CHOICE Internal report I-6 Support available for innovation in ICT R&D&I in China: Protecting IPR

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Abstract: This report reviews support available to EU organisations for innovation in collaborative ICT R&D with China. In particular, attention is paid to the extent to which this support addresses ICT IPR related concerns. The report discusses the context of the issues around IPR protection in China, reviews the support for IPR protection in China available to EU organisations at the member state and EU level, support provided by the European Chamber of Commerce in China, guidance from UK Trade & Investment, provides an overview of Chinese industrial associations and centres, and Chinese Science and Technology Bureaus, with an interest in promoting IPR protection and provides some IPR related links. Conclusions are drawn and recommendations made which are targeted at organisations concerned about ICT related IPR protection in China.

Disclaimer: The views presented in this report reflect those of the document organizers and do not necessarily represent the views of the European Commission.

The context: IPR Protection in China

Given that the promotion of collaborative EU-China ICT R&D cannot be decoupled from considerations innovation ([1]) one of the major disincentives to innovation activities by EU organisations in China, concerns over the protection of intellectual property in China, has to be addressed when seeking to promote collaborative EU-China ICT R&D&I. In this report this is done in the wider context of the support for available to EU organisations for innovation in China.

When discussing the contentious issue of IPR protection in China a report by UK charitable foundation Nesta rightly emphasises effective IPR protection is of fundamental importance to Chinese industry ([2]): "According to the World Intellectual Property Organisation, the ICT giant ZTE applied for more patents (PCT) in 2012 than any other company worldwide. Huawei came a close fourth in the global rankings."

The main issue with IPR protection in China appears to be ([2]): "China has developed a sophisticated system of IP regulations and a patent law which largely meets WTO requirements, yet enforcement hasn't kept pace with improvements in the legal framework."

"Chinese companies have started to voice their demands for improved IPR protection. Japan, Taiwan and South Korea all strengthened their IPR protections when they moved from low—cost manufacturing to R&D and design, and Simon argues that China will be no different."

Most pointedly of all it is argued that ([2]): "To convince China of the value of improving its IP system, developed countries should recognise and be open about the problems in their own systems."

While incidental evidence suggests that IPR protection is not, in general, a major barrier to ICT R&D collaboration with China. Significance direct evidence of this is provided in [1]: "according to law firm Jones Day, 'the most serious IP problem for foreign business in China is that they often fail to register their IP there. China's reputation of poor IP rights enforcement had led many foreign businesses to draw the conclusion that it is not worth it to apply for patent or trademark protection in China. These foreign companies have come to regret their earlier decisions."

Furthermore ([2]): "Ian Harvey ... believes that 'many Western companies' problems are self-inflicted wounds,' because they believe that 'we mustn't sue – it would annoy the government.' This issue, which was confirmed by several of the interviews we conducted with SMEs for this report, is according to Harvey, a misunderstanding. He believes that the Chinese government wants companies to use the legal system and gets annoyed when they complain about poor IP protection before doing so."

Reflecting the observation made earlier in this report that cultural differences could be behind some of the difficulties encountered by EU companies in exploiting the IPR protection available in China, possibly by making the framing of effective patents more difficult, Nesta recommends in a UK context ([2]): "Using the new Beijing representative of the (UK) Intellectual Property Office to help UK businesses gain the knowledge they need to operate in the Chinese IP environment and to press for further improvements". These observations motivate this report which reviews the support for doing business in China provided by governments of individual EU member states and by the EU with a specific focus on IPR protection and commercialisation more generally.

All this leads to one of the major conclusions of [2] that: "The greatest 'China risk' for innovative companies is focussing too heavily on downside risks, and missing out on the opportunities that China presents. Hawkish perspectives on Chinese innovation highlight the 'dark side' of China's absorptive state: international flows of ideas and technology resulting from IP theft, forced technology transfer and hacking. But innovative firms recognise that without some risk, there is little reward. Intellectual property is only as valuable as one's capacity to exploit it and stay ahead of the competition. The increasingly absorptive Chinese system brings both risks and opportunities for businesses, universities and others seeking to work with and in China. These risks need to be managed with care, but they should not be

over-emphasised to the extent that they eclipse a far greater risk – that of failing to participate fully and benefit from the next phase of China's growth."

Support at the member state level

In the case of the UK its embassy in Beijing¹ provides a list of English speaking lawyers², though not all are involved in commercial law, and provides some guidance on handling commercial disputes in China³. However, it leaves the provision of more detailed advice and support for UK businesses operating in China to the China Britain Business Council (CBBC)⁴.

The CBBC describes itself as the leading organisation helping UK companies grow and develop their business with China, and is committed to helping companies of all sizes and sectors whether new entrants or established operations. It offers practical in-market assistance, services, industry initiatives and a membership programme delivering access, seminars and networking. The CBBC recently announced a merger with the British Chamber of Commerce South West China and the British Chamber of Commerce in China, unifying the three organisations and their membership in a stronger, more streamlined structure.

The UK/China Economic and Financial Dialogue provides a platform for engaging on market related issues, such as IP enforcement and is led by HM Treasury and the Ministry of Finance [3].

The current UK support for commercial connections in China has some striking parallels to that provided by China's biggest trading partner in ICT, the United States. The US embassy in Beijing⁵ provides a list of English speaking lawyers⁶ and some basic advice on doing business in China⁷ while advising businesses to contact the relevant China regional U.S. Export Assistance Center for advice and support on exporting to China, and the relevant China regional American Chambers of Commerce office or the U.S.-China Business Council for in-country business support. However, uniquely for the ICT industry dedicated support is provided through The U.S. Information Technology Office (USITO) which is an independent, non-profit, membership-based trade association, representing the U.S. information communication technologies (ICT) industry in China⁸:

"USITO seeks to provide new insights and approaches to the many complex challenges facing the ICT industry in China, which sits at the heart of the U.S.-China trade relationship.

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¹ https://www.gov.uk/government/world/organisations/british-embassy-beijing

² https://www.gov.uk/government/publications/china-list-of-lawyers

³ https://www.gov.uk/commercial-disputes-in-china

⁴ http://www.cbbc.org/

⁵ http://beijing.usembassy-china.org.cn/acs_eme.html

⁶ http://beijing.usembassy-china.org.cn/acs_legal.html

⁷ http://beijing.usembassy-china.org.cn/doing-business-local.html

⁸ http://www.usito.org

USITO serves to create effective channels for engagement between our members and the Chinese & U.S. governments, academia and other industry groups focused on improving policy and regulation.

USITO serves as the China representative of four parent associations, including:

- Information Technology Industry Council (ITI)
- o Semiconductor Industry Association (SIA)
- o Software and Information Industry Association (SIIA)
- o Telecommunications Industry Association (TIA)

USITO also represents approximately 50 leading US-based companies actively engaged in China, drawn from across the spectrum of information and communication technologies, from semiconductors, computing, networking and software to telecoms, broadcasting and digital content -- in a word, anything related to the creation, distribution and consumption of things digital."

USITO reports its specialities to be⁹: "IPR, Trade & Investment Policy, Cybersecurity and Cryptography Policy, Standards & Conformity Assessment, Telecommunications Policy, Environmental Policy - RoHS, WEEE, Energy Efficiency Policy and Standards, Cloud Computing, Trade Compliance."

No comparable dedicated support for ICT business in general is available to UK companies through the CBBC. However, it is crucial to note that for ICT business in the area of ecocities and the green value chain there is a platform for UK-China cooperation in the development and delivery of world-class solutions, the UK-China Eco-cities & Green Building Group¹⁰. The existence of this group reflects the Chinese preference for R&D&I cooperation with poles of global excellence in areas of key national interest [4]: "At the IGEBC conference in March 2011 Vice Minister Qiu outlined China's plans to develop 300 eco-cities in the coming years. He noted that the UK has much relevant experience in this area, including global leadership in garden cities, new towns, and eco-towns, from which China could learn and build upon. Given that experience, he invited the UK to become China's lead partner in their eco-cities development programme."

For Finnish companies the main networks and associations for receiving foresight from day-today business in China, and establishing key partnerships and contacts include, EK Confederation of Finnish Industries, Federation of Finnish Technologies Industries, the OSKE network, the FinNode network, Finland-China Trade Association and significantly the Finnish Business Councils in China [5].

The German embassy in Beijing¹¹ provides support to German business in China in a similar way to that in which the UK embassy in Beijing provides support to British business in China. A lawyers list is available as is advice on litigation in China, but it leaves the provision of more detailed advice and support for German businesses operating in China to The Delegation of German Industry.

⁹ http://www.linkedin.com/company/united-states-information-technology-office-usito-

http://www.cbbc.org/guide/uk_china_eco_cities_green_building_group

¹¹ http://www.china.diplo.de/Vertretung/china/de/Startseite.html

Through its China regional chambers of commerce The Delegation of German Industry¹² supports German companies with a comprehensive range of services including location services, monitoring companies entering the Chinese market and looking for Chinese business partners, legal and customs information, information on tax law, labour and trade fair services etc.

Dragon-STAR Deliverable 4.4 [6] provides a concise overview of the support services offered to:

- o German business by the German Centre for Industry & Trade Beijing which is a limited company and the consultancy German Industry & Commerce Greater China (Beijing) both of which charge for their services
- Austrian business by Austrian Federal Economic Chamber (WKÖ) Trade Promotion Organization: Aussenwirtschaft Austria and the Federal Promotion Bank Austria Wirtschaftsservice (aws)
- o Danish business by Innovation Centre Denmark

Support at the EU level

At the EU level The EU SME Centre¹³: "is a European Union funded initiative helping SMEs get ready to do business in China. Located in Beijing, the Centre provides practical information, confidential advice, and training in the areas of business development, legal issues, standards and HR to facilitate market access for European SMEs." Apart from the fact that the Centre only provides guidance to SMEs, its remit in terms of providing guidance on doing business in China appears to be somewhat narrower that the CBBC which explicitly includes detailed aspects such as: agents and distributors, joint ventures, representative offices, certification and standards, due diligence, and language and marketing.

The China IPR SME helpdesk¹⁴ funded by the European Commission's Directorate-General for Enterprise and Industry: "supports European Union (EU) small and medium sized enterprises (SMEs) to both protect and enforce their Intellectual Property Rights (IPR) in or relating to China, through the provision of free information and services. These take the form of jargon-free, first-line, confidential advice on intellectual property and related issues, plus training, materials and online resources."

Additional support for SME's is available from the EU level Enterprise Europe Network (EEN)¹⁵. It offers help with finding international business partners, sourcing new technologies and receiving EU funding or finance. It offers advice on issues such as intellectual property, going international, and EU law and standards. It claims to be a one-stop shop for all business needs. The EEN brings together business support organisations from more than 50 countries and has close to 600 member organisations we are always close to where your business is based. Significantly, it has recently opened new network offices in

¹² http://www.china.diplo.de/Vertretung/china/de/03-wi/bilateral/0-bilateral-ubs.html

http://www.eusmecentre.or g.cn/

¹⁴ http://www.china-iprhelpdesk.eu/en/about-the-helpdesk

¹⁵ http://een.ec.europa.eu/about/mission

China¹⁶ where additional contact points have been established in Shanghai and Nanjing (in Jiangsu Province).

In general, there appears to be a case for at least some form of EU chamber of commerce type support for EU businesses operating in China that are based in less prosperous and in some cases less populous member states. The issue of targeted support for EU based ICT businesses operating in China is problematic since ideally any such support to be directed through clusters of global ICT excellence ([1]).

On the Chinese side The China International Economic and Trade Arbitration Commission (CIETAC)¹⁷ accepts foreign-related and international cases and offers to independently and impartially resolve economic and trade disputes by means of arbitration. Its scope of accepting cases is not limited by the nature of the parties' business and it states that in recent years, on average, it has handled as many as 1,300 cases annually, involving parties from more than 50 countries and regions outside the Chinese mainland.

A concise overview of the services offered to EU business by several Chinese organisations covering different regions of China is given in [6]. The organisations concerned are:

- o China International Technology Transfer Center (CITTC), a Government-based Service Agency
- o Northern Technology Exchange Market Consortium of EEN Northeast China Centre (NTEM), a State-owned National Technology Transfer organisation
- o EU Project Innovation Centre (EUPIC), a non-governmental organisation and CHOICE project partner
- o CCPIT Hunan Sub-Council, a Provincial foreign economic organization
- o Shanghai Technology Transfer & Exchange Centre (STTE), a public organisation

Particularly interesting in the wider context of support for commercial connections between the EU and China is the work of the Finnish Center of Chinese Law and Chinese Legal Culture¹⁸ which aims to promote research and education in Chinese law and Chinese legal culture. The members of the Center include Finnish universities and significantly the Finnish National Research Institute of Legal Policy. While the Center promotes education in the field in universities, among legal practitioners and the wider community, it also has a role in supporting policy development which is a crucial component in developing business models for commercial connections between the EU and China. The Center's Academy of Finland¹⁹ funded research project: "Climate Change Mitigation and Energy Efficiency Legislation, Finland/EU-China" aims at improving the knowledge of Finnish/EU and Chinese policymakers on energy efficiency legislation and policies applied in Finland/EU and in China".

¹⁶ http://een.ec.europa.eu/news-media/news/new-network-offices-china

http://www.cietac.org/index.cms

http://blogs.helsinki.fi/chinalawcenter/#.U7KiqrGmUzQ

https://www.ivu.fi/vliopistopalvelut/research-and-innovation/international-collaboration/china/academy-of-

http://blogs.helsinki.fi/chinalawcenter/environmental-law/#.U7KopLGmUzO

The Center is also conducting research in Intellectual Property Law to promote innovation and creativity in China²¹.

An Internet search for European level Chamber of Commerce type support led to resources related to the work of the European Chamber of Commerce which is covered in a separate section because it could be viewed as more of a lobbying organisation than a conventional Chamber of Commerce, and in particular, because it is not affiliated to the EU or to any EU member state.

Support provided by the European Chamber of Commerce in China

The European Chamber of Commerce in China (ECC) provides its members with extensive information on business and market conditions in China but otherwise is more focussed on lobbying than a conventional Chamber of Commerce. It is Europe rather than EU wide and is not affiliated to any nation state. Nevertheless, its activities provide very significant support for EU industry in actively participating in Chinese markets. This section is devoted to exploring the implications of the work of the ECC for EU-China ICT R&D&I.

This mission statement of the European Union Chamber of Commerce in China (ECC)²² is: "As the independent voice of European business in China, we seek greater market access and improved operating conditions for European companies."

The Chamber is recognised by the European Commission and the Chinese Authorities as the official voice of European business in China. It is recognised as a Foreign Chamber of Commerce with the Ministry of Commerce and China Council for the Promotion of International Trade."

The ECC provides the following services to its members²³:

"We provide European business with an effective communication and lobbying channel to the European and Chinese officials, business associations and media.

We ensure our key recommendations and lobbying strategies are shaped by business through our members' Working Groups.

We monitor China's compliance with the World Trade Organisation (WTO) and other international commitments that have an impact on doing business in China.

We support companies with an information platform on business and market conditions in China.

We help companies expand their networks of European and Chinese business contacts.

We promote sharing of knowledge and experience between European and Chinese businesses."

 $^{^{21}\,\}underline{http://blogs.helsinki.fi/chinalawcenter/intellectual-property-law/\#.U7KpObGmUzQ}$

http://www.europeanchamber.com.cn/en/home

http://www.europeanchamber.com.cn/en/publications-archive/170/European Chamber Brochure

"The ECC was founded in 2000 by 51 member companies that shared a goal of establishing a common voice for the various business sectors of the European Union and European businesses operating in China. It is a members-driven, non-profit, fee-based organisation with a core structure of 43 Working Groups and Fora representing European business in China".

"The European Chamber now has more than 1,800 members in 7 chapters operating in 10 cities: Beijing, Chengdu (Sichuan Province - West), Chongqing (directly controlled city in the West of China), Nanjing (Jiangsu Province – in the mid-East of China), Pearl River Delta (Guangdong Province: Guangzhou, Shenzhen and Zhuhai), Shanghai (directly controlled city on the mid-Eastern coast of China), Shenyang (Liaoning Province – in the North East of China) and Tianjin (directly controlled city on north-Eastern coast of China). Each chapter is managed at the local level by local boards reporting directly to the Executive Committee."

The ECCs core structure includes numerous groups of interest in the context of collaborative ICT R&D&I with China, in particular, those on: Information and Communication Technologies, Research & Development, Standards & Conformity Assessment, Intellectual Property Rights, Legal and Competition, Public Procurement, and SME. The ECC publishes an annual Position Paper that outlines the problems European businesses in China are currently facing with regard to World Trade Organisation implementation, trade, regulatory and broader policy-related issues and the Working Groups recommendations for alleviating them. It is presented to senior Chinese officials from over 20 ministries and general administrations and directly to the European Commission. To ensure the relevant policymakers are informed about the latest issues concerning European business in China, regular briefings are provided to senior European officials. The ECC constantly interacts with the European authorities, including the Delegation of the European Commission in Beijing, the EU Member States' Embassies and Consulates in China, as well as the National Chamber representatives and Business Associations.

The ECC regularly organises breakfast seminars at which senior level industry experts and representatives from Chinese ministries provide information and analysis on current issues.

The ECC conducts in-depth studies on topical issues in China's economic and on the policy landscape. The ECC endeavours to propose constructive suggestions for improving the policy environment for the benefit of all stakeholders. Of particular interest in the context of this report is the ECC study launched in 2012 'Dulling the Cutting Edge: How Patent-Related Policies and Practices Hinder Innovation'.

The 2013-14 position paper of the ECC Research & Development Forum²⁴ is only one page but highlights annual events organised by the Forum of major interest in the context of this report: "The Forum holds external events, like the 2012 R&D Conference on "Essential Strategies for R&D Management in China", or in 2013 the "Protection of intellectual property during the design, procurement, construction and operation of new production or R&D facilities in China" which offer European companies an insider's perspective from government officials, consultants and R&D managers on key R&D considerations on issues such as managing research collaborations, intellectual property rights and human resources."

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²⁴ http://www.europeanchamber.com.cn/en/publications-archive/202

Although these events address R&D in general the fundamental issues around R&D management and IPR protection of R&D activities in China are generic and it is hard to envisage how any EU project could deliver better information on such matter. Rather the information provided by such activities is the natural starting point for developing more specifically ICT focussed guidance around such matters if there is perceived to be the a significant demand of it, which is not clear at this time.

The three key recommendations of the 2013-14 position paper of the Information & Communication Technology (ICT) Working Group²⁵ are:

- 1. Develop Information & Communication Technology (ICT) Standards that Benefit the End-user and Industry as a Whole
- 2. Enhance the Efficiency and Effectiveness of China's ICT Services Sector to Provide More Choices at Lower Costs to the Consumer
- 3. Encourage Enhanced Innovation and Research that Drives the ICT Industry Forward Through a Global and Cooperative Approach

We will consider further key recommendation 3 first as it is closest to the interests of stakeholders in collaborative ICT R&D&I with China. To realise this recommendation the Working Group proposes that:

o Global IPR practices (or European case studies) can be applied for China national (R&D) fund applications.

Significantly, in support of this recommendation, a clear example of a lack of reciprocity in ICT R&D is highlighted: Chinese ICT companies have benefited substantially from participation the latest project of Mobile and Wireless Communications Enablers for the Twenty-Twenty Information Society (METIS) for the next generation of mobile technology. The ECC ICT Working Group believes that European companies, especially those with a research base in China, should be given equal access to Chinese research and funding programmes and funds. This is notable not only because of the scale of the market in this area but also because it relates especially to European companies with a research base in China. This means that the Chinese could be encouraged to view Chinese subsidiaries of EU companies as Chinese companies from a national funding programme point of view thereby providing programme access. This would also mirror EU policy towards European subsidiaries of non-EU countries so would achieve reciprocity in more than one sense.

The detailed recommendations made in the report in support of key recommendation 3 are listed below:

- Encourage greater reciprocity in the field of ICT research and engage in further collaboration with EU organisations with a view to developing mutually beneficial international standards.
- Open up China's national ICT R&D programmes to participation from the international community, avoiding a system that isolates R&D and consumers from reaping the benefits of a globalised research environment.

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²⁵ http://www.europeanchamber.com.cn/en/publications-archive/238

- Focus the build-up of indigenous innovation capabilities on enhancing technological innovation that drives the ICT industry forward and benefits end users, rather than shortterm benefits for domestic enterprises.
- o Encourage a build-up of indigenous innovation capabilities through a global and collaborative innovation approach, where global stakeholders, including academia, government, industry and other experts, communicate and cooperate on international research and standardisation in order to maximise end-user benefit.

The above detailed recommendations support the view that collaboration in EU-China ICT R&D be directed towards developing mutually beneficial international standards and the building up of China's indigenous innovation capability, and the further opening up of China's national ICT R&D programmes to participation by EU organisations.

Moving on to the second key recommendation, which is supported mainly by concerns about access to the Chinese market for mobile content for European mobile content providers, this is placed in the context of the broader concern that: European companies have a long history in China's ICT market, yet European access to participate in China's ICT services market lags dramatically behind participation in China's ICT infrastructure and devices market.

Concerning the first of the key recommendations, this is underpinned by detailed recommendations one of which is focussed on a particular market, which probably reflects domination of the working group by telco related interests:

o Encourage the creation of a healthy ecosystem for TD-LTE by allowing European organisations a fair share of the Chinese market.

However, the means to achieve this is embodied in the other detailed recommendations all of which relate to market access for ICT products generally.

There is one recommendation related to EU participation in Chinese standardisation bodies:

• Encourage the Standardisation Administration of China (SAC) to provide written clarification in its new 2009 policy on membership management of Standards Development Organisations (SDOs) that Foreign Invested Enterprises (FIEs) and Wholly Foreign-Owned Enterprises (WFOEs) must be provided with full and equal membership access to all standardisation Technical Committees (TCs) and Working Groups in China.

There are two recommendations relating to market access impeded by the imposition of local Chinese standards:

- o Increase participation and cooperation with the international community on international standardisation initiatives in ICT and harmonise Chinese ICT standards with international standards to increase interoperability.
- o Encourage technology neutrality, ensuring that specific technologies are not unfairly mandated through local standards or other technical requirements.

There are two recommendations related to market access impeded by certification requirements:

- Streamline the complex and duplicative ICT equipment certification process into a simple, transparent and unified certification scheme.
- Provide clarification and transparency of licensing and certification requirements well in advance of the implementation date, and provide notification under the World Trade Organisation (WTO) Technical Barriers to Trade (TBT) Agreement for any standard that is applicable to mandatory certification and market access.

There is one recommendation related to the protection of IPR:

 Avoid testing and certification requirements compelling disclosure of sensitive commercial information and information unrelated to core product features, such as source code and additional software or hardware information.

The 2013-14 position paper from the Intellectual Property Rights Working Group²⁶ makes three key recommendations one of which is clearly related to ICT:

- o Issue a Regulation Providing a Delisting System for E-commerce
 - This is about Fighting against the sale of counterfeit products on the internet by addressing the passive attitude of most internet service providers (ISPs) towards the problem.

However, the other key recommendations which are generic are of more direct interest to may suppliers of ICT products. For example, the key recommendation:

- o Issue a Regulation about Trademark Usage in Original Equipment Manufacturing
 - This is a primary concern of the high-end ICT consumer product industries.

The Intellectual Property Rights Working Group 2013-14 position paper provides a very useful summary and critique of the recent developments in Chinese IPR law on trademarks, copyright, and patents. There are also very detailed key recommendations concerning patents and trademarks. While these are very generic issues they are nevertheless of major and direct importance for the EU ICT industry sector. This raises the issue of the extent to which the IPR barriers to EU-China collaboration in ICT R&D&I are ICT specific. Most of the issues are clearly generic and all that focussing specifically on the ICT industry sector does is effect the relative importance of these issues.

Guidance from UK Trade & Investment

On 7 June 2013 the Guardian newspaper reported that²⁷: "Britain's monthly exports to China have hit the £1bn level for the first time" Given the relative success of the UK in exporting to China it makes sense to review the support available from the UK government for UK companies seeking to do business in China to see if any insights can be gained that will assist the successful establishment of EU ICT R&D&I collaborations in China.

"UK Trade & Investment (UKTI) is the British Government Department that helps UK-based companies succeed in an increasingly global economy. UKTI's range of expert services are

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²⁶ http://www.europeanchamber.com.cn/en/publications-archive/241

http://www.theguardian.com/business/2013/jun/07/uk-exports-china-ons

tailored to the needs of individual businesses to maximise their international success. UKTI provides companies with knowledge, advice and practical support." [8]

The report Doing Business with China [8] produced by ima UK (International Market Advisory) highlights the scale of the ambition of UKTI in providing support for UK organisations seeking to do business with China. It comprehensively addresses the regional markets of China, legal and bureaucratic considerations, and the Chinese business culture, as such it is of general interest to EU organisations seeking to do business in China.

UKTI and the China-Britain Business Council (CBBC) provide detailed guidance on protecting intellectual property. It is stated in [8] that: "from having no IP protection law in the late 1970s, China has progressively enacted legislation to the point where it broadly matches or exceeds that in the UK." and [8] makes the common sense observation that: "An experienced independent IPR lawyer is invaluable in helping you to establish the best [IPR] strategy for your company." Nevertheless, for EU businesses in China IPR protection remains a major issue [8]: "The UK's first ever Intellectual Property (IP) Attaché to China was appointed in December 2011 to improve the IP environment for UK companies."

UKTI issues a monthly newsletter from the UK Intellectual Property Office, IP Insight that reports on the latest developments in the Intellectual Property and often contains valuable information on IPR developments in China. The August 2014 issue contains a section: China IPR considerations for European businesses in the ICT industries: part 1, which was written by the China IPR SME Helpdesk and applies to the EU ICT industry.

UKTI even issues a monthly ad hoc newsletter specifically on recent developments in the Chinese IP environment²⁸.

For a general overview on protecting intellectual property rights in China, see [9].

Other useful documents relating to protecting intellectual property in China are available through the web portal of the UK Intellectual Property Office²⁹.

A case study on UK-China Cooperation on Intellectual Property is available³⁰ that provides a number of useful links related to IPR and trade secrets protection in China.

The UK Foreign and Commonwealth Office Guidance Overseas Business Risk – China Published 1 August 2014³¹ is very helpful in putting IP risks in context in terms of where they fit within the wider key security and political risks which UK businesses may face when operating in China. The report looks not only at the intellectual property risks but also the organized crime, human rights, bribery and corruption, and terrorism risks.

It is noted that the (US) report [10] makes related pronouncements about IPR protection in China: "Enforcement of IPR by foreign companies is increasingly possible in large cities and against large companies, but still rare and difficult in most parts of the country. IP criteria have been built into government procurement and technical standards policies in ways that do

²⁸ https://www.gov.uk/government/publications/china-ip-newsletter

²⁹ http://www.ipo.gov.uk/

https://www.gov.uk/government/case-studies/uk-china-cooperation-on-intellectual-property

https://www.gov.uk/government/publications/overseas-business-risk-china

not conform to international norms. Chinese 'junk patents' have also been used by Chinese technology corporations to win IP settlements against foreign businesses operating in China."

Chinese industrial associations and centres with an interest in promoting IPR protection

Several Chinese ICT related industrial associations and centres have an interest in IPR protection and EU organisations should consider leveraging these when promoting the case for more efficient and effective IPR protection in China. Particularly notable in this context is the work of:

Shanghai Integrated Circuit Industry Association (SICA)³²

The Shanghai Integrated Circuit Industry Association is a nongovernmental organization composed of 5 committees on IC design, manufacturing, testing & packaging, smart card, materials & equipment. It helps the government with implementing policies, seeks to integrate the IC industry chain, engages R&D cooperation and forums, establishes industrial standards and works on IPR protection.

The Ministry of Industry and Information Technology Software and Integrated Circuit Promotion Center (CSIP)

CSIP is China's national software and integrated circuit public service platform³³. It is China's national software and integrated circuit public service platform. It engages technical exchange and consultation with domestic and overseas partners, and in industry and informatization related fields' soft science research, such as strategic research and IPRs warning research, and provides supportive services for government's decision-making and industry development.

The major responsibilities of CSIP include³⁴:

- Promote R&D and application of advanced technologies and common technologies in relevant fields, and engage in scientific achievement transforming, promotion, and technical exchange and consultation with domestic and overseas partners.
- o Engage in industry and informatization related fields' soft science research, such as strategic research and IPRs warning research, and provide supportive services for government's decision-making and industry development.

Other ICT related Chinese industrial associations and centres supporting Chinese industry that have an interest in IPR protection include:

- o China Smart City Industry Alliance (CCIT)
- o Shanghai Integrated Circuit Industry Association (SICA)
- Shanghai Software Industry Association (SSIA)
- o China Software Industry Association (CSIA)

³² http://www.sica.org.cn/detail.aspx?id=133

³³ http://www.miit-csip.org.cn/CSIPEnglish/CSIPEnglish_Aboutus/DevelopmentHistory/

³⁴ http://www.miit-csip.org.cn/CSIPEnglish/CSIPEnglish Aboutus/CSIPIntroduction/

 The Ministry of Industry and Information Technology Software and Integrated Circuit Promotion Center (CSIP)

Chinese Science and Technology Bureau's with an interest in promoting IPR protection

At least two Chinese municipal government science and technology bureaus have an interest in IPR protection and EU organisations should consider whether it is appropriate to leverage these bureaus when promoting the case for more efficient and effective IPR protection in China.

Xi'an Science and Technology Bureau³⁵

Xi'an³⁶ Municipal Government does not have a focus on ICT but it does have very interesting policy on IPR. Significantly, the main responsibilities of the Xi'an Science Technology Bureau include:

- o Organizing the protection work regarding intellectual property, enhancing the construction of intellectual property protection system; and arranging to coordinate matters on international intellectual property rights of Xi'an;
- Mediating patent disputes according to laws and regulations, and investigating and treating with the counterfeiting of patents; taking charge of the management of approval and registration of patent license contracts; directing the business work of patent service agents, and taking charge of the construction of patent information publicity service system of Xi'an.

The responsibilities of the bureau also include:

- o Taking charge of the scientific and technological cooperation and exchange of Xi'an;
- o Directing the commercialization of research findings;

It is gratifying to note that on May 8th, 2014, the China Science and Technology Exchange Center (CSTEC) held a Horizon 2020 Infoday in Xi'an, which attracted over 130 participants from local research centers, universities and enterprises participated in.³⁷

That CSTEC organised this event is important because it is affiliated to the Ministry of Science and Technology of the People's Republic of China and has expertise in international S&T exchanges and plays a significant role in the reform and opening-up of China, as well as the construction of the socialist economy.

³⁵ http://www.xa.gov.cn/ptl/def/def/index 1121 3316 ci trid 160997.html

³⁶ Shaanxi Province

³⁷ http://www.dragon-star.eu/cstec-held-horizon-2020-infoday-in-xian/

Qingdao Science and Technology Bureau

As of May 2014 according to the city's science and technology bureau authorities in Qingdao³⁸, expect S&T to play a more important role in driving local growth.³⁹ In particular, the city has been actively engaged in facilitation of intellectual property rights protection ¹⁴⁹:

"In 2013, police across the city cracked 109 cases of IPR violations, with 144 criminals arrested. The combined value of relative intellectual property was worth 492 million Yuan. An increasing number of IPR-related training workshops are being conducted in the city. Last year, a total of 7.5 billion Yuan was loaned to 68 enterprises as intellectual mortgages by Qingdao-based financial institutions. The city has also been encouraging the legal trading of intellectual properties and facilitating the development of IPR agencies. Bureau officials said the government is also improving its service to create a better business environment for hightech companies. Efforts include helping enterprises recruit and train talented professionals and enhancing intellectual property rights protection."

While the local government has been trying to improve the city's innovative strength by facilitating the transfer of new technologies for commercial use by guiding more funds into R&D and public services the focus understandably is on supporting local industry. However, its efforts in the area of IPR protection emphasise the importance of local enforcement and will create a better environment for EU ICT businesses within to operate in Qingdao.

Other useful links

The EU-China IPR2 Project ran from 2007-2011⁴⁰: "In the course of project implementation, IPR2 initiated a broad range of IPR-related information tools, reference materials and services including expert presentations, training and e-learning modules, comparative studies, case law compendia, Q&A manuals, guidelines for industry and other publications. These are provided for public access, in the form of:

IPR2 Document Centre - An search tool for intellectual property documentation by leading experts from China and Europe, representing the consolidated expert works of the Project; and

IP Law Search - Access to laws relevant for the protection and enforcement of intellectual property in China and the European Union, aiming to be a valuable source of information for companies, professionals and students working, studying or simply interested in the Chinese or European legal IP environment."

These tools were still available at the time of the writing of this report but are of course only up to date to 2011.

³⁸ Shandong Province

³⁹ http://qingdao.chinadaily.com.cn/2014-05/18/content 17548005.htm

http://www.ipr2.org/aboutipr2.html

No review of IPR protection in China would be complete without reference to the China Intellectual Property Rights Protection Website (IPR in China) sponsored by Ministry of Commerce (MOFCOM) of the People's Republic of China which has a version in English⁴¹: "The English Version is currently the only comprehensive governmental portal in the field of IPR protection. It has become an authoritative site to publicize the government's efforts and achievements in IPR protection and provided strong public opinion support for international IPR negotiation and public relation."

An important project of related interest is EUCTP II. This project is an EU-China trade related technical assistance project that will run from 2010 to 2015. Its activities are intended to 42: "support the Chinese government's trade reform and sustainable development agenda by working under the EU-China economic and trade dialogues to promote fair competition and value for consumers; facilitate harmonisation with international standards and promote safe products; improve food safety and quality; modernise customs; encourage a more transparent legal environment, and work towards transparency, good governance and sustainable development."

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⁴¹ http://www.chinaipr.gov.cn/AboutUs.shtml

http://www.euctp.org/index.php/en/project-background.html

Conclusions

Member states that are heavily involved in ICT R&D collaboration with China provide access to support for their businesses operating in China through chamber of commerce type organisations.

The European Chamber of Commerce in China (ECC) is a lobbying organisation not affiliated to any nation state. It provides European business with an effective communication and lobbying channel to the European and Chinese officials, business associations and media.

The ECCs core structure includes numerous working groups and fora, notably on: Information and Communication Technologies, Research & Development, Standards & Conformity Assessment, Intellectual Property Rights, Legal and Competition, Public Procurement, and SME.

For SMEs the EU provides business support through the EU SME Centre, the European Enterprise Network (EEN) and the China IPR SME helpdesk.

The Finnish Center of Chinese Law and Chinese Legal Culture Center promotes education in the field in universities, among legal practitioners and the wider community, and has a role in supporting policy development which is a crucial component in developing business models for commercial connections between the EU and China.

The China International Economic and Trade Arbitration Commission (CIETAC) accepts foreign-related and international cases and offers to independently and impartially resolve economic and trade disputes by means of arbitration.

Several Chinese ICT related industrial associations and centres, and at least two Chinese municipal government science and technology bureaus, have an interest in IPR protection.

The ECC publishes an annual Position Paper that outlines the problems European businesses in China are currently facing with regard to World Trade Organisation implementation, trade, regulatory and broader policy-related issues and the Working Groups recommendations for alleviating them. It is presented to senior Chinese officials from over 20 ministries and general administrations and directly to the European Commission.

The ECC Research & Development Forum holds annual external events of major significance for ICT R&D&I, like the 2012 R&D Conference on "Essential Strategies for R&D Management in China", or in 2013 the "Protection of intellectual property during the design, procurement, construction and operation of new production or R&D facilities in China" which offer European companies an insider's perspective from government officials, consultants and R&D managers on key R&D considerations on issues such as managing research collaborations, intellectual property rights and human resources.

The ECC Intellectual Property Rights Working Group 2013-14 position paper provides a very useful summary and critique of the recent developments in Chinese IPR law on trademarks, copyright, and patents, including recommendations in support of the efficiency and effectiveness.

UKT&I has made clear that China's IP protection law broadly matches or exceeds that of the UK. Extensive current information related to IP protection in China in available from UK government agencies.

For EU businesses in China IPR protection remains a major issue because of the distinctive nature of the IP law in China and cultural differences. The UK's first ever Intellectual Property (IP) Attaché to China was appointed in December 2011 to improve the IP environment for UK companies.

Recommendations

It is important to be aware that the UK government has acknowledged China's IP protection law broadly matches or exceeds that of the UK but that for some EU businesses in China IPR protection remains a major issue because of the distinctive nature of the IP law in China and cultural differences.

It is important to be aware of the recent report: China IPR considerations for European businesses in the ICT industries available from China IPR SME Helpdesk.

The ECC Intellectual Property Rights Working Group 2013-14 position paper provides a very useful summary and critique of the recent developments in Chinese IPR law on trademarks, copyright, and patents including recommendations in support of the efficiency and effectiveness. While these are very generic issues they are nevertheless of major and direct importance for the EU ICT industry sector.

Member states that are heavily involved in ICT R&D collaboration with China provide access to support for their businesses operating in China through chamber of commerce type organisations. If your organisation resides in a member state that provides such support it should be your first port of call if you are concerned about IPR protection in China.

If your organisation is an SME the EU provides business support through the EU SME Centre, the European Enterprise Network (EEN) and the China IPR SME helpdesk which you refer to as useful support may well be forthcoming.

In the event of a dispute around IPR protection in China it is worth considering approaching The China International Economic and Trade Arbitration Commission (CIETAC) which accepts foreign-related and international cases and offers to independently and impartially resolve economic and trade disputes by means of arbitration.

If your organisation wishes to raise specific concerns related to IPR protection in China it is useful to hold in mind that the European Chamber of Commerce is a very effective forum through which to air these concerns. Furthermore, several Chinese ICT related industrial associations and centres, and at least two Chinese municipal government science and technology bureaus, have an interest in IPR protection and it may be appropriate to approach one or more of these bodies with a view to eliciting their support for resolution.

References

- [1] CHOICE Internal report I-5 Clustering for Success: Cluster to establish EU-China collaborative ICT R&D&I, Document organisers: Dr T J Owens and Dr T Itagaki, November, 2014.
- [2] CHINA'S ABSORPTIVE STATE Research, innovation and the prospects for China-UK collaboration, Kirsten Bound, Tom Saunders, James Wilsdon and Jonathan Adams, October 2013, Nesta

(http://www.nesta.org.uk/publications/chinas-absorptive-state-innovation-and-research-china)

[3] Science, Research and Innovation: Co-operation between the European Union, Member States and China, Compiled by the Delegation of the European Union to China, May 2012.

http://eeas.europa.eu/delegations/china/documents/eu_china/research_innovation/2_horizon/c o-operation_between_the_european_union,_member_states_and_china_en.pdf

[4] Progressing Eco-city Policies into Mainstream Practice in China, The UK-China Ecocities & Green Building Group, July 2012.

(http://ols.cbbc.org/eco-cities/progressing%20eco%20city%20policies.pdf)

[5] Jani Kaarlejärvi and Matti Hämäläinen, New opportunities for China-Finland R&D&I cooperation, Tekes Review 295/2012, Helsinki 2012

www.tekes.fi/Julkaisut/china-finland.pdf

[6] Dragon-STAR Deliverable 4.4: Handbook on support instruments and services for European technology-based companies entering the Chinese market: An overview of European and Chinese initiatives, Steinbeis-Europa-Zentrum (SEZ), 30 June 2014

From: http://www.dragon-star.eu/handbook-support-instruments-and-services-for-european-technology-based-companies-entering-china/

- [7] CHOICE Internal report I-4 The current status of ICT R&D&I for Chinese Eco-Cities: The implications for EU-China collaboration in ICT R&D&I, Document organizers: Dr T J Owens and Dr T Itagaki, November 2014.
- [8] Doing Business in China, ima, 2014.

http://www.China.DoingBusinessGuide.co.uk

[9] Intellectual Property Rights in China, UKTI, 2013.

From: https://www.gov.uk/government/publications/intellectual-property-rights-in-china

[10] Micah Springut, Stephen Schlaikjer, and David Chen, China's Program for Science and Technology Modernization: Implications for American Competitiveness, the U.S.-China Economic and Security Review Commission, 2011.