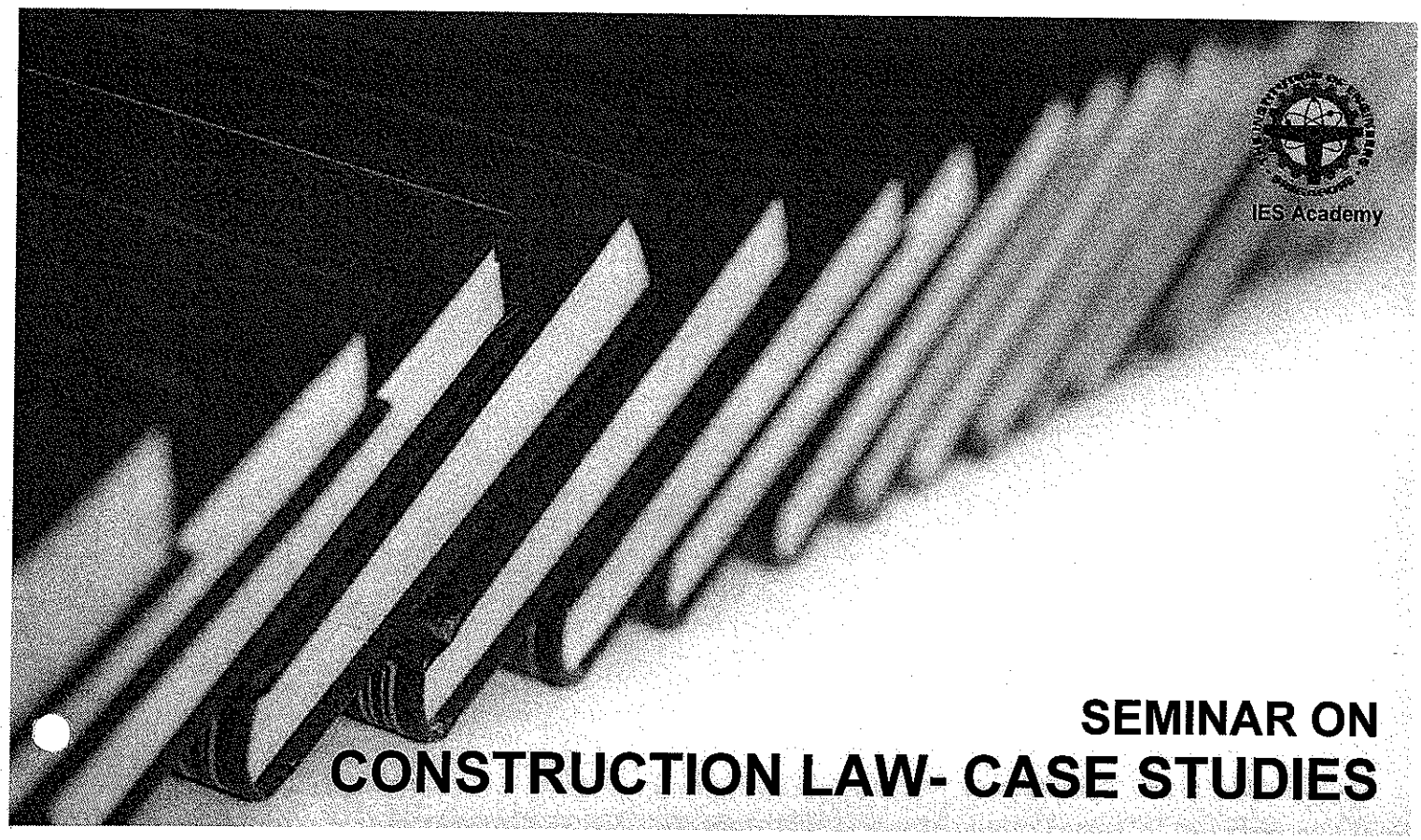


IES Academy

SEMINAR ON CONSTRUCTION LAW- CASE STUDIES

SYNOPSIS

Engineers, like other professions are accountable to the consumers in respect of their services rendered. With the advancement in technology including email communication, much is expected of the professional engineers in Singapore and indeed the whole world.

This seminar allows a sharing of the recent legal developments affecting the professional engineer Notably, a new test for the standard of care has emerged rivaling the established Bolam's test. In addition, recent cases have made construction professionals including professional engineers more vulnerable to being liable for defects in common property [pure economic loss] and even where there is no loss suffered by the developer, there is liability on the part of the developer's designer. In particular, the duties concerning design and supervision including duties imposed by the Workplace Safety and Health Act 2006 will be discussed.

SEMINAR DETAILS

Date:	26 January 2007
Duration:	1 Day
Time:	9.00 am – 5.00 pm
Venue:	**Furama City Centre**
CPD Programme:	7 PDUs
Organising Committee:	C&S Committee
Discounted Fees **:	$247.00 (IES Members) $342.00 (Non- Members)
Normal Fees:	$260.00 (IES Members) $360.00 (Non- Members)

- *Fees inclusive of 5% GST, seminar materials and refreshments.*
- *** For registration with full payment received before or on 12 January 2007 OR companies that send 3 or more participants*
- *Certificate of Attendance will be given to participants with at least 75% attendance*

PROGRAMME OUTLINE

Paper 1 – Recent developments in liability for design negligence
Paper 2 – Buildability and Supervision duties
Lunch Break
Paper 3 – Duties under the WSHA
Paper 4 – Recent cases affecting PEs

CV OF SPEAKER

Dr Chan, an Associate Professor, teaches *construction law* and *arbitration* at the *Department of Building*, School of Design and Environment, *National University of Singapore* [NUS]. Outside the university, he is a Deputy President of the Singapore Strata Titles Board. He is also a General Editor of the *Asian International Arbitration Journal* and a member of the Editorial Advisory Board and Country Correspondent of the *International Construction Law Review*. Dr Chan is a practising arbitrator and an advocate and solicitor of the Supreme Court of Singapore. He is also a Fellow and Honorary Secretary of the *Singapore Institute of Arbitrators* (SIArb). In the world of books, he is the author of three books and the co-author of five books including Volume Two of the *Halsbury's Laws of Singapore* [Arbitration, Building and Construction] the original edition and the 2003 Reissue edition.

Ref. No: SW07-01-12

IES – NUS Talk

"An Overview of an Engineer's liability"

Friday, 26 January 2007

Paper 1
"The applicable principles for professional negligence"

by

Dr Philip Chan

Associate Professor

Dept of Building, NUS

Topics

- **Bolam's test vs Edward Wong's test**
- **Limitation period –for patent and latent defects**

Bolam's test vs Edward Wong's test

Standard of care test for negligence

- **The "Sunrise"**
- **Gunapathy**
- **Eastern Lagoon**

The "Sunrise" – 1

- **"The ultimate Q that has to be answered is what was the degree or scope of care which a person in the shoes of the appellant should exercise. Lord Atkin put it well in DvS…: 'The nature of the thing may very well call for different degrees of care… ." – para 24 p725**

The "Sunrise" – 2

"It is obvious that the law expects a person who carries a pound of dynamite to exercise more care than if he is only carrying a pound of butter… ." – para 25 p725

The "Sunrise" – 3

"…while it is true that the law of tort offers an avenue of redress for losses suffered by a person where such losses would otherwise be without a remedy, it does not conversely mean that remedies in tort become automatically unavailable simply because the P has a remedy in contract against another party." – para 34 p727

The "Sunrise" – 4

- "It is clear that the law does differentiate between a claim in pure economic loss and that for personal injuries or physical damage. In respect of the former, the law is more restrictive in imposing a duty of care." – para 36 p728

Gunapathy – 1

- **After referring to *Bolam*, "In determining whether a doctor has breached the duty of care to his patient, *a judge will not find him negligent as long as there is a respectable body of medical opinion, logically held, that supports his actions*. Beyond this time honoured test of liability, neither this court not any other should have any business vindicating or vilifying the acts of medical practitioners." – para 3 p419**

Gunapathy – 2

- **"In our view, *Bolitho* presented a timely *addendum to the Bolam test*. …that the Bolam test did not represent immunity from judicial inquiry over the medical process. It was not satisfied by the production of dubious expert whose professional views existed at the fringe of medical consciousness. *An expert view in order to qualify as representative of a 'responsible' body of medical opinion, had to satisfy the threshold test of logic*." – para 63 p433**

Gunapathy – 3

- **The threshold test of logic – two stage inquiry "The first inquiry …is *whether the expert directed his mind at all to the comparative risks and benefits relating to the matter.* It is accordingly the process and not the result of the expert's reasoning that is material in the eyes of the court." – para 63 p433**

Gunapathy – 4

- **"The second stage of inquiry relates to *whether the medical expert had arrived at a 'defensible conclusion'* as a result of the balancing process. …a 'defensible conclusion' connotes the satisfaction of two concepts." – para 65 p433**

Gunapathy – 5

- **"First, the medical opinion must be internally consistent on its face. …*no part of the opinion contradicts with another*. Second, *the opinion should not fly in the face of proven extrinsic facts relevant to the matter*. It should not ignore or controvert known medical facts or advances in medical knowledge." – para 65 p433**

Eastern Lagoon

- **"Thus, the principle established by *Edward Wong* was that *professional negligence is established by objective, not subjective, standards* and if on an objective assessment a particular practice is negligent, *the court can and should ignore the practice of the entire profession* in deciding so. This principle was followed by our CA in Chong Yeo" – para 87 p21**

Eastern Lagoon

- "To assess whether, on an objective basis, the D in this case fell short of the standard of care required by them, the three Qs formulated by the PC in EW have to be answered. These are
- Did the practice followed by D involve a foreseeable risk?
- if so, could that risk have been avoided?
- If so, were the D negligent in failing to taking avoiding action?" – para 88 p21

Limitation periods

- Limitation Act for patent defects
- Limitation Act for latent defects

Limitation Act 1

- S6(1)(a) – *Patent defect*
  - 6 years from the date on which the cause of action accrued founded on a contract or on tort;
  - Contract – date of breach
  - Negligence – date of damage
- S6(A) Contribution – 2 years from date of judgment/award

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Limitation Act 2

- S24A(3) *Latent defect – 1st requirement*
  - 6 yrs from date of cause of action; or
  - 3 yrs from earliest date on which P … first had both the knowledge required for bringing an action for damages in respect of the relevant damage and a right to bring such an action…

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Limitation Act 3

- **S24A(6) *Latent defect – Knowledge***
- **…a person's knowledge includes knowledge which he might reasonably have been expected to acquire**
- **(a) from facts observable or ascertainable by him; or**
- **(b) from facts ascertainable by him with the help of appropriate expert advice which it is reasonable for him to seek.**

Limitation Act 3

- **S24B(1) *Latent Defect – 2nd requirement***
- **An action for damages for negligence, nuisance or breach of duty to which section 24A applies shall not be brought after the expiration of 15 years from the *starting date*.**

Limitation Act 4

- **Section 24B(2)(a) "*starting date*" means the date (or, if more than one, from the last of the dates) on which there occurred any act or omission which is alleged to constitute negligence, nuisance or breach of duty**

Thank you

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IES – NUS Talk

"An Overview of an Engineer's liability"

Friday, 26 January 2007

Paper 2

"Negligent design"

by

Dr Philip Chan

Associate Professor

Dept of Building, NUS

Topics

- Highland Towers – physical damage
- Eastern Lagoon – economic loss
- Design-and-build & performance specification

Highland Towers 1

Brief facts

- 3 apartment blocks – 1 collapse
- Constructed between 1975-1978
- Collapsed on 11 Dec 1993
- After 10 days of continuous rainfall
- 48 people dead

Highland Towers 2

Brief facts

- 10 defendants
- 1st D - developer
- 2nd D – architect
- 3rd D – qualified civil engineer
- 4th D – local authority

Highland Towers 3

Basis of Claim vs Engineer

- Negligence in preparing, designing and supervising construction of Highland Towers including 2 retaining walls and drainage system of Highland Towers site

Highland Towers 4

Particulars of negligence

- Foundation – used rail piles welded together
- Drainage plan – not fully implemented

Highland Towers 5

Court's findings 1

- As the type of piles used was accepted in the engineering and building industry to support high-rise building at the material time in this country no fault can be attributed to the 3rd D in approving its use since he was only adhering to the accepted professional practice at the time.

Highland Towers 6

Court's findings 2

- **The engineer should have exercised care to either design and construct a foundation to accommodate lateral load vs the fdn of the bldg.**

Highland Towers 7

Court's findings 3

- **The paramount duty of an engineer for the HT was the safety of the buildings he was involved. This duty cannot be exempted by a mere belief of the retaining walls and terracing of the slope were designed, supervised and built by the developer whose director was an engineer himself or another firm of consultant, and therefore presumed safe.**

Highland Towers 8

Court's findings 4

- **The engineer should not issue a notice to the authorities stating that the entire approved drainage proposal was implemented when only 10% was completed.**
- **This was a gross violation of his duty of care particularly when the approved drainahe system was so fundamental to the safety of the buildng.**

Eastern Lagoon 1

Brief facts

- **Design work – 1973-1981**
- **Construction commenced – July 1982**
- **Completion – Sept 1984**
- **COF – July 1985**
- **MC constituted – 5 Apr 1986**
- **Falling of bricks & tiles – 20 Nov 1992**
- **PWD – situation likely to be dangerous – 29 May 1993**

Eastern Lagoon 2

Basis of claim

- **MCST vs RSP**
- **Negligence in the design and supervision of the construction of Eastern Lagoon Completion – Sept 1984**
- **Bulk of claim is the cost of rectification works in respect of external walls and tiles**

Eastern Lagoon 3

Legal Issue

- **Whether RSP owed a duty of care to MCST in respect of the design of the condominium insofar as purely economic loss was concerned**
- **Whether design was sound and supervision adequate**

Eastern Lagoon 4

Legal Principles 1

- **Where the loss is economic in nature , different requirements are necessary – depending on the nature of the negligent act or omission – to give rise to liability**
- **The question is not whether a duty was owed by A to B, but whether a duty was owed by A to B to avoid the loss incurred by B [para 42]**

Eastern Lagoon 5

Legal Principles 2

- **Vis-à-vis the developers, there was an assumption of responsibility of professional competence by RSP**
- **RSP knew that the developers would be relying on their exercising reasonable care and skill**
- **MC was merely a statutory creation and was successor to the developers [para 38]**

Eastern Lagoon 6

Legal Principles 3

- In respect of common property, RSP knew that the MC would be in charge & would be managing the common property and would depend on their care & skill in the design and supervision of the construction of the CP
- In such a situation there was sufficient proximity in the relationship bet MC & RSP as would give rise to a duty on the part on RSP to avoid the loss sustained by MCST [para 38]

Eastern Lagoon 7

Legal Principles 4

- On the evidence before her, the learned judge was justified in maiing the findings of fact as she did and we could find no grounds for disturbing her findings [para 56]
- With regard to design, the learned judge found that RSP were in breach in 3 areas [para 47]

Eastern Lagoon 8

Legal Principles 5

- **Failing to provide movement joints in the gable end walls**
- **Failing to provide adequate wall ties bet the inner and outer leaves of the cavity brickwork**
- **Failing to provide adequate method of adhesion in the claddings**
- **There was no breach of duty in supervision [para 47]**

Performance-based Regulatory System 1

Key Words

- **Performance Requirements for design & construction [ss 49(2)(ca), 49(2A)(a)]**
- **Approved Documents [s 9(2A)(b)]**
- **Acceptable Solution [s 9(3A)(a)]**
- **Alternative Solution [s 9(3A)(b)]**
- **Specialist QP certification [s 9(3A)(b)(ii), 9(3B)]**

Performance-based Regulatory System 2

Key Words

- ***Performance Requirements for design & construction***
  - **Minister's power to make Reg [s49(2)(ca)]**
  - **Deemed compliance with PR specified by CBC [s49(2A)(a)]**

Performance-based Regulatory System 3

Approved Documents [s 9(2A)(b)]

"the Commissioner of Building Control may issue in such form as he thinks fit, and from time to time amend, one or more *Approved Documents* setting out the *specifications, materials, designs or methods of construction* which shall, *without prejudice to any alternative means of achieving compliance*, be *deemed to comply* with the relevant objective and performance requirement for the design and construction of buildings prescribed in those regulations."

Performance-based Regulatory System 4

Acceptable Solution [s 9(3A)(a)]

"the plans of any building works that are prepared in accordance with the ***acceptable solutions*** as set out in the Approved Document issued by the Commissioner of Building Control in respect of such building works shall be ***deemed to comply*** with the objectives and performance requirements that are prescribed by the building regulations in respect of such building works."

Performance-based Regulatory System 5

Alternative Solution [s 9(3A)(b)]

- *Definition* – "a solution that entails the use of any design, material or construction method that differs completely or partially from those in the ***acceptable solution***"
- Provision of Alternative Solution – 2 options
  - Design QP [s 9(3A)(b)(i)]
  - Specialist QP [s 9(3A)(b)(ii)]

Performance-based Regulatory System 6

Specialist QP certification [s 9(3B)]

"No qualified person shall issue any certification for the purposes of subsection (3A) (b) (ii) unless he has taken ***all reasonable steps and exercised due diligence*** to ensure that the alternative solution in respect of which his certification is being sought satisfies the objectives and performance requirements that are prescribed by the building regulations in respect of the building works for which the alternative solution is to be applied."

Thank you

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IES – NUS Talk

"An Overview of an Engineer's liability"

Friday, 26 January 2007

Paper 3
"Supervision duties – applicable standard"

by

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Associate Professor

Dept of Building, NUS

Supervision duties

- Applicable standard
  - statutory
  - contractual

Statutory duty

- Types of QPs
- Duties of QPs
- Penalties imposed for QP failure

Qualified Person 1

Types of QPs

- **DQP – s 6(3)(a) [design]**
- **SQP – s 6(3)(b) [supervision]**
- **Specialist QP - s 9(3A)(b)(ii)**

Qualified Person 2

Duties of QPs: **take all reasonable steps and exercise due diligence**

- **DQP – s 9(3) [design]**
- **SQP – s 9(3C)**
  - **(a) supervision & inspection**
  - **(b) immediate supervision in absence of SS**

Qualified Person 3

Penalties imposed for QP failure

- **DQP - $100,000**
  - no diff bet Str & Non-Str [Minister]
  - no diff bet prescriptive & performance reg
  - Alternative solution (DQP or SpQP)
- **SQP - $50,000 (same as AC)**
  - supervision & inspection and immediate supervision

Contractual duty

- Sim & Associates v Tan Alfred [1994] 3 SLR 169
  - Express terms
  - Implied terms

Contractual duty

Express duty of supervision

- **Usual terms**
- **Supervision of the execution of the contract**
- **To see that the work was done in accordance with the contractual specification**

Contractual duty

Express duty of supervision

- **P to show a want of competent care in supervising the bldg works**
- **CA disagreed with HC that the duty of supervision reqd supervisor to discover defective works at the time they were being done or soon after they were done.**
- **Such a position fails to take into account the DLP period**

Contractual duty

Implied duty of supervision

- **In the absence of an express term for a higher degree of supervision, what is reqd is reasonable supervision. This means such supervision as would enable the supervisor to certify that the work had been executed according to contract**

Contractual duty

Implied duty of supervision

- **Prolonged and detailed inspection & mst at interim stage is impractical & not to be expected**
- **Not necessarily negligent if there is a failure to discover a defect which a reasonable exam would have disclosed. The omission may be explicable as no more than an error of judgment**

Thank you

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IES – NUS Talk

"An Overview of an Engineer's liability"

Friday, 26 January 2007

Paper 4

"Recent Developments of the Law affecting Engineers"

by

Dr Philip Chan

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Topics

- **Prosperland – liability to developer**
- **Seasons Park – liability to subsidiary proprietors**
- **SM Integrated Transware – whether email satisfy requirement of "in writing"**

Case 1 – *Prosperland* 1

<u>Remedies – *Title to sue for substantial damages by Developer* – HC & CA</u>

The Issue:

"Whether the D can claim vs the A & his firm for SD even tho the D has suffered no loss & the MCST has a direct legal remedy in tort vs the A & his firm"

Case 1 – *Prosperland* 2

Can D sue for SD?

- **Gen Rule – Actual Loss/Nominal D**
- ***St Martin Property Corp v McAlpine***
  - **Narrow Grd – where no other person able to recover from contract breaker**
  - **Broad Ground – loss of "*performance interest*"; fail to receive contracted bargain**

Case 1 – *Prosperland* 3

Can D sue for SD?

- **YES under Narrow Grd – Legal Blackhole not completely avoided because of *Ocean Front* and *Eastern Lagoon***
- **YES under Broad Ground – shld not be dependent on : ownership of property nor rts of TPs to sue contract breaker except avoidance of double liability**

Case 1 – *Prosperland* 4

Impact on Consultants

- **Exposure to liability has in a way been "guaranteed"**
- **Premium for insurance cover is affected**

Case 1 – *Prosperland* 5

Limitation section 24A - CA

- **Applicable to latent damage – postpones commencement of LP [3yrs]**
- **Date of Knowledge of rt to bring claim**
  - **Includes "constructive" K [reasonably expected to acquire from facts observable or ascertainable]**

Case 1 – *Prosperland* 6

Limitation section 24A – CA

- **Burden of proof on claimant to prove K acquired on date in compliance with s24A**
- **Burden of proof on defendant that K was acquired earlier**

Case 1 – *Prosperland* 7

Limitation section 24A – CA

Impact on Consultants

- **Limitation of Liability in respect of latent defects is extended to max of 15 years & 3yrs from date of Knowledge**
- **Affects insurance cover**

Case 2 - *Seasons Park* 1

Contract – *Title to sue relationship bet MC & SPs* – HC & CA

- **S116 LTSA – SPs must have rt of action**
- **No assumption that all SPs entitled will want to sue – cannot be cured by a resolution as those voting may be TPs**
- **SPs in representative action must be named for enforcement purposes**
- **MC rt party in Ocean Front type of case**

Case 2 - *Seasons Park* 2

Contract – *Title to sue relationship bet MC & SPs* – HC & CA

- **S &P are pre-Contract (Rights of Third Parties) Act**
- **Suggestion from CA – Amend S&P to confer TP rts pursuant to the Act**

Case 2 - *Seasons Park* 3

Tort - Negligence – *Defence of Independent Contractor* – HC & CA

The Issue:

- **Whether the D D was negligent in failing to exercise reasonable care & skill in designing and/or building the Season's Park condominium and/or supervising the construction and rectification works**

Case 2 - *Seasons Park* 4

Tort - Negligence – *Defence of Independent Contractor* – HC & CA

- **Developer not vicariously liable for independent contractor's negligence**
- **Allegation that there is a non-delegable duty imposed on the developer by the Housing Developers (Control and Licensing) Act rejected**

Case 2 - *Seasons Park* 5

Tort - Negligence – *Defence of Independent Contractor* – HC & CA

Suggestion by the CA

- **Novation – P, SP and D**
- **Name –lending by P to SP with indemnity given to P by SP**

Case 2 - *Seasons Park* 6

Tort - Negligence – *Defence of Independent Contractor* – HC & CA

Impact on Consultants

- **If the issues relate to C's scope of works then Cs appear to be the likely parties to be defendants**

Case 2 - *Seasons Park* 7

Tort - Negligence – *Defence of Independent Contractor* – HC & CA

Issue formulated in Ocean Front:

"whether the MC has a claim vs the developers, whether in contract or tort, for pure economic loss in the form of cost of repair or making good those defects complained of."

Case 3 - SM Integrated 1

Issue : *Interpretation of the Civil Law Act*

- **6(d) No action shall be brought against any person upon any contract for the sale or other disposition of immovable property, or any interest in such property *unless the promise or agreement* upon which such action is brought, or some memorandum or note thereof, *is in writing and signed* by the party to be charged therewith or some other person lawfully authorised by him.**

Case 3 - SM Integrated 2

- ***S6(d) Civil Law Act***
- **"the promise or agt or some memorandum or note thereof, is in writing and signed"**
- ***4(1) ETA*** **- Parts II and IV shall not apply to any rule of law requiring writing or signatures in any of the following matters:**
  - **(d) any ctt for the sale or other disposition of immovable ppty, or any interest in such ppty**

Case 3 - SM Integrated 3

- **S2, Interpretation Act**
- **"writing" and expressions referring to writing include printing, lithography, typewriting, photography and other modes of representing or reproducing words or figures in visible form; [para 78]**

Case 3 - SM Integrated 4

- **Whilst the statute does not make it plain tt e-records will be adequate to satisfy legal rules relating to writing and signature in most commercial matters, [it] does not mean that, as a matter of law, e-comm cannot satisfy reqts of s 6 CLA [para 76]**

Case 3 - SM Integrated 5

- **The ETA does not change the common law position in relation to s 6 CLA [para 76]**
- **Whether an e-mail can satisfy the reqts for writing and signature …will be decided by construing s6(d) CLA and not …s4(1)(d) ETA [para 76]**

Case 3 -SM Integrated 6

- **"…while the underlying digital information will not be "writing", the screen display will satisfy the IA defn…" [para 79]**
- **"I am satisfied that the common law does not require handwritten signatures for the purposes of satisfying the signature reqts of s6(d) of the CLA. A typewritten or printed form is sufficient. " [para 91]**

Case 3 - SM Integrated 7

- **"Therefore, I hold that the signature reqt of s6(d) is satisfied by the inscription of Mr Tan's name next to his e-mail address at the top of the e-mail of 4 Feb 2003 :**
- **"From: "Tan Tian Tye tian-tye.tan@schenker.com"**

Case 3 - SM Integrated 8

Advice by Learned Judge [para 85]

- **"If parties who negotiate electronically do not wish to be bound until formal document is signed, they can have recourse to the "subject to contract" endorsement that can easily be added to their e-mail correspondence."**

Thank you

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