

(1)BACKGROUND

Objectives / Missions:

- Facilitate a continuous dialogue between China and Europe
- Come up with missions and actions between group members
- Contribute short term and long term values and benefits to the community, university and other stakeholders

The Four Common Challenges defined by the 2nd Biennial China-Europa Forum:

1. Harmonious Society, Sustainable Development
2. Values, Openness, Modernity, Identity
3. Participatory and Integrated Governance
4. Role of China and Europe

Methodology for Discussions:

1. Confirmation of Key Issues
2. Sharing and Exchange - Experience and Cases
3. Elicitation of Future Outlook and Strategies
4. Development of Action Plan

Recap of Key Issues (discussed between Chinese and European Prime Movers during the Prime Movers Meeting in July 2009):

1. Stakeholders of technology transfer (TT): the check and balance for the application of new technology for value of the stakeholders (i.e., industries, governments, universities, society at large).
2. Management of potential risks of knowledge transfer (KT) - Mainly consider economic risks but hidden impact on society/culture is not observed.
3. Guiding principles for assessing the impact (both good and bad over time) of technologies, that should be recognized by certain autonomous expert bodies or regionally associated with cultural/societal judgment?
4. Determining factors for universities/research institutes to embark on certain technology development endeavours toward eventual [commercial] application beyond the conventional scholarly knowledge discovery. Who and what should make such decisions? For knowledge diffusion into community, how to define objectives? Development nature of both education and economic development? How does one find balance? How to minister - economic or social impact both on plus or minus side?
5. Should university recruitment and performance assessment criteria include KT metrics? Should universities actively engage, with extra resources in KT activities for tangible (financial) and intangible (reputation, goodwill) benefits?

Participants:

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(2) SUMMARY OF DISCUSSIONS - 9th JULY 2010

Comments on the Key Issues:

Dr James Foulds (Foulds):

KT and TT are different and NOT INTERCHANGEABLE. KT - passive thing in the sense that knowledge is developed from university research and put out to the world with no extra cost in teaching and publications. We owe it to recipients to pick it up and make it into something workable and/or usable. Drivers are reputation of university because of rankings and economic value in rankings, (in Britain) there is money you can compete for as universities from research - publications become star ranking and more research is attracted.

University works against business plan for resources allocation. Transfer of technology involving resources becomes decision of the board. With KT, there will mainly be research and publications with no additional cost. There may be economic cases for TT along reputation or student experience, which may not be present in knowledge itself.

For example:

- (1) Medical departments through research found a way of reducing cot death in children. Knowledge is published - but not technological. In using the knowledge, people have to train their methodology, but universities simply put knowledge out.
- (2) A research on polymer leading to producing a chewing gum that is not sticky. 14 million pounds was invested to get from original research through to prototype. Resources (time, legal advice, equipment) have been invested yet without first product. When we get there the first stage is to set up a university joint venture to sell the product so as to recover full economic cost of developing technology and more to develop next stage of technology. If it proves that it is not economical the University will not go ahead even if it will be good for society.
- (3) Medical department working with Africa with developed technology and doing it pro bono. No commercial benefits but improves humankind and student experience and leads to university development.

As such, we should separate and differentiate: knowledge, technology for commercial, technology for other reasons.

Prof. Sergio Ferrari (Ferrari):

Organize the spinoff: to start an activity at a university; It is difficult to find the required competence for managing commercial and business activities from within the university, those talents are outside the university because university is not organized as such.

Mr Jonathan Peel (Peel):

If you pass on knowledge you need funding, and companies would want to gain.

Dr Alwin Wong (Wong):

From China context, TT is pretty much driven by economic incentives. Regional government university themselves are the prime driver with economic reasons.

Dr Jun Ma (Ma):

From Tsinghua's experience some TT cases did not make much money but professors insisted to go ahead. The reason is that through the transfer if the technology is good enough then the technology or product out of it may go international, and in turn it could promote the university

research reputation. It is yet consistent with the income factor. But the revenue made from international TT could in return make more TT cases.

How does a university discern what type of research you are doing? How would one qualify to make a decision to publish/drive? How would decision making bodies have the knowledge to discern research?

Foulds:

On balance universities do not derive huge income. Considering the risk factors of TT, universities probably don't want to take things too far, and would want industrial partners to share risks. Philosophy - development of technology from research in respect of making a huge income. Reduce risk - benefit of teaching and developing student's entrepreneurial skills.

How do you decide as a university whether to push a certain technology or let it be? You don't, because built in things which is extremely strong which is built in university ethos is intellectual freedom. Research staff and professors will publish themselves - no control over publication. Research is done and published. Control is whatever magazine allows to publish - control that peer group assessment of value of research. Governing body will be involved for ethical issues only. As far as TT is concerned, the governing body will delegate power to academic team and Vice Chancellor to decide what is worth developing, which is almost a business case. TT comes down to commercial agreements, with essence to limit risk and recover economic cost of doing it. Never expect a governing body which is largely independent to micromanage the transfer - that should be left to the professors. What is managed is how much money you get.

Prof Josep Vilalta (Vilalta):

How to improve on promotion of TT – a contract program between government and universities. A specific experience / case in Catalonia, Spain – it is interesting in the way that the government will sign specific contracts with universities on the idea of different missions and statements and objectives. 10% of total budget will be subject to negotiation between government and each university. For example, university will focus on research and another would be on pushing technology. Internal governing body within university also separately negotiates with departments - specific companies with specific sectors. The separate negotiations will be first from government to institution to negotiate objectives and funds, then internally towards institutes and departments. There are different roads of approaching the academic world.

Foulds:

How do we actually check what technology we develop? Who makes the decision in terms of assessment?

In the University of Bristol, the Research Enterprise and Development (RED) comprises of business, lawyers, intellectual property experts. If something is to be developed, it would be put through an advisory department. Also depends on what is it you're actually transferring - define what that property is and commercial lawyers will ask what sort of contract there will be. Government provides funding and money but does not ask for any return - generally not for technology but for fundamental research. There is indirect return for good research ideas that drive the economy in some way. Universities do it themselves and spin it through a company or through partnership with a company, or contract research from companies - different arrangement with different tactics.

Peel:

There should be proper risk management for TT in place, for example – for Genetic modifications of food which is of concern to environmentalists. What if GM crops have environmental mop-on

effects - species disappear/weeds get stronger. There is societal judgment for TT on potential environmental risks long term public acceptability, which however has deep cultural rifts.

There are different cultural views – in Europe, people fear poison in food, mad cow disease as opposed to GM, whereas Americans concerns yay! more food! Views from China may be quite different on GM food / crops as compared to America/Europe.

Wong:

Laws are there but you get away with anything as long as you get away with it until you get caught. Law makers are intelligent, but enforcement is weak until something happens. That will be cleaned up – there is safety margin for a few years until something else happens again.

On the policy side, there is the need for economic growth - government is pushing for TT which is seen as a huge plus in driving economic growth that you forego the minus side. Once diligent economic development is done negative things can be ignored.

Peel:

If there are different cultural views on risks that may be brought by TT, will the technology / transfer be damaged? Especially in international TT where the common challenge is to make sure that the TT will not bring along long term risks / hazards that become a contention between countries.

Case Studies / Experience Sharing:

Prof Ping Wei (Wei):

This collaboration of transfer has two drivers: one is innovation and one is commercialization. Huazhong University of Science and Technology collaborated with the Dongguan Municipal Government to set up an Engineering Technology Research Institute. The government funded RMB 120 million and the university sends students and professors to conduct research according to the roadmap development of Dongguan. The requirements are posted by local companies and academics will then conduct the relevant research – a “public technology/innovation platform”. This is a very specific case used by a municipal government where the government uses both money and policies in order to support local development.

Another example is “industry alliance” framework driven by government. The thinking is to build up R&D consortium between universities and enterprises in different fields / specializations. Government’s more active role in trying to drive research.

Should government participate more in TT?

In Japan and Korea, it is the government that initiates technology innovation and research for key national strategic innovation development. If the state sees that technology development has a certain value, the government will guide and then use policies to attract industries / companies to take it up and commercialize such research.

If government national interest is at stake, will China be willing to transfer technology to Europe or USA?

In terms of certain policies, China is quite open with TT, such as stem cell research and related therapeutic applications. There will be a research / innovation platform for collaborative R&D and TT from China to USA. For certain key technologies, such as wind turbines, China cannot develop the critical components - they are imported. If they would want to develop further, they

will have to develop their own innovation and own technology in terms of turbines. There are strategic developments that governments would like to protect.

Foulds:

There are cost components (e.g. personnel and materials) associated to develop technology from research. The question is who should pick up the costs? And who owns what? If government takes up the costs then it may look for a return. A resource governance and management system has to be in place. There is no extra cost if government money funds university research - knowledge itself doesn't cost - if the research knowledge can be readily transformed into technology for transfer and commercialization.

Prof Jun Wang (Wang):

In China - the conventional way to support academic research - fund basic research in educational stream. State government diverts research funds to universities through Ministry of Science and Technology but the funding is not accordant to higher education. In order to benefit, universities have to collaborate with companies and that portion has been picking up in terms of science.

Governance: Public money goes through conventional academic research cycle and if there is intellectual property generated, universities own intellectual property. If they go through a collaborative / contract research with industry and not use government money, the IP may be jointly owned by the universities and enterprises.

The role of government: Guangdong province has RMB 20 billion industrial investment plan - aims to build a team for regional innovation system. Governments establish a fund to incubate industry sectors and clusters of individual projects. Instead of making direct investment and owning shares the governments only put in 10% (of total investments) in any project but not looking for any return. Rather VC and other companies will join as majority shareholders for the invested projects / companies. For investments in high risk and early stage projects, government should take the lead, as private enterprises will unlikely make such investments. Yet potential economic / market / business risks should be shared / borne by enterprises.

The risks elements of TT: Government (through universities or other agencies) should take up innovation risks, whereas VC, investors or enterprises should take up investment risks, and entrepreneurs or enterprises should take up the market and business risks.

From economic point of view to promote innovation, there will be risks to be picked up by different stakeholders. How governments bear risk of innovation and how ideas are generated and picked up are within the university contexts - through department interest, expert advices and peer consideration. In certain topics consideration of market elements is seldom. The private enterprises should come in and take up market / business risk for commercialisation. Since the failure rate is high in certain technology areas, if government, industry and academia can work together it will effectively lower the risk of innovations because risk is already incorporated in research and would be easier for outcome to be commercialised.

(3) SUMMARY OF DISCUSSIONS – 10th JULY 2010

Revisions on the Five Key Issues & Related Discussions

Foulds and Peel:

Following key issues discussed on the first day, the following five key issues were identified:

- (1) The need to differentiate clearly between the transfer of knowledge where all parties may gain but the recipient bears the costs and the transfer of technology, where considerable key costs need to be recovered by the potential donor in a fair way
- (2) Identification of the common principles of universities, public education institutes that encourage TT.
- (3) To what extent should outside independent bodies oversee technological development and TT by universities and higher education institutes, and to what extent public funding should be brought in where commercially linked university research is involved.
- (4) Management of risks and potential risks that arise from TT, notably where long term environment and/or public safety issues may arise, leading to loss of public acceptability or reputation of which technology is transferred, notably where the technology in question originated from another country.
- (5) How far university recruitment and performance assessment criteria should include TT metrics?

Wei:

KT (including knowledge creation and diffusion) is a much broader concept than TT, which should be part of TT, however there is no specific definition to differentiate KT and TT in China. Chinese reckon that one of the universities' missions is to create and disseminate knowledge to public stakeholders as public assets, yet when it comes to TT with IP and ownership issues and knowhow involved, there must be a price tag / cost involved, which can be recovered either by transfer of technology to private enterprises or through technology investments into a spin-off / JV for equity shares.

Difficulties: Investments by enterprises / public government: more business and economic driven and so focus is on profit maximization, commercial benefits / economics negotiations rather than on public issues / focus, even with government investment (and take 10% investment) government will not take that much into account the public issues but it's more business driven.

Foulds:

Differentiation between KT and TT: there are differences between pure and applied science, and technology development. One of the major missions of universities is to disseminate knowledge created (through teaching to students), which the cost involved is picked up by students through the lectures / seminars. Having the knowledge disseminated, it is the choice of people to apply such knowledge to make something usable out of it and at some stage the costs (prototyping and staff costs) must be recovered and picked up (by either enterprises or government).

Risk assessment: In University of Bristol, there is a rigorous risk assessment in place to assess the technology and its merits and potential risks before transferring the technology to others, as there is a potential negative impact on university reputation if, having transferred the technology, it turns out to be a bad idea.

Clarifying point: Transfer of basic knowledge/research should be free, whereas industrial research and TT are not free because patents must be developed for protecting the intellectual properties concerned. There are collaborations between other universities and countries based on economic

agreements using technologies, but there are also important agreements based on the nature of research, and this should be differentiated.

Dr Jun Zhang (Zhang):

From Chinese government perspective, there are some sort of differentiations between pure scientific research projects (973 scheme, National Science Foundation of China (NSFC) funds) for knowledge creation and discovery, applied research & development projects (863 scheme) for potential technology development and applications and Technology supporting framework projects (科技攻關項目) which are pre-TT projects (where enterprises can bid for projects with Government). There are also enterprise-driven projects which IP are owned by the enterprises.

There are about 50 to 60 nationally recognized science parks in China Science parks, which also play key roles as intermediaries and incubators for TT. Agents within the parks will assist along the TT process. For stakeholders, the most difficult job is cost assessment / valuation that should not only consider monetary side but also social impact / risks

The importance of risk assessment - for university risk assessment there is a margin but not for market/government bureaucrats. The upside of intellectual property is that it brings huge economic benefit and would help to support the reputation of the university but if the company of which technology is transferred to is unethical that there will be no benefits at all.

Although there are assessments being done, they are not adequate. It is suggested that outsiders should be brought in to assess risk/return of such inventions/technologies. Social benefit is not maximised - risk must be balanced by delegating someone to do that. Assessment of technology on the economic benefits and social impact is still an issue.

Wei:

There are loads of explorations for TT opportunities in mainland China through for example R&D consortium (government and enterprises) and project specific TT, as TT is a link of economic interest.

For international TT, it is essential to define and promote an effective and good model for international TT to encourage and contribute to harmonious sustainable development of societies. In the face of economic crisis, impactful research with multi-facet elements would at the end of the day actualize the transfer through seminar and forums. It should be taken note that country politics and legislation might have a part to play in the diffusion of the country's technology. There will be national control of TT, defining what technology can be transferred / cannot be transferred. Defining topics and bilateral agreements is suggested so that they should be reviewed to find a way that will facilitate international TT.

It is hoped that through this T13d meeting, a research body / platform for TT can be established to look into issues, matters and obstacles that hinder or promote TT. In addition, it is worthwhile to propose some research topics for further discussions (that may involve Chinese / national regulations, societal impact, national interest / control on TT, etc.)

Wang:

To differentiate between KT and TT, one can refer to knowledge value chain with 3 major links, with different value and risks associated in each link:

- Upstream: Knowledge Creation. From university's perspective, product and knowledge created shall be beneficial to general public with government funding.

- Midstream: Technology Development. There are costs and resources involved in developing technologies from research knowledge. As technology development risks are high and the TT rate is low, it is better supported by government or universities through public funding – different perceived value and gap between academia and market
- Downstream: there are market & business risks for commercializing the technologies – the risks should be borne by private enterprises / VCs / investors (versus market and business return)

However, for social safety and security, it should be led by government (e.g. with pre-defined regulatory framework, policies and enforcement). Yet, one potential shortcoming is on enforcement even there are existing policies, rules and regulations.

There is also the issue of who actually owns the technology. From a university perspective, sometimes knowledge and products are not sellable for many reasons, with different perceived value from different stakeholders and perpetual problems due to different interests. For international TT, as an international body, countries may also consider their own interest and nations should be seen as gigantic enterprises, not just on economic terms alone but in risk assessment. The interest of governments is different from the interest of enterprises however and is not so simple. Other elements should be considered as well.

Vilalta:

There should not be just one policy regarding TT since there are different countries within EU. Technology has no frontiers or boundaries so it might be talked about without boundaries.

In Europe, more than 90% of the enterprises involved in TT are small/medium enterprises. A good number of collaborations between the universities and industries are not based on “big” or breakthrough technology but rather incremental innovations. The universities are not thinking about revolutionary ideas but more on how to help companies to improve / upgrade their products or technologies.

Ferrari:

There is also direct contact with institution from the company and agreement on ideas and TT is established. Direct contact, without any interference, is important. There shouldn't be any politics or policies - there should be a fundamental contact.

Vilalta:

International TT: For domestic TT when you are working within your own jurisdiction and environment, it will be relatively simple, especially when the technology in question is consumer-orientated. However in terms of international TT, there are obstacles that are there not by intent, such as history culture, law, and politics. International TT is also made more difficult when the technology is highly complex for national security reason. When there is technology that may shape the future of society then it becomes much more political and it takes out of tech and enters the field of international politics. There is also a potential that the third world may be left behind in terms of technological development, which will create a further unintentional divide in the world.

Extract from Speech by Prof Liu Yingli

Shenzhen Hi-Tech Industrial Park (SHIP) was developed 16 years ago, with reclamation of harbor and farm lands. Along the development, Shenzhen's population has developed from 200,000 to 12 million during this period of time.

Some most notable innovative companies in Shenzhen:

- Huawei – Ranked top 5 in the world in telecommunications facilities manufacturing
- BiYaDi – battery and electric vehicle manufacturer
- QQ – a mobile / internet communications service provider
- Xunlei – an online movie and entertainment platform, created by a young guy from US who came to Shenzhen to start the company

With China adopting an open reform policy some 30 years ago, Shenzhen was identified by the Chinese government to be developed into an economic zone starting from early 80s with preference tax policies.

Highlights of strategy of Shenzhen innovation endeavours:

1. Attract young talents to come to Shenzhen (average age at around 26) by inviting prominent universities to come to China
2. Re-create system for innovation: university requires environment for innovations → virtual university park (foreign universities from Canada, Hungary, etc.) → come for talents and big market
3. TT Roadmap: from research → development → pilot production → production and commercialization
4. Provide environment for universities from other cities to come to Shenzhen and recruit research students, conduct R&D, work with local companies and contribute to local economy
5. Shenzhen-Hong Kong collaborations

Future Challenges of Shenzhen: Talents & resources (e.g. water supply, which requires supply from other locations in China)

Extract from Presentation by Mr Tu Bo:

What lessons Hi-Tech R&D companies can learn from VC practices?

- There is a trade-off between having VC involvement in the company or to go into incubation type model with small amount of funding / resources support.
- There are brilliant ideas in research institutes but there is a lack of knowledge on how to apply them, and they need assistance. This is the reason why VC can help to fund and to transfer ideas to commercial enterprise.

Start-up companies can apply for loan from the bank but they are very different in individual cases because of size of business and previous credit. It is nearly impossible to apply for commercial bank loan for early stage Hi-Tech companies, and the main resource is from the 4Fs (father friend family fool) and investors (e.g. VC, angels)

Out of 100 companies one gets the fund. What happens to the other 99? - There are always missed opportunities for VCs.

VCs won't invest in breakthrough technologies if the inventors do not have commercial sense. Even though company owners are very good entrepreneurs and have good ideas which VCs may invest in, they might still lose money.

In the past, there are a lot of investments on academic excellence because it is believed that if there is academic excellence there is potential success in commercial markets. However, a number of the investment projects turned out to be a disaster. Nowadays one of the key criteria / consideration by VC: we definitely need academic excellence but the inventors / owners have to focus full time on the invested technologies. It is impossible to be commercially successful if they concentrate elsewhere.

Company Valuation – There is no one single methodology to follow, and it is very difficult to evaluate. It depends on negotiation and inventor of the technologies. There are certain principles, and sometimes you can forecast with future turnout can be quantifiable but in most of cases it is very difficult. There is however a common sense in the market.

VC investment is almost like an art. How do you convince the investment board / committee that the technology is worth the risk. It is very tough to talk to a very conservative board of directors who are not on your side, however it would be better if there are previous successful IPO cases with for example 40 times investment return.

Discussions on Proposed Action Items:

The following Action Items were proposed for further discussions and fine-tuning:

- (1) To review universities governance for common principles to support TT (e.g. “open” to business / U-I partnerships)
- (2) To promote sharing and comparison of cases, data, information on UITT to understand, compare the principles and practices of UITT
- (3) To conduct comparative studies on relative % of research inspired by academia, research initiated by commercial sectors versus research initiated by government in China and Europe
- (4) To set up a China-Europe joint fund at institutional level to support TT and to examine possible models to fund ideas (potential sources of funds: VC)
- (5) To establish “virtual” organization for further dialogue between universities in China and Europe
- (6) To make a presentation reporting our discussions outcome in the next AGM of International Strategic Technology Alliance (ISTA, with 24 member institutions) and potentially other invited international organizations for sharing of challenges and common interests
- (7) To set up internship for professional development for institute attachment for TT practitioners / academics
- (8) To strengthen China-Europe collaborative research on soft science of TT (e.g. high level collaborative research on risk assessment of TT, other potential topics: governance, social impact, state policies / regulatory framework, sustainable development, etc.) (potential source of fund: China-EU research fund)
- (9) To conduct house-keeping review / health check of the current China TT system and practices through ISTA
- (10) To have further discussions on the best way in monitoring and mitigating risks out of TT (and to apply for funding for further collaborative research / studies on risk assessment / mitigations of TT)

- (11) To compare common approach for IP protection legislations and practices with regards to TT
- (12) To define the boundary for KT and TT

(4) SUMMARY OF DISCUSSIONS – KEY ISSUES & PROPOSED ACTIONS

The Five Key Issues Confirmed:

- (1) The need to differentiate clearly between the transfer of knowledge where all parties may gain but the recipient bears the costs and the transfer of technology, where considerable key costs need to be recovered by the potential donor in a fair way
- (2) Identification of the common principles of universities, public education institutes that encourage TT
- (3) To what extent should outside independent bodies oversee technological development and TT by universities and higher education institutes, and to what extent public funding should be brought in where commercially linked university research is involved
- (4) Management of risks and potential risks that arise from TT, notably where long term environment and/or public safety issues may arise, leading to loss of public acceptability or reputation of which technology is transferred, notably where the technology in question originated from another country.
- (5) How far university recruitment and performance assessment criteria should include TT metrics?

The Proposed Action Items:

ACTION 1 (1+12): To review universities' governance for common principles and appropriate policies to support TT (e.g. open to business / university-industry partnerships) and to define the boundary for KT and TT

ACTION 2 (2+3): To promote sharing and comparison of information on UITT and to conduct comparative studies on relative % of research inspired by academia commercial sectors and by government

ACTION 3 (5+6): To continue dialogue between universities in China and Europe. With the following proposed actions:

- To make a presentation reporting our discussions' outcome in our next AGM of ISTA (composing of 24 member institutions) and potentially other invited international organisations for sharing of challenges and common interests
- To appeal to the Forum to set up a permanent platform for continual dialogue on TT between China and Europe, to refine action points on TT, and encourage regional development and propose possible action plan(s); for example, collection and sharing of data and knowledge, direct discussions between researchers on TT.
- To conduct housekeeping review/health check of the current China and European TT systems and practices, and make relevant presentations
- To set up internships for professional development for institute attachment for TT practitioners/academics

ACTION 4 (8+10): To strengthen China-Europe collaborative research on risk assessment, monitoring and regulations of TT and other potential topics such as governance and sustainable development so as to develop a harmonious society. A recommendation should be made to the next China/EU summit for funding.

ACTION 5 (11): To examine and compare the current IP protection legislations with the view to encourage the development of compatible practices with regards to TT

**The numbers inside the brackets refer to corresponding action items discussed in the previous day (10th July 2010)*

The following 4 common challenges:

1. Harmonious Society, Sustainable Development

Action 3 & 4, 5

ACTION3: To continue dialogue between universities in China and Europe on sharing of knowledge and practices on TT for a more harmonious society and sustainable development

ACTION 4: To strengthen China-Europe collaborative research on risk assessment, monitoring and regulations of TT and other potential topics such as governance and sustainable development so as to develop a harmonious society.

ACTION 5: To examine and compare the current IP protection legislations with the view to encourage the development of compatible practices with regards to TT

2. Values, Openness, Modernity, Identity

Action 1, 2 & 5

ACTION 1: To review universities' governance for common principles and appropriate policies to support TT and to define the boundary for KT and TT

ACTION 2: To promote sharing and comparison of information on TT and to conduct comparative studies on relative % of research inspired by academia commercial sectors and by government

ACTION 5: To examine and compare the current IP protection legislations with the view to encourage the development of compatible practices with regards to TT

3. Participatory and Integrated Governance

Action 1, 3 [2]

ACTION 1: To review universities' governance for common principles and appropriate policies to support TT and to define the boundary for KT and TT for better governance and policy framework for TT

ACTION 2: To promote sharing and comparison of information on TT and to conduct comparative studies on relative % of research inspired by academia commercial sectors and by government

ACTION3: To continue dialogue between universities in China and Europe for better understanding and sharing of principles and practices on TT

4. The Role of China and Europe in the World

Action 2, 4 [3, 5]

ACTION 2: To promote sharing and comparison of information on TT among China and Europe and to jointly conduct comparative studies on relative % of research inspired by academia commercial sectors and by government

ACTION3: To continue dialogue between universities in China and Europe to promote mutual understanding and sharing of practices and knowledge on TT for better governance models

ACTION 4: To strengthen China-Europe collaborative research on risk assessment, monitoring and regulations of TT and other potential topics such as governance and sustainable development so as to develop a harmonious society.

ACTION 5: To examine and compare the current IP protection legislations with the view to encourage the development of compatible practices with regards to TT