Indonesia' Policy on Transfer of Technology, Research and Innovations; Does It Enhance a Better Access to Technology?

Nurul Barizah

Department of International Law, Faculty of Law, Universitas Airlangga, Surabaya, 60286, Indonesia
E-mail: nurul.barizah@fh.unair.ac.id

Abstract

Transfer of technology is one of the most crucial elements of developing countries like Indonesia to get access to important technologies needed for development. Transfer of technology has been a subject of concern on the basis that international intellectual property rights (IPR) regimes provide incentive to enhance transfer of technology. On this reason, this Article examines whether the protection of IPR in Indonesia provides a significant way to foster transfer of technology in Indonesia. This Article also analyses the adequacy of Indonesia' policy, and regulation on transfer of technology, research, and innovations in enhancing transfer of technology to Indonesia. The main focus on this analysis is on national regulation for research, development, and the implementation of science and technology, as well as innovation policy. Furthermore, it also analyzes the approaches that have been used by Indonesia toward transfer of technology and the problems associated with it.

Key words; Transfer of Technology, Intellectual Property Rights, Research and Development, Innovation, Indonesia

Introduction

Indonesia is a Member of World Trade Organization (WTO) and has ratified the Trade -related Aspects of Intellectual Property Rights (TRIPs) Agreement of 1994. One of the main reasons for ratification is because the TRIPs Agreement promotes that the protection and enforcement of Intellectual Property Rights (IPRs) contribute to the transfer and dissemination of technology. As developing country, Indonesia needs to create a sound and viable technological base for national development, and transfer of technology from developed countries is required. On this basis, Indonesia provides patent protection for all inventions in all fields of technology without discrimination provided that they are new, have an inventive step and industrially applicable in accordance with the TRIPs Agreement. This patent protection provides an incentive for technological change, especially for further investment on research and development (R & D) to make new useful inventions.

This research examines whether patent together with other relevant legislations provides a significant way to foster transfer of technology in Indonesia. This Article also analyses the adequacy of Indonesia' policy, and regulation on transfer of technology, research, and innovations in enhancing transfer of technology to Indonesia. The main focus on this analysis is

on national regulation for research, development, and the implementation of science and technology, as well as innovation policy. Furthermore, it also analyzes the approaches that have been used by Indonesia toward transfer of technology and the problems associated with it.

Methodology

The type of this research is normative legal research by using statutory and conceptual approaches. This statutory approach is done by reviewing all laws and regulations related to the issues of this research, particularly national legislations. This research uses primary and secondary legal sources. The primary sources constitute authoritative sources in nature in the meaning that this source is officially made by legal authority bodies. It consists of legislations, regulations, and treatise in legislations. While secondary legal materials constitute all forms of publication which is not an official document, which consists of: textbooks, law dictionaries, legal journals, etc.

Result

It is uneasy to examine the function for patent for fostering transfer of technology in Indonesia, as Indonesia had no specific instruments to monitor, filter, and control foreign technology imports. Accurate information regarding the amount of technology that inflows into Indonesia, including the fees and royalties paid for the use of patented foreign technologies is not available. Similarly, there is also no available data on the number of technology licensing agreements signed by Indonesian corporations with their foreign licensors. In addition, there is also no acceptable definition of technology inflows.

In the absence of any laws and regulation on transfer of technology during that time, Indonesia took liberal approach to transfer of technology in the meaning that it was essentially unregulated. It was then suggested that Government intervention to regulate the transfer of technology agreement was needed because local corporations had a lack of bargaining power and a lack of commercial experience in their negotiation with foreign firms as a technology supplier. The Government intervention policy might help to avoid any unfair restrictions and conditions in such agreements. However, there was no indication that the Government would change its liberal approach to technology transfer because: (1) that the restriction conditions might slow down the inflows of foreign direct investment (FDI) and the accompanying important technology imports which are currently needed to revitalize the Indonesian economy; (2) that in general, the Government official do not have the necessary business experience and knowledge on industrial technologies.

Since in the era of 1990s until now, the problems concerning technology transfer policy in Indonesia cannot be divorced from the problem with the overall national technology policy. Until 2002, there was no single law and regulation in the field of science and technology that could be used as a foundation for the development of it in Indonesia. The policies and principles of regulation of technology were mostly presented in the 'official speech' of executives (*pidato pejabat*), which are non-binding in nature. As a developing country, scientific capacity of Indonesia is relatively proficient. But this potential is meaningless without consistency in policy and adequate research infrastructure, and facilities. This may also be due to a lack of ability to

establish linkages between Government sponsored-research and private industry. Government funding has dominated most R &D in Indonesia until now.

Then, in 2002, the *SINAS P3 IPTEK* Act was introduced. It seems that this Act provides promising legal basis for development of science and technology, and a foundation for technological policy in Indonesia. This Act shifted technological policy which stipulated the importance of 'strengthening the capacity to audit technology imports' in line with a national standardization policy. The audit aimed to prevent flooding of the national market with cheap poor quality foreign products and processes. However, this Act is ineffective.

This can be seen clearly in the context of IPR provisions, which principally highlight the imperative role of IPR protection. Article 23 stipulates that the Government guarantees protection of IPR owned by both individual and legal entities in line with prevailing regulations. Another interesting point is that Article 13 (2) which stipulates the legal obligation for universities and agencies for R & D to disseminate information of R & D results as long as it does not reduce the protection of IPR. Article 13 (3) also obligates such institutions to establish 'Centres for IPR'. Furthermore, each IP and result of research, development, engineering, innovation, funded by both local and national governments shall be properly managed and utilised by universities, research agencies and other legal entities. This is a well-intended policy seems to provide a greater transfer and access to technological innovation.

The establishment of 'Centers for IPR' are designed to overcome the current lack of interest by Indonesian scientists and industry in obtaining patent rights. These Centres aimed to actively promote IP potential in research centres, to assist inventors in obtaining patents, and to help in commercialisation. The Minister also launched a 'program to obtain a patent'. The program provides financial incentives for patented inventions and assistance for bearing the financial risks of the patenting process. Significant endeavours have also been dedicated by the Government on all sectoral levels to increase the national patent applications. Similarly, several technical departments have enhanced IP-oriented research. However, the number of national patent applications remains insignificant and has not increased. This may indicate that there is a little evidence that the patent system encourage local innovation in Indonesia. Antons critically commented that this is due to the predominance of imported technologies, particularly in the mega projects of strategic industries.

Under *SINAS P3 IPTEK* Act, the universities and other research agencies are obligated to promote the transfer of technology. This Act obligates all stakeholders and all components of society to participate in R&D. Legal enterprises shall allocate part of its income for increasing the capacity on engineering, innovation, and diffusion of technology in the light to enhance goods and services production and competitiveness of its product. But it seems that the Article is merely a recommendation or a moral obligation for businessmen and entrepreneurs. Furthermore, society in general is also obliged to provide support and participate in shaping a favourable climate for R&D and its application. The Explanatory Memoranda strongly emphasises the mandatory nature of this responsibility.

Three years after the enactment of SINAS P3 IPTEK Act, the Government Regulation on Transfer of Technology was introduced for the first time in Indonesia. The Regulation defined

transfer of technology as not limited to national technologies but also including foreign technologies, but there are no further provisions regulating foreign technology transfer. The regulation focuses on several important aspects related to the university's obligation to carry out the transfer of technology, the ownership of IP resulted from public research institutions; and the use of income derived from local transfer of technology. But, the Act neither affects nor facilitates transfer of foreign technology.

The Regulation requires higher education and R&D institutions to carry on transfer of technology from publicly funded research, to local and national governments, companies and society. But this regulation does not provide a sanction mechanism, although the nature of this Article is imperative.

The most important provision of the regulation specifies that both local and or national governments are the owners of publicly funded IP rights, and researchers and inventors will receive recognition and reward for their work. This suggests that the relationship between public researcher and government is like the relationship between employer and employee according to Article 12 of Patent Act. This provision may be intended to ensure that the benefits of publicly funded research are available to all, but such an approach provides little motivation in encouraging research and innovation because the researcher has no right to determine and manage the use of IP and other R&D results. With this scenario, the researcher will only carry on research and the result will be submitted to the Government which will secure and protect through IPR. This means that the most responsible body for the application of IP rights is the higher education and R&D institution in which the researcher is employed because the management of IP and result of R&D is mandated to universities and R&D institutions. Accordingly, it is an obligation of those institutions to establish work units responsible for technology transfer management to implement that provision. However, if R & D activities are funded partly by other parties, the IP resulting from those activities can be owned collectively by the Government and the party involved.

The existence of this regulation may not help Indonesia to gain access to technologies that are required for its development. This is because the regulation does not focus on the importance of foreign technology licences to national corporations and other national institutions. It does provide opportunity for foreign corporations to manufacture locally to provide employment for a local workforce but does not address real technology transfer issues.

Conclusion

Almost three decades from the existence of Patent Act, Indonesia still poses fundamental problem with transfer of technology. This problem is not entirely due to patent system have little implication to stimulate transfer of technology, and the development of national technological capacity, but mainly due to unclear direction and national technology policy. The first government regulation regarding transfer of technology was enacted in 2005, and the regulation does not regulate transfer of foreign technology to Indonesia. It only regulates transfer of technology of IP and result of R & D by universities ad R& D agencies in Indonesia.

References

Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) of 1994. (Marrakesh Agreement Establishing the World Trade Organization. Annex 1C. 15 April 1994, 33 I.L.M. 1197, 1201 (entered into force on 1st January 1995).

Christoph Antons, 'Harmonization and Selective Adaptation of Intellectual Property Policy in Asia', in C. Antons, M. Blakeney, and C. Heath (eds) (2004) *Intellectual Property Harmonization Within ASEAN and APEC*, (Kluwer Law International, The Hague) 109-121.

Christoph Antons, 'Technology Transfer in Indonesia', in Christopher Heath, and Kung-Chung Liu (eds) (2002) *Legal Rules of Technology Transfer in Asia* (Max Planck Series on Asian Intellectual Property Law 4, Kluwer Law Inetrnational, UK), 227-252, 235.

Sartua Tampubolon, 'Menyoal Efektivitas Regulasi Iptek' (Discussing Effectiveness of Science and Technology Regulation), *Hukum Online*, 18 March 2005, available at <http://www.hukumonline.com/detail.asp?id=12465&cl=Kolom>

The Act of the Republic of Indonesia Number 14 of 2001 about Patent (State Gazette of the Republic of Indonesia Number 109 of 2001, Supplementary State Gazette Number 4130).

The Act of the Republic of Indonesia Number 18 of 2002 Regarding National System of Research, Development, and Application of Science and Technology (State Gazette of the Republic of Indonesia year 2002 Number 84,Supplementary State Gazette Number 4219).

The Government Regulation of the Republic of Indonesia Number 20 of 2005 regarding Transfer of Technology Intellectual Property and Result of Research and Development Activities by Higher Education and Research and Development Agencies (State Gazette of the Republic Indonesia Number 43 of 2005, Supplementary State Gazette Number 4497)

The Government Regulation of the Republic of Indonesia Number 41 of 2006 Regarding Permit to Conduct Research and Development Activities for Foreign Higher Educations, Foreign Research and Development Institutions, Foreign Companies and Foreign Individuals (State Gazette of the Republic of Indonesia of 2006 Number 104, Supplementary State Gazette Number 4666).

Three Kian Wie, 'Determinant of Indonesia's Industrial Technology Development', in H.and Three Kian Wie (eds) *Indonesia's Technological Challenge* (Institute of Southeast Asian Studies- Research Schools of Pacific and Asian Studies, Singapore-Canberra, 1998) 117-34.

Wie Kian Thee, 'Channels of International Technology Transfer in Indonesia; A Brief Survey', The International Centre for the Study of East Asian Development, Kitakyushu, Working Paper Series Vol -32, November 2001, 14.