address the challenges of climate change	Ensure duty free treatment on al ITA-covered products is maintained		
2008	Digital Prosperity Checklist	ITA's integrity maintained	Brunei Goal of tripling Internet access was achieved Bring Doha Round to a conclusion Key foundation for APIS is APII Strengthen protection and enforcement of Intellectual Property Rights (IPR) Achieve universal access to broadband by 2015 Full response for innovative and secure cross-border business services, provide users with seamless cross-border telecom and value added services at competitive prices Protection to minors Effective responses to ensure security against cyber-threats, malicious attacks and spam. Cultivate a culture of security to facilitate electronic transactions Information sharing on Grid computing and test beds on new and advanced technologies including co-operative projects	Guide for Implementing WTO GATS Article VI – Domestic Regulation as applicable to the telecommunications sector

D.6.3 TEL Environment of Action as of May 2009

The following[12]:

- Objectives
- Scope / Activities / Topics
- Agendas
- Action Plans
- Goals
- Principles / Guidelines
- Initiatives
- Vision Statements
- Priorities
- Blueprints / Roadmaps / Workplans
- Mandates
- Frameworks
- Programmes
- Strategies
- Standards / Best Practices
- Policies

comprise TEL's environment of action defining the "whats" and "hows" of the group's operation.

Objectives :

- APEC Economic Leaders' Objectives:
  - Technology and Technical Co-Operation:
(1)   - Joint Research
(2)   - Technology transfer
(3)   - Promotion of international standards
  - Telecom Network:
(4)   - Modernisation of telecom infrastructure
(5)   - Development of domestic and global markets for networks
(6)   - Services and applications
(7)   - Pilot projects on administrative information networks
(8)   - Collaborative pilot projects
(9)   - Promotion of interconnectivity and interoperability
  - Content, Information and Applications:
(10)   - Promotion of EDI
(11)   - Joint development of databases
(12)   - Test-beds
(13)   - Interconnection and information sharing
(14)   - Social and societal implications of IS
(15)   - Initiatives to make government information more widely available via electronic means
  - Human Resource Development:
(16)   - Development of training and educational programs
(17)   - Exchange of human resources
  - Policy and Regulation:
(18)   - Policy dialogues on the Information Infrastructure between developed and developing member economies
(19)   - Policy and regulatory measures to further liberalisation
(20)   - Removal of technical and administrative barriers to market access
(21)   - Measures aimed at promoting small and medium scale enterprises

- APII Objectives:
(22)   - Facilitating the construction and expansion of an interconnected and interoperable information infrastructure in the region;

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12 These list was compiled from the analysis of APEC's and TEL's published goals, statements, declarations, etc., Leaders' Declarations, Ministers' Declarations, TEL Chairs' Reports, Meetings' Reports, Fact Sheets, Terms of Reference, and other related documents.

(23)	- Encouraging technical co-operation among member economies in the development of the infrastructure;
(24)	- Promoting free and efficient flow of information;
(25)	- Furthering the exchange and development of human resources; and
(26)	- Encouraging the creation of policy and regulatory environment favourable to the development of the Asia Pacific Information Infrastructure.

- 1993 Policy Objectives:
(27)	- Electronic Data Interchange
(28)	- Standards
(29)	- Data Survey: "The State of Telecommunications Infrastructure and Regulatory Environments of APEC Economies
(30)	- Human Resource Development
(31)	- Telecommunications Infrastructure Development
(32)	- Endorsement from Ministers regarding the importance of telecommunications to sustaining APEC's broad objectives

(33)   - The role of APEC TEL on disaster preparedness

(34)   - The vital role played by ICT in all phases of emergency preparedness, early warning systems, disaster mitigation, rescue and relief operations, delivery of humanitarian assistance and recovery efforts.

(35)   - Disaster Management Capacity Building Needs

- Regional Economic Integration:
(36)	- Continuing support for the multilateral trading system
(37)	- Taking concrete actions towards achieving the Bogor goals
(38)	- Examination of the options and prospects for a Free Trade Area of the Asia-Pacific (FTAAP)
(39)	- Promote high-quality free-trade agreements
(40)	- Refocusing APEC's trade and investment agenda to accelerate REI and reduce behind-the-border barriers
(41)	- Strengthening APEC's work on structural reform
(42)	- Strengthen and deepen financial markets in the region
(43)	- Sharpening ministerial agendas that promote REI to support long-term growth and development
(44)	- Developing a strategic approach to the expanding capacity-building activities
(45)	- Providing the APEC secretariat with greater resources and institutional capacity to support this work

Scope / Activities / Topics:

(1)   - Technology transfer

(2)   - Regional co-operation

(3)   - Standardisation

(4)   - Compatibility of equipment

(5)   - Flow of information

(6)   - Harmonisation for interconnection and interoperability on networks and services

(7)   - Efficient-cost-effective telecom services

(8)   - HRD primary focus on the formulation of telecom policies and programs

(9)   - Compatible procedures for certification of telecom equipment

(10)   - Guidelines for the provision of IVANs

(11)   - MRAs

(12)   - Conformity assessment

(13)   - Harmonisation of equipment certification procedures,

(14)   - Develop a model mutual recognition agreement on conformity assessment of telecommunications
         equipment to apply to test data.

(15)   - Full and active participation of APEC economies in the GATT's Negotiating Group on Basic Services
         (NGBT).

(16)   - Align national standards with international standards and recognise each other's national standards

(17)   - Implementation of intellectual property rights

(18)   - Harness technologies of the future

(19)   - Stimulate private sector participation in infrastructure development

         - LSG's activities shall include, but not be limited to:
(20)   - Defining action plans with commitments, both individual and collective, to achieve trade and
                 investment liberalisation, incremental steps
(21)   - Monitoring conformance with APEC Guidelines for trade in International Value-Added Network
                 Services .
(22)   - Monitoring conformance with APEC Guidelines for Harmonisation of Procedures for Equipment
                 Certification.
(23)   - Developing Mutual Recognition Arrangements for Conformity Assessment
(24)   - Developing policy/regulatory recommendations and conducting seminars on such issues as:
(25)   - Rules and regulations for competition and market access
(26)   - Rules and regulations for tariffs, consumer protection, etc.
(27)   - Interconnection and interoperability
(28)   - Content/information policy issues
(29)   - Universal services
(30)   - Facilities and basic services competition
(31)   - Intellectual property rights, privacy, data
(32)   - Security.
                         - Content/information policy issues such as:
(33)   - Regulatory and policy approaches to accommodate convergence
(34)   - Access to internet services
(35)   - Numbering and addressing policies
(36)   - Internet governance (intellectual property rights)
(37)   - Increasing co-operative efforts with such organisations as ITU, OECD, WIPO and WTO.
(38)   - Trade and investment liberalisation
(39)   - Effective policy
(40)   - Regulatory frameworks
(41)   - Policy and regulatory roundtable

         - BFSG's activities shall include, but not be limited to:
(42)   - Exchanging, compiling and disseminating telecommunications infrastructure and regulatory
                 information, including markets and statistical data.
                 - Promoting electronic commerce in a manner consistent with the Reference Framework for Action
                 on Electronic Commerce agreed by Ministers in Singapore. These issues could but need not
                 necessarily include:
(43)   - Content rating and identification systems
(44)   - Rights management systems
(45)   - Digital signatures
(46)   - Encryption
(47)   - Digital transaction laws
(48)   - Public key authentication
(49)   - Data protection and security

(50)   - Promoting standards information sharing
(51)   - Promoting spectrum access.
(52)   - Pursuing other initiatives to achieve trade and investment facilitation.
(53)   - Increasing co-operative efforts with such organisations as APT and ITU, as well as reaching out to the business and private sector

- DCSG's activities shall include, but not be limited to:

(54)   - Implementing co-operative projects to exchange experiences on infrastructure deployment (e.g. Telecom and Information Infrastructure Project).
(55)   - Identifying and implementing APII technology, infrastructure and applications development pilot projects (e.g. Test-Bed Forum and Interconnection).
(56)   - Carrying out developmental needs assessment.
(57)   - Identifying and developing applications projects for rural and developing areas.
(58)   - Increasing co-operative efforts with relevant international organisations and encouraging the support of international financial institutions for business/private sector participation an investment in the development of information infrastructure in member economies.
(59)   - Identifying and implementing technology transfer related to infrastructure development.
(60)   - Enhancing the APII by ensuring linkage and expanding bandwidth among economies
(61)   - Joint projects for killer applications
(62)   - Meeting the needs of less developed economies (basic service connectivity, education services, regulatory assistance)

- HRDSG's activities shall include, but not be limited to:

(63)   - Conducting education, training courses and seminars.
(64)   - Conducting personnel exchange programme.
(65)   - Promoting distance learning.
(66)   - Vocational education for telecommunications training.
(67)   - Skill standards.
(68)   - Collaboration with HRD Working Group
(69)   - Facilitating a personnel exchange programme among economies.
(70)   - Developing Skill standards for key functions.
(71)   - [Facilitating development of] human resources capabilities to support the effective implementation of key initiatives by other TEL Steering Groups
(72)   - [Facilitating] effective knowledge sharing among APEC economies
(73)   - [Co-operation to develop] an adequate corps of capable personnel to develop and operate telecommunications network
(74)   - Providing training in new technologies and applications to equip member economies to be better users of technology
(75)   - Providing training to meet the needs of a rapidly changing policy environment
(76)   - Facilitating the use of the APII to meet the training needs of all sectors of the economy

- ICT Development Steering Group (DSG) is created with the following priority objectives:

(77)   - Advancement and use of ICT infrastructure, services and applications to create digital opportunities (e.g.. Broadband access, Telecenters, e-Inclusion, e-Government)
(79)   - Development, implementation and application of advanced technologies (e.g.. Ipv6, GRIDs) including knowledge transfer in ICT research.

- Security and Prosperity Steering Group (SPSG) is created with the following priority objectives:

(79)   - Secure and trusted networks (including converged networks), infrastructure, services, technologies, applications, e-Commerce
(80)   - Cyber-crime prevention
(81)   - Incident response
(82)   - Malicious use of ICT
(83)   - Emergency preparedness and response
(84)   - e-Authentication

(85)   - Y2K awareness

(86)   - Multimedia technologies

(87)   - Internet applications

(88)   - Content production tools

(89)   - Implement strategies for e-commerce in co-operation with the private sector

(90)   - Convergence

(91)   - Emphasis on preparing young people in ICT which should be a core competency for e-learning and e-teaching

(92)   - Extend e-health through ICT

(93)   - Cyber-security

(94)   - E-Certification

(95)   - Counter-Terrorism

(96)   - Commitment to universal access by 2010 focusing on connectivity for rural areas, MSMEs, women, youth and disabled

(97)   - Call for the expansion of cyber-education, improve teacher quality, promote language study and facilitate the use of distance learning

(98)   - Establish a regional public health surveillance network and early warning system to monitor and respond to critical disease outbreaks in the region, and critical threats such as bio-terrorism

(99)   - Structural Reform

(100)   - IPR Protection

(101)   - Digital Piracy

(102)   - Electronic Certificates of Origin

(103)   - Next Generation Networks

(104)   - Disaster Preparedness

(105)   - Early Warning Systems

(106)   - Disaster Mitigation

(107)   - Rescue and Relief Operations

(108)   - Delivery of Assistance

(109)   - Recovery Efforts

Agendas:

(1)   - Osaka Action Agenda
(2)   - APEC Agenda for Science and Technology Industry Co-Operation into the 21st century
(3)   - Action Agenda of the New Economy
(4)   - APEC Cyber-Education Co-Operation
(5)   - Leaders Agenda to Implement Structural Reform towards 2010
(6)   - Bussan Business Agenda
(7)   - Ambitious long-term agenda to strengthen Regional Economic Integration (REI)

Action Plans:

(1)   - Osaka Action Plan
(2)   - Manila Action Plan
(3)   - Integrated Plan of Action for SME Development
(4)   - APEC Trade Facilitation Action Plan
(5)   - Ha Noi Action Plan
(6)   - APEC Investment Facilitation Action Plan (IFAP)

Goals:

      - Bogor:
(1)   -Strengthening the open multilateral trading system,
(2)   - Enhancing trade and investment liberalisation and facilitation,
(3)   - Intensifying Asia Pacific development co-operation, and
(4)   - Improving the information infrastructure.

(5)   - Implementation of the WTO Agreement on Basic Telecommunications

(6)   - Create policy framework to triple the number of people in the region with individual and community based internet access by 2005

Principles / Guidelines:

      - APII Core Principles:
(1)   - Encouraging member economies in the construction of domestic telecommunications and information infrastructure based on their own reality;
(2)   - Promoting a competition driven environment;
(3)   - Encouraging business/private sector investment and participation;
(4)   - Creating a flexible policy and regulatory framework;
(5)   - Intensifying co-operation among member economies;
(6)   - Narrowing infrastructure gap between the advanced and developing economies;
(7)   - Ensuring open and non-discriminatory access to public telecommunications networks for all information providers and users in accordance with domestic laws and regulations;
(8)   - Ensuring universal provision of and access to public telecommunications services;
(9)   - Promoting diversity of content, including cultural and linguistic diversity;
(10)   - Ensuring the protection of intellectual property rights, privacy and data security.

(11)   - Principles to Enhance Competition and Regulatory Reform

(12)   - Pathfinder Initiatives Guidelines

(13)   - APEC Technology Choice Principles

(14)   - APEC Leaders' Declaration on Climate Change, Energy Security and Clean Development

(15)   - APEC Principles on Disaster Response and Co-Operation

(16)   - APEC Guidelines for trade in International Value-Added Network Services

(17)   - APEC Guidelines for Harmonisation of Procedures for Equipment Certification

Initiatives:

(1)   - APEC Y2K 100 Days Co-Operation Initiative
(2)   - APEC E-Commerce Readiness Initiative
(3)   - Beijing Initiative
(4)   - Pathfinder initiatives
(5)   - Santiago Initiative

(6)   - APEC Anti-Counterfeiting and Piracy Initiative

Vision Statements:

- 1993 Vision:
(1)   - Enhance the provision of efficient telecommunications services accessible to all citizens and business of APEC economies,
(2)   - Ensure regionally balanced development and expansion of telecommunications infrastructures is given a high priority in economic planning,
(3)   - Encourage flows of information, technology and expertise as a means of facilitating balanced growth of telecommunications networks and services in the APEC region,
(4)   - Encourage applications of modern and compatible means of communication whenever possible to enhance the introduction of modern telecommunications services in order to ease information flows and to facilitate economic development.
(5)   - Emphasise human resource development to sustain growth of the telecommunications sector and to ensure efficiency, innovation and high-quality telecommunications services.
(6)   - Encourage the flow of telecommunications goods, services, capital and technology

Priorities:

- Manila Six Organising Themes and Priorities:
(1)   - Develop human capital
(2)   - Develop stable, safe and efficient capital markets
(3)   - Strengthen economic infrastructure
(4)   - Harness technologies for the future
(5)   - Safeguard the quality of life through environmentally sound growth
(6)   - Develop and strengthen the dynamism of small and medium enterprise

-Priorities (from "APEC Fact Sheet – TEL"):
(7)   - Reduce the Digital Divide
(8)   - Next Generation Networks and Technologies
(9)   - E-governance
(10)   - Mutual recognition arrangements
(11)   - Regulatory reform
(12)   - Capacity building
(13)   - Protecting information
(14)   - Communications infrastructure and cyber-security
(15)   - Advancing the Asia Pacific Information Society
(16)   - Assist developing economies reform policy and regulatory structures and become WTO compliant
(17)   - Implement initiatives that encourage greater access to basic communications and build-out of the Internet, and which [SIC] promote greater broadband accessibility, availability and use
(18)   - Develop a collaborative approach to cyber-security
(19)   - Create sustainable markets through both convergent and new technologies

- ECOTECH (Manila 6 Priorities, plus):
(20)   - Integration into the global economy
(21)   - Human security and counter-terrorism capacity building
(22)   - Promoting the development of knowledge-based economies
(23)   - Addressing the social dimensions of Globalisation

Blueprints / Roadmaps / Workplans:

(1)   - Blueprint for Action on Electronic Commerce
(2)   - Digital Divide Blueprint for Action
(3)   - Busan Roadmap towards Bogor Goals
(4)   - 2009 Work Plan for the APEC Regional Economic Integration (REI) Agenda

Mandates:

(1)   - Liberalisation Steering Group (LSG): The mandate of this group is to develop and implement plans to achieve the Bogor objectives of trade and investment liberalisation for the telecommunications and information sector.   The group will address related policy and regulatory issues to achieve this mandate, including removal of technical and administrative barriers to market access.

(2)   - Business Facilitation Steering Group (BFSG): The mandate of this group is to undertake project and programme initiatives which facilitate business trade and investment in the region. The group will examine ways to increase co-operation between APEC and existing international institutions and programmes, so as to actively promote the development of APII and reduce duplications of efforts.

(3)   - Development Co-Operation Steering Group (DCSG): The mandate of this group is to develop and carry out pilot and co-operative projects aimed at the development of infrastructure, technology and applications of the APII, including pilot and co-operative projects aimed at addressing the developmental needs of industrialising economies. The group will endeavour to promote and implement technology transfer.

(4)   - Human Resource Development Steering Group (HRDSG): The mandate of this group is to develop human resource capabilities for the implementation of APII, including capabilities in technology evaluation, demand forecasting and regulatory reform, and to reduce gaps between developed and developing economies within the region.

(5)   - SOM: Contribute to the ongoing work of WTO next phase of the Information Technology Agreement (ITA II) projects on electronic commerce with the lead of the private sector.

(6)   - Ministers: facilitate business travel, encourage business/private sector involvement in APEC work

        - TELMIN-4:
(7)   - Convergence,
(8)   - APEC Principles of Interconnection,
(9)   - Common Principles for ICAIS,
(10)   - Importance of the digital divide to the work of the APIS,
(11)   - Importance of engaging the business/private sector in the work of the TEL

(12)   - Ministers of Trade: Devote greater attention to user requirements for open standards and systems in government interaction with business and the public to facilitate interoperability.

(13)   - SOM-ABAC: New Economy / Knowledge-based Economy and the Management Reform Process

(14)   - Need for a new action agenda to create programmes for the use of advances in information technology to boost productivity and stimulate growth and extend services to the whole community

        -AELM:
(15)   - A strong statement in support of the WTO Round of trade negotiations.
(16)   - A renewed commitment to fighting terrorism.
(17)   - Digital Economy Pathfinder and Transparency Standards.
(18)   - An Action Plan for Structural Reform.
(19)   - A movement to reform APEC.

        - AMM:
(20)   - Fighting Terrorism and Promoting Growth.
(21)   - APEC Cyber-security Strategy
(22)   - A Comprehensive Strategy for IPR Protection
(23)   - A Digital Piracy Initiative
(24)   - A Five-year Strategic Plan for e-Learning
(25)   - Competition Policy and Regulatory Reform
(26)   - APEC Policies on Trade and the Digital Economy, Advanced Passenger Information Systems, Electronic Certificates of Origin

(27)   - Endorsement in full of APEC's message to WSIS

(28)   - Enhance activities across APEC fora in order to combat socio-economic disparity issues in the region

(29)   - Safe and trusted ICT environment that can effectively respond to cyber threats, malicious attacks and
           spam.

(30)   - Promote Corporate Social Responsibility (CSR) awareness and capabilities in the region

Frameworks:

(1)   - Reference Framework for Action on Electronic Commerce
(2)   - Framework for the Integration of Women in APEC
(3)   - Framework for Capacity Building Initiatives on Emergency Preparedness

Programmes:

(1)   - Kuala Lumpur Action Programme on Skills Development in APEC
(2)   - APEC Trade Recovery Programme

Strategies:

          - e-APEC Strategy for the New Economy - From APII to APIS:
(1)   - Use of reliable and secure ICT towards digital society
(2)   - Universal access
(3)   - Improved learning and employment
(4)   - Improved public services and better quality of life

(5)   - APEC's Communications and Outreach Strategy

(6)   - APEC Cyber-security Strategy

(7)   - Transform Digital-Divide into Digital-Opportunity

(8)   - APEC Comprehensive Strategy on Intellectual Property Rights

(9)   - Strategic Approach to Capacity Building

(10)   - Pathfinder Approach

(11)   - APEC Strategy for Disaster Risk Reduction and Emergency Preparedness and Response

Standards / Best Practices:

(1)   - APEC Transparency Standards
(2)   - APEC Best Practices for RTAs and FTAs
(3)   - Digital Prosperity Checklist as a tool to promote sustained economic growth through the use and
          development of ICT

Policies:

(1)   -APEC Policies on Trade and the Digital Economy