
Economic and Social Commission for Asia and the Pacific

Asian and Pacific Centre for Transfer of Technology

Governing Council

Thirteenth session

Manila, 28–30 November 2017

**Report of the Governing Council of the Asian and Pacific
Centre for Transfer of Technology on its thirteenth session**

**I. Matters calling for action by the Commission or brought
to its attention**

A. Matters brought to the attention of the Commission

1. The following decisions adopted by the Governing Council of the Asian and Pacific Centre for Transfer of Technology are brought to the attention of the Economic and Social Commission for Asia and the Pacific (ESCAP):

Decision 1

The Governing Council requests the Asian and Pacific Centre for Transfer of Technology to (a) continue publication of the *Asia-Pacific Tech Monitor* periodical and (b) discontinue the publication of the *Value Added Technology Information Service Updates* on biotechnology and new and renewable energy, from January 2018 onward.

Decisions 2.1–2.7

2.1 The Council notes the cost-cutting efforts made by the Centre in the past 13 years, including the reduction of the number of its staff members from 14 to 7. The Centre's current human resource capacity is less than optimum to address increasing capacity-building and other needs of member States to achieve the Sustainable Development Goals.

2.2 The Council takes note of the request made by the Commission in paragraph 4 (c) of its resolution 71/1 that the Governing Councils of each regional institution consider that the regional institution will be primarily funded by extrabudgetary resources.

2.3 The Governing Council of the Centre calls upon member States, including the host Government, to significantly enhance the financial support provided to the Centre to ensure that it has the minimum level of human and financial resources required to effectively implement its mandate of assisting

* Reissued for technical reasons on 23 March 2018.

member States to achieve the Sustainable Development Goals through capacity-building activities.

2.4 The Council invites non-contributing Council members to consider providing voluntary contributions to the Centre to strengthen its financial basis.

2.5 The Council invites member States to consider financing new technical cooperation projects or to develop new joint projects, based on the expressed demands for technical cooperation activities.

2.6 The Council invites member States to consider contributing national experts to work at the Centre. Such arrangements will enable the experts to benefit from their work experience at the Centre, and at the same time it will ease the Centre's current human resource constraints.

Decision 3

The Council encourages the secretariat, when developing its future work in support of sustainable development, to consider the discussions and recommendations of the International Conference on Green Technologies for Achieving Sustainable Development Goals, which was organized as the high-level substantive segment of the Council's thirteenth session.

Decisions 4.1–4.2

4.1 The Council adopts the programme of work of the Centre for 2018 as presented in document E/ESCAP/APCTT/GC(13)/3.

4.2 The Council requests the secretariat to include concrete proposals with regard to cooperation with the Centre, as presented by the member States in the Council's report.

Decision 5

The Council welcomes the offer made by Thailand to host the fourteenth session of the Council in November or December 2018.

II. Proceedings

A. High-level substantive segment: International Conference on Green Technologies for Achieving Sustainable Development Goals

(Agenda item 2)

2. The Centre jointly organized the International Conference on Green Technologies for Achieving Sustainable Development Goals with the Technology Application and Promotion Institute of the Department of Science and Technology of the Philippines.

3. A total of 77 participants, including government officials from countries across Asia and the Pacific, deliberated on how Governments could promote the transfer and adoption of green technologies for a sustainable future.

4. The chair's summary of the Conference is contained in annex II to the present report. Specific recommendations for the Centre emerged during the discussions and are summarized as follows:

(a) To consider creating regional knowledge networks for cross-border knowledge transfer among countries in the Asia-Pacific region, especially in the transfer and commercialization of green technologies;

(b) To design and implement capacity-building programmes on a wide range of topics including, but not limited to, preparing robust business proposals for green technology startups, as well as intellectual property rights, technology valuation, financing, accounting and business ethics.

(c) To continue facilitating South-South collaboration in the areas of green technology research, development, technology transfer and commercialization in member States.

B. Report on the activities of the Centre during the period December 2016 to November 2017

(Agenda item 3)

5. The Council had before it the report on the activities of the Centre during the period December 2016 to November 2017 (E/ESCAP/APCTT/GC(13)/1).

6. The Council took note of the report with appreciation.

7. The Council noted with appreciation the accomplishments of the Centre in terms of the range and quality of work delivered that had benefited more than 20 countries during the reporting period.

8. The Secretary of the Department of Science and Technology of the Government of the Philippines congratulated the Centre on its fortieth anniversary and commended it for its useful capacity-building work promoting science, technology and innovation. He suggested that the Centre should continue and strengthen its work on (a) facilitating the sharing of best practices and lessons learned related to the transfer of technologies; (b) strengthening its technology transfer database; suggestions included indicating preferred countries in which the technologies could be adopted by the technology providers; (c) facilitating cross-border technology transfer and providing capacity-building activities, for example on intellectual property rights protection; (d) facilitating public-private sector cooperation and engaging private sector stakeholders, such as venture capital firms and business angels, with the Centre's activities; and (e) taking advantage of the international exhibitions on technology transfer and display technologies already transferred through the Centre's platform. He encouraged member States and the Centre to jointly develop a vision for the Centre, on how it could become even more dynamic in its contributions to international goals when it reaches its fiftieth anniversary.

C. Analysis of the Centre's periodicals

(Agenda item 4)

9. The Council had before it the analysis of the Centre's periodicals (E/ESCAP/GC(13)/WP.1).

10. The Council took note of the analysis of the Centre's periodicals.

D. Report on the administrative and financial status of the Centre, including resource mobilization for upcoming projects/activities
(Agenda item 5)

11. The Council had before it the report on the administrative and financial status of the Centre for the period January to September 2017 (E/ESCAP/APCTT/GC(13)/2). The Council took note of the report and expressed its appreciation to the member States that provided annual voluntary contributions to the Centre so that it could continue to deliver on its programme of work.

12. The representative from China stated that her country continued to support the activities of the Centre. She informed the Council that the possibility of sending technical experts from China to the Centre on a secondment basis would be explored.

13. The representative from India stated that the enhancement of the host country's institutional support to the Centre would be considered within the framework of the host country agreement between his Government and ESCAP. The proposal should be submitted by ESCAP to the Ministry of Commerce and Industry of India. He assured the Centre that the highest priority would be given to the proposal on maintenance and/or renovation of the Centre's premises.

14. The representative from Kazakhstan assured the Council that the Government of Kazakhstan would be informed of the request to facilitate the financial contribution to the Centre.

15. Reaffirming the importance of the Centre's mandate, especially in the post-2015 sustainable development scenario, the Deputy Executive Secretary of ESCAP reiterated that technology transfer was critical to bridge the technological and digital divide member States of the region faced. He informed the Council that the United Nations system was undergoing severe budget cuts globally. To sustain the activities of the Centre and to meet the ever-increasing demands of member States, the Centre needed to seek increased financial and human resources support from member States.

16. The Council took note of the following ad-hoc expenditures proposed by the Centre for 2018:

(a) Website and information and communications technology (ICT) server migration for enhanced security;

(b) Installation of anti-air pollution measures: automatic glass doors on the Centre's floor to prevent inflow of polluted air and air-quality-related purchases such as additional air purifiers and replacement filters;

(c) Measures for greening the Centre's premises for future cost savings, such as the conversion of existing lighting to light-emitting diode light bulbs and the installation of solar panels in consultation with the ESCAP Subregional Office for South and South-West Asia (costs to be shared);

(d) An office car, as the current car had been in use for 12 years.

E. Main conclusions of the discussions of the high-level segment: International Conference on Green Technologies for Achieving Sustainable Development Goals
(Agenda item 6)

17. The Chair presented the summary of the discussions of the high-level segment, International Conference on Green Technologies for Achieving Sustainable Development Goals, contained in annex II to the present document.

18. The Council took note of the summary.

F. Proposed future projects and programme of work for 2018
(Agenda item 7)

19. The Governing Council had before it the draft programme of work of the Centre for the year 2018 (E/ESCAP/APCTT/GC(13)/3), also contained in annex III of the present document.

20. The Council took note of the draft programme of work and its three main areas of work:

(a) Institutional support project on strengthening the national innovation system of ESCAP member States with a special focus on technology transfer and the deployment of technology innovations;

(b) Evidence-based innovation policy for effective implementation of the 2030 Agenda for Sustainable Development in the Asia-Pacific region;

(c) Promoting technology commercialization through public-private partnerships in the Asia-Pacific region.

21. The member countries highlighted their science, technology and innovation-related priorities and suggested that the Centre should consider implementing their suggested activities, subject to their conformity with the mandate of the Centre and the availability of budgetary support. Specific suggestions were made by the following member States:

(a) The representative from China commended the Centre's expertise in organizing technology transfer capacity-building activities. She would explore the possibility of involving the Centre as a co-organizer of events at international conferences and business-to-business meetings for facilitating cross-border technology transfer to be held in her country;

(b) The representative from Fiji requested the secretariat to provide advance information on science, technology and innovation capacity-building activities;

(c) The representative from India expressed support for the work on technology commercialization. India would consider providing funding support for the project on promoting technology commercialization;

(d) The representative from Indonesia shared a proposal to hold the 2018 Asia-Pacific Innovation Forum in Jakarta in partnership with the Centre. The representative would communicate later the suggested modality of the Centre's participation after consultation with the Government. The representative expressed interest in exploring the possibility of participating in the United Nations Development Account project on evidence-based innovation policy;

(e) The representative from the Islamic Republic of Iran commended the Centre for its work on nanotechnology and highlighted its importance for the Islamic Republic of Iran and other member States. The Government of the Islamic Republic of Iran was interested in organizing an expert group meeting on the production and application of nanoparticles in various sectors thereby contributing to sustainable economic growth;

(f) The representative from Kazakhstan stated that his country would be interested in organizing capacity-building events in Kazakhstan and in working with the Centre on technological innovation and technology transfer;

(g) The representative from Malaysia stated that his country would be willing to co-host a capacity-building event in 2018. The suggested themes of the event would be finalized after internal consultations among relevant stakeholders in Malaysia. The Government of Malaysia also offered to host the fifteenth session of the Governing Council of the Centre in 2019 subject to domestic approval. The representative expressed appreciation to the Centre for organizing a regional conference on nanotechnology for safe and sustainable development in cooperation with the National Nanotechnology Centre of the Ministry of Science, Technology and Innovation of Malaysia in Putrajaya, Malaysia from 2 to 4 May 2017;

(h) The representative from Sri Lanka stated that his country was interested in exploring the possibility of participating in the United Nations Development Account project on evidence-based innovation policy. In addition, his Government requested the Centre's support on capacity-building related to disruptive technologies such as the Internet of things and innovative applications of ICT to achieve the Sustainable Development Goals;

(i) The representative from the Philippines commended the Centre for its achievements and congratulated the Centre on its fortieth anniversary. He informed the Council that the Government of the Philippines would support a regional forum on science, technology and innovation in 2018 to be held in the Philippines in partnership with the Technology Application and Promotion Institute of the Department of Science and Technology of the Philippines;

(j) The representative from Thailand requested the secretariat to consider bringing out a special issue of *Asia-Pacific Tech Monitor* focusing on technology-based entrepreneurship and startups. The representative also suggested that the Centre should cover issues related to the Internet of things and ICT-related innovations in its programme of work.

22. The Council recommended the Centre to continue focusing on capacity-building activities for member States in areas such as national innovation systems, nanotechnology, renewable energy, sustainable agricultural technologies, ICT and the Internet of things, which were of critical interest to member States.

G. Dates and venue of the fourteenth session of the Governing Council (Agenda item 8)

23. The Council welcomed the offer made by the Government of Thailand to host its fourteenth session in November or December 2018.

H. Other matters (Agenda item 9)

24. One representative stated that the Centre's activities were in line with promoting innovation as well as strengthening cooperation on science,

technology and innovation among member States. However, the name of the Centre did not reflect the Centre's broad area of focus and its mandate. He suggested that the Council should consider renaming the Centre to highlight the innovation promotion aspects of its programme of work.

25. Some representatives stated that the current name had a brand value and reflected the Centre's important mandate.

26. The Council expressed its appreciation to the Government of the Philippines, and especially the Technology Application and Promotion Institute, for its generous support in hosting the thirteenth session of the Council and the excellent hospitality extended to all the participants.

I. Adoption of the report (Agenda item 10)

27. The Council adopted the present report on 30 November 2017.

III. Organization

A. Opening, duration and organization of the session

28. The Governing Council held its thirteenth session in Manila from 28 to 30 November 2017. The Head of the Centre made the opening remarks. The inaugural address was made by the Deputy Executive Secretary of ESCAP. Mr. Fortunato de la Peña, Secretary of the Department of Science and Technology of the Philippines, provided the keynote address.

29. The Head of the Centre welcomed the representatives to the thirteenth session of Council and highlighted the importance of green technologies for achieving the Sustainable Development Goals and the Centre's unique mandate to support member States in the development, transfer and adoption of green technologies.

30. The Deputy Executive Secretary of ESCAP highlighted that science, technology and innovation were the means of achieving the Sustainable Development Goals and had great potential for helping countries meet social and environmental challenges. He reiterated that the major challenge had always been the weak link between research and commercialization, especially in the case of green technologies.

31. Mr. De La Peña commended the Centre's continued support to member States on science, technology and innovation. He stated that the Centre's unique mandate made it an ideal platform to support member States for the development, transfer and adoption of green technologies through regional cooperation and networking to achieve the Sustainable Development Goals.

B. Attendance

32. The session was attended by representatives of the following members of the Council: Bangladesh; China; Fiji; India; Indonesia; Iran (Islamic Republic of); Kazakhstan; Malaysia; Pakistan; Philippines; Republic of Korea; Sri Lanka; and Thailand.

33. The representatives of the following intergovernmental organizations attended: Asian Development Bank; and World Trade Organization.

C. Election of officers

34. The Council elected the following officers:

Chair: Mr. Edgar I. Garcia (Philippines)

Vice-Chair: Mr. W.J.L.S. Fernando (Sri Lanka)

D. Agenda

35. The Council adopted the following agenda:

1. Opening of the session:
 - (a) Opening statements;
 - (b) Election of officers;
 - (c) Adoption of the agenda.
2. High-level substantive segment: International Conference on Green Technologies for Achieving Sustainable Development Goals.
3. Report on the activities of the Centre during the period December 2016 to November 2017.
4. Analysis of the Centre's periodicals.
5. Report on the administrative and financial status of the Centre, including resource mobilization for upcoming projects/activities.
6. Main conclusions of the discussions of the high-level segment: International Conference on Green Technologies for Achieving Sustainable Development Goals.
7. Proposed future projects and programme of work for 2018.
8. Dates and venue of the fourteenth session of the Governing Council.
9. Other matters.
10. Adoption of the report.

Annex I

List of documents

<i>Symbol</i>	<i>Title</i>	<i>Agenda item</i>
<i>General series</i>		
E/ESCAP/APCTT/GC(13)/1	Report on the activities of the Asian and Pacific Centre for Transfer of Technology during the period December 2016 to November 2017	3
E/ESCAP/APCTT/GC(13)/2	Report on the administrative and financial status of the Asian and Pacific Centre for Transfer of Technology	5
E/ESCAP/APCTT/GC(13)/3	Draft programme of work of the Asian and Pacific Centre for Transfer of Technology for 2018	7
E/ESCAP/APCTT/GC(13)/4	Report of the Governing Council of the Asian and Pacific Centre for Transfer of Technology on its thirteenth session	
<i>Conference room papers</i>		
E/ESCAP/APCTT/GC(13)/CRP. 1	Concept note and provisional agenda of the International Conference on Green Technologies for Achieving Sustainable Development Goals	2
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E/ESCAP/APCTT/GC(13)/WP. 1	Analysis of Asian and Pacific Centre for Transfer of Technology periodicals	4
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E/ESCAP/APCTT/GC(13)/L.1	Annotated provisional agenda	1
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<i>Information available online</i>		
www.apctt.org	Information for participants	
www.apctt.org	Tentative programme	

Annex II

Chair's summary*

Main conclusions of the discussions of the high-level segment: International Conference on Green Technologies for Achieving Sustainable Development Goals

1. The International Conference brought together 77 participants from the Centre's Governing Council member States including government officials, science, technology and innovation professionals and international experts to discuss three core topics, namely:

(a) The role of public policies in promoting green technologies for achieving sustainable development;

(b) Transfer and Commercialization of Green Technologies: Challenges and Opportunities;

(c) The business environment for innovation in green technologies.

2. To advance implementation of the Goals of the 2030 Agenda for Sustainable Development, member States would need to achieve greater economic and social development with less resources and less ecological footprint. There should be a balance between economic, social and environmental gains. The economic development must be sustainable, inclusive and environment-friendly.

3. There is an ever-increasing need for green technologies and related innovations that can help in achieving economic progress while ensuring minimal, reduced or no impact on environment and natural resources. Green technologies hold the key for achieving sustainable development goals and can transform lives, boost economic growth, build livelihoods and ensure sustainable use of resources.

4. The decoupling of economic growth will require increased contributions from the private sector. Yet, public sector policies are also fundamental to address the market and systemic failures that limit the adoption and development of green technologies and to encourage private investment in green technologies. For instance, public funding helps to reduce the risk and the cost of private sector financing. Procurement policies, when carefully designed, can be a powerful instrument to encourage innovation in the private sector and support the diffusion and adoption of green technologies.

5. There has been rapid progress in the recent years on the development of market for green technologies, especially for the renewable energy based technologies. Besides, green technologies are creating more employment opportunities. The field is so promising for some investors seeking good returns for investments. Apart from new technologies and products, there are also opportunities in greening of services sector as part of the value chain.

6. While more advanced countries will need to invest more in R&D in new and emerging technologies, developing countries with more limited technological capacities could focus on the adoption and diffusion of existing

* The present annex is being issued without formal editing.

technologies. This necessitates more capacity-building on various aspects of technology transfer and commercialization.

7. In the promotion of green technology policy, often the challenges are insufficient financial allocation, limited knowledge and skills, lack of strong political will and inadequate private sector participation due to lack of incentives. The case study from Malaysia showed that how the political will, adequate financing, supportive policy ecosystem and hand holding support through an end-to-end innovation and commercialization facilitation platform resulted in remarkable success and achievements and exceeded the initial targets set for commercialization.

8. SMEs are the backbone of economies in Asia and the Pacific. Supporting the commercialization of green technologies may require support to selected SMEs that have the potential for innovation. In addition to financing aspects, comprehensive support must be extended to these SMEs including advice on intellectual property rights (IPRs), market analysis and mentoring throughout the commercialization process.

9. The commercialization of research and technologies requires a market-driven approach that provides business advisory, regulatory, consultancy services and support from the early phase of idea conceptualization to the final commercialization. This requires working with a wide range of stakeholders (universities, public research institutions, large scale industries, SMEs, individual entrepreneurs and start-ups) that are necessarily involved in the commercialization of innovation.

10. The green growth strategy of the Republic of Korea, for instance, has been characterized by a strong top-down leadership and substantial budget allocation which resulted in accelerating green growth in the country.

11. There are important trade-offs and synergies between different sustainable development goals. Addressing growing competition for water among agriculture, energy, industry and cities has become a critical challenge for Asia-Pacific countries and requires careful consideration, research and dedicated resources.

12. The green economy offers a great opportunity for economic growth. However, such opportunities have so far concentrated in mostly developed countries and few leading developing countries. The increasing demand for green products and the adoption of environmental requirements is a strong incentive for the development of the green economy. Trade can be an important mechanism for the transfer of green technologies, for example by making the acquisition of green technologies less expensive. It can also provide SMEs with business and learning opportunities through their participation in global value chains. Trade policies must be carefully designed and negotiated so that they respond to environmental concerns but do not act as a non-tariff measure that result in unnecessary increase in the cost of technologies or discrimination against non-domestic firms.

13. The organization of large technology exhibitions such as Astana World Expo-2017 “Future Energy” in Kazakhstan will serve as a demonstration platform and can be a launching pad for collaborative projects. Kazakhstan also has a plan to establish an International Centre for Green Technologies and Investment, “Future energy”.

14. The use of certifications, eco-labelling, standards and green public procurement are other important areas for supporting the green economy. These are powerful instruments for supporting the switch to more environmentally sound technologies (ESTs). However, if they are not carefully designed and managed, they can also have negative effects.

15. The development of a national green economy requires the adoption of long-term national strategies that set up increasingly ambitious goals and that are sustained beyond a single political cycle. This further requires substantive budget allocation and a comprehensive set of financial mechanisms. Adoption of environmental standards, particularly international ones, would support the emergence of new green-technologies.

16. Sharing best practices and lessons learned in technology commercialization among countries are useful. However, strategies and models need to be customized and fine-tuned to meet specific needs of the end users in target countries.

Specific recommendations

17. APCTT to consider creating regional knowledge networks for cross-border knowledge transfers among countries in the Asia-Pacific region, especially in the transfer and commercialization of green technologies.

18. APCTT to continue facilitating South-South collaboration in the areas of green technology research, development, technology transfers and commercialization in member States.

19. APCTT may develop case studies and business models on green technology transfer and commercialization and design capacity-building programmes targeting start-ups, business incubators and technology promotion agencies in member States.

20. APCTT may also design and implement capacity-building programmes on a wide range of topics including, but not limited to, preparing robust business proposals for green technology start-ups, intellectual property rights, technology valuation, financing, accounting and business ethics.

21. There is a need for capacity-building for policymakers to enhance awareness on the subsidies and incentives for encouraging private sector participation as well as to establish an effective regulatory ecosystem for cross-border trade of green technologies and products. Countries can learn from experiences, best practices and even failures from other countries while designing new policy instruments and/or creating new strategies for promoting green technology innovation and commercialization.

22. APCTT may consider organizing business-to-business meetings between technology providers and seekers in the area of green technologies for accelerating technology diffusion. APCTT can act as a mentor, especially for technology transfers to least developed countries (LDCs) in the Asia-Pacific region.

23. APCTT may explore organizing capacity-building activities on financing aspects of innovation with possible focus on green technologies in cooperation with public and private financial institutions.

Annex III

Programme of work for 2018*

I. Introduction

1. The programme of work for APCTT is aligned with the sub-programme of the Trade, Investment and Innovation Division (TIID) of ESCAP. The following projects are proposed for implementation in 2018.

A. Project on “Strengthening the National Innovation System (NIS) of ESCAP member States with special focus on technology transfers and deployment of technology innovations”

2. Funded through the annual contributions received from the APCTT Governing Council member States (multi-donors) for the biennium 2018–2019. This project supports the organization of APCTT’s substantive activities to strengthen the capacity of science, technology and innovation (STI) policymakers and key stakeholders in ESCAP member States.

3. The project would facilitate regional cooperation, improve access to knowledge and information on new technological innovations, enhance skill and capability in policymaking, strategy development, technology transfer, promoting the adoption and use of new and emerging technologies, and encourage technology-based enterprise creation.

4. The project also supports production of APCTT’s regular web-based publications, namely the *Asia-Pacific Tech Monitor* and the *Value-Added Technology Information Service (VATIS) Updates*.

5. The *Tech Monitor* features analytical articles and reports on technology trends and developments, technology policies, technology market, innovation management, technology transfer and new products and processes. The *Tech Monitor* will also be disseminated widely through social media, such as Facebook and Twitter to enhance the outreach.

6. APCTT currently brings out *VATIS Update* periodicals on new and emerging areas such as biotechnology and new and renewable energy. These periodicals disseminate information on latest technological innovations, policies, market, recent publications and events.

7. The thirteenth session of the Governing Council will decide on the future course of action related to publishing the *VATIS Updates* in a separate session to discuss agenda item 4.

B. Project on “Evidence-based innovation policy for effective Implementation of 2030 Agenda for Sustainable Development in the Asia-Pacific region”

8. Expected funding support from United Nations Development Account (UNDA) eleventh tranche. In partnership with TIID-ESCAP, APCTT developed a project proposal on “Evidence-based innovation policy for effective implementation of 2030 Agenda for Sustainable Development in the Asia-Pacific region,” to be funded by the United Nations Development Account (UNDA) eleventh tranche.

* The present annex is being issued without formal editing.

9. The main objective of the project is to strengthen capacity of least developed countries in South Asia, South-East Asia and small island developing States to formulate evidence-based innovation policy. This project is scheduled to be jointly implemented by TIID-ESCAP and APCTT during the period 2018 to 2021.

C. Project on “Promoting Technology Commercialization through Public-Private Partnership (PPP) in the Asia-Pacific Region”

10. The project aims at strengthening capacity of Science, Technology and Innovation stakeholders (e.g. R&D institutions, technology commercialization agencies/offices, technology business incubators and policy makers) in selected Asia-Pacific countries to promote technology commercialization, technology business incubation, cross-border technology transfer and regional networking and technology business cooperation.

11. APCTT is currently exploring the funding possibility for this project with the Department of Scientific and Industrial Research (DSIR) of the Ministry of Science and Technology, Government of India. This project would build upon the achievements of earlier DSIR supported NIS projects (phase I and phase II) implemented by APCTT.
