

### NEWSLETTER



#### FACULTY OF LAW, UNIVERSITY OF MALAYA

## CELEST



#### CENTRE FOR LAW AND ETHICS IN SCIENCE AND TECHNOLOGY













## Happy New Year!

IN THIS ISSUE

#### 2019 Year-End Message from the Director

As we bid goodbye to 2019 and look forward to 2020, it is time for us to step back and take stock at what CELEST has done for this year so that we can chart a more defined path that we could pursue in the coming year.

#### **Featured Article**

Dr Sherin Kunhibava writes on the regulation of digital currency exchanges in Malaysia. She identifies both the benefits and risks of this recent innovation and notes that although regulation is necessary to protect the public, regulators must be careful not to stifle innovation. She then provides an overview of the positions taken by Bank Negara Malaysia and the Security Commission of Malaysia on digital currencies exchanges and the regulations issued by each institution.



# 2019 Year-End Message from the Director

As we head towards the end of 2019, we look forward with anticipation to what the new year may unveil. It's time for us to step back and take stock of what CELEST has done so that we can chart a more defined path that we could pursue in the coming year. One of the aims of CELEST is to undertake and promote legal and ethical research in areas that relate to science and technology. Our researchers have been engaged, to varying extent, in diverse legal areas within the broad discipline of science and technology. These areas include health technology; biobanking; artificial intelligence and cyber warfare, data protection, and intellectual property; blockchain; and nanotechnology.



Given the fast-moving pace of technology and its complexity, many of us at CELEST find ourselves playing catch-up with the advancement and trying to comprehend its impact on the legal environment. Nevertheless, the only way forward is to embrace the technological and scientific changes. Several public talks and a biobanking forum were organized during the year where experts from different backgrounds were invited to share their knowledge and experience. In a similar vein, our researchers were also involved in speaking engagements, both nationally and internationally.

Students remain an important part of us at CELEST. We organized a national essay competition for Malaysian undergraduate law students on the theme of "Artificial Intelligence and Data Protection Law in Malaysia". A forum on "Legal Tech: Powering Tomorrow's Practices" was also held where legal practitioners from the law firm, Messrs Lee Hishammuddin Allen & Gledhill, shared their views on the impact of technology on legal practice in various areas of the law.

Undeniably, opportunities to delve into legal research in science and technology with academics in research institutions and experts working in external agencies are aplenty. The time is now apt for CELEST to forge closer links with these individuals as a way of developing and moving forward in our research. It is hoped that CELEST will take that direction in the coming year. On a personal note, I would like to thank all my colleagues at CELEST who have played a significant role in promoting legal and ethical research in science and technology. Without their cooperation and shared interest in this area, CELEST would not have been able to successfully oganise any of its activities. A big thank you is also due to all the contributors of CELEST newsletters, past and present, who have kindly agreed to spend time to write about their research in simple and plain English without the daunting legal jargon for our readers, many of whom are non-legally trained.

In closing, I wish you all the very best of everything and a very Happy New Year filled with happiness, good health and success.

Best regards,

Tay Pek San, PhD Associate Professor Faculty of Law, University of Malaya tayps@um.edu.my

#### News

Congratulations to our members on the following publications:

Adam, A., 2019. 'The Crime of Possession of Infringing Copies' in Liu K.C. (ed.) Annotated Leading Copyright Cases in Major Asian Jurisdictions. Hong Kong: City University of Hong Kong Press, pp 171-183.

Adam, A., 2019. 'Measure of Damages for Infringement in Malaysia: Lost Profits (Profit Margin) times Loss of Sales' in Liu K.C. (ed.) Annotated Leading Trademark Cases in Major Asian Jurisdictions. Oxford: Routledge, pp 381-391.

Karim, Md Ershadul et al., 2019.
Renewable Energy for Sustainable
Growth and Development: An
Evaluation of Law and Policy of
Bangladesh. Sustainability, Vol. II, 5774
(ISI and SCOPUS Indexed).

Sik, C, P., 2019, 'Market Survey in Malaysia: An Impracticable and Undesirable Way to Adduce Evidence in Trademark Lawsuit' in Liu K.C. (ed.) Annotated Leading Trademark Cases in Major Asian Jurisdictions. Oxford: Routledge, pp 83-93.

Sik, C.P., 2019, 'The Defense of the Use for Judicial Proceedings is Hard to Avail in Malaysia' in Liu K.C. (ed.) Annotated Leading Copyright Cases in Major Asian Jurisdictions. Hong Kong: City University of Hong Kong Press, pp 320-331. Tay, P.S., 2019. 'Dilution of well-known trademark as a ground for refusal of registration of an identical or similar mark for different goods or services in Malaysia' in Liu K.C. (ed.) Annotated Leading Trademark Cases in Major Asian Jurisdictions. Oxford: Routledge, pp 230-239.

Congratulations to Dr Ainee Adam who is the recipient of Confucius China-Studies Program - Understanding China Fellowship at the School of Law, Nankai University (October 2019 - November 2019).

Congratulations to Dr Md Ershadul Karim on his appointment as Member of the Editorial Board of the International Journal of Human Rights in Healthcare (ISI Emerging Sources Citation Index and SCOPUS Indexed).

Congratulations to Dr Pardis
Moslemzadehtehrani for winning the
University of Malaya Excellence Award
2019 for her book 'Cyberterrorism: The
Legal and Enforcement Issues'

Congratulations to Dr Zalina Abdul Halim, who is the recipient of a special grant under the UM Social Advancement and Happiness Research Cluster for her book project entitled 'Media Law, Policy and Ethics in Malaysia'.

#### **Events**

#### • 25 September 2019

Dr Mohammad Firdaus Abdul Aziz presented at the UM Faculty of Law Journal Club Meeting on 'Special Regulatory Pathway for Stem Cell-based Therapies and its Ethical Considerations'.

#### • 26 September 2019

Associate Professor Dr Tay Pek San was a panelist at 'The Role of IPR in ASEAN's Transition to a Knowledge-Based Economy', which was organized by the Institute for Democracy and Economic Affairs (IDEAS) in Kuala Lumpur.

#### • 14-18 October 2019

Dr Mohammad Firdaus Abdul Aziz was invited as an expert trainer for Ethics Teachers Training Course at the National Fiji University in Nadi, Fiji, which was organised by UNESCO Bioethics.

#### • 2 November 2019

Both Dr Sharon Kaur and Dr Mohammad Firdaus Abdul Aziz were invited as speakers at the 'Regulating Artificial Intelligence: Global Perspective Forum', Intersection of Law and Medicine Series: Legal & Ethical Issues in Emerging Technologies, which was held at Weill Cornell Medical College, Qatar, Doha.

#### • 6-7 November 2019

Dr Izura Masdina Binti Mohamed Zakri was a panelist at 'Persidangan Kebangsaan Jenayah Komersil: Ancaman dan Pendekatan Teknologi Siber 2019', which was held in Kuala Lumpur.

#### • 12-13 November 2019

Dr Sharon Kaur participated in the Global Forum for Bioethics in Research 2019, which was held in Singapore.

#### • 13-15 November 2019

Dr Mohammad Firdaus Abdul Aziz presented on 'Expedited Regulatory Pathways for Stem Cell-based Products in Malaysia: Ethical and Legal Considerations' at a Joint Symposium organised by Singapore Stem Cell Society and International Society for Cell and Gene Therapy, held in Singapore.

#### 18 November 2019

Dr Sharon Kaur spoke at 'Bengkel Inisiatif Rangka Kerja Consent Model Baru Dalam Pelaksanaan Electronic Medical Record (EMR) ke arah Lifetime Health Record (LHR)', organized by the Ministry of Health, Malaysia.

#### • 22-23 November 2019

The Blockchain Sukuk Research Group (Dr Sherin Kunhibava, Dr Md Ershadul Karim, Dr Aishath Muneeza, Zakariya Mustapha) spoke on 'Review of Sukuk on Blockchain' at the INCEIF-ISRA Inaugural Annual Conference on Islamic Economics and Finance (I-ARIEF) with the theme 'Islamic Finance and Islamic Economy Ecosystem in the Era of Digitalisation', which was held in Kuala Lumpur.

#### • 1 December 2019

The Blockchain Sukuk Research Group spoke on 'Blockchain Sukuk Regulation via Regtech & Shariahtech' at the 5th Islamic Finance Conference (IFC 2019) with the theme 'Islamic Banking and Insurance in the Era of Digital Transformation', which was held at Effat University, Saudi Arabia.

#### • 5 December 2019

Dr Mohammad Firdaus Abdul Aziz spoke on 'Biosafety Law for RNAi Technology' at the CEBAR Plant RNAi Workshop, organised by Centre for Research in Biotechnology for Agriculture, which was held at UM.

#### 13-15 December 2019

Dr Mohammad Firdaus Abdul Aziz participated in the Youth Scientists Network-Academy Sciences of Malaysia Colloquium 2019, which was held at the Palace of the Golden Horses. He is an affiliate member of the Policy and Governance Working Group of the Network.

#### • 16 December 2019

Dr Sharon Kaur, Dr Mohammad Firdaus Abdul Aziz, and Dr Pardis Moslemzadehtehrani met with Dr Cheah Phaik Yeong, an Associate Professor of Oxford University, to develop a project on research ethics in mHealth. Dr Cheah is based in Bangkok and heads the Department of Bioethics and Engagement. Dr Lee Wan Ling from the Faculty of Medicine, UM also present at the meeting, which was held at Faculty of Law. UM.



## Regulating Digital Currency Exchanges in Malaysia

By Sherin Kunhibava, PhD Faculty of Law, University of Malaya



#### **Author's Biography**

Dr Sherin Kunhibava is a Senior Lecturer at the Faculty of Law, University of Malaya. Her area of expertise is in commercial law and Islamic finance law. Apart from her fifteen years of teaching experience in academia, Sherin has also worked at Pacific Bank Bhd., International Shariah Research Academy (ISRA) and Wisdom Management Consultancy Sdn. Bhd. Her working experience has been in the area of commercial law, Islamic finance and banking. She has also provided training under the LEEP program at University of Malaya and for a number of years was the examiner for two external bodies, namely the Malaysian Association of Company Secretaries and the Malaysian Institute of Chartered Secretaries and Administrators. She also sits on the editorial board of the Journal of Malaysian and Comparative Law as a Subject Editor. Sherin has written extensively in local and international peer reviewed journals. Currently, her area of research focuses on regulatory concerns affecting fintech and blockchain solutions for finance.

#### Introduction

The Malaysian financial industry is governed by two regulators, namely the Central Bank or Bank Negara Malaysia (BNM) and the capital market regulatory authority or the Securities Commission Malaysia (SC). BNM governs inter alia the banking and insurance industry and the SC regulates and develops the Malaysian capital market. Both regulatory authorities have actively been issuing regulations on digital currency Exchanges.

Digital currency is a recent innovation that has taken the world by storm due partly to the profits earned when trading them. Digital currency has been defined by the Financial Action Task Force (FATF), Financial Crimes Enforcement Network (FinCEN) and New York State Department of Financial Services as 'virtual currency that has a store of value and can be converted to real money'. It is a medium of exchange but does not have legal tender, as it is not issued or guaranteed by any jurisdiction but is accepted by agreement within the community of users decided to introduce regulations or of the digital currency.

Digital currency has its benefits - it is devoid of a central authority (decentralized) and therefore is less vulnerable to security risks; it enables more efficient digital transfer of value which is faster and cheaper; it is also easier to store and transact. The historical path of ownership of the digital currency is also traceable and therefore it is more transparent in nature than physical cash.

At the same time two key attributes of digital currency, facial anonymity of the user, and decentralization, which is crucial for its use as a medium of exchange, enable digital currencies to be used for a number of vice activities, such as money laundering, illegal trading, investor scams, and extortion where computer systems have been hijacked through ransomware.

Therefore, regulation is necessary to protect and safeguard the interests of the public and businesses. However, over-regulation can stifle innovation, and thus a balance must be achieved between risk management and allowing innovation. Significantly, regulating the use and trading of digital currency is not straight forward as there is no central authority that issues or 'controls' the digital currency. Thus, it is necessary to regulate the platform that facilitates the trade and exchanges of the digital currency to enable the identification and reporting of unusual trading activities.

It is with this in mind that Malaysia has provisions that mitigate against risks, while at the same time allowing innovation in the use and trading of digital currencies at digital currency exchanges. A digital currency exchange (or digital asset exchange as referred to by the SC) refers to an electronic platform facilitating the trading of a digital currency. This article will explain the stance of BNM and SC on digital currencies exchanges and the regulations issued by them. This article starts with regulations issued by BNM.



### BNM's Policy Document on Digital Currencies

The Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) -Digital Currencies policy (Sector 6) or the Policy Document on Digital Currencies was issued in late February 2018 by BNM. In summary, it is directed at businesses involved in converting digital currencies to money and vice versa (digital currency exchanges) which although not licensed or regulated by BNM, are "reporting institutions" under the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA). This means digital currency exchanges are required to provide detailed information on the buyers and sellers of such currencies.

To expand further, the policy document defines digital currencies as a digital representation of value that:

- functions as a medium of exchange; and
- is interchangeable with any money but is not electronic money

Electronic money refers to the digital representation of fiat money. The policy document is applicable to any persons providing the following services:

- the exchange of digital currency for money;
- the exchange of money for digital currency; or
- the exchange of one digital currency for another, whilst carrying on a digital currency exchange business or otherwise.

Thus, reporting institutions are digital currency exchanges doing business in a digital currency (i.e. a medium of exchange that is convertible to fiat money). These digital currency exchanges are not licensed or regulated by BNM, neither is digital currency recognized as legal tender under the policy document. However, digital currency exchanges must be incorporated and comply with the provisions of the Companies Act 2016 of Malaysia.

Under the policy document, reporting institutions must ensure that they:

- send a declaration of their details to BNM:
- assess risks relating to anti-money laundering (AML) and terrorist financing (TF);
- verify the identity of clients through customer due diligence;
- identify and assess the AML and TF risks that may arise in relation to the development of new digital currencies, products, services, and business practices;
- put in place management information systems;

Therefore, regulation is necessary to protect and safeguard the interests of the public and businesses. However, over-regulation can stifle innovation, and thus a balance must be achieved between risk management and allowing innovation



NEWSLETTER 2019• Issue 5

- keep records which must be maintained and stored for at least 6 years;
- appoint a "fit and proper" compliance officer who is based in Malaysia; and
- submit suspicious transaction reports when certain suspicious circumstances arise.

Enforcement measures can be taken against the reporting institution, its directors, officers, and employees for non-compliance in accordance with ss22, 66E, 86A, 87, 88, 92, and 93 of the AMLA.

The purpose of the policy document is clear – it ensures that the risks associated with AML and TF are mitigated at digital currency exchanges by the identification and collection of customer data and transactions. BNM does not regulate digital currency exchanges, however as we will see in the next section, they are required to be licensed with the SC to carry out business in Malaysia.

The purpose of the policy document is clear – it ensures that the risks associated with antimoney laundering and terrorist financing are mitigated at digital currency exchanges by the identification and collection of customer data and transactions.

### SC's Digital Currency and Digital Token Order

The Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 or the Digital Currency and Digital Token Order was published on 8 January 2019 and came into effect on 15 January 2019.

Under this Order, digital currency refers to:

- a digital representation of value which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise;
- that functions as a medium of exchange; and
- is interchangeable with any money, including through the crediting or debiting of an account.

A digital token refers to a digital representation which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise.

It would appear that this definition of digital currency is similar to the one offered by BNM's Policy Document on Digital Currencies (see above) except it includes the term "which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise." This effectively means blockchain[1]-based digital currencies will fall within the definition.

[1] Blockchain is a distributed public ledger that consists of 'blocks' maintained by a distributed computer network which contains multiple verified

transactions record without a central authority or third-party intermediary.

Digital tokens are differentiated from currency only in that they are not exchangeable for money, i.e. they are not mediums of exchange. Together digital currencies and digital tokens are collectively called digital assets.

The Order contains a total of 5 parts including when digital currencies and tokens are to be prescribed as securities and the application of requirements under securities laws.

Digital currencies and tokens will be prescribed as securities: if traded in a place or on a facility where offers to sell, purchase, or exchange such currencies are regularly made or accepted; a person expects a return in any form from the trading, conversion, or redemption of the digital currency or an appreciation in its value; and where they are not issued or guaranteed by any government body or central banks as may be specified by the Commission.

A digital token that represents a right or interest of a person in any arrangement made for the purpose of, or having the effect of, providing facilities for the person: where the person receives the digital token in exchange for a consideration; the consideration or contribution from the person, and the income or returns, are pooled; the income or returns of the arrangement are generated from the acquisition, holding, management or disposal of any property or assets or business activities; the person expects a return in any form from the trading, conversion, or redemption of the digital token, or an appreciation in the value of the digital token;

the person does not have day-to-day control over the management of the property, assets, or business of the arrangement; and the digital token is not issued or guaranteed by any government body or central banks as may be specified by the Commission, is prescribed as a security for the purpose of the securities laws. Thus, the provisions of securities laws shall generally apply to such digital currencies and tokens.

Issuance of this order simply indicates that the primary regulatory authority for digital currencies and tokens is the SC. In the first week of March, the SC also issued a separate consultation paper on the offering of digital assets via initial coin offerings (ICO) (not discussed in this article). In addition, the guidelines on recognized markets have been amended to accommodate a digital asset exchange or DAX. The effect of this order is that anyone intending to make available digital currencies and tokens must seek the prior approval of the SC, then register a disclosure document with it. Further, anyone dealing in digital currencies and tokens as a business must be licenced by the SC.

#### SC's Guidelines on Recognized Markets - Digital Asset Exchanges (DAX)

The Guidelines on Recognized Markets provide a framework for the operation of, inter alia, DAX to safeguard investors and operators of digital assets. These Guidelines were recently amended and followed the coming into force of the Digital Currency and Digital Token Order (above) and applies to any person interested in operating a digital asset platform (DAX). A digital currency exchange that is a reporting institution under the Policy Document on Digital Currencies of BNM is deemed a DAX and will therefore have to be registered as a Registered Market Operator (RMO) with the SC.

Although the Guidelines do not define what an RMO is, it can be understood from the Guidelines that any body corporate that operates an alternative trading venue, marketplace or facility that brings together purchasers and sellers of capital market products like a DAX is an RMO. All RMOs must be a body corporate or a limited liability partnership meaning RMOs should be registered either under the Companies Act 2016 or the Limited Liability Partnerships Act 2012. DAX are covered under Chapter 15, Part G of the Guidelines on Recognized Markets. The main points are as follows:

- DAX
  - Refers to an electronic platform facilitating the trading of a digital asset

- Digital Asset
  - Refers collectively to a digital currency or token which has the same meaning assigned to it as in the Digital Currency and Digital Token Order
- DAX Operator
  - Refers to a RMO operating a DAX
  - All DAX operators must be locally incorporated and have a minimum paid-up capital of MYR5 million
  - The SC may at any time impose additional financial requirements or other terms and conditions on the DAX operator commensurate with the nature, operations, and risks posed by said operator
  - If a DAX operator is a public company, at least one member of the board must be an independent director
- Conflict of Interest
  - The DAX operator's framework on conflicts of interest must include policies and procedures relating to, amongst other issues:
    - proprietary trading by the DAX operator on its platform;
    - trading in digital assets by its officers and employees on its own or other platforms;
    - the management of non-public material information; and
    - the offering of any digital asset to be traded on its platforms.
  - DAX operators are prohibited from providing direct or indirect financial assistance to investors, including its officers and employees, to invest or trade in digital assets on its platform





 DAX operators should identify possible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems,

policies, procedures, and controls

NEWSLETTER

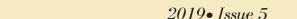
- Such systems should be designed to ensure a high degree of security and operational reliability including having adequate capacity
- Operational Risk Management
  - In this regard, a DAX operator must:
    - establish a robust operational risk management framework with appropriate systems, policies, procedures, and controls to identify, monitor, mitigate, and manage operational risks;
    - have in place clearly defined roles and responsibilities for addressing operational risk;
    - have in place clearly defined operational reliability objectives and policies designed to achieve such objectives;
    - ensure it has adequate capacity proportionate to stress volumes to achieve its service-level objectives; and
    - have comprehensive physical and information security policies that address all potential vulnerabilities and threats.

According to the SC's official website, currently there are three companies who have registered as DAX RMOs, namely Luno Malaysia Sdn Bhd, SINEGY Technologies (M) Sdn. Bhd and Tokenize Technology (M) Sdn. Bhd. The SC also provides a list of DAX operators that are not permitted to continue business. The level of regulation for RMOs in comparison to other approved markets is not as stringent. Thus, risk mitigation through registration and regulation is ensured and at the same time innovation is encouraged through not too stringent Guidelines.

Thus, risk mitigation through registration and regulation is ensured and at the same time innovation is encouraged through not too stringent Guidelines.

#### Conclusion

A balance has to be struck when regulating technology driven businesses. The balance between the need to maintain and encourage innovation with the need to protect against ML, TF and illegal activity. Malaysia has addressed this in the trading of digital currencies through digital currency exchanges through reporting requirements to BNM and through registration requirements at the SC.





#### References

Allen, D. (2017). Discovering and Developing the Blockchain Cryptoeconomy, Social Science Research Network available from https://ssrn.com/abstract=2815255. Bank Negara Malaysia. (2019). Laws and Guidelines, available from www.bnm.gov.my

NEWSLETTER

Bank Negara Malaysia and Securities Commission. (2018). Press Release: Joint Statement on Regulation of Digital Assets in Malaysia, available from from http://www.bnm.gov.my/index.php? ch=en\_press&pg=en\_press&ac=4783

FATR, Virtual Currencies — Key Definitions and Potential AML/CFT Risks (Paris: Financial Action Task Force, 2014) available from http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pd.

FinCEN, Application of Fincen's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies (March 2013, accessed 31 August 2017); available from https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering.

New York State Department of Financial Services, New York Codes, Rules and Regulation Title 23 Chapter I Part 200. Virtual Currencies, ed Department of Financial services (2015).

Securities Commission. (2019a). List of Market Operators. Available from https://www.sc.com.my/development/digital /list-of-registered-market-operators.

Editor: Dr Sharon Kaur Production Editor: Dr Mohammad Firdaus Bin Abdul Aziz