

Policies and Practices for
Hong Kong as a Knowledge Economy and the Proposed

Innovation

and

Technology Bureau

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Table of Contents

Preface

Executive summary

1. Background & introduction

2. On-going initiatives

- Historical perspectives
- Recent initiatives

3. The proposed Innovation and Technology Bureau

- Roles of the Innovation & Technology Bureau
- Administrative arrangement

4. Hong Kong to become an IP and Technology Transfer Centre

- Trading IP without the associated technology?
- Business models
- Enterprise China Network – working with Europe and China
- Hong Kong’s role and the way forward

5. Further studies

- High-level economic studies
- Progress report and review of Prof Tien Chiang-lin’s proposals
- Facilitation of international standards

6. Practical things that can be done now

- Consensus Building – “Five Steps for HK’s Future”
- Build links with Europe and Mainland China
- Build links with Taiwan and other ASEAN countries

7. Policy measures roles for the Innovation & Technology Bureau

8. Concluding Remarks

Appendices

Preface

This paper is written in response to an open request for ideas and inputs to participants of a study trip to Taipei organised by the Central Policy Unit (CPU) of the HKSAR Government at the end of June 2011. The briefing made by Prof Lau Siu-kai to the delegates of the Taiwan study trip is summarized in the “Background & Introduction” section. An observation made by APICC about Taiwan’s economic support structure is also made in the same section. The rest of the paper outlines the specific policy measures and practical steps the HKSAR Government should, in our opinion, facilitate to help Hong Kong move forward to become a truly world class “Knowledge Economy”. It is the fourth in a series of papers prepared by Asia Pacific Intellectual Capital Centre (APICC)¹ on the subject:

- i. **February 2010** -- *“Specific Measures for InvestHK to promote the Knowledge-based Economy as a new product positioning for Hong Kong”*
- ii. **May 2010** -- *“The Knowledge-based Economy from the perspectives of the Commerce and Economic Development Bureau of the HKSAR Government”*
- iii. **March 2011** -- *“Hong Kong’s Innovation and Technology Role in Mainland China’s 12th Five Year Plan”*

Recommendations by Dr. Gordon McConnachie on how to turn Hong Kong into an “IP Trading and Technology Transfer Centre” are also included in Chapter 4 of this paper.

APICC welcomes the invitation from the Central Policy Unit (CPU) to offer useful ideas, practices and policy inputs to the proposed Innovation and Technology Bureau, is pleased to submit this document for consideration and will also take up opportunities to do so in future.

¹ APICC is a not-for-profit company registered in Hong Kong. The team behind APICC has been promoting the concepts and practices behind the “Knowledge Economy” in Hong Kong and Mainland China since 2006: <http://www.apicc.asia/>

Executive summary

According to a briefing made by the CPU, Hong Kong has been looking at further economic diversification as it was felt that the traditional industries should not be the only drivers of economic growth. The “Six New Industries” were proposed with the primary objectives of improving people’s livelihood, boosting employment and providing more opportunities for the young people. There is now increased economic integration with Mainland China and an added dimension of “HK-Taiwan” relations following the improvement in “Cross Strait” relations. According to the Central Policy Unit (CPU), HKSARG is unlikely to be dogmatic on the subject of “Free Market Economy” versus “Planned Economy”. Hong Kong needs to do well in its participation in Mainland’s “12th Five Year Plan” (2005-2010), HKSARG’s support to industries will increase but implementation of “central economic planning” in HK is unlikely to be feasible as the HKSARG does not have control over HK’s economic activities.

From the visit, APICC observed that government units in Taiwan are more aware of the need to help industries in the “commercialization” process when compared to Hong Kong. Business enterprises, academics and government units in Mainland China are also aware of HK’s unique administrative, legal and commercial infrastructure and understand HK’s potential to assist China in moving towards goals stated in the “12th Five Year Plan”. Hong Kong needs to have a better understanding of how the game in international trade is played if it wishes to play a more useful role in China’s economic development and move away from the current government policy of A) “intellectual property protection alone”, to B) “how to make use of IPR to create commercial values for business enterprises”.

A more holistic approach to economic development needed

Hong Kong has not been a totally laissez-faire economy. For example, the “Rail-link Land Use Policy” and the decision to build the Mass Transit Railway (MTR) were made in the late 1970s. HKTDC and HKPC were established in the mid-1960s and Mr. C.H. Tung took advice from Prof. Tien Chiang-lin in 1998 and began to build the innovation and technology capacity we have today. Hong Kong, however, will benefit from a more holistic approach to economic development and an overall strategy of developing innovation and technology. The Innovation and Technology Bureau (I&TB) proposed by Samson Tam (Legislative Councilor, IT Sector) is such an attempt. The role proposed I&TB would include providing strategic direction, exploiting

existing opportunities, exploring new ones, coordination within HKSARG and specific implementation steps to convert wishes into reality. It will also assist HK enterprise and R&D agencies to understand how to extract values from money invested in “intangible assets” and create commercial values from “intangibles”.

I&TB will also coordinate policy initiatives within the HKSARG, driving change amongst the business community and public and will have the role of helping to attract inbound investment and helping to position Hong Kong as one of the most important “Knowledge Economies” within China and around the world. Such activities will indirectly assist Mainland organizations to connect with the rest of the world (i.e. “going out” 走出去 *Zōuchūqū strategy*) through Hong Kong.

With the passing of the motion debate moved by Samson Tam on 6 July 2011, HKSARG now has a clear mandate from Legco to investigate the roles of the proposed Innovation and Technology Bureau. From an administrative viewpoint, a practical way to put the Innovation and Technology Bureau into practice is to upgrade the Communications and Technology Branch (CTB) of the Commerce and Economic Development Bureau (CEDB) to become a full policy bureau. The newly created Innovation and Technology Bureau would assume all the existing functions and the Government Departments now under the supervision of the Branch. Since protection and use of Intellectual Property Rights (IPR) are closely related to Innovation and Technology, the HKSARG should also seriously consider putting the Intellectual Property Department (IPD) under the supervision of the proposed Innovation and Technology Bureau.

Hong Kong to become an IP and Technology Transfer Centre

“Technology” throughout this document is used in the wider sense to include “Know-how” and business process. HK is well established as a trading centre for goods and services and can become an IP and Technology Transfer Centre for Asia.

HK’s current experience in IP Trading comes largely from the more narrowly defined experience of licensing of trade mark, musical work and product design licensing; (i.e. “Copyright”, “Trademarks” and “Registered Design”). There is almost no experience in trading “Patents” and in the IP and Technology Transfer arena China is seeking help in and with which HK ought to be involved. Such an approach require the high-end and integrated “legal”, “business” and “technology service” skills and business

environment to package and sell an IP and Technology bundle. Such high-end business service skills are essentially missing in HK at this moment.

HKSARG's facilitation and involvement, such as pushing ahead with signing more than 50 bi-lateral Double Taxation Avoidance Agreements (DTAAs), pushing ahead to work with the Central Government in issuing HK originated patents and finding practical ways to use HK's strong legal and administrative environment to assist Mainland China's "Self-initiated Innovation" goal, such as participating in a proposed Enterprise China Network (ECN) technology transfer initiative in close collaboration with ITTN-Beijing and the Enterprise Europe Network (EEN) owned by the European Union are necessary.

A new economic development path

Credit must be given to Mr. C.H. Tung, HK's first CE for having the foresight to build up the innovation and technology capacity HK now has today. However, the "intellectual argument" on how the HKSARG should facilitate Hong Kong's economic development will be an on-going issue. HK will benefit from undertaking some practical steps and further studies on the "philosophical" as well as practical implementation aspects of HK's further development into a world-class "Knowledge Economy" that service Mainland China and the world (see Point 5.4 Section and Section 6). The proposed I&TB will have a strong role to play in economic development and job creation and at the same time be able to defend government facilitation in a coherent intellectual framework or strategic blueprints to local, mainland and international stakeholders.

Hong Kong (HKSARG and government critics alike) somehow acknowledges that the "old" economic development model is not working but could not pinpoint what the "new" economic development model is. HK needs to find its own market niche and its own economic development path based on its unique history, economic and social strengths and political position as a territory of China that operates under a separate legal and administrative framework that is separate from the Mainland under "One Country, Two Systems". HK also has a very unique role to play in the further development of China. The "Knowledge Economy", the practical policy measures and steps proposed in this document and the Innovation and Technology Bureau are proposals. It is clear the without some sort of government leadership and facilitation, the economic transformation in HK will not happen.

1. Background & introduction

- 1.1 According to a briefing made by the Prof. LAU Siu-kai, Head of CPU to the delegates of the Taiwan study trip, Hong Kong has been looking at economic diversification as it was felt that the traditional “Four Pillars Industries” of “Financial Services”, “Trade and Logistics”, “Tourism” and “Professional Services” alone should not be the only drivers of economic growth. The “Six New Industries”² were invented with the primary objectives of improving people’s livelihood, boosting employment and providing more opportunities for the young people.
- 1.2 Other than Hong Kong’s increased economic integration with Mainland China, there is now an added dimension following the improvement in the “Cross Strait” relations. Hong Kong and Taiwan can now develop official relationships, such as the study trip to Taiwan led by the Central Policy Unit in June 2011 and the official visit made by the Financial Secretary (FS) to Taiwan in August 2010. Since the FS’s visit, a decision was made to re-designate and upgrade Taiwan’s representative office in Hong Kong. From 15 July 2011, the “Chung Hwa Travel Service 中華旅行社 ” will be renamed “Taipei Economic and Cultural Office in Hong Kong 駐香港台北經濟文化辦事處”.
- 1.3 The HKSAR Government will not only look at policy research for this term of government (to end on 30 June 2012) but would also look into researches that extend beyond the current term.

HKSAR Government’s role in Economic Development and the 12th Five Year Plan

- 1.4 Prof. Lau Siu-kai said that the HKSAR Government is unlikely to be dogmatic on these two subjects. It will neither take on a “Free Market Economy” or “Planned Economy” stance on the subject, but as Hong Kong moves forward, HKSARG’s role must and will become more and more active. The Government’s role in economic development has been changing since the “Laissez-faire” days of Sir John Cowperthwaite and Sir Philip Haddon-Cave of the 1960s and 1970s . In the past ten years, Government’s thinking is changing as well, particularly in the

² “Six New Industries” are: 1) Education Services, 2) Cultural and Creative Industries, 3) Inspection and Certification, 4) Medical Services, 5) Environmental Protection Industry, 6) Innovative Science and Technology.

development of the “New Industries” and the “Creative Industries”. People are unlikely to oppose HKSARG’s economic development initiative; instead they are more likely to say that the HKSARG is not doing enough on the “Six New Industries”.

- 1.5 Hong Kong has been participating in China’s Five Year Planning cycle since the “11th Five Year Plan” (2005-2010). Hong Kong is now formally written in to the “12th Five Year Plan” (2011-2015) and some people are even demanding that Hong Kong should have its own 12th Five Year Plan. This change is unlikely to be feasible as Hong Kong is fundamentally a free market economy and HKSARG does not have direct control over Hong Kong economic activities.
- 1.6 Even though Hong Kong cannot become a planned economy, Hong Kong’s participation in the 12th Five Year Plan is important. Hong Kong needs to do well in this area, otherwise we may not be invited to participate in the “13th Five Year Plan” (2016-2020). Under these perspectives, HKSARG’s participation activities must increase, as in the case of support given to the “Creative Industries”.

From “IP Protection” alone to “Extracting Values from IP”

- 1.7 From the study trip to Taiwan, APICC finds that Government units in Taiwan are probably much more keenly aware of the need to help industries in the “commercialization” process than the HKSARG. “Intellectual Property Rights Value Enhancement” (智權增值) was mentioned in the introduction of Industrial Technology Research Institute (ITRI 工業技術研究院). Taiwan Intellectual Capital Research Centre (TICRC 台灣智慧資本研究中心), APICC’s counterpart organization in Taiwan <http://ticrc.km.nccu.edu.tw/home> is closely linked to the Department of Industrial Technology, Ministry of Economic Affairs (DOIT of MOEA 經濟部技術處) <http://doit.moea.gov.tw/About> and the Institute for Information Industry (財團法人資訊工業策進會) <http://www.iii.org.tw> of Taiwan.
- 1.8 Government units, academics and enterprise in Mainland China are also more receptive, more aware of Hong Kong’s unique administrative, legal and commercial infrastructure and have better understanding of Hong Kong’s potential to assist China in moving towards goals stated in the “12th Five Year

Plan”, particularly the **“Self-initiated Innovation”** goal (自主創新 *Zìzhǔ chuàngxīn*) – one of the key cornerstones in China’s attempt to upgrade its business and industrial infrastructures.

- 1.9 In the case of Hong Kong, the subject of **“Intellectual Capital”** was mentioned several times in Prof. Tien Chiang-lin’s report written in 1998. However, Hong Kong business experience has primarily been in “Trading” and “Financial Services” and very few people in business and in government understand how **“intangibles”** of the developed Knowledge Economy of the world work. There has been a long “struggle” with HKSARG Departments to facilitate HK’s transition from the current policy of: A) **“Intellectual Property Protection”** alone to B) **“Intellectual Property Exploitation”** -- i.e. how to make use of IPR to create commercial values for business enterprises. Hong Kong needs to have a better understanding of how this game is played in international trade and move forward to become a truly innovative “Knowledge Economy”.

2. On-going initiatives

- 2.1 Sir David Akers-Jones said in his memoirs³ that *“... the colonial government possibly overdid the policy of non-intervention, of leaving Hong Kong to develop on its own lines without interference and without trying to adjust to the world around us.”*
- 2.2 Despite such misgivings, Hong Kong has not been a totally laissez-faire economy as there were many economic development projects and facilitation measures since the days of Sir Murray MacLehose⁴. For example, we know that the “Rail-link Land Use Policy”⁵ and the decision to build the Mass Transit Railway (MTR) were made by Sir Murray⁶ towards the end of his term in the

³ See page 265 of “Feeling the Stones, Reminiscences by David Akers-Jones”. Sir David is a former Chief Secretary (1985-1987) and a former Acting Governor (1986-1987) of Hong Kong.

⁴ Sir Murray MacLehose was Hong Kong’s Governor from 1971-1982.

⁵ See Slide 17 and remarks made by Jimmy C F Leung, Director of Planning of HKSARG in a speech he made at the Hong Kong Democratic Foundation.

<http://www.hkdf.org/newsarticles.asp?show=newsarticles&newsarticle=301>

⁶ See a comprehensive list of policy decision made by Sir Murray MacLehose in a Wiki page: http://en.wikipedia.org/wiki/Murray_MacLehose,_Baron_MacLehose_of_Beoch

early 1980s. We know that, soon after his arrival, he appointed McKinsey (management consultant) which led to the reorganization and distribution of responsibility between the Policy Branches (Policy Bureaus of today) and Departments which execute policies.

Historical perspectives

2.3 Some of the major initiatives made before Sir Murray's days to 1997 that are still affecting Hong Kong's Innovation and Technology development include:

1966 *Establishment of the Hong Kong Trade Development Council (HKTDC) to support Hong Kong's export and trade. HKTDC now has 40 overseas offices and is finance by tax (trade declaration charge) and from income-generating business activities.*

1967 *Establishment of the Hong Kong Productivity Council as a statutory organisation to support the industrialists. (HKPC now has 600 staff, an operation budget of HK\$600 million of which HK\$150 to 170 million is financed by a government subvention now made through the ITC and the rest are from income-generating business activities).*

2.4 In 1999 Prof TIEN Chiang-lin, Chairman of Chief Executive's Commission on Innovation and Technology published a final report and many of the recommendations made were implemented under Mr. Tung Chee-wah, HKSAR Government's first Chief Executive and also implemented by this term of Government led by the Hon. Donald Tsang:

2000 *Establishment of the Innovation and Technology Commission (ITC),*

2000 *Founding of Hong Kong Applied Science and Technology Research Institute (since 2006, ASTRI was designated as a research centre for the Information and Communication Technology industries),*

2001 *Incorporation of Hong Kong Science and Technology Park (HKSTP),*

2003 *Opening of Cyberport,*

2004 *Establishment of the Steering Committee on Innovation and Technology (now chaired by John Tsang, Financial Secretary),*

2001 - *Hong Kong Jockey Club Institute of Medicine and five other R&D*

2006 *Centres were established⁷.*

⁷ The six R&D institutes are: i) Automotive Parts and Accessory Systems (APAS) R&D Centre; ii) ASTRI; iii) Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre); iv) The Nano

More recent Initiatives

2.5 More recently, HKSARG has shown strong interest in supporting the “Creative Industries”, new industries as expressed in “Six New Industries” and in “IP Trading”:

- 2006** *Hong Kong Design Centre established,*
- 2008** *Opening of Jockey Club Creative Arts Centre,*
- 2009** *“Six New Industries” announced in CE’s 2009/2010 Policy Address,*
- 2009** *CreateHK established as a Department under the Commerce and Economic Development Bureau of HKSARG,*
- 2010** *With the support of Hong Kong Design Centre, Hong Kong Polytechnic University and the Vocational Training Council, a private foundation (Musketees Education and Culture Charitable Foundation Limited) won the bid to turn the former Hollywood Road Police Married Quarter into a creative landmark,*
- 2010** *OGCIO, IPD and the HKTDC beginning to look into the feasibility of building up an IP Trading capacity in Hong Kong,*
- 2011** *Innovation and Technology Commission steps up the activities to link Hong Kong with Shenzhen and other projects in Mainland China.*

2.6 Hong Kong has many of the attributes of an advanced society and it is in an ideal position, both geographically and politically, to transform itself into a leading centre of the globalised “Knowledge Economy”. While all these initiatives undertaken by Hong Kong are useful, ***a common thread – a development strategy -- that links facilitation activities to an economic development goal*** seems to be missing. This inadequacy could be linked to:

- lack of the relevant industrial experience China and the developed industrial nations have;
- lack of knowhow in commercialization of “intangibles” and;
- lack of coordination at the Policy Bureau level.

and Advanced Materials Center; v) The Hong Kong Research Institute of Textiles and Apparel (HKRITA); vi) Hong Kong Jockey Club Institute of Medicine.

- 2.7 Hong Kong would benefit from a more holistic approach which will need to include:
- i. Measures and initiatives to stimulate organisations and business enterprises to think for themselves as to *how they best create, extract and capture values* from business activities;
 - ii. More effective and **strategic policy support**, stimulation and coordination of facilitation measures at a level higher than the units that are executing the projects.

3. The proposed Innovation and Technology Bureau

3.1 Hong Kong has many of the attributes of an advanced society which render it fit for purpose as a leading centre in the modern globalised “Knowledge Economy”. However HK is applying its knowledge and strength in a rather piecemeal fashion. **Hong Kong would benefit from a holistic approach** and better use of its “First Level Business Conditions” — the extremely well-organized and effective social and business conditions – and turn those conditions into bringing considerable economic benefit to Hong Kong and partner “Knowledge Economies” of Asia and around the world.

3.2 Some HKSARG officials⁸ have well understood that the subject of “Knowledge Economy” is wider than the portfolio of any single Policy Bureau under the current structure of the HKSARG. In November 2010, Dr Samson Tam, legislator for the IT Sector suggested that Hong Kong needs an Innovation and Technology Bureau at a speaker luncheon hosted by a public policy think tank⁹. On 6 July 2011, Dr Tam moved a motion debate in the Legislative Council urging the HKSARG to “... *proactively study the establishment of an Innovation and Technology Bureau*” specially tasked:

- i. *“To co-ordinate and formulate Hong Kong’s overall strategy of developing innovation and technology, so as to manifest the*

⁸ e.g. in follow-up e-mails between the CEDB and APICC following separate meetings with InvestHK and CEDB in 2010 where the subject of “Knowledge Economy” was raised.

⁹ The speaker luncheon was hosted by the Hong Kong Democratic Foundation on 26 November and an edited version of Dr Samson Tam’s speech was published in “Trader of Ideas”, Friday 3 December 2010, Page A19 of SCMP <http://www.hkdf.org/newsarticles.asp?show=newsarticles&newsarticle=286>

Government's determination and commitment in promoting the development of innovation and technology",

- ii. "To upgrade Hong Kong's international status in this respect",*
- iii. "To provide more public resources towards building an innovation and technology culture, to build recognition and consensus amongst the general public".*

Positive Support from Legco

3.3 The motion was passed with positive amendments from Ms Emily Lau of the Democratic Party and Mr. PAN Pey-chyou of Hong Kong Federation of Trade Unions¹⁰. The motion as passed now includes the Legislative Council's wishes to:

- i. create more local employment opportunities and *achieve economic development with employment as the priority*;*
- ii. earmark land in planning for developing innovation and technology and to capitalize on Hong Kong-Mainland connection;*
- iii. specify that sufficient resources be given to local universities and technological research institutes and that the sum which the Government puts into research and development activity must occupy a certain proportion of the Gross Domestic Product;*
- iv. reform Hong Kong's existing patent application system, including considering the progressive introduction of a Hong Kong "original grant patent system";*
- v. adopt a transparent, open, fair and impartial approach to attract investors to develop in Hong Kong, and refrain from packaging property development projects as innovation and technology schemes.*

Administrative arrangements

3.4 Even though motion debates in Legco are not intended to have binding legislative effects, passing of a motion urging the administration (i.e. executive arm of the HKSARG) indicates that there is now increased awareness and a clear consensus within the political parties of Legco to support government's facilitation of economic development.

¹⁰ See the original motion and amendments made:
http://www.legco.gov.hk/yr10-11/english/counmtg/motion/m_papers/cm0706cb3-980-e.pdf
and the final wordings of the motion passed:
http://www.legco.gov.hk/yr10-11/english/legco_rpt/legco_motion07072-e.pdf

- 3.5 The HKSARG now has a clear mandate from Legco to investigate the roles of the proposed Innovation and Technology Bureau. From an administrative viewpoint, the easiest way to put the Innovation and Technology Bureau into practice is to **upgrade the Communications and Technology Branch (CTB)** of the Commerce and Economic Development Bureau (CEDB)¹¹ to become a full policy bureau. The newly created Innovation and Technology Bureau would assume all the existing functions and the Government Departments now under the supervision of the Branch¹². Since protection and use of Intellectual Property Rights (IPR) are closely related to Innovation and Technology, the HKSARG should also seriously consider putting the Intellectual Property Department (IPD) under the supervision of the proposed Innovation and Technology Bureau's (I&TB).
- 3.6 The new I&TB would have its own politically appointed Secretary (equivalent of minister in other economic systems), Under Secretary and a Political Assistant. Such a change would require new funding approval, wide consensus within Legco and wide support from the Hong Kong community. It is now clear that such a funding request by the Administration will most likely be approved by Legco during this term of government or at the beginning of the next term.

Roles of the Innovation and Technology Bureau

- 3.7 The role of the Bureau would include providing strategic direction, exploiting existing opportunities, exploring new ones, coordination within HKSARG and specific implementation steps to convert wishes into reality.
- 3.8 *Coordinating policy initiatives* within the HKSAR Government means connecting the many policy measures “dots” – the stand-alone initiative -- into a coherent “line”. The responsibility of *providing strategic direction* means driving change within the government, amongst the business community and public.
- 3.9 The Bureau will also have the role of helping to attract inbound investment, *branding Hong Kong as one of the key “Innovation and Technology Centres” of*

¹¹ See links to the Organisation Chart of the HKSARG and Commerce and Economic Development Bureau: <http://www.gov.hk/en/about/govdirectory/govchart/>
<http://www.cedb.gov.hk/about/index.htm>

¹² Departments directly supervised by the Communications and Technology Branch of CEDB include: ITC, OGCIO, OFTA, RTHK, TELA, Broadcasting Authority and CreateHK.

the world, helping to position Hong Kong as one of the most important “Knowledge Economies” within China and building links to similar initiatives in Mainland China and around the world. Such activities will also indirectly assist Mainland organizations to connect with the rest of the world (i.e. “going out” 走出去 Zōuchūqū strategy) through Hong Kong.

3.10 The proposed bureau will also have the responsibility to implement the wishes, *particularly the economic development and job creation tasks*, as expressed by Legco during the motion debate on 6 July 2011.

3.11 In order to achieve these roles, the Innovation and Technology Bureau would need to *operate outside the narrow and vertically defined scope of “Innovation Science and Technology” as defined in the vertical business sectors in the “Six New Industries”*. There is ample evidence that “Innovation” does not necessarily come exclusively from heavy investment in R&D¹³ but also from the design and marketing process. There is plenty of room for innovation in other high-values business sectors Hong Kong is already doing well in – such as trading and financial industries. Performing art, culinary art and many business activities of the creative industries do not necessarily use cutting-edge technology but creative industries do create useful and satisfying employment for a large number of people.

3.12 Finally, one of the very important roles of the “Innovation and Technology Bureau” is to help government-invested corporations, research projects funded by government and the business community (particularly the SMEs) to understand how to extract values from money invested. The “input” orientation of the current approach to funding by the HKSARG is at the very least incomplete; at its worst it destroys values the funding intends to create. “Output/Outcome Analysis” is well understood by governments. To make the desired outcome happen, there needs to be *clearer accounting of social economic value created*. Business enterprises also need to know how to create commercial values from investments in intangibles. There is no lack of funding from private and public sources in Hong Kong. Investors (i.e. private investors and the general public who are a stakeholder in public investment)

¹³ Innovative design and marketing concept that make use of existing technology (e.g. Apple i-Phone and i-Pad) can capture most of the economic value for the brand owner.

need to know how to get “values” back from money invested; otherwise the “Innovation and Technology” initiative to be attempted by Hong Kong will not be a sustainable one.

4. Hong Kong to become an IP and Technology Transfer Centre

- 4.1 The CPU made a specific request to APICC to give input on how Hong Kong should move forward with facilitating Hong Kong to become an “IP Trading Centre”. It should be noted that “Technology” in this section and throughout this document is used in the wider sense to include ‘Know-how’ and business process. It should also be understood that HK’s position under “One Country, Two Systems” offer **a very unique role and market niche to HK in technology exchange and cooperation** between the more developed countries of the West and China. This initiative is also a very specific policy initiative to create the necessary business conditions HK needs to have in its economic transformation.
- 4.2 Hong Kong is well established as a trading centre for goods and services and possesses transferrable skills which can be applied to allow Hong Kong to become an IP and Technology Transfer (IP & Tech-Transfer) Centre for Asia. There are other skills specific to IP & Tech-Transfer which will require to be learned. Much of the needed transformation can be seen by looking at the strengths and weaknesses of similar transfer organizations which exist in the world today.

Trading IP without the associated technology?

- 4.3 Intellectual Property (IP) has defined ownership and scope and is thus one of the tradable intangibles in a company. The question which then arises is how best to trade this IP? There are basically two options. If the company wants a quick sale (as in the case of Nortel, the Canadian telecom equipment manufacturing company that went bankrupt) or is prepared to accept “10 cents on the dollar” (as in the case of universities in Hong Kong anxious to sell patents to Shenzhen companies to generate a cash flow or to satisfy certain requirements imposed by the ITC), the IP can be traded as it is without any enabling technology.

- 4.4 Hong Kong's current experience in IP Trading comes largely from the narrowly defined experience of licensing of trade mark, musical work and product design licensing; (i.e. "IP Trading" as it is known in HK includes "Copyright", "Trademarks" and "Registered Design"). There is almost **no experience in trading "Patents" and in the IP and Technology Transfer arena** China is seeking help in and with which HK ought to be involved. This – IP Trading without the associated patent and technology – is essentially the business model more widely understood and promoted by various government units (e.g. IPD and OGCIO) and semi-government organizations (e.g. HKTDC and Hong Kong Design Centre) at the moment.
- 4.5 However, if a company wishes to maximize the long-term value that can be obtained and is prepared to package the IP & Tech-Transfer and the value it has in line with its potential for prospective buyers or licensees, a much higher return can often be obtained after meaningful and open negotiation that involves "Patents" and "Technology Transfer". **Such an approach require the high-end and integrated "legal", "business" and "technology service" skills, the ability and business environment** to package and sell an IP and Technology bundle which is a well defined process; with steps of package definition, potential buyer sourcing, potential buyer contacting, making the deal, transferring the technology, and following up on obligations (e.g. royalties, performance). The process for buying is a mirror process. The skill of the intermediary agency is in carrying out all of these steps because they have day by day experience whereas the buyers and sellers often have not. **Such high-end business service skills are essentially missing in HK at this moment.** Developing such a business cluster will need some degree of government participation and facilitation. Such a capacity is an important "product feature" the Hong Kong Brand needs to have if HK's ambition is to become a "Knowledge Economy" and an innovation and technology hub that service Mainland China and the rest of the world.
- 4.6 At Dow Chemical in the 1990s, such steps were introduced which transformed an inward looking high technology chemical company into a modern knowledge enterprise. **An Intellectual Capital Technology Center** was created and **Intellectual Asset Managers** were trained and placed in each of the 16 global

business units to manage the intellectual property and structural capital. A new global business “Corporate Licensing” was created to be responsible at a corporate level for all technology acquisitions, sales and licenses and conducted these activities in a hands-on manner on behalf of the business units. The technology and IP acquisitions and divestitures of the company were centralized on a global basis and the acquisition and divestiture processes merged with the individual corporate and global business plans.

Business model

4.7 The largest and by far most successful IP Trading and Technology Transfer Company in the USA is www.yet2.com, a privately owned company. It is a comprehensive “IP and Technology Transfer” business that covers any industrial sector. In other words, it is perfectly acceptable for individual private companies to focus on a particular market niche or to cover the entire market and to lobby government units to support their business activities. It is a different story and indeed *different angles need to be considered if the objectives of national or local governments are building up technology development, transfer and business capacity behind the innovation and technology for the purpose of long-term economic development.*

4.8 There are essentially four business models for IP & Technology Trading:

- Full service private sector for profit model,
- Full service public sector model,
- Investment model,
- Boutique model.

4.9 The full private sector model (e.g. www.yet2.com) provides all aspects of the well defined process for packaging and selling an IP & Technology bundle namely package definition, potential buyer sourcing, potential buyer contacting, making the deal, transferring the technology, and following up on obligations (royalties, performance). The process for buying is a mirror process. The skill of the intermediary agency is in carrying out all of these steps because they have day by day experience whereas the buyers and sellers often have not, especially if they are SME companies. Fees are levied either on a fixed price scale or percentage of transaction or mixed formula depending on how many of the available services are provided. Yet2.com is a company set up by a consortium

of major US corporations with the directive to transact in and transact out technology and IP. The company www.yet2.com operates with a small core staff and a global network of associates who work on a commission basis.

- 4.10 The full service public sector model provides similar services to that provided by the private sector model above but is designed to provide a service primarily to SME companies on a regional, national or supranational basis. An excellent example of such a business model is the **Enterprise Europe Network (EEN)** which provides local access through 580 network organizations in local language in every country of the European Union with outreach contact centers in other territories including China and South America. The unit, which is linked to the powerful EU business support services, is operated as a one-stop-service by The European Commission and is a not for profit activity (see www.enterprise-europe-network.ec.europa.eu/index_en.htm).
- 4.11 The investment model is represented by an organization which first invests in partially developed technology and supporting IP and assists in its development to a stage where it is fit for market entry or further higher value transaction. This model represents a higher risk which is reflected in the return required per transaction which will depend on the particular project. A good example of such a business model is **The British Technology Group (BTG)** www.btgplc.com which began life in 1948 as The National Research Development Corporation in the UK designed to commercialize public founded research. A merger with the National Enterprise Board (1981) led to privatization of BTG in 1992 and listing on the London Stock Exchange in 1995. After exploring and commercializing a broad range of technologies, BTG has recently concentrated on the narrower healthcare industry sector.
- 4.12 The boutique model has many variants each of which concentrates on a particular niche of the IP and Technology Trading arena. Companies tend to be exclusively in the private sector. Examples of boutique operations include Ocean Tomo which provides services and consulting in the area of intellectual capital, including valuation, risk management and sale/auction of IP assets www.oceantomo.com and Consor www.consor.com which specializes in IP valuation and IP litigation support.

Enterprise China Network – working with Europe and Mainland China

- 4.13 A fast track approach to fulfill China’s desire to participate fully in the global transaction of IP and technology as part of its innovation push can be realized by creating an “**Enterprise China Network**” modeled on a variant of “Enterprise Europe Network”. As China is still very much a socialist country, it is more likely to follow the more “socialist”, public-sector driven approach to economic development than to follow the pure private-sector approach as practiced in the USA.
- 4.14 There are many organizations involved in IP and technology across the world today and in order to have access to all the available technology it is important to network with each of these organizations. As APICC understands it, government units at the Central Government (MOST) and Provincial Government levels (e.g. ITTN) have been pumping resources into this area following exchanges between Premier Wen Jia-bao and his counterparts at various European Countries.
- 4.15 Many of the required skills do exist in mainland China or in Hong Kong today. Access to the organizational skills and service approach of Enterprise Europe Network can in a relatively short timescale provide China and Hong Kong with a powerful and functioning inward and outward facing IP and Technology Transfer capability which can network with the rest of the world.
- 4.16 In this respect unity is strength and one central organization representing China would possess the critical mass to interact with all the existing IP and Technology Transfer world centers: this would be a world first that would place China – hopefully Hong Kong included -- in an advantaged role.

Hong Kong’s role and the way forward

- 4.17 There is no question that China can occupy an advantaged position if it is represented in the world IP and Technology Transfer arena by one organization – the proposed **Enterprise China Network**. There is also no question that many in the developed economies of the West still distrust the way in which IP is treated in China and fear loss of technology. These two situations provide a unique opportunity for Hong Kong (*or even Taiwan if Hong Kong could help resolve the political difference*) to play a key role in this aspect of the growth of China.

- 4.18 Hong Kong is a market place trusted all over the world for its fairness and for its rule of law and is ideally suited to become a hub of the IP and Technology Transfer business in China.
- 4.19 In order to achieve this, Hong Kong must first come to agreement internally, and then with the relevant government units within the Central Government in Beijing on the role which Hong Kong will play and ideally be given the charter to become the entry node for IP and Technology Transfer on behalf of China. As ***one of the key nodes of ECN within China***, Hong Kong could then co-ordinate with the ***other key nodes of ECN (e.g. ITTN in Beijing)***, various IP and Tech-Transfer agencies in the Mainland and in the Rest of the World. Thereafter it is simply an implementation matter and the requirement to assemble the resources, the needed skills and to activate ***a world class IP and Technology Transfer Centre in Hong Kong in close collaboration with corresponding units in Mainland China***.
- 4.20 The APICC has taken the step of building links with the International Technology Transfer Network (ITTN)¹⁴ in Beijing and officers of the European Union in Hong Kong and Europe¹⁵, including the very specific tasks of: Assisting ITTN to build the *Enterprise China Network (ECN)* with full assistance from the European Union and Enterprise Europe Network (EEN); Linking *ITTN to the “soft technology” (business and commercialization know how) from around the world* through the APICC’s “China Network” http://www.apicc.asia/?page_id=433.
- 4.21 APICC has since been **invited to set up an office at ITTN Tower**, an office building to be assigned to ITTN by the Beijing Municipal Government to house international technology transfer units from around the world.
- 4.22 The project idea as proposed by APICC to ITTN is a very practical project that will eventually link various innovation and technology units throughout

¹⁴ ITTN is a not for profit company operating under the Science and Technology Commission of the Beijing Municipal Government (BJKW). APICC has been invited to set up an office at ITTN Tower, an office building assigned to ITTN to house international technology transfer units from around the world.

¹⁵ Officers in EU-HK and in Brussels have promised to receive a delegation from ITTN to discuss the subject should they decide to make a visit to Hong Kong or to the European External Action Service office in Brussels.

China to Europe and to the rest of the world. Hong Kong's participation will help bridge many cultural and business practice differences between China and the West. Hong Kong will also benefit enormously should it decide to participate, but ***such an approach will require full support from HKSARG and from the proposed Innovation and Technology Bureau.***

5. Further Studies

5.1 To “intervene” or “not to intervene” that is the question. The HKSAR Government has been sensitive about “Freest Economy” ratings given to HK by the Heritage Foundation and Cato Institute but does not seem to be fully aware of the deliberate political agenda behind those ratings. The HK Government under British Administration and the current HKSARG also seems to be ***ambivalent to HK's economic development policy***, preferring to hide behind various slogans, such as “maximum support, minimum intervention” or “big market, small government”. On industrial and economic development policies before 1997, the British Hong Kong administration believes that “... *there is little point in using taxpayers' money in pursuit of policies which go against the economic tide*”¹⁶, but none the less allowed itself to be lobbied into injecting funds into the Innovation and Technology Development Council, construction of the Tseung Kwan O Industrial Estate and Industry Technology Centre Corporation in 1994.

5.2 The situation changed dramatically when HK's first Chief Executive Mr. Tung Chee-hwa took advice from Prof Tien Chiang-lin and implemented HK's current Innovation and Technology capacity through the Hong Kong Science and Technology Park in 1998. Tony Latter¹⁷ pointed out that this is ***an allocation of public resource issue*** – whether the HKSARG is allowing itself to be *lobbied by any business sector (or sectors) for favorable treatment* or whether such support policy is based on “... *a coherent intellectual framework or strategic*

¹⁶ Quote of a statement made by Hamish McCleod, Financial Secretary his 1994 Budget Speech, page 27, “Hands On or Hands Of? The Nature and Process of Economic Policy in Hong Kong”, Tony Latter, Hong Kong University Press

¹⁷ Pages 45, 140 and other chapters in: “Hands On or Hands Of? The Nature and Process of Economic Policy in Hong Kong”, Tony Latter, Hong Kong University Press

blueprint against which polices can be tested". It was unfortunate that Mr. Tung Chee-hwa did not have the consensus building (i.e. political) skills to defend his economic development blueprint and he did cross the *"uneasy line"* drawn between the bureaucrats and business interests established in the colonial era in the case of how Cyberport was implemented¹⁸, thus opening himself up for attacks. However ***credit must be given to Mr. Tung for having the foresight*** to build up the innovation and technology capacity HK now has today.

5.3 The pragmatic view expressed by CPU that HKSARG will neither be a "Free Market Economy" or "Planned Economy" will probably be the most practical and reliable guideline¹⁹ Hong Kong could rely on as it move forward. It would be indefensible if HKSARG was to stick to "Laissez-faire" and do nothing to facilitate economic development, particularly since the HK Dollar is pegged to the US Dollar and HK has no control over its monetary policy, while HKSARG sits on an enormous **fiscal reserve which should be put to good use** for HK's economic and social development. The HKSARG will need to face up to the demands and interests from the local population, the Central Government and the international community. All these considerations, however, need to be considered against the "Freest Market in the World" branding which is a very positive "product positioning" (i.e. perception) HK should not give up easily and totally.

5.4 However, the ***"intellectual argument" behind Hong Kong's economic development will be an on-going issue*** amongst detractors (and therefore the general public) who might see any sort of government "facilitation" as economic "intervention" despite Samson Tam's success in moving and passing the motion debate in Legco. In fact, this will only be one of the many "intellectual arguments" amongst many social and economic issues faced by Hong Kong. In this respect, the HKSARG could consider providing resources to facilitate the following studies:

¹⁸ See final version of "Innovation and Technology Bureau" motion moved by Samson Tam in Legco.

¹⁹ Intellectual arguments such as whether HK should follow the OECD's example of promoting the "Knowledge Economy" as a "horizontal" economic support policy does not carry much weight amongst the local economists; and even though Tony Latter acknowledged that the Hong Kong Democratic Foundation (HKDF) has struck the right balance in its support of HK's traditional values and its economic development policy, he also rated HKDF as an organization that has little influence over the formulation of policy in HK.

- 1) **High-level economic studies** – this outlines the positive effects of HKSARG’S participation and the risks of non-participation in HK’s “Knowledge Economy” development. This will, in essence, be an intellectual argument which seems to be missing²⁰ since 1997. *Hong Kong (HKSARG and government critics alike) somehow acknowledges that the “old” economic development model is not working²¹ but could not pinpoint what the “new” economic development model is.* The study could start with an economic impact study of policy measures implemented by Sir Murray MacLehose in the early 70s to early 80s. This is an intellectual argument based on what HK did in the past, how HK should find its footing in its fundamental values and how HK should face the choices in policy as HK moves forward in a changing world of increased globalisation and increased integration with Mainland China. This is an academic argument that could become one of the cornerstones of HK’s future economic development policies.
- 2) **Progress report and review of Prof Tien Chiang-lin’s proposals** – This is not intended to be an advocacy of any policies initiatives²² or an intellectual argument; but a practical study on what has been done and what HK should do now in view of changing circumstances. This study is the opposite of study number 1) above. It sets the “philosophical argument” aside and would provide the practical framework to review the progress made in the implementation of “Innovation and Technology” policy measures since 1997. An update of “Division of Responsibilities for Services Delivery” amongst Non-government Public Institution” (Annex F of Prof Tien’s Second and Final Report) would be particularly useful from a policy implementation viewpoint.
- 3) **A study of the roles undertaken by ITRI and how they might fit into HK’s existing infrastructure** – ITRI still lists the “political setback”

²⁰ Mrs. Anson Chan, former Chief Secretary said she was not senior enough to have made an impact on MacLehose economic development policies. Sir David Akers-Jones, former chief secretary who was Secretary for New Territory during the MacLehose days said he did not have a chance to document what was done properly.

²¹ A comment made by Prof LAU Siu-kai during the Taiwan Study Trip in June 2011.

²² Versus the ITC sponsored “Innovation Policy and the Limits of Laissez-faire” study by Savantas Policy Institute which advocated massive investment in science and technology.

faced by Taiwan in the early 1970s²³ as the trigger point for its establishment on its website (Chinese website only). HK took on a different economic development path in the 70s and transformed itself into the financial centre of Asia, replacing Tokyo's position in Asia. It was not until very recently that HKSARG perceived some threats to HK's economic development path and began to look at alternatives. In practice, it would be extremely difficult for HK to start building the HK version of ITRI from scratch now²⁴; but it would be very useful for CPU (ideally with help from a Taiwan research agency) to study the function now performed by ITRI and see if they are already served by institutions in HK now and what could and should be done if those functions are not served in HK.

- 4) **A more comprehensive study on IP Trading & Technology Transfer** – the APICC did the best it could to describe the broader high-value added infrastructure that would include building HK's capacity in developing and issuing original patents in this paper. The HKTDC also published a booklet²⁵ which describes HK's current experience capacity in the narrower "Copyrights", "Trademarks" and "Registered Designs" licensing arena. However, as a marketing agency of the HKSARG, HKTDC is more used to promoting tangible export product than developing intangible services. HKTDC would also instinctively stay away from discussing the inadequacies of current HKSARG policies which it felt it has no power to influence. *The task ahead of HK will involve some major "Product Development" in building up what HK does not have, not just "Advertising and Promotion" alone which HKTDC is focused on doing.* A more objectives study which proposes how HK could overcome the major weaknesses of HK's shortcomings²⁶ and transform itself into a major IP and Technology Transfer node of the world would be very useful from the implementation viewpoint.

²³ PRC replaced ROC as the government representing China in the United Nations in 1971.

²⁴ ASTRI was such an attempt but it is now relegated to become the R&D agency for the ICT industry.

²⁵ "Hong Kong grows as a regional intellectual property market", published by HKTDC.

²⁶ e.g. HK's inadequacy in signing bi-lateral Double Taxation Avoidance Agreement (DTAA) with other countries was mentioned in the HKTDC booklet, without mentioning that HK has fallen very far behind Singapore in signing of such international agreements. HKSARG and HKTDC blame the lack of interest in HK from the other countries. The number of DTAA signed will be around 20 by the end of 2011 while Singapore has signed 62 DTAA bi-lateral agreements.

- 5) **A study on the innovative roles HK could play in China’s economic development, cross-strait relations and international relations** – It is probably fair to say that Hong Kong was built on trade and an open, reliable and predictable administrative framework built by the British. In the post Second World War period, HK continued to thrive while Mainland China made many mistakes during the “Great Leap Forward” (1958-62) and the “Cultural Revolution” (1966-76). China’s rise to become the second largest economy of the world following Deng Xiao-ping’s reform opens up the question of how China might be able to find her rightful place and influence in international affairs. The “China Development Model” emerged and the question of *how China could make better use of Hong Kong’s “soft power” to facilitate “China’s Rise” and “Cross Strait Relations”* begins to emerge²⁷. A very practical and apolitical way for Hong Kong to help China’s ambition in shaping world affairs is to work together with China, Taiwan and other ASEAN countries in shaping “international standards” – which could include:
- i) Technical and technology standards;
 - ii) Business standard such as international accounting standards in “Intangible Assets” and;
 - iii) Alternative to the misleading “Financial Ratings” which help created the Global Financial Crisis of 2008.

6. Practical things that can be done now

6.1 To move forward, Hong Kong does not have to wait for the political and administrative procedures to set up the Innovation and Technology Bureau to come into place. HKSARG and CPU can show government policy leadership by taking some very practical steps or offering practical support to kick start some processes:

- 1) **Consensus Building – “Five Steps for HK’s Future”** – HK could consider hosting a high-level conference to be attended by think tanks

²⁷ e.g. Lectures given by Prof Zhang Weiwei and Prof Meng Xiangqing at CPU of HKSARG.

from Hong Kong, Mainland China, Taiwan and from Europe (including TEKES, Finland economic development agency which hosted a “Five Steps for Finland’s Future” in 2007) to discuss mutual cooperation in “Innovation and Technology”. The conference would be held in Hong Kong with simultaneous interpretation.

<http://www.tekes.fi/en/community/Publications/368/Publications/1464#>

- 2) **Build links with Europe and Mainland China** – HKSARG to begin to investigate or even participate in practical projects, such as cooperation between China and Europe through building the Enterprise China Network (discussed in Section 4 of this document) through building more formal working relationships and perhaps:
 - committing to set up a ECN-HK office at ITTN Tower²⁸ in Beijing amongst the technology transfer units from around the world.
 - working with ITTN-Beijing, and
 - working with EU-HK and EU-Brussels²⁹ in bringing ECN – the national “IP and Technology Transfer Network” from a goal into reality.
- 3) **Build links with the leading innovative economies in Europe and Asia**– HK with strong consular representation from Europe is in an ideal position to build links with the economic development units of Europe. APICC has already built a formal link with the Scottish Intellectual Assets Centre. First and foremost amongst formal links that should be built include: *TEKES* (Finland’s economic development agency), *The Design Council* and *NESTA* (National Endowment for Science, Technology and the Arts) and the *IP Academy of Singapore*.
- 4) **Build links with Japan, Taiwan and other ASEAN countries** – In December 2008, APICC managed to persuade PECC-China (that has the diplomatic mission of building “soft” business and economic relations with ASEAN for China) to host a conference titled “Cooperation for Promotion of Intellectual Capital Management” on the basis that *countries (and territories) must cooperate in the “Knowledge Economy”* (vs. competition for markets and resources). HK is in an ideal position to continue working on this theme in close

²⁸ See ITTN Business Centre proposal.

²⁹ APICC has been in touch with Michalis Rokas, Deputy Head of Division of China, Hong Kong, Macao, Taiwan & Mongolia of the European External Action Service of EU-Brussels on the subject ECN.

cooperation with PECC-China, ASEAN, Taiwan, Japan and South Korean based on this theme.

- 5) **Build links with Hong Kong universities** – There is an education and training aspect in providing the necessary knowledge behind the practices of the “Knowledge Economy”. Some universities, such as the Law Department of HKU, do provide post-graduate level courses in “IP Management”³⁰ However, such effort is scattered and legal training just cover one aspect of the “Legal/Business/Technology” triangle, so coordination by the HKSARG is needed.
- 6) **Cooperate with the Efficiency Unit of HKSARG on the “Future Centre for Public Centre” and “Intellectual Capital Management Group” concepts** – As we understand it, the Efficiency Unit will set up a physical space for facilitation or training various government units in the “Future Centre for Public Sectors” concepts and practices when it moves into new offices at Revenue Tower, Wanchai. CPU should consider coordinating with the EU on this subject but the *CPU should focus on providing links between the business community and the public* through facilitated discussion groups on sector-specific commercialization issues. This is a very specific facilitation method that would be applied is in the **collection of ideas and inputs from specific business or industrial sectors**, for example:
 - i. *How specific business sectors could get together to help themselves make best use of Intellectual Capital Management and other commercialization methods to move up the value chain?*
 - ii. *How “Innovation and Technology” can be applied in the financial services and trading sectors?*
 - iii. *What are the key policy measures needed to make best use of the free and unrestricted use of the internet in HK to help capture more economic values from the “Data Centre Project” the HKSARG has committed to build in Tseung Kwan O?*
 - iv. *What is the best way for HKSARG to facilitate technology start-ups in Hong Kong?*

³⁰ HKU’s Master of Laws in IT and IP Law (ILM-IT&IPL) is delivered with the help of David Llewelyn, former head of IP Academy of Singapore.

This is essentially the technique used by the major corporations in the USA (e.g. Microsoft, IBM, GM etc) when they began to investigate how to make best use of knowledge content in their business to extract maximum commercial values from creating and use of intangibles with the ultimate goal of increasing long term profits of the companies.³¹ However, such facilitated discussion techniques are also equally applicable in assisting the HKSARG in solving social issues.

- 7) **Push ahead with the “Hong Kong Originated Patent” initiative** – APICC participated in a meeting with SIPO (State Intellectual Property Office) in Beijing in September 2010. As we understand it, the Intellectual Property Department (IPD) is working with SIPO on the feasibility of HK originated patents and perhaps building the capacity for those patents to be fully examined in HK or in Beijing. Ideally, HK originated patent should also be valid in Mainland China as this is one of the many building blocks needed by HK to move forward. HKSARG position has been that HK will not invest public money in building capacity to examine patents; however, this “line-to-take” will need to be changed as it will have a direct effect on building and sustaining HK’s knowhow in writing and developing patents (normally done by people with engineering and patent attorney qualifications).
- 8) **Push ahead with signing bi-lateral DTAA agreement** – some “advertising and promotion” by a very senior HKSARG official to the 40 plus countries who have not signed Double Taxation Avoidance Agreement (DTAA) with HK will eventually enable patents purchased by HK companies to be “repatriated” to HK. This important “product feature” of creating the necessary competitive (or enabling) condition for patents to be domicile in HK is another one of those building blocks and a necessary condition for HK to become a “Knowledge Economy”.

³¹ See ICMG <http://icmgllc.com/Experts/Experts.html>

7. Policy measures roles for the Innovation & Technology Bureau

- 7.1 The role of the proposed Innovation and Technology Bureau (I&TB) was discussed in Section 3 of this paper. First and foremost amongst the policy measure roles of the I&TB is **policy coordination** -- “**linking the policy dots**”³², coordination with other government units and coming up with an “*intellectual argument*” for government intervention in the context of **economic development and job creation** as expressed in the motion debate moved by Samson Tam and passed in Legco on 6th July 2011.
- 7.2 This is just one of the many policy arguments (e.g. how to reduce the gap between the rich and the poor, what kind of public housing HK should have) and many coherent intellectual framework or strategic blueprints³³ against which policies proposed by I&TB would be tested and challenged by the local, mainland and international stakeholders. Some will still favor the so called “non-intervention” or “supply side” economics and argue that government will not be successful (and therefore has no role) in creating economic activities that are not already there. The CPU pointed out correctly (see Section 1.1) that HK cannot rely on the traditional “Four Pillars Industries” to drive economic growth and the “Six New Industries” were invented to address the problem that HK has no choice but to find economic activities at the very top end of the value chain. However, HK has no experience, nor even the awareness³⁴ of what it takes for HK to successfully climb up the value chain. *Without some sort of **government leadership** and facilitation, the economic transformation in HK will not happen.*
- 7.3 The difficulties in making policy choices in HK (including choices in social development) often involve a well-tried path of offering “**land grants**” to the **favoured initiatives**³⁵ and not through tax breaks. In a place as small as HK,

³² See page 25 (point 6.6) of “Hong Kong’s Innovation and Technology Role in Mainland China’s 12th Five Year Plan” <http://www.apicc.asia/wp-content/uploads/2011/03/HKs-Inno-Tech-Role-in-12-5.pdf>

³³ See page 69, 140, 141 of “*Hands On or Hands Off? The Nature and Process of Economic Policy in HK*” written by Tony Latter, HKU Press 2007.

³⁴ This is a case of “not knowing that they do not know”. The lack of awareness is common amongst government officials, academics, businessmen, lawyers, accountants, IT professional and also amongst the strongest critics of government invention. Mainlanders APICC came into contact with often “know that they do not know” the subjects.

³⁵ e.g. Construction of public housing, Taipo and Tseung Kwan O Industrial Parks, HKPC, HK

how would the HKSARG find land to meet the demands from the “Six New Industries” as well as demands for social development, such as land for housing, education, hospitals and recreation? This will remain a difficult issue to solve! If such land grants be given any particularly business sector, under what conditions will this be done, constituting an act of “*picking winners*” and not just providing the necessary facilitation for business and industries to “*self-select*” winners? If further “land grants” were given to the innovation and technology initiatives, how would the I&T Bureau justify to Legco³⁶ and the public that such land grants are “horizontal” support measures and facilitation necessary for HK’s economic development and that they are not “intervention” harmful to HK’s free market economy and “property development” or “property rental” projects in disguise?

- 7.4 The other very important policy roles and a very specific task for the proposed I&TB is to come up with an “*Innovation Policy and System*” for Hong Kong and eventual integrating and fitting such a system into the national innovation system. It might not be feasible for HK to follow the mainland innovation systems, but it is could be feasible for HK to overhaul what it has now with some help from Taiwan and from one or two European countries on very specific subjects.
- 7.5 A very practical task to be driven by the I&T Bureau is the “*construction*” of the ***Enterprise China Network – Hong Kong Branch (ECN-HK)*** with the full support of the Central Government and in collaboration with a local government unit (e.g. ITTN owned by Beijing Municipal Government) that is in a position to lead the execution of this project at a national level in the Mainland. In APICC’s proposals to ITTN, the “soft technology” (i.e. knowhow now grouped under the “**China Network**” http://www.apicc.asia/?page_id=433) that links knowledge economy initiatives of the world to Mainland China is attached to ITTN-Beijing and the proposed APICC-Beijing office to be set up in ITTN Tower in Beijing.

Convention & Exhibition Centre, MTR, Disneyland, Cyberport and HKSTP.

³⁶ Amendment made by Emily Lau on the “Innovation and Technology Bureau” motion debate moved by Samson Tam on 6 July 2011.

7.6 Other specific policy measure roles for the Innovation & Technology Bureau include:

- i. **Promote “Innovation” and in-bound investment** -- build “Knowledge Economy” as a key “product feature” of the Hong Kong Brand both locally and outside of HK;
- ii. Build **community consensus** and gain Legco’s support; including initiating and justify financial and other non-financial policy facilitation measures designed to support the “Knowledge Economy” and innovation and technology in HK.
- iii. Envisioning and implementation of a **support system for start-up companies** and ensuring that the “soft infrastructure” (e.g. incubation and venture capital help) are available;
- iv. **Initiative new drivers and aligning the output/outcome** of support and funding agencies under the Bureau’s policy initiatives; this is complex task that would probably start with:
 - A thorough review of the function performed by existing funding and support agencies,
 - Ensuring the interests of existing stakeholders are protected and enhanced and,
 - Fully align the needs of all stakeholders (“old” and “new”) with the need to further develop the cross-disciplined services need by HK as a world class knowledge economy.
- v. Envision and build the support structure needed by HK registered companies should they wish to **expand overseas** (i.e. IT&B will need to work closely with HKTDC and the overseas trade offices of the HKSARG³⁷);
- vi. Envision and implement a framework where **knowledge could be transferred between universities and enterprises** (UK’s “Knowledge Transfer Partnerships” scheme www.ktponline.org.uk of subsidizing students to work within enterprise under the supervision of campus based university professors is one of the good examples of a proven and successful system).

³⁷ Some coordination is needed with MofCOM of China and trade representatives of foreign countries in Hong Kong what would be considered a “Hong Kong company” if those companies were founded or headquartered in territories or countries outside of Hong Kong.

8. Concluding Remarks

- 8.1 In this paper, we have placed the present position of Hong Kong in the context of the world economy. We have pointed out how the inexorable development of the knowledge based economy alongside the agricultural and the industrial economies places a premium on the **smart use of knowledge** in creating, extracting and releasing value for companies and for society. HK cannot copy China, Taiwan, Singapore or Silicon Valley. Instead, we must find **our own market niche**, based on our own unique history and position as part of China under “**One Country, Two Systems**”, our business experience and our strength.
- 8.2 The consequences for Hong Kong are clear: the opportunity to build on the strengths of the Hong Kong economy by adding the skills especially relevant to a knowledge hub presents a fantastic opportunity for the future development of Hong Kong. The opportunity for **HK to play a key and very unique role in the further development of China** also needs to be taken into consideration.
- 8.3 The creation of an **Innovation and Technology Bureau** is a key step in the transformation of Hong Kong into an innovation and knowledge centre. The positioning of Hong Kong as an **IP Trading and Technology Transfer Hub for China and ASEAN** through the creation of a truly world class IP and Technology Trading Centre in Hong Kong is most strongly recommended. In addition, various policy measures and roles for the proposed Bureau are suggested.
- 8.4 This paper has only touch the surface of the issues and opportunities presented to Hong Kong by the present developments in the economy of China and in the economy of the world. It will take a team effort of the stakeholders in Hong Kong, in partnership with colleagues in Mainland China and elsewhere, to fully scope out the steps to be taken. **The road will be long and hard but the opportunities are enormous** both for Hong Kong and for China. We present this paper for the CPU’s consideration in the knowledge that this is **only the beginning of a significant step towards achieving the economic development process** that will involve a lot of hard work and leadership from the HKSARG, from Legco and from the general public. APICC is pleased to have the opportunity to present its idea to the Central Policy Unit and will make the best effort to do so in future.

Appendices:

Appendix I: About the Authors

Appendix II: Non-government Public Institutions:
Division of Responsibility for Service Delivery (Annex F of
Prof Tien Chiang-lin's final report published in June 1999)

Appendix III: International Technology Transfer Network (ITTN)
Business Center (ITTN's Proposal)

About the Authors

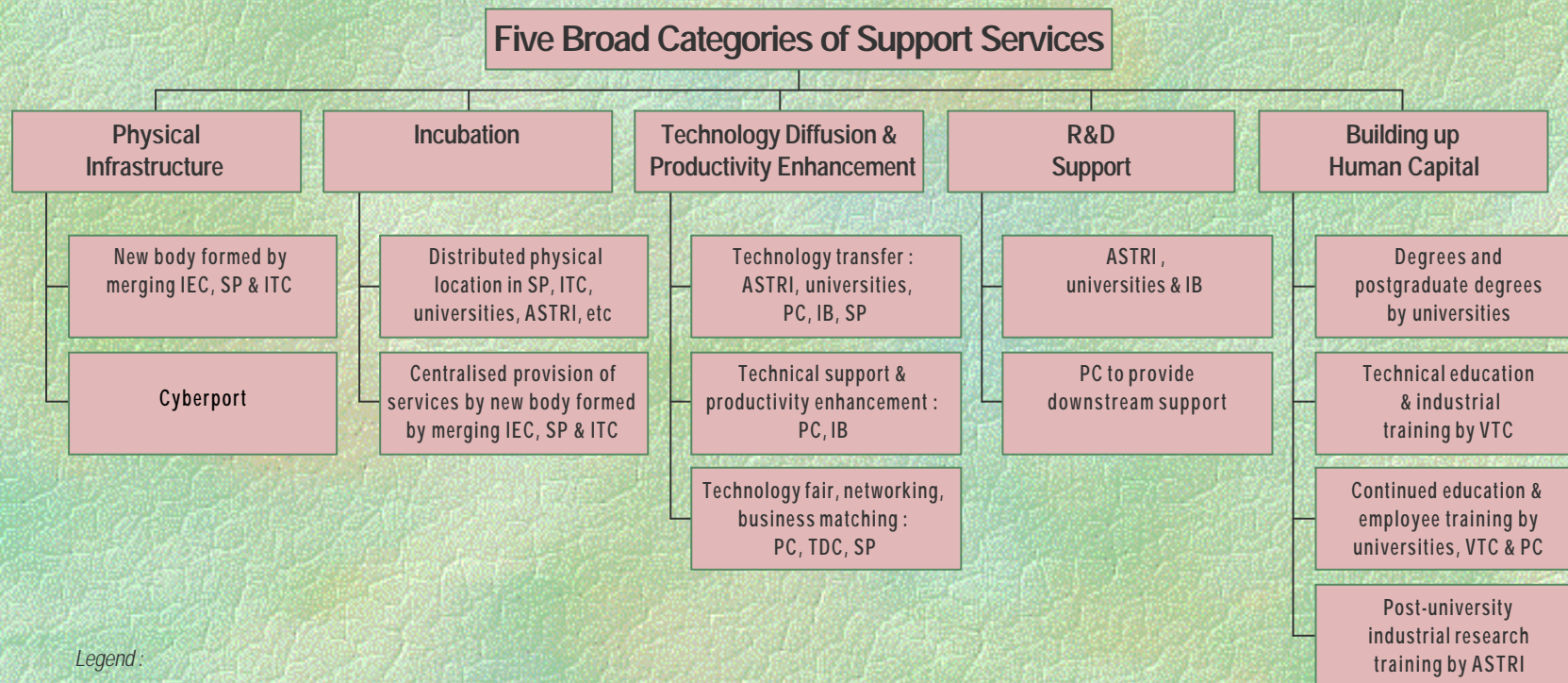
Dr. Gordon McConnachie, B.Sc., Ph.D.

Dr Gordon McConnachie is the founding Chairman of Scottish Intellectual Assets Centre(2003-2007) www.ia-centre.org.uk and Chief Technology Officer of APICC. He is a chemical engineer by training and he spent most of his working career with Dow Chemical where he grew up together with the innovation and technology transfer systems of the world as we know it today. At Dow Chemical Europe (1989-1999), he invented the IP and Intellectual Assets Management System for the worldwide company together with Gordon Petrash, who is now a member of APICC's China Network: http://www.apicc.asia/?page_id=433. The system was later modified and applied across the global company, where he transferred technologies from companies and universities into Dow Europe which brought him into intimate contact with the EU Innovation Relay Centres (now Enterprise Europe Network). From 1999 to 2002 Gordon directed the European Intellectual Asset Management Services of PricewaterhouseCoopers. In 2009, 2010 and 2011, Gordon was placed on the Global IAM 250 list of leading IA Strategists and one of only a handful of experts on the list from China and The ASEAN Nations.

Mr. Alan Lung

Since 2005, Alan Lung has been driving the Intellectual Capital Centre formation movement in Hong Kong, Beijing, Guangzhou and Hangzhou. He was born and educated in Hong Kong and also educated at the University of Wisconsin in the USA and Wilfrid Laurier University in Canada. He started his working career as an account executive in 1977 with McCann Erickson, an international advertising agency in Hong Kong. In 1985, he was appointed the general manager of Ogilvy & Mather Direct Singapore. In 1998, Alan introduced the Activity Based Costing & Management (ABCM) practice to Hong Kong. In his spare time Alan chairs the Hong Kong Democratic Foundation (since 1997) www.hkdf.org a well-known Hong Kong political and public policy think tank founded in 1989. He is skilled in converting his knowledge of governments and public policies into practical steps to move forward the "Knowledge Economy". He is a member of the Innovation and Technology Advisory Committee of the Hong Kong Trade Development Council (HKTDC) and is active in promoting Hong Kong's development into a "Knowledge Economy" along the line of a whitepaper titled: "Hong Kong's Innovation and Technology Role in Mainland China's 12th Five Year Plan". <http://www.apicc.asia/wp-content/uploads/2011/03/HKs-Inno-Tech-Role-in-12-5.pdf>

Non-government Public Institutions : Division of Responsibility for Service Delivery



Legend :

ASTRI Applied Science and Technology Research Institute
 IB Institute of Biotechnology
 IEC Industrial Estates Corporation
 ITC Industrial Technology Centre

PC Productivity Council
 SP Science Park
 TDC Trade Development Council
 VTC Vocational Training Council

International Technology Transfer Network (ITTN)

Business Center

Background

Beijing, boasts great number of well-known universities, research institutes, innovative enterprises and enormous market potential, is acting as a leading and pilot role in China empowered by international technology transfer.

In 2010, Beijing Technology market volume reaches 157.9 billion (RMB), with more than 41 countries as trading partners.

Since 2010, Ministry of Science and Technology and Beijing Municipal Government jointly took actions to support international technology transfer based on Beijing, sponsored international technology transfer events such as UK-China Agri-tech Innovation Forum, launch of International Technology Transfer Network (ITTN), International Technology Transfer Beijing Conference 2011 (AUTM-Asia 2011), founding of China-Italy Technology Transfer Center, and UK-China Low Carbon Technology Partnering Forum, etc...

Aimed at “linking the best and partnering for success”, Ministry of Science and Technology and Beijing Municipal Government are committed to building up a platform—**International Technology Transfer Network (ITTN) Business Center** for international cooperation in international tech transfer. The ITTN Building will be acting as a bridge connecting overseas university, research center, science park, competitive cluster, public organization and SMEs, with Chinese market, and provide you business domiciliation in the innovation hub of Beijing, as well as facilitate you an Easy access to the Chinese market and partnering with Chinese partners.

ITTN Business Center,

—Located in Zhongguancun Innovation Zone, bordered on Beijing CBD, with occupied area of 10,000 sqm

—Sponsored by Beijing Municipal Commission of Science & Technology
—managed and operated by Beijing Technology Exchange & Promotion Center (BTEC) and International Technology Transfer Network(ITTN) teams

ITTN Business Center service for tenants:

- A flexible and cost effective way to have your Full time office, Virtual office rental, Instant office, and Mobile office, well-equipped and ready-to-use offices with a tailor-made solutions
- Domiciliation service---a business address that's just like being there yourself, for your start-ups.
- Administrative outsourcing support---mail/express delivery, photocopying/fax/printing, personal assistance, and comfort.
- Conference room---3000 sqm of well-equipped with audio-visual facilities, give your meetings a new dimension in comfort.
- Exhibition hall ---500 sqm of show room with LED display, for your technology, prototype and brochures showcasing

Target tenants with specific area arrangement in ITTN Business Center

- University licensing organization **area (500sqm)**
- Technical research center **area (500sqm)**
- Tech transfer organization & association **area(500sqm)**
- Tech transfer service (i.e. Law & patent firm , IPR agency, VC/PE)**area(2,000sqm)**
- SMEs incubator **area(2,500sqm)**

As a tenant, within ITTN Business Center you will have:

- Extra savings: **Save up** RMB 2/sqm per day leasing for tenants, than the same location.
- Technology showcase: 500sqm for your Tech request and Tech offer showcase on LED display in the hall, and show room available for prototypes and brochures by SME tenants---**free of charge**
- Business opportunity guide: Newsletter offer for tenants, with China tech request and investment opportunity---**free of charge**
- Business networking support: Networking with your business contacts in Chinese government officials, business interests and academics in the business sector, including Beijing and over 50 cities in mainland. Monthly Business Networking Salon held for tenants---**free of charge**
- Partnering event support: 3000sqm conference and meeting rooms for organizing tech introduction and partnering event as well as industry-focus seminars or workshops, by weekly, monthly, and annually for tenants---**government subsidy for facilities (venue, backdrop, translation) rental, as well as inviting Chinese participants free of charge**
- Business registration, financial advising and tax planning: ITTN local partners support your venture during your start-up phase.