SOUTH-EAST ASIA IPR SME HELPDESK

Software Protection in South-East Asia

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1. Introduction: Software Protection in South-East Asia

The Information Technology services and software sector in South-East Asia has been booming in recent years as South-East Asian nations continue to develop and flourish. In particular, South-East Asia is experiencing a rapid growth of Internet, digital, social media and mobile activities. With more than 320 million Internet users in January 2017[1], increasing connectivity and therefore dependence on computer technology is to be expected in this region. This translates to growth in the software industry as well, as computers cannot operate without software.

"Software" is commonly understood to refer to a group of programmes, instructions, codes and other documentation related to the operation of a computerised system[2]. As opposed to the hardware of a system, software comprises only non-physical online information and data. In the ASEAN ICT Masterplan 2020, the importance of a digitally-enabled ASEAN Community in furthering economic and social development is recognised[3], and undoubtedly software play a crucial role in the realisation of this digitally-enabled ASEAN Community. While there might be various categories of software, generally, there are three common ones: i) system, ii) utility and iii) application software[4]. Generally, a variety of intellectual property (IP) issues may arise in the software industry in South-East Asia.

[1]Southeast Asia digital, social and mobile 2017 https://aseanup.com/southeast-asia-digital-social-mobile/.

[2]Software and Copyright http://www.esa.int/About_Us/Law_at_ESA/Intellectual_Property_Rights/Copyright_and_software.

[3]The ASEAN ICT Masterplan 2020 https://www.trc.gov.kh/wp-content/uploads/2016/10/1.pdf.

[4]A "system software" is a set of programmes that manages all the concurrent tasks performed by a computer. A "utility software" is a collection of programmes that perform routine tasks such as copying, compressing data and other similar tasks. An "application software" performs specialised functions not directly related to the computer itself. See generally Software and Copyright http://www.esa.int/About_Us/Law_at_ESA/Intellectual_Property_Rights/Copyright_and_software.

With a combined population of almost 630 million, an aggregate GDP of over US$2.4 trillion (approx. EUR2.1 trillion) in 2015[5], and an average annual GDP growth of around 6% over the past decade, South-East Asia offers an attractive market to EU SMEs involved in the software industry. Before entering this market, however, EU SMEs should be aware of the different IP rights and how they apply to the software industry, as well as the possible risk of IP infringement in this market. This is increasingly important with many companies developing their own software, and software development being an ever-growing industry. Knowledge of the different aspects of software and how to protect them with the appropriate IPs is certainly beneficial for EU SMEs to develop a good IP protection strategy.

2. Frequent issues concerning Copyright

Copyright is an IP right which gives the owners of original literary and artistic works a set of exclusive rights over their works, including copying, translating, adapting and altering, communicating and performing to the public, distributing, renting and lending copies of the copyrighted works[6]. Copyright arises automatically upon the creation of a work, which means formal registration is not required for protection to exist (although registration - where possible - is still recommended, as proof of ownership EU SMEs obtain from registering their copyright may prove useful in the event of a copyright dispute in the future). Furthermore, citizens of all signatories to the Berne Convention for the Protection of Literary and Artistic Works are afforded copyright protection automatically for any of the works they create. This Convention currently includes all EU member states, and most of the ASEAN member states. Therefore, in this sense, copyright presents a relatively easy and inexpensive approach in obtaining a protection that is almost universally recognised. As the software industry features constant and cumulative innovations, with later software often incorporating new features that aim to extend the capabilities of the earlier software, EU SMEs may wish to take advantage of copyright as a form of protection for their software.

With the exception of Myanmar, the Philippines and Thailand, software programmes are expressly protected by copyright in South-East Asia[7]. However, it should be noted that copyright protects the expression of ideas, and not the ideas per se. In other words, copyright does not protect the ideas underlying the software that is often the source of commercial value – this is typically protected by patent, which will be covered below. However, copyright may provide protection against any unauthorised running, copying, modifying or distribution of the software[8].

As a matter of IP protection strategy for EU SMEs, it is advisable to include prominent copyright notices on the software sold to the end users. An example of a copyright notice may include the symbol © or "Copyright" followed by the year, the company name and the phrase 'All rights reserved'. Such a notice should be affixed to the wrapping, disks and first page of the screen when the software programme is launched on a computer. When the software is in its development phase, EU SMEs should also consider marking code files with copyright notices to warn all personnel with access to the code files (whether authorised or otherwise) that such files contain the company's proprietary property. Although this step is not necessary for EU SMEs to assert their copyright over the software that they own, it is still useful to display ownership and deter any possible infringers.

Another issue to consider is ownership of the copyright. Generally, an author of a work owns the copyright in that work. However, when it comes to software development, copyright ownership can be a complex issue. In the software development context, a software may be created by a developer during the course of employment with his/her employer, using the employer's resources and for which the employer remains responsible. In such a situation, the employer usually owns the economic rights to the works, while the employee owns the right of attribution of authorship. There are exceptions to this rule, however. For example, in Indonesia, the copyright for works created by an employee, even during the course of employment, does not automatically belong to the employer[9]. As such, before entering the South-East Asian countries, EU SMEs should consult local legal counsels and provide, in an employment contract or otherwise, for express ownership of the copyright in the works created by their local employees, if necessary.

In other instances, EU SMEs may commission an external party to develop its software. Generally, without an agreement stating otherwise, copyright of a commissioned work belongs to the commissioned party[10]. As such, when EU SMEs commission local independent contractors to develop software (due to costs consideration or otherwise), proper contracts and/or assignment agreements must be put in place to ensure that the ownership

[5]ASEAN Economic Community Chartbook 2016 http://www.aseanstats.org/wp-content/uploads/2016/11/AEC-Chartbook-2016-1.pdf.

[6 9 10]Guide to Copyright Protection in South-East Asia http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/Copyright_english.pdf.

[7]IP considerations in ICT Industry in South-East Asia http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_ICT_industry.pdf.

[8]IP considerations in ICT Industry in South-East Asia http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_ICT_industry.pdf.

of the copyright in the software developed by the independent contractors will eventually belong to the EU SMEs.

Lastly, it should be noted that independent development of a copyrighted work is a defence to an allegation of copyright infringement. Given the increasing connectivity in South-East Asia and the availability of various standard programming codes and procedures, it is perhaps not impossible for more than one creator to create similar or even identical software programmes.

For more information about Copyright in South-East Asia, please refer to our Guide on Protecting Your Copyright in South-East Asia at http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/Copyright_english.pdf.

3. Frequent issues concerning Patents

As mentioned earlier, copyright protection extends only to the expression of ideas, and not to ideas, procedures, or method of operation as such. Hence, many software developers and software companies seek to patent their software and software-related inventions, in order to afford the inventions another layer of protection in addition to copyright.

Generally speaking, patent owners acquire, for a fixed period, the exclusive right to prevent others from using, commercialising or importing the patented inventions without the patent owners' consent. Through such exclusive rights granted by patent, EU SMEs may be able to reduce competition and establish themselves in the respective South-East Asian countries in which their inventions are patented.

Typically, for an invention to be patentable, the invention must meet the following three requirements: (1) novelty, (2) inventive step, and (3) industrial applicability[11]. Unlike copyright which arises automatically when the work is created, a patent must be applied for in the jurisdictions of interest. Patent laws generally vary from country to country, and as such EU SMEs are strongly encouraged to consult local IP experts who would be able to advise them on the different patenting requirements in the specific jurisdictions in which they seek to patent their inventions.

In addition, the application process, as well as the time and costs associated therewith, vary depending on the practice of the respective local patent offices. Generally speaking, the patenting journey may take a long time and require substantial resources to prosecute the applications through to grant. As such, as much as possible, EU SMEs should avail themselves of the ASEAN Patent Examination Cooperation (ASPEC) Programme as well as any other Patent Prosecution Highway Programmes between the national patent offices. Such programmes allow the sharing of search and examination results between the participating patent offices, thereby allowing applicants in participating countries to obtain corresponding patents faster and more efficiently.

Also a very valid way to approach patent prosecution is to protect the patent under PCT route which allows applicants seeking patent protection internationally for their inventions. By filing one international patent application under the PCT, applicants can simultaneously seek protection in a very large number of countries, including all South-East Asia countries except for Myanmar.

In any event, EU SMEs should note that not all countries in South-East Asia afford patent protection for computer software. In the Philippines and Thailand, for example, it is explicitly provided in IP laws that computer software or programs are not patentable. On the other hand, other countries such as Singapore and Cambodia, software may be patented[12].

For more information about Patents in South-East Asia, please refer to our Guide on Protecting Your Patents in South-East Asia at http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_patent.pdf.

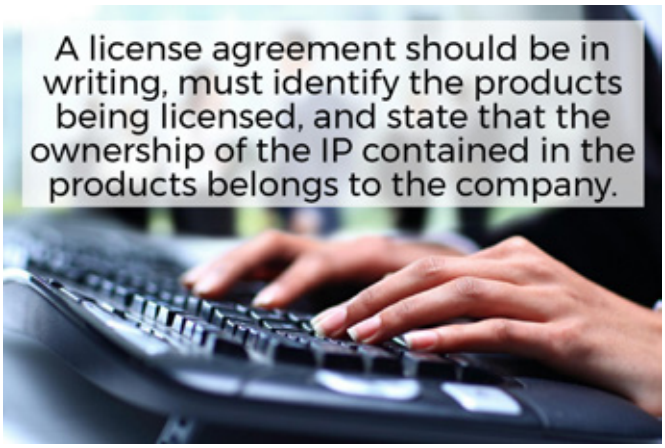
4. Frequent issues concerning Trade Secrets

Another way that EU SMEs in the software industry may protect their rights to the software is by keeping the software as a trade secret. While copyrights and patents are made public and are limited in duration, trade secrets are private and can last indefinitely, as long as proper measures are put in place to ensure the confidentiality of such trade secrets.

In this regard, EU SMEs should develop a sort of "trade secret protection programme" for their software. For example, a proper protection programme will require entering into confidentiality agreements with the EU SMEs' employees, independent contractors or other third parties that may have access to the software, ensuring limited access to the source code, and having password protection or another encryption method for documents containing the source code, amongst others.

Although the protection of trade secrets is of a less formal nature as compared to that of patents or copyright, it is still an important and valuable IP protection measure that EU SMEs may avail themselves of before entering the South-East Asian markets.

[11] [12] IP considerations in ICT Industry in South-East Asia http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_ICT_industry.pdf.



5. Software and IP licensing

A significant portion of the income of software companies nowadays stems from licensing their software. EU SMEs wishing to enter the South-East Asian market may tap on this business model to establish themselves in the local markets and subsequently enhance their market position, by licensing their software to local manufacturers, clients and other key players.

Although the legal recognition and protection of software licences may vary in different South-East Asian countries, the considerations mentioned in the discussion that follows generally apply across all jurisdictions.

A licence agreement involves a licensor assigning the exclusive rights of its IP to a licensee for an agreed fee or royalty. As such, a licence agreement should be in writing, must clearly identify the products being licensed, and state that the ownership of the IP contained in the products belongs to the company. The agreement must also identify the permissible uses of the products. Where there is access to a source code of a software programme, EU SMEs should consider including a confidentiality clause to ensure that their IP rights are sufficiently protected[13].

Additionally, the licence agreement should clearly indicate the fee payable, as well as the manner and frequency of payment. The agreement should also provide for circumstances under which the agreement may be terminated, and clearly spell out the consequences of such termination. For example, it is not uncommon to provide that either party to the agreement may terminate the agreement upon the insolvency of the other party. Another common clause provides that in the event of termination of the agreement, all obligations of the parties (except for certain obligations such as those concerning confidentiality, and representations and warranties) shall cease, and all payments due as at the date of the termination of the agreement shall be come payable immediately.

Dispute resolution is another important clause that is often overlooked by parties to the agreement. Increasingly, contracting parties provide for a multi-tiered alternative dispute resolution clause that includes several methods of alternative dispute resolution rather than litigation. For example, when a dispute arises, parties may attempt to amicably settle the dispute through negotiation, failing which the dispute will be referred to mediation, followed by arbitration as the final resort. This is due to the relatively lower costs as well as the other advantages offered by alternative dispute resolution, including for example flexibility and confidentiality.

When entering into IP licence agreement, EU SMEs should also be mindful of the different restrictions on such agreements under the respective local laws. For instance, in Singapore, subject to certain conditions, a term of a licence to work a patented invention that purports to require the licensee to acquire from the licensor, or to prohibit the licensee from acquiring from any specified person, or from acquiring except from the licensor, anything other than the product which is the patented invention may be void under the Singapore Patents Act[14].

For more information about IP licensing in South-East Asia, please refer to our Guide on Transfer of Technology to South-East Asia at http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/Technology-Transfer-English.pdf.

6. Case studies

Case study 1: Disclosure of technical information on software in Singapore

Background

Company 'DE' in Germany develops a portable payment device that allows users to make payment for their purchases easily and securely. With a view to enter the South-East Asian market, Company DE participates in a software trade show in Singapore and comes into contact with Company 'MY', a local Malaysian company in the business of manufacturing and distributing software. After learning of Company DE's intention to enter the South-East Asian market, Company MY expresses its interest in becoming its appointed local partner and promises to "take care" of the necessary activities in order for Company DE to seamlessly enter the Singapore and Malaysian market, before expanding into the ASEAN region.

[13] IP considerations in ICT Industry in South-East Asia http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_ICT_industry.pdf.

[14] Section 51, Singapore Patents Act (Cap. 221).http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_ICT_industry.pdf.

Action Taken

The two companies subsequently meet to discuss the details of the joint venture, during which meeting Company DE discloses certain important information about its portable payment device. The two companies then fix their next meeting in the near future to formalise their joint venture.

Outcome

Six months later, having obtained the necessary approval from the Board of Directors, Company DE is ready to formalise its joint venture with Company MY by way of a joint venture agreement. However, Company MY declines Company DE's invitation to meet, stating that it has lost interest in the project given that Company DE has taken too long to close the deal. Disheartened by the news, Company DE nevertheless starts to look for another local partner while using the opportunity to also survey the local market. While surveying the market, however, Company DE comes across a portable payment device that has been developed and distributed by Company MY, whose main functions are very similar to those of Company DE's invention. Company DE further learns that this product is becoming increasingly popular in Singapore and Malaysia, which leads Company MY to decide to expand its reach into the other countries in the region. This product therefore poses as a strong competitor to Company DE's product, if Company DE were to enter the South-East Asian market.

IP Lessons Learned

When engaging in initial negotiations with potential local partners, EU SMEs should be vigilant and consider entering into Non-Disclosure Agreements (NDAs) with such local partners, pending formalisation of the relationship between the parties subsequently.

Case study 2: Working with a freelance software developer: a copyright ownership case in Singapore

Background

Company A in Singapore engages a freelance software developer to develop for Company A a programme that predicts the stock market. The programme, which predicts the stock market with 95% accuracy, proves to be a commercial success. However, six months into the commercialisation of the programme, Company A learns that another company in Singapore, Company B, is advertising another similar programme that claims to achieve the same precise prediction. After investigation, Company A learns that Company B's programme has been developed by the same freelance software developer that develops the programme for Company A.

Action Taken

Company A intends to sue the freelance software developer for breach of contract. To Company A's dismay, the software developer claims that the copyright in the programme belongs to him, and therefore he has the rights to sell or license it to another party.

Outcome

Company A then realises that the contract between Company A and the software developer is silent on the ownership of the programme. The two parties also do not enter into any assignment agreement to assign the rights in the programme from the software developer to Company A.

IP Lessons Learned

When EU SMEs commission independent contractors to develop software, proper contracts and/or assignment agreements must be put in place to ensure that the ownership of the copyright in the software developed by the independent contractors will eventually belong to the EU SMEs.

7. Take Away Messages

- Businesses should consider what is the best way to protect software-related products and inventions, by weighing various factors such as cost, subject matter protected, and duration of protection, amongst others. By understanding the different types of IP and issues related to software development, EU SMEs will be better equipped to protect the rights in their software. This in turn will help EU SMEs to maximise the economic value of their software.

- If possible, EU SMEs should consider using a combination of IPs to protect their software, including copyrights, patents, and trade secrets. In addition, EU SMEs should apply for patent protection even before entering the local markets.

- In entering into licence agreements with their counterparts, EU SMEs should carefully consider the terms to be put into these agreements, and consult local legal advisers to ensure the enforceability of such agreements under the respective local laws.

- EU SMEs should also actively monitor their IP rights and bring any infringing acts (e.g. software piracy) to the attention of the competent authorities, for the latter to undertake the necessary actions (if the same are provided for under the local laws) to protect the interests of EU SMEs in cases of IP right infringement.

- EU SMEs should remain vigilant in ensuring that their trade secrets are protected. This may increase their chances of making a successful claim for trade secret, as often time one of the key conditions to the constitution of a trade secret is the measures used to protect the confidentiality of the information.

8. Glossary of Terms

- **ASEAN** – The Association of the South East Asian Nations is a regional organisation comprising ten South-East Asian states which promotes intergovernmental cooperation and facilitates economic integration amongst its members. Since its formation on 8 August 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand, the organisations' membership has expanded to include Brunei, Cambodia, Laos, Myanmar and Vietnam. Its principal aims include accelerating economic growth, social progress, and sociocultural evolution among its members, alongside the protection of regional stability and the provision of a mechanism for member countries to resolve differences peacefully.
- **Copyright** – Copyright protection covers original creations in the literary (including software), musical and artistic domain, whatever the mode or form of expression.
- **Licence Agreement** – A licence agreement involves a licensor assigning the exclusive rights of its intellectual property to a licensee for an agreed fee or royalty.
- **Patent** – An exclusive right granted for a product or a process that provides a new way of doing something or offers a new technical solution to a problem.
- **Software Licensing** - A software license is a legal instrument, usually regulated by a written contract, governing the use or redistribution of software among entities or individuals.
- **Source Code** - Source code is any collection of computer instructions, possibly with comments, written using a human-readable programming language, usually as ordinary text.
- **Trade Secret** – Any confidential business information which provides an enterprise a competitive edge may be considered a trade secret.

9. Related links and additional information

- Visit our Guide on Protecting Your Copyright in South-East Asia - http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/Copyright_english.pdf
- Visit our Guide on Protecting Your Patents in South-East Asia - http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/EN_patent.pdf
- Visit our Guide on Transfer of Technology to South-East Asia - http://www.southeastasia-iprhelpdesk.eu/sites/default/files/publications/Technology-Transfer-English.pdf
- Visit the country factsheets of South-East Asia countries – http://www.southeastasia-iprhelpdesk.eu/en/country-factsheets
- Visit other publications at South-East Asia IPR SME Helpdesk website – www.ipr-hub.eu
- Visit the Helpdesk blog http://www.yourIPinsider.eu for related articles on IP in South-East Asia and China

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The South-East Asia IPR SME Helpdesk provides free, business-focused advice relating to South-East Asia IPR to European Small and Medium Enterprises (SMEs).

Helpdesk Enquiry Service: Submit further questions to the Helpdesk via phone or email (question@southeastasia-iprhelpdesk.eu), or visit us in person and receive free and confidential first-line advice within three working days from a South-East Asia IP expert.

Training: The Helpdesk arranges trainings on South-East Asia IPR protection and enforcement across Europe and South-East Asia, tailored to the needs of SMEs.

Materials: Helpdesk business-focused guides and training materials on South-East Asia IPR issues are all downloadable from the online portal.

Online Services: Our multilingual online portal (www.ipr-hub.eu) provides easy access to Helpdesk guides, case studies, E-learning modules, event information and webinars.

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