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ABSTRACT

Internet has caused the emergence of ‘Cyberspace’ through which business transactions can be undertaken ‘paperless’ anytime, anywhere and practically without binding laws. Some countries have made a bold attempt to enact ‘Cyber Laws’ to regulate the Internet and among these, the US Laws are regarded as a source of reference by others.

On the whole, the US Cyber Laws deal on the three specific areas of Internet use: Access control, Consumer privacy and Security in the cyberspace. Sixteen federal laws with another eleven statutory provisions collectively provide the regulatory framework for these. In the US Cyber Laws are often challenged illegal as infringing on fundamental rights. Hence, the government shows reluctance to enact Cyber Laws on a preemptive basis and instead, prefer the industry to devise its own self-regulatory controls.

Unlike the US, Singapore’s Cyber Laws are on the Internet Access, Computer abuse, Electronic transactions, Intellectual property and Consumer protection. ‘Internet Access’ includes also ‘content creation, their transmission’ and relevant codes of practices. Laws under the remaining four mainly deal on the various aspects of e-commerce .Laws are enacted on a preemptive basis with provisions for the industry to devise its own ‘codes of good practices.’ As a regional centre for commerce and finance, Singapore recognizes the emerging importance of k-economy and e-commerce, and its Cyber Laws are meant for the eventual conversion to these.

In the race towards embracing Internet and conversion to k-economy, Malaysia had adopted a novel ‘leap-forge’ strategy. It is the establishment of the Multimedia Super Corridor (MSC), designated to be the ‘international test bed’ for IT-based ideas. The MSC is claimed to be the “gift to the world” and IT industries are invited to MSC with incentives and protections, including through enacting ‘innovative’ Cyber Laws. Content-wise, these Cyber Laws are almost similar to those of others except their ‘extra-territorial reach’ in intended enforcement. The government aims to champion these Cyber Laws for the eventual ‘international acceptance and adoption.’ On theory, these Laws are ‘internationally binding and enforceable’ at present. Malaysia had in fact assumed the role of a pacesetter in drafting Laws for the cyberspace and only time can determine the eventual success of this assumed leadership.

ABSTRAK

Internet telah mewujudkan ‘alam maya’ dimana segala transaksi bisnes dapat dilakukan ‘tanpa kertas’ dan tanpa sekat masa , tempat dan sebarang perundangan. Kini ada sebilangan negara yang telah memperkenalkan undang-undang untuk mengawal Penggunaan Internet. Di antara ini, negara Amerika Syarikat (AS) di anggap sebagai panduan untuk negara-negara lain.

Pada amnya, undang-undang ‘alam maya’ AS melibatkan tiga aspek amalan Internet iaitu Penggunaan , Keperibadian Konsumen dan Keselamatan di ‘alam maya’. Enam belas peraturan Internet dan sebelas undang-undang yang lain mengeluarkan garis panduan umum untuk mengawal penggunaan Internet di AS. Usaha memperkenalkan undang-undang seperti ini pada amnya sering dicabar dengan dakwaan mencabuli hak asas kebebasan. Maka kerajaan AS at pada lazimnya tidak begitu berminat memperkenalkan undang-undang untuk sekat Internet , malahan suka menggalakan industri ‘IT’ mewujudkan ‘sekat kawal mutu ‘ sendiri yang boleh diikuti oleh semua pihak yang berkenaan.

Undang-undang ‘alam maya’ negara Singapura sebaliknya, meliputi aspek-aspek Penggunaan Internet, Penyalahgunaan Komputer, Transaksi Elektronik , Hak milik intelek dan Keselamatan Konsumen . ‘Penggunaan Internet’ juga membicarakan butiran seperti Isi Penghasilan intelek, Transmisi Hasilan Isi dan Kod-kod Amalan Industri yang relevan. Undang-undang yang digubal di bawah keempat-empat aspek yang berlainan pada amnya adalah mengenai amalan ‘Perniagaan Elektronik’. Kesemua peraturan ini digubal atas dasar ‘mencegah kesalahan’ (pre-emptive basis) dan dengan ruang untuk mengenalkan ‘Kod Amalan Baik’ industri. Sebagai sebuah pusat antarabangsa perniagaan dan kewangan di rantau ini, Singapura telah memperkenalkan undang-undang ‘alam maya’ dengan tujuan mengalih kepada ‘Ekonomi Pengetahuan’ dan ‘Perniagaan Elektronik’ tanpa sebarang kerumitan.

Dalam proses mengalih kepada ‘Perniagaan Elektronik’, dan mempergiatkan lagi penggunaan Internet , Malaysia telah memilih sebuah strategi yang unik dan menarik. Ini adalah dengan penubuhan MSC yang diperkenalkan sebagai ‘hadiah kepada dunia’ dan ‘medan eksperimen Teknologi maklumat antarabangsa’. Dengan tujuan menggalakkan pelabur asing melabur di MSC , kerajaan Malaysia telah memperkenalkan pelbagai insentif dan beberapa undang-undang ‘alam maya’ . Dari segi isi kandungannya, undang-undang ini adalah hampir serupa dengan undang-undang ‘alam maya’ kebanyakannya negara melainkan ianya digubal khas untuk ‘pemakaian di mana-mana sahaja seluruh dunia’ jika perlu. Karajaan Malaysia berhasrat menaja serta menjayakan undang-undang ini ke masyarakat antarabangsa. Maka, dengan pendekatan ini, Malaysia telah memperkenalkan dirinya sebagai ‘Negara Perintis’ menggubal undang-undang ‘alam maya’ bagi dunia dan usaha ini adalah amat dibanggakan.

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CHAPTER 1: INTRODUCTION

CHAPTER 1: INTRODUCTION

Internet has caused tremendous changes to the way people do business. One among these is the emergence of "paperless" economy where business negotiations, verification, sourcing of goods and services, transfer of funds and other related commercial functions are dealt-with electronically through the Internet. This is what we mean as "e-commerce" or in a broader perspective, "knowledge-economy".

In any "e-commerce" process broadly five parties are in interaction with one another: The purchaser, seller, business intermediaries, communication network providers and the legislative or government regulatory environment under which the whole business transaction takes place.

An e-commerce transaction as any other business deal, is viable only under a safe, secure, transparent and trustworthy "business environment". Legal and governmental rules are usually considered as the very basis to ensure such an environment where e-commerce is emerging. This applies to any nation, both developed as well as the ones that are still in the process of development, including Malaysia.

In a way, e-commerce is "international" in its outlook. This is because it rides on the 'technological backbone' advantage of the Internet that permits communication linkage to all over the world, instantly and also around the clock. Hence the biggest

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REFERENCE NOTES

1. TAY SWEE KIAN: “e-Commerce Law” – Times Books International, Kuala Lumpur (2001) page 23.
2. *Ibid*: Page 24 and LEE FOONG YEW: “What is electronic commerce” – Jaring Internet Magazine. (Jim): July 1998 issue (Vol. No.2) pages 16-17.
3. JEYANTHI MALA RAMAKRISHNAN: in the STAR newspaper (M’sia) dated 10. 04. 2001 in “Business Section” page 9. The definition is adapted from the one given by the “British Dept. Of Trade and Industry “ in 1998.
4. TAY SWEE KIAN: *Ibid* page 26
5. Currently the most popular types of “Dos attacks” are “Smurf”, “TCP SYN”, “VDP” and the combinations thereof. These are available at :
<http://www.cert.org/advisories/CA-98.01.smurf.html>
ftp://info.cert.org/pub/cert_advisories/CA-96.21.top_syn_flooding
http://www.cert.org/reports/ds1_workshop.pdf
6. AHMAD KUSHARI: Reporting in COMPUTIMES of NST (M’sia) dated 18.12.2000 at page 14.
7. *Ibid*.
8. KEITH HAZELTON in an article named “E-commerce, A white paper” released at the University of wincousin – Madison on 14-07-1998.
Available at : http://www.wisc.edu/arch/teams/ecommerce/white_paper.dic

The relevant Malaysian policies can also be read at :
<http://www.e.com.ec/necc/report-19971007-appendix1.html>
9. TAY SWEE KIAN: *Ibid* pages 24-25 and as reported by DERRICK VINESH in the STAR newspaper in the “E-Biz” section dated 16-03-200 at page 6.
10. JOHN R. LEVINE and others: “Internet for Dummies” - 3rd Edn. (1995) IDG Books-world-wide, pages 8-9.
11. TAY SWEE KIAN: *Ibid*, page 23.
12. *Ibid*.
13. Towards the end of 2000, the “fixed-line” telephone lines numbered 5 million with a ‘population-to-phone’ rate of 20 %. The “Telikom Malaysia” estimated this to be “27 lines per 100 person”. The total number of mobile phones “active” towards the end of 2000 was estimated to 4.2 million lines. Details Available at:
<http://www.acstrade.gov.au/mp/index.asp?pageid=52742>

14. CHARLES F. MOREIRA reporting in the STAR newspaper (M'sia) in the "InTech" section dated 29.05.2001 in page 3.
15. *Ibid.*
16. *Ibid.*
17. ASSAFA ENDESHAW: "Internet and E-commerce Law" – Prentice Hall Pearson Education Asia Ltd. Singapore. (2001) page 181 and also as reported in the 'New Straits Times (M'sia) dated 17.04.2000 at page 8.
18. RASLAN SHARIF: Reporting in the STAR newspaper (M'sia) in the 'InTech' section dated 1.05.2001 at page 3.
19. *Ibid.*
20. AHMAD KUSHAIRI: *Ibid.* Also as reported in the STAR newspaper (M'sia) dated 15.06.2001 in a news item titled "Pak Lah: Need to transform to K-economy fast".
21. RIDZUAN A. GHANI in an article named "Surviving business race with Net deployment" as reported in the COMPUTIMES of the NST newspaper (M'sia) dated 18.12.2000 at page 16.
22. As reported in the "SunBiz" Section of the SUN newspaper (M'sia) dated 16.03.2001 at page 4
23. AHMAD KUSHAIRI: *Ibid.*
24. *Ibid.*
25. *Ibid.*
26. KEITH HAZELTON: *Ibid.*
27. As reported by the STAR newspaper (M'sia) in the 'InTech' section dated 30.01.2001 in an article named "study: Internet economy continues to grow", at page 33.
28. Reported in an article "Malaysian Surfers to increase by 85% in five years" in the STAR newspaper (M'sia) in the 'InTech' section dated 29.05.2001 at page 3.
29. In article, "Local IT spending slows, E-commerce set to shine" as reported in the STAR newspaper (M'sia) in the 'InTech' section dated 8.05.2001 at page 35.
30. These details were reported by a Malaysian Legal Firm, "Azman bin Othman Luk, Chooi & Company" in an article named "Jurisdiction and Cross Border E-commerce – A Malaysian perspective". This article was presented at the INTERNET LAW & POLICY FORUM" in San Francisco, US during a conference dated 11-12 Sept. 2000.
31. Available at: <http://www.bbbonline.org> and also at <http://www.fedma.org>
32. *Ibid*

33. *Ibid.*

34. TAN KAH PENG in an article, "Malaysia ranked 33rd globally in e-readiness" as reported in the STAR newspaper (M'sia) in the Business section dated 10.05.2001 at page 8.
Also: *Ibid.* - ASSAFA ENDESHAW – page 153-155.

35. *Ibid.*

36. Details and relevant reports available at: <http://www.e.com.ec/necc/report-html>
Also: *Ibid*- Ref. 30 above.

37. *Ibid*: ASSAFA ENDESHAW- page316-319.

38. *Ibid.*

39. *Ibid.*

40. LEONG MENG YEE: "Law to Guard Personal Data Store" as reported in the STAR newspaper (M'sia) dated 9.9.1999.
Also available at: <http://www.star.com.my/online/newsreport.asp?files>

41. *Ibid*: Reference 36 above

42. *Ibid*. Also *Ibid*: Reference 30

43. TAY SWEE KIAN: *Ibid* at page 23.

44. ASSAFA ENDESHAW: *Ibid* page 13

45. *Ibid*: page 14

46. PETER KNIGHT and JAMES FITZSIMONS: "The legal environment of computing" (1990) – Addison Wesley (US) – Introduction.

47. CHRIS REED (Ed): "Computer Law" (2ND Edn.) (1993) – Blackstone (Lond.), Page 2.

48. *Ibid.*

49. IAN0 J. LIOYD: "Information Technology Law" (1993) Butterworths (Lond.) – Introduction.

50. COLIN TAPPER: "Computer Law" (3rd Edn.) (1983) – Longman (Lond.) – Introduction.

51. MARK L. GORDEN: "Computer Software Contracting for Development and Distribution" (1986) – JOGN WILBEY (NY) at Page 6.

52. DAVID BAINBRIDGE: "Introduction to computer Law" (3rd Edn) (1996), Pitman (Lond.), at Page 1.

53. ASSAFA ENDESHAW: *Ibid.* Page 17.

54. *Ibid.*

55. LEE FOONG YEUW: "What is electronic Commerce" – Jaring Internet Magazine (JIM): July 1998 Issue, Vol. No.2: Pages 16-17.

56. Available at: <http://www.usdoj.gov/criminal/cybercrime/unlawful.html>

57. Available online from the "Dow Jones Interaction" especially the TOM VERDIN'S "Despite opposition, Internet Gambling Grows into Billion dollar industry".

58. *Ibid.* – CECILIA M. KANG's "Commission to recommend for the ban on Internet Gambling".

59. *Ibid.*

60. ASSAFA ENDESHAW: *Ibid*, page 438

61. San Jose Mercury News (US) dated 20.11.1998 – available online through 'Dow Jones Interactive'.

62. Video Privacy Protection Act of 1988 (US).

63. These are available at: <http://www.ftc.gov/os/1999/9910/64fr59888.htm>

64. Available at: <http://www.usdoj.gov/criminal/cybercrime/unlawful.htm>

65. *Ibid.*

66. *Ibid.* Also ASSAFA ENDESHAW : *Ibid.* At page 448.

67. Available at: <http://thomas.loc.gov/>

68. *Ibid.*

69. Available online at the '0Dow Jones Interactive'. Refer to Elizabeth Becker's "Pentagon sets up new centers for waging cyber warfare".

70. Available at: http://www.uncitral.org/english/sessions/wg_ec/wp-77.htm

71. *Ibid.*

72. *Ibid.* TANKAH PENG -Ref 34.

73. Refer to: GARY CHAPMAN's : "The Cutting Edge, Digital Nation" in the Los Angeles Times dated 22.02.1999 – Business Section C. This newspaper is available online.

74. Available at: <http://app.internet.gov.sg/scripts/molaw/hq/newswatch>

75. ASSAFA ENDESHAW: *Ibid.* At page 41,

76. The Singapore Broadcasting Authority: "Statement on the Internet" dated 3.03.1996
77. *Ibid.*
78. ADELIN GOH's article in the STRAITS TIMES (Singapore) dated 17.09.1996 at page 22.
79. Available at: <http://www.spinet.gov.sg/news/plm/mar/bb3-1.html> with reference to an article titled. "Police Life", March 1998.
80. The STRAITS TIMES (Singapore) dated 13.03.1998 at Page 44.
81. ASSAFA ENDESHAW: *Ibid.* At page 46.
82. Available at: <http://app.internet.gov.sg/scripts/molaw/hq/newsmatch/read.cgi?1>
83. *Ibid.*
84. *Ibid.*
85. *Ibid.*
86. *Ibid.*
87. Available at: <http://www.idc.com/Data/Global/ISI/default.thm>
88. "The year 2000 IDC/ World Times Information Society Index: Measuring the Global Impact of IT and Internet Adaptation". Also *Ibid*- Ref. 87 above.
89. *Ibid.*
90. The STAR newspaper (M'sia) dated 15.06.2001 at page 8 in a news item titled, "Pak Lah: Need to transfer to K-economy fast".
91. This is the "ultimate goal" of Malaysia that is well known and adequately documented in the various National 5-year development plans. Also refer to: <http://www.sibexlink.com> for the "G-15 update" vol.2. No. 3 of July/August 1999 at page 8.
92. ASSAFA ENDESHAW: *Ibid.* At page 157.
93. The STRAITS TIMES newspaper (Singapore) dated 14.08.1998 at page 36 on a news item titled, "Third Suspect Held for spreading E-mail Rumours". Also available online from: "Lexis-
Nexis".
94. Available at: <http://www.mdc.com.my/msc/incent/bill.html>
95. The STAR online dated 8.09.1999 in an article, "Proposal to Regulate the Net". Also available at <http://thestar.com.my/online/newsreport>

96. The New STRAITS TIMES newspaper (M'sia) dated 17.04.2000 at page 8 in a news item titled, "Plea for Tighter Controls on Cyber Cafes".
97. Available at: <http://www.mde.com.my/msc/incent/bill.html>
98. *Ibid.* Note 95 above. Also the STRAITS TIMES newspaper (Singapore) dated 4.04.1996, at page 29 in a news item titled, "Wanted: pact to Check Internet Smut"
99. ASSAFA ENDESHAW: *Ibid.* page 178.
100. *Ibid.* Note 96 above.
101. The STRAITS TIMES newspaper (Singapore) dated 17.03.1999 at page 29 in a news item titled, "Mahathir orders Internet censorship lifted".
102. ASSAFA ENDESHAW: *Ibid.* At page 190
103. ASSAFA ENDESHAW: *Ibid.* At page 206
104. The NEW STRAITS TIMES newspaper (M'sia) dated 2.10.1998 on a news item titled, "Drafts of Bill on Personal Data Protection ready by year-end".
105. ASSAFA ENDESHAW: *Ibid.* At page 208.
106. *Ibid.* Page 207
107. Refer to *Section 9(1)* of the CCA 1997
108. *Ibid.* Reference 30
109. ASSAFA ENDESHAW: *Ibid.* At page 211.
110. *Ibid.* At page 178.
111. *Ibid*
112. Refer to *Section 4(1) and 4(2)* of the CMA 1998
113. *Ibid.* Also Reference 30 above.
114. *Ibid.*
115. The STAR newspaper (M'sia) in the 'InTech" section dated 1.05.2000 in a feature article titled, "The fallibility of Digital Medical Data" by CHARLES F.MORIERA.
116. *Ibid.* Reference 91.