



**Asia-Pacific  
Economic Cooperation**

---

**2016/SOM1/SCE-COW/005**

Agenda Item: 4

## **Policy Partnership on Science, Technology and Innovation Proposed Work Plan for 2016**

Purpose: Consideration  
Submitted by: PPSTI Chair



**SOM Steering Committee on Economic and  
Technical Cooperation - Committee of the Whole  
Meeting  
Lima, Peru  
29 February 2016**

## **Working Groups and SOM Taskforces Draft Workplan Template**

### **Proposed Workplan for 2016**

Fora: Policy Partnership on Science, Technology and Innovation (PPSTI)

In 2012, APEC Senior Officials agreed to broaden the mandate of the APEC Industrial Science and Technology Working Group (ISTWG) to include issues of innovation policy development by transforming ISTWG into a Policy Partnership on Science, Technology and Innovation (PPSTI) to intensify cooperation among the relevant stakeholders -- government, private sector and academia. The PPSTI's strategic aim is to enhance economic growth, as well as social progress, in harmony with sustainability, through the development of an enabling environment for market-based innovation policy in support of commercialization, the promotion of innovation capacity, and the facilitation of science, technology and innovation cooperation among member economies, which is closely related with the Leaders/Ministers/SOM/SCE Priorities and Decisions of recent APEC meetings. In 2015, an Independent Assessment was done and several recommendations were proposed to PPSTI. In 2016, PPSTI, operating as primary fora for science, technology and innovation (STI) cooperation under APEC framework, will not only support the development of science and technology cooperation, but also place greater emphasis on innovation and its policy in its deliberations and sponsored activities in APEC economies.

In 2015, the STI cooperation promoted by PPSTI has obtained rich cooperation achievements. The *Innovation Initiative –Towards Innovation-driven Development*, endorsed by APEC leaders has been written into the 2014 APEC Leaders' Declaration. APEC 2015 Joint Ministerial Statement endorsed *PPSTI Policy Statement* on the development of common approaches to STI policies that encourage joint R&D and STI activities, advise APEC policy-making, and support commercialization and popularization of research and market-based innovations through policy translation. APEC Leader's Declaration highlights STI as one of the new drivers of growth that leads to more balanced and sustainable outcomes and recognizes the importance of investment in human capital. Our people, in particular, women and youth, need to be equipped not only with technical skills in science, technology, and innovation but must also be adaptable and resilient. PPSTI will actively promote and carry out relevant work according to APEC leaders' instructions and further the implementation of *Innovation Initiative*. In the *2015 APEC Strategy for Strengthening Quality Growth*, newly endorsed by APEC economies, has highlighted enhancing dialogues and information sharing on innovation policy as one of the tasks.

Furthermore, as *APEC Tasking Statement (for 2016)* has proposed several requirements for PPSTI in S&T, SMEs, Women, Emergency Preparedness, also considering the theme and priorities of APEC 2016, PPSTI will set "Science, Technology and Innovation for Quality Growth" as its annual theme for 2016. Based on existing cooperation, PPSTI will especially encourage and support S&T industry, including SMEs through multiple channels and platforms to participate in the APEC STI cooperation on various levels and in different fields, which will give full play to the strong points of collaboration between

government and academia and realize the goal of Asia-pacific quality growth through joint efforts. PPSTI will also conduct its work through three Subgroups: Subgroup A on Building Science Capacity, Subgroup B on Promoting Enabling Environment for Innovation, Subgroup C on Enhancing Regional Science and Technology Connectivity. All the programs and projects would work to highlight this annual theme.

1. Proposed Work Plan for 2016 in Response to Leaders/Ministers/SOM/SCE Priorities and Decisions, and to ABAC recommendations.

1.1 Overall plan

First, in order to best implement Leaders/Ministers/SOM/SCE priorities, decisions and fulfill *Innovation Initiative*, PPSTI will enhance its overall planning and arrangement, including improving its operation through taking consideration of the recommendations of the Independent Assessment.

1.1.1 Improvement of PPSTI operation

Considering the change of managerial portfolio by the end of 2015 and in 2016 to guarantee the working progress, PPSTI will continue to complete its working mechanism, mainly including

- 1) To clarify the governing board composition and working responsibilities (i.e., clearly divide the relevant work including drafting the Annual Work Plan, implementation of PPSTI Strategic Plan, organization of two PPSTI annual meetings, preparing agenda and minutes etc.). The two PPSTI meetings will be in May 9-11<sup>th</sup> in Arequipa, Peru and in August 15-17<sup>th</sup> in Lima, Peru.
- 2) To decide on candidacy of the chair and one vice-chair for the period 2017-2018 on PPSTI 8, clarifying the chair and vice-chair's responsibilities and their working procedures.
- 3) To improve the working relation between PPSTI and ABAC.
- 4) To consider further its role to steer, guide and monitor the APEC centers and long-term mechanisms to ensure effective collaboration and further realize APEC and PPSTI goals. Any PPSTI-endorsed APEC center should be asked to report at least annually to PPSTI
- 5) To increasingly focus on the coherence and integrity of PPSTI's achievements during 2016 (i.e., planning in a more integrated manner with other international groups and fora, working step by step to regularize the annual theme and priorities to be set by the governing board, unfolding the subgroups' works based on the annual theme and priorities, regularizing the annual theme and priorities and thus assisting PPSTI in clarifying its core and aligning with its Strategic Plan).

6) To establish the optimal relationship with CSAE grouping.

7) To develop its own additional procedures for assessing and ranking project proposals against ToR, with short term preference to be given to those which fill current gaps against the ToR and provide opportunities for appropriate cross-fora and multi-economy collaboration and third party engagement. To make sure that each project can extract best policies which can be recommended to PPSTI.

8) To ensure all projects will be well attended by representatives from PPSTI member economies.

#### 1.1.2 Progress on implementing the PPSTI Strategic Plan

The *PPSTI Strategic Plan (2016-2025)* has been endorsed on PPSTI 6 in August 2015. Setting as the guiding document for PPSTI future actions, PPSTI will try its utmost to implement this document in full way and finally achieve innovative growth through PPSTI's efforts by 2025 set by the strategic plan.

1.1.3 To hold the proposed PPSTI Center Conference in 2016 which will be a place for discussion on procedures for checking progress on centers and long-term mechanisms, at the APCTP (one of PPSTI Centers), Korea, in June 2016.

By taking consideration of the recommendations from the Independent Assessment and also based on PPSTI's consensus about the centers and long mechanisms, PPSTI will hold a report seminar, outlining the activities so as to help PPSTI better steer, guide and monitor and also help the centers and long mechanisms ensure effective collaboration and better contribute to PPSTI's goals.

1.1.4 To hold the APEC PPSTI innovation policy sharing seminar on Mass Entrepreneurship and Innovation.

This program coincides with APEC's goals by enhancing the policy dialogue and information sharing on research, technology and innovation, so as to enhance regional connectivity on S&T policy resources.

As indicated in policy statement which has been endorsed in PPSTI 6, PPSTI will promote the development of common approaches to STI policies that will contribute to policy formulation, PPSTI will build on the seminar's outcomes to help formulate policy recommendations and inform APEC leaders on potential S&T development and reform. The seminar will try to improve the ability of the PPSTI to provide policy advice and initiating relevant projects beyond specific technical fields of cooperation.

1.1.5 To hold best practice sharing workshop on technology business incubation and acceleration organizations (to be further discussed with all members).

One of the main tasks of PPSTI is to encourage the establishment of seed and venture capital investment funds, as well as technology business incubation and acceleration organizations, within APEC by propagating successful models, best practices and success stories in this area. Also this issue has been emphasized in the *Innovation Agenda* and *APEC Implementation Plan for the Boracay Action Agenda to Globalize MSME*. Strengthening institutional support for MSMES has been listed as one of the priority actions. PPSTI will promote the use of STI in raising the quality of products and services of MSMES for global markets and develop STI policy recommendations in support of MSMES. Holding this workshop would be an echo and it will help extract good policy recommendations so as to provide institutional support for MSMES and build an innovative ecosystem. PPSTI requests each member economy to recommend successful models to join in this workshop.

1.1.6 To promote research and development (R&D) and commercialization activities to foster sustainable economic growth, job creation and enhanced wellbeing and prosperity throughout the APEC region as stated in policy statement which has been endorsed on PPSTI 6.

1.1.7 To implement PPSTI theme and priorities for 2016

In 2016, PPSTI will set its annual theme to “Science, Technology and Innovation for Quality Growth”.

Based on the theme, the annual priorities will include the following (to be confirmed after subgroup discussion):

- 1) To enhance STI policy dialogues and develop STI policy recommendations;
- 2) To encourage SMES to participate in their own economies' drafting and implementation of STI strategy and the best practice sharing among APEC economies,
- 3) To cultivate STI talent, making sure that our people equipped not only with technical skills in STI but must also be adaptable and resilient.
- 4) To best leverage STI's role in promoting Asia-pacific region to share the development dividend.
- 5) To build an enabling environment for SMES to adopt STI and invest in R&D.
- 6) To propagate successful models, best practices and success stories on technology business incubation and acceleration organizations within APEC region.
- 7) To strengthen cooperative projects and programs related to the technology inception, dissemination and commercialization cycle;

1.2 Proposed Work Plan of three PPSTI’s subgroups for 2016 Work Plan is listed below: (To be supplemented by member economies)

1.2.1 Subgroup A: Building Science Capacity

PPSTI will support opportunities for cooperation among APEC member economies in order to promote STI capacity building, including Human Capacity, Science Integrity, and its related activities on Science Awareness and Technological Cooperation.

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
Enhance Human Capacity	<p><b>APEC Research &amp; Technology (ART) 2016 Program</b> One of three formal policy dialogue mechanism as listed in the PPSTI ToR.</p> <p>Hold workshop to discuss STI policy issues and feed the results into the PPSTI policy discussion.</p>		2016	Korea/STEPI	To be confirmed	
	<p><b>Second exhibition (hardware based) as a side event of PPSTI7 meeting (Regarding Internet of Vehicles, to be confirmed by the Project Overseer)</b></p>		2016	China	Funded PPSTI 01/2015A	
	<p><b>Training and Nurturing Young Scientists (Theoretical Physicists) in the Asia-Pacific Area (APEC Young Scientist Training)</b></p>		2-years program	Korea	PPSTI 05/2015S	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
	<p><b>APEC S&amp;T Mentoring Center for the Gifted in Science (AMGS)</b></p> <p>To build and operate the Mentor-Mentee pool among scientist, science education professionals and gifted students in science from APEC Economies for continuing exchange programs and joint research activities</p>	<p>APEC Agenda for Science and Technology Industry Cooperation into 21<sup>st</sup> Century</p> <ul style="list-style-type: none"> <li>• Improved human resource development:</li> <li>• Needed solutions for enhancing prospective students into science and technology fields</li> <li>• APEC cyber education system and on-site camp for GiS being suggested</li> </ul>	2016	Korea/AMGS	Self-Funded  To be confirmed	
Improve Science and Technology Capacity	<b>Workshop on impact assessment and monitoring of Science, Technology and Innovation Policies</b>			Peru	PPSTI 12 2015S -	

### 1.2.2 Promoting Enabling Environment for Innovation

PPSTI will support opportunities for cooperation among the APEC member economies in order to seek solutions for financing issues, to promote tax policy, incentives, intellectual property protection, innovation ecosystem, entrepreneurial education, and science park development.

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
Accelerate Commercialization of Science and Technology	<b>Promoting Commercialization and Investments for Science and Technology Products and Developing Potential Technology in the APEC Region</b>			Viet Nam	PPSTI 11 2015S -	
	<b>APEC Workshop on the Establishment of Regional Database on Herbal Medicine</b>	The project contributes to promoting regional economic integration specifically on the development of standards, conformity assessments, regulations, and regulatory cooperation as well as on information technology and digital economy with the development of a digital library as one of the expected outputs of the workshop. It also supports the APEC Leader's growth strategy by promoting innovation policy and research cooperation.	09-10 June 2016	The Philippines Philippine Council for Health Research and Development- Department of Science and Technology	PPSTI 09/2015	



GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
	<p><b>APEC Workshop on Strategies to Address Non-communicable Diseases (NCDs) through Science, Technology and Innovation: Nutrigenomics Approach</b></p>	<p>The rising global economic burden of NCDs creates an impact not only on labor supply, capital accumulation and GDP but also on human workforce and productivity.</p> <p>The APEC initiative on Healthy Asia-Pacific 2020 calls for the reduction of intermediate risk factors by taking actions on modifiable health risk factors and this is where Nutrigenomics comes in. Nutrigenomics emphasizes the use of personalized nutrition interventions to prevent the onset of severe chronic diseases in individuals or populations with specific genetic predispositions. Nutrigenomics can be used not only to prevent but also to mitigate or cure chronic diseases through personalized dietary intervention based on</p>	07-08 June 2016	The Philippines Food and Nutrition Research Institute- Department of Science and Technology (FNRI-DOST)	PPSTI 01/2015S	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
		<p>knowledge on nutritional status, nutritional requirement and genotype.</p> <p>The outcome of the proposed project would be valuable for APEC economies as it introduces innovative means to address the current problem on NCDs and its perceived impact on enhancing human productivity, development of harmonized genomic techniques, and economic prospects on genetic analyses and science-backed revolution in food and nutrition industry.</p>				
	<p><b>APEC Workshop on Commercialization and Popularization of Research and Market-based Innovations through Policy Translation</b></p>	<p>The project is in support to the APEC's initiative Toward Innovation Driven-Development to promote regional science and technology collaboration, cross-fora cooperation and coordination. The policy documents in the form of</p>	<p>15-17 June 2016 (1<sup>st</sup> Workshop) Second workshop – Sept 2016</p>	<p>The Philippines Food and Nutrition Research Institute- Department of Science and Technology</p>	<p>PPSTI 02/2015S</p>	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
		<p>policy briefs that will be developed by the APEC member participants will promote the increase in proportion of public finance for innovations in science and technology, strengthen support for innovative activities by SMEs and highlight the contribution of science and technology in the development of economies. The capacity building of APEC member economies on policy translation further supports the implementation of the Policy Partnership of Science, Technology and Innovation (PPSTI) Policy Statement on the development of common approaches to STI policies that encourage joint R&amp;D and STI activities, advise APEC policy-making, and support commercialization and popularization of</p>		<p>(FNRI-DOST), Philippine Council for Health Research and Development- Department of Science and Technology</p>		

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATIO N
		research and market-based innovations through policy translation (as indicated in the APEC 2015 Tasking Statement)				
Promote Public-Private-Partnerships for Science and Technological Innovation	<b>The Co-establishment of an Online Service Platform for Collaborative Innovation of SMEs in APEC Member Economies</b>		Second-half 2016	China	PPSTI 08/2015S	
	<b>Improving Mirco, Small and Medium Enterprises (MSMEs) Competitiveness through Low Carbon Economy</b>	APEC Leaders has recognized the importance of micro enterprises in the economy and the need to address their special concerns.	22-23 June 2016	The Philippines Department of Science and Technology – Philippine Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD)	To be confirmed	

1.2.3 Enhancing Regional Science and Technology Connectivity

PPSTI will support opportunities for cooperation among the APEC member economies in order to promote Physical, Institutional, Human to Human, Data Sharing, Research Infrastructures, and Voluntary Market Driven Technology Dispersion.

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATION
To facilitate the exchange of forecasting technologies to support disaster management; to share best practices in disaster management using forecasts; and to build capacity in flood hazard mapping	<b>APEC Training Programs for Seismic Design of Structures 2015</b>		15/09/2015~30/11/2015	Chinese Taipei	PPSTI 10/2015S	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPER ATION
Promote and empower collaborative cross-economy STI activities to address current and future challenges	<p><b>APEC Science Prize for Innovation Research and Education(ASPIRE) with the 2016 theme "Technologies for Food Security"</b></p> <p>To strengthen international science and technology networks; enhance economic growth, trade and investment opportunities in harmony with sustainable development, through policies, innovative R&amp;D and technologies, and knowledge sharing; and improve linkages and efficiency between research and innovation.</p>	ASPIRE reflects the 26th APEC Joint Ministerial Statement which encourage members to promote regional science and technology collaboration	2016  (Annual award)	USA  PPSTI Program Director, U.S. Government, APEC Host Economy, Wiley, Elsevier	Self-Funded  To be confirmed	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATION
	<b>Innovation Futures in APEC: Competitiveness and Grand Challenges</b>		01/10/2014~30/09/2016	Russia; Thailand	PPSTI 05/2014S	
	<b>APEC Climate Symposium</b>		2016 (Annual Symposium, the date to be decided)	APEC Climate Center, Republic of Korea in cooperation with Peru's counterpart (TBD)	To be confirmed	

GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPERATION
	Building regional land and ocean observation systems to safeguard APEC resources and communities	<p>This project relates to a number of APEC objectives: 1. ocean-related issues for economic growth including blue economy, conservation and sustainable development of marine and coastal resources; 2. building an open economy in the Asia-Pacific featuring innovative development, 3. interconnected growth and shared interests; 4. building sustainable and resilient communities; 5. food safety and security; 6. emergency preparedness and disaster management; and 7. human capital development including education and capacity building.</p> <p>This project also supports the:</p> <ul style="list-style-type: none"> <li>• Xiamen Declaration, Five pillars of the APEC Accord on Innovative Development, Economic Reform and Growth Annex C</li> </ul> <p>This project supports core PPSTI objectives to strengthen collaboration and enhance member economies' innovative capacity, to develop science, research and technology cooperation, to develop innovation policy frameworks and to foster an enabling environment for innovation. It aligns with the PPSTI Strategic Plan by promoting an enabling environment for innovation and enhancing regional science and technology connectivity.</p> <p>This project is expected to have a high level of industry involvement and thus is of great relevance to ABAC.</p>	2016	Australia	Self-funded  PPSTI 03/2015S	EPWG OFWG



GOALS/ OBJECTIVES	ACTION ITEMS/SPECIFIC PROCESSES/ACTIVITIES	RELEVANCE WITH LEADERS/MINISTERS/SOM/SCE PRIORITIES AND DECISIONS AND TO ABAC	TIME FRAME	ORGANIZING/ COOPERATING PARTY	FUNDING TYPES	CROSS FORA COOPER ATION
Exchange environmental technologies and products and then increase the green economy through the focus on developing economies and SME's environmental industry	<b>Policy Investigation on the last mile solution of smart transportation and its application on SME value chain development</b>  (unsuccessful CN in S2, 2015)	This project intends to find out the models with best policy recommendations which can be benchmarked among APEC and enhancing the role of SME's in supporting the last mile policy and implementation in relation to building the supply chain.	15/12/2015~31/12/2016	Chinese Taipei/ China; Indonesia; Japan; Malaysia; Peru; United States; Viet Nam	Waiting to receive SF template from PO  Self-Funded	

2. Anticipated Activities and/or Proposed Work Plan with outside organizations in response to Leaders' and Ministers' calls for greater engagement with:

### 2.1 Business Sector

Firms of all size will take STI as a way to build resiliency and achieve growth. Additionally, the sound development of STI policies and programs by governments will take into account the business sector's view, given their proximity to markets. The financial support, technological edge and talent advantages are also reliable backups for continuously promoting STI development. PPSTI, therefore, has always emphasized the importance of enterprises or private sectors' participation in STI cooperation, and has implemented a number of projects led or attended by enterprises or private sectors. For example: in 2014, APEC Smart City Innovation & Technology currency Forum was mainly carried out by enterprises and the overseer of the forum is a business man. The ASPIRE Prize was also initiated by enterprises, simultaneously participated in by government, business and academia. It is a good

example of PPP cooperation. In addition, the 1st PPSTI Cooperation Achievements Exhibition demonstrated the major achievements of PPSTI during 2013 to 2014, made business sector including entrepreneurs know more about the work of PPSTI, and increased their interest of participation in APEC STI Cooperation. (to double check the 2015 activities)

In 2016, as the member economies have reached consensus that PPSTI should continue to explore potential cooperation with ABAC on the APEC *Innovation Agenda* as part of its ongoing effort to better engage with the private sector. As also identified in APEC Implementation Plan for the Boracay Action Agenda to Globalize MSME, better implementation of this plan calls for close cooperation between relevant APEC fora and the ABAC. PPSTI will work together with ABAC regarding the above issues and will try to create an innovation network with in-depth knowledge. And PPSTI welcome ABAC's more involvement in PPSTI's mission. Member economies are also encouraged to invite their own ABAC members to participate in PPSTI activities and seek common interests between ABAC and PPSTI. ABAC's increased participation in PPSTI activities and discussion with PPSTI members would also help both mechanisms achieve the concrete results and the great potential of cooperation, furthermore, accomplishing the ambitious goals of the *Innovation agenda* and the other related task will also need close cooperation and communication between PPSTI and ABAC.

## 2.2 Other Organizations/Stakeholders

The activities under PPSTI shall be conducted in alignment with international frameworks for STI.

To this end, PPSTI will engage in the following endeavours:

☒Where appropriate, pursue regional cooperation, in accordance with international agreements that regulate activities under the PPSTI, such as those issued by the United Nations and other international organizations, such as WTO, WIPO. In PPSTI 5, WIPO's participation presents a great opportunity to enable the innovators to raise their awareness of IP and enhance their skills of exploiting these potential assets, especially for SMEs, who were often rich in IP but low in terms of awareness and skills.

☒Where appropriate, identify areas for alignment with international frameworks and review, on a regular basis, member economies' activities, with a view, where appropriate, to align them with international frameworks.

☒Where appropriate, complement the work of specialized international or regional bodies in the development and review of STI. For example, in cooperation with the OECD as instructed in the *Boracay Action Agenda to Globalize MSME*.

Where appropriate, encourage the PPSTI endorsed projects to establish cross-fora cooperation with other APEC fora and furthermore other international organizations.

Where appropriate, seek to establish the optimal relationship with CSAE grouping.

☒ Identify and discuss issues, bottlenecks, or incidents, either domestic, within APEC or international fora which might be of vital importance to, and impact on the activities of the PPSTI, or which the PPSTI might be able to influence.

The PPSTI strives to be relevant to regional and multilateral organizations and have impact on the activities of regional or multilateral organizations such as the ASEAN Committee on Science and Technology (COST). In addition, the PPSTI's work is aimed at developing a more coherent regional perspective for articulation in broader international bodies.

3. Identify cross cutting issues and explain how they will be coordinated across Fora.

PPSTI, with its focus on science, technology and innovation, is dealing with cross-cutting issues which other APEC bodies are also engaged in. Therefore, PPSTI should strive to improve communication and coordination with these working groups to ensure complementarity and promote synergies. For example, APEC Cooperative Forum on Internet of Vehicles (IoV) and Its Worldwide Application Implementation had connections with the following groups: TELWG, TPTWG, and Automotive Dialogue. Additionally, ACES could cooperate with EPWG. The High Level Policy Dialogue on Science and Technology in Higher Education should also consider the linkage between PPSTI and HRDWG activities and interests.

4. Capacity building activities planned for 2016.(To be supplemented by member economies)

*[Note: for this item please extract those activities identified under sections 1, 2 or 3 above which involve capacity building and provide some detail on the capacities being targeted.]*

#### 4.1 Science Capacity Building Policy Recommendations

In 2016, the PPSTI will continue to reinforce its capability building in the execution of particular program for each particular workshop, and the concrete actions are as follows:

4.1.1 To reform the current capacity building mode, which is centered by short-term workshops. It does not mean that short-term workshops are useless. It is no doubt that they are still efficient in several fields of capability building, especially when it comes to arouse the attention of each participant on some important issues. However, the real capability building calls for a long-term and more targeted mode. PPSTI will try to establish Flagship or overarching projects or activities on Science Capacity Building to build a brand for PPSTI, such as ART, Young Scientist Workshop, so as to increase visibility within APEC.

4.1.2 To make sure that the projects and activities have specific goals and requirements in terms of technical knowledge and the professional knowledge of those beneficiaries, would be better to be more closely tailored to meet market needs. With a large scope of beneficiaries, the current capability building

projects for technological innovation is too general to provide professional knowledge for a certain group of people in their daily work. We should try to make a change and establish a specific goal for each project and define the concrete scope of beneficiaries. The key to the change is to make clear whose capability should be improved and what kind of result we got at last and what is the best way to achieve our goal.

4.1.3 The overseers of projects on science capacity building are strongly encouraged to select qualified participants well-fitted for their projects. The project guidebook notes that the project overseer will be responsible for ensuring that all participants, experts and speakers, are appropriately briefed on their roles, entitlements, and obligations before they agree to participate in a project. Participants are to add value to the event, for example by providing descriptions of relevant practices in their own economies and help disseminate the knowledge gained upon returning to their economies. The project overseers should also clearly outline the proposed selection criteria for participants and how they will be engaged in the project concept note and full proposal.

4.1.4 To provide all kind of online-training and self-learning courses or materials by using remote technology. Since the coverage of the APEC and the chances it provided are limited, remote technology is no doubt the best way to tackle those problems. We can stimulate participants to finish their distance training by providing proper incentives and certification for participants who have finished their courses. If it can be carried out successfully, distance training can be used as an economic way to supply training chances for people in large groups. However, capability building include not only distance training and the latter is just a small part of basic training for the former.

4.1.5 Participants generally agreed that if possible, the STI training and seminars' interactivity should be strengthened through case studies, discussion or simulations. We should make full use of the valuable communication opportunities among participants and those with resources. We should especially pay attention to early-period trainings, which could not only spread basic knowledge but also clarify complicated questions, exchange opinions and experiences.

4.1.6 To provide the participants with network and interactive activities featuring foresighted facilitated services through organizing seminars and follow-up activities. Network building is one of the most important goals of capacity building. PPSTI will explore and make use of such resources to the most extent. The effective method to facilitate STI network construction includes a platform to communication attended by participants from all economies, and to maintain the vigor of the network through follow-up activities.

4.1.7 As a way to motivate participants, PPSTI will consider to issue certifications for participants who have finished some specific courses and meanwhile invite participants who have finished their training courses to take part in relevant activities.

One of the problems we found in our investigation is that government officials are so busy with their daily work that they can hardly spare any free time to participate in our capability-building activities, especially when it comes to attending distance education courses and the relevant subsequent activities. To offer certifications only to participants who have finished the training courses instead of to all will encourage them to finish their courses. Another effective way of stimulation is to invite those who finished their courses to attend the relevant seminars and classes for further studies.

Moving to a combination of online courses delivery mechanisms that could enable a greater number of participants to complete the first stage of training. Those who successfully complete training could then participate in more targeted training on one style mentoring and/or work experience placements to put in practice new skills taught.

4.1.8 PPSTI will develop and make use of external resources in a larger scope, including all kinds of distance education courses and excellent expert networks. In the implementation of capability building in science and technology innovation, PPSTI has established a set of systematic resource network which is available. However, due to the limited resources, PPSTI will continue to seek for and make full use of external resources of knowledge which is relevant with our current external resources network of knowledge including the knowledge of network construction, the knowledge of management and experiences in curriculum.

#### 4.1.9 Follow-up assessment on operation mechanism

PPSTI would consider to conduct follow-up in-depth and systematic assessment on overall operation in certain years after current science capacity projects being carried out, in order to reassess the influence of science capacity building activities.

#### 4.2 Capacity building through the cooperation with business sector, other international organizations and other APEC fora

To enhance closer cooperation with outside organizations, such as business sector, other international organizations and other APEC fora, member economies will endeavor to:

☒ Collaborate with specialist regional and multilateral bodies;

☒ Consider, where appropriate, joint action within appropriate international and APEC fora towards shared objectives;

☒ Coordinate the PPSTI's work program with, where appropriate, and draw upon the expertise and the experience of regional and international bodies, including business sector, other international organizations and other APEC fora;

☒ Foster an effective interaction between business sector, other international organizations and other APEC fora; and

☒ Ensure that the PPSTI work builds upon, rather than duplicates, the work undertaken in business sector, other international organizations and other APEC forums

#### 4.3 Science Capacity Building Projects

Several economies have proposed influential and effective projects for science capacity building, such as the ASPIRE prize by the U.S. to encourage the groundbreaking researches by young scientists; APEC Green Video Festival by Chinese Taipei to appeal youth to use ICT technologies and internet skills to enhance S&T communication; as well as various projects on cultivating science skills and capacity in various research fields.

#### 5. Expected Outcomes/Deliverables for 2016. (To be supplemented by member economies)

OBJECTIVES	PROGRAMS	OUTCOMES/DELIVERABLE
<b>5.1 Enhance human capacity in policy development and best practice sharing</b>	Building regional land and ocean observation systems to safeguard APEC resources and communities	<ul style="list-style-type: none"> <li>• Stocktake of APEC economies current land and marine observation capabilities, underpinning data systems, future needs, key stakeholders and opportunities. The Stocktake will include a special emphasis on needs of developing economies and gender equity opportunities.</li> <li>• An articulated 10-year Action Plan for the marine and land observation needs of the APEC region, including recommendations for the development of a system and forward communication strategy, including:               <ul style="list-style-type: none"> <li>○ recommendations for the development of a system</li> <li>○ one or more funding proposals</li> </ul> </li> </ul>
<b>5.2 Accelerate S&amp;T knowledge sharing to strengthen regional connectivity as an enabler for innovation</b>	Building regional land and ocean observation systems to safeguard APEC resources and communities	<ul style="list-style-type: none"> <li>• An APEC marine and land observation community, comprising government, research and industry stakeholders will be formed to act as Ambassadors for APEC’s needs in the development of future regional observation systems and provide peer support to developing economies.</li> <li>• An Action Plan including a forward communication strategy</li> </ul>
<b>5.3 Accelerate Commercialization of Science and Technology</b>		