

SOCIETY OF CONSTRUCTION LAW (SINGAPORE)

# SINGAPORE CONSTRUCTION LAW NEWSLETTER

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**SWEET & MAXWELL** 

#### 2008-2010 COUNCIL

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Newsletter

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# CHAIRMAN'S MESSAGE

I am very pleased to update you on the work of the new 2008-2010 Council, which seeks to capitalize on the unique multi-disciplinary membership of the Society.

#### Committees

To this end, the Council has established seven Standing Committees:

Committee Vice Chair	Chair	Vice Chair
Social/Networking	Brendon Choa	Audrey Perez
Professional Development	Karen Fletcher	Anil Changaroth
Publications	Naresh Mahtani	Hardesh Singh
Website	Christopher Vickery	Peter Chow
External Relations	Johnny Tan	Chow Kok Fong
Specialist Sectors	Goh Phai Cheng	
Membership	Christopher Nunns	

#### Professional Development (PD)

The PD Committee's successful SCL-NUS Lecture by Chow Kok Fong on 14 January was followed by our well received 4 March evening talk by 2 Queens Counsel from Atkin Chambers.

This Council is keen to expand the PD programs beyond talks, important as they are. So the Council is looking at a number of "firsts":

- our first site visit on 24 January 2009 to the Buona Vista MRT work site. Thanks to Nirhbik Sengupta and Vivek Singhal of Alpine Bau Gmbh, for hosting this event:
- our first customized 2½ day Engineering 101 training program, scheduled for end March.

continued overleaf...

## SCL(S) CALENDAR OF EVENTS 2009

DATE	2009 EVENT DETAILS
Wed, 14 Jan 2009	Inaugural Annual SCL-NUS Lecture 2009
Sat, 24 Jan 2009	Site Visit: Construction of the Circle Line MRT Stations and Interconnecting Tunnels
Wed, 4 Feb 2009	1st Social & Networking Event: Networking Cocktail 2009
Wed, 4 March 2009	Atkin Chambers on: (1) Delay Analysis, Concurrency and the Contractual Allocation of Risk (2) Immunity of Expert Witnesses?
Fri, 20 March 2009	Site Visit: "High Rise Constructions: Site Tour and Challenges Met"
Fri-Sun, 27-29 Mar 2009	Engineering 101 for Non-Engineers
Wed, 22 Apr 2009	2nd Social & Networking Event (Networking in an Art Gallery)
Thurs, 7 May 2009	The 2009 SIA Conditions of Contract (8th Edition) - What's New?







## Social/Networking

Our welcome tradition of social and networking events continued with our well attended Networking Evening at Bacchus Boathouse on 4 February 2009.

The Social Committee is currently looking at an Annual Dinner in mid 2009, as well as corporate sponsorship opportunities for our social events, amongst others.

#### Other Initiatives

Amongst other initiatives:

- the Publication Committee is considering an Annual Directory of members:
- the Website Committee will revamp our website to make it more resource and user friendly;
- the External Relations Committee is evaluating relationships with industry users, regulatory bodies and suitable international organizations;
- the Membership Committee is looking into corporate membership; and
- the Specialist Sectors Committee will reach out to the building, infrastructure and marine/offshore segments.

#### **Financial**

To financially sustain this expanded suite of activities, the Council has reviewed the Society's policy of not charging for

our evening talks. Instead of an increase in annual membership fees, the Council is in favour of a more targeted fee for the Society's individual activities. This allows members to align their financial commitment to their direct participation in the Society's programs.

The Council understands the need to stay competitive. So our member rate for our regular evening talks at S\$35 compares favourably to equivalent rates of S\$80 or more levied by other professional organizations.

Similarly, our member rate of S\$500 for the  $2\frac{1}{2}$  day Engineering 101 program is well below equivalent rates of professional organizations in excess of S\$2,000.00 (for members) and close to S\$3,000.00 charged by commercial organizations.

So I do sincerely hope our new line of programs will find support amongst you. On behalf of the new Council, I look forward to your active participation, and meeting you at our many activities.

I welcome your feedback on our programs, activities or initiatives. You can email me c/o the SCL Secretariat [secretariat@scl.org. sg].

Mohan R Pillay Chairman

# SCL-NUS Annual Lecture & Award of SCL Annual Book Prize

The inaugural Society of Construction Law – National University of Singapore annual lecture was held on 14 January 2009 at the Pod at the National Library. The event was chaired by Immediate Past President of the Society, Mr Naresh Mahtani. The keynote speaker was Mr Chow Kok Fong, also a former president of the Society, who, with his customary insight, tackled the highly topical subject of "Managing Construction Contracts During Times of Economic Uncertainty" A question and answer session saw the panel of Mr Chow, Dr Philip Chan of the National University

of Singapore, and Mr Mahtani, fielding questions of a distinctly financial flavour. The event closed with two presentations. The first was the award of this year's SCL Book Prize to the Department of Building's outstanding graduating student, Ms Lee Wei Ling. This was followed by the presentation to the Society by the publishers, Thomson, and Lexis-Nexis, of a book each. These were received by the President of the Society, Mr Mohan Pillay. The session was closed by an address by Professor Tham Kwok Wai of the National University of Singapore.



Chow Kok Fong, Naresh Mahtani and Dr Philip Chan



Mohan Pillay awarding the SCL Book Prize to Ms Lee Wei Ling



# Programming in Construction — talk by Anthony Clifford

On 21 May 2008, Mr. Anthony Clifford, Chairman of Messrs International Construction Consultants Pte Ltd, presented a paper to nearly 120 members and guests of the Society on the subject of 'Programming in Construction'.

The following are highlights of his paper:

- The challenges in programming in the construction industry are heightened by the different interests of the parties involved a labour force wanting maximum pay, a client desiring high quality for a low price and shareholders wanting a maximum return on their investments. The contract programme serves as a tool to optimize the chances of giving satisfaction to these divergent interests.
- The early issues of programmes inevitably contained numerous assumptions (which were in effect best guesses) concerning methods, sequencing and productivity, many of which would be erroneous to some degree. Mr Clifford stressed the need for the constant monitoring of progress, particularly in the early part of a programme period, in order to verify these assumptions or alternatively to correct them with programme updates. It was vital that production targets and mini-milestones be set and made known to site personnel at all levels in formats that could be readily understood by those who were required to achieve them. He stressed that it was essential that all programmes be practical and achievable and should be formulated for all kinds of preparatory activity (designs procurement etc), not just the construction process itself.
- Mr Clifford noted that programmes were called for as part of the contractor's contractual obligations in a contract, but queried the significance of the "Approval" of these programmes, when in reality the achievement of the milestones stated in the contract documents was what really mattered. Issues often arise when the contractor's programme called for milestone events to be met that were not identified in the contract, such as the provision of third party details, designs and drawings needed by the contractor to enable him to progress his own works and designs, and the consequences resulting when this data was not provided by the required dates. This raised the interesting legal question as to whether the client had to accept the contractor's milestones for the supply of information and drawings, and the subsequent rights of each party if the client refused to do so.
- Problems could also arise when there were differences between the programme a contractor submitted with his tender (at best usually hastily compiled), and the true working programme subsequently submitted by the contractor's construction team after contract award and following a much more detailed study and evaluation of the project by the contractor. A wise client would have the tender programme examined by a person competent to do so in order to determine the contractor's expectations and would not just check that the completion date and intermediate milestones were compliant. Such a measure would create an understanding between the client and the contractor at an early stage and before any disputes arose.
- The person responsible for the production and monitoring of a programme ought to be the manager in charge of construction, in close consultation with his colleagues, advisors and other concerned personnel and particularly with the planner. He must mastermind the programme and take account of all contractual requirements and imposed restraints. Before work on a programme could commence lists of activities, possible sequences, conditions, restraints, assumptions and production parameters (upon which studies would need to be conducted and decisions made), needed to be drafted and reviewed. These studies should include physical factors (location, accessibility,



Anthony Clifford

ground conditions, working space etc), technical factors (labour quality and availability, equipment availability etc) and financial factors.

- A client should also be mindful of the decisions taken by the contractor and his subsequent degree of flexibility, or lack thereof, to accommodate any changes he may be considering before instructing the implementation these changes.
- Once decisions related to durations, sequences and resource levels had been made an initial programme could be drafted and the critical path could be determined. The critical path was the sequence of items whose start or completion dates could not be delayed without having a direct impact on the overall completion date. Sub-critical paths could also exist to accommodate intermediate milestones. The initial draft programme run through would probably not produce the required completion date, and adjustments to this draft would need to be made in order to achieve the specified date.
- A further very important process in the programme compilation was resource leveling. This was the process whereby the start of some activities would be deliberately delayed in order to avoid high peaks of specific resources for short durations, which would result if all activities were to commence at their earliest possible start dates. Resource leveling applied not only to labour resources but also to other resources such as craneage, equipment, production or fabrication facility capacities etc.
- Progress against a programme must be regularly and closely monitored, and where necessary corrective action would need to be taken to redress unacceptable slippages. Effective statusing could not only provide information regarding the current situation of an activity but would also indicate production trends and could project the date at which that activity would achieve completion at its current rate of progress. When adjudicating claims and delays, these marked up charts, programmes or drawings should be studied usually there were enough of these documents and record photographs available to enable this examination to be carried out retrospectively. The effectiveness of a contractor's remedial measures and actions should be reflected in production changes evident from these records.
- The various means of progress monitoring included marked up drawings, marked up programmes of various styles, tabulated progress records and "S" curves – it was noted that the latter needed to be used with care if it was not to be misleading. It is also possible to track progress by the tabulated recording of the dates at which activities were completed compared to their target completion dates.





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- Once programme monitoring detected that an activity was not proceeding as planned, and that the slower rate of production being achieved was going to cause critical delays, immediate corrective action was required. A favourite and frequently used remedial measure taken by contractors when they suffer delays, however, was to simply increase working hours. This measure had very limited value, although in Singapore it was popular. He advised that research had shown that hourly productivity could drop to as low as 65% of normal levels when working hours were extended beyond 12 hours a day, 6 days a week on an ongoing basis - and the payment of overtime rates made the costs prohibitive. In these instances, productivity in terms of value of work done per dollar spent, could fall well below 50%. Safety standards were also compromised by the adoption of these solutions. Mr Clifford advised that it was far better and far more cost effective to deploy additional independent resources with additional supervisors, although with the restricted resources in Singapore this could be difficult to implement. Another very effective solution would be to introduce an incentive scheme to reward increased productivity. On one project Mr Clifford stated that he had obtained double productivity for about 20% increased hourly cost by the introduction of such a scheme. A further solution would be to investigate the possibility of implementing additional measures which could make it possible to move some of the items off the critical path that were currently on it. This could be done by studying whether or not the criticality of an activity could be circumvented by re-sequencing activities, or be accommodated by introducing temporary measures to compensate for the activity's delay.
- Mr Clifford reviewed the controversial question of the ownership of float. He stated that consideration needed to be given to what float was and how it was created. He recalled that the scheduled duration and completion date of an activity was determined by the methods, productivity levels and sequences the contractor elected to adopt and that had been used to

- construct the programme. Float was the surplus time available to the contractor, after adjustment for resource leveling, which could be used should an activity not be completed within its scheduled duration. The amount of float had therefore been determined solely by the contractor's own decisions and assessments, and should therefore be available to him to correct any errors he may have made in these decisions. Mr Clifford expressed the opinion that if a client tried to use the contractor's float to compensate for his own delays he would be imposing restrictions on the contractor by reducing the floats available to the contract conditions. The client would therefore be in breech of contract.
- It was essential therefore to have immediate and open liaison between the client and his contractor when client imposed delays occurred, in order to agree a way forward. The contractor should outline to his client his options to minimize the consequences of the delay.
- If a client wished to have a buffer to cover his own potential commitment failures, he could easily do so by introducing buffer zones between the completion of one phase by one contractor and the start of the follow on phase by another contractor.

He could also introduce clauses into the follow-on contractor's contract to impose on that contractor requirements for earlier start dates than those specified, providing a certain minimum amount of notice was given. In this way the client could benefit from the timely or even early completion of a hand-over condition without violating either contractor's contract conditions.

 Mr Clifford stressed that the contract programme needed to be a living document which needed constant scrutiny and adjustment to make it usable and meaningful throughout the duration of the construction process.

# Comparative Overview: (1) Institutional Arbitration (2) Liquidated Damages

On 20 November 2008, we had the pleasure of being addressed by Ms Finola O'Farrell QC and Simon Hughes from the construction law specialists barristers at Keating Chambers speak to SCL members and guests on "A Comparative Overview: (1) Institutional Arbitration (2) Liquidated Damages".

The talk was kindly chaired by Michael Furmston the Dean of Law at the Singapore Management University, the editor of "Construction Law Report" and for 30 years the editor of "Cheshire, Fifoot and Furmston on Contract".



Ms Finola O'Farrell



Members of the audience





# Cross Fertilisation — New Zealand Developments in Construction Law and Adjudication

On 20 October 2008, Mr. Tomas Kennedy-Grant QC gave a talk to SCL members and guests on "Cross-Fertilization: Developments in Construction Law and Adjudication in New Zealand". Mr. Kennedy-Grant, a renowned international arbitrator, was formerly a Master of the High Court of New Zealand and is the author of "Construction Law in New Zealand", amongst other publications. The evening seminar was chaired by Mr. Chow Kok Fong, former Chairman of the SCL in Singapore. In his talk, Mr. Kennedy-Grant dealt with many interesting developments in the law in New Zealand, in particular, in relation to Negligence, Specific Performance and Adjudication.





# NETWORKING COCKTAIL EVENT — 4 FEBRUARY 2009

Some forty SCL members and guests convened on 4th February 2009 for a networking cocktail at its now customary venue of the Boathouse, at the Fullerton Hotel. The event was launched by the Society's chairman, Mr Mohan Pillay, who set the scene by highlighting initiatives that would be undertaken by the SCL Council in the coming year. He also mentioned that regular events, such as the Networking Cocktails, would flavoured by inclusion of new elements. For example, at this event, there was an exhibition of creatively composed photographs, by member Audrey Perez and one of her colleagues, of construction sites and activities. The attendees represented a wide cross-section of the construction industry and included lawyers, engineers, architects, contractors and other construction professionals.







# SITE VISIT: CONSTRUCTION OF CIRCLE LINE MRT — 24 JANUARY 2009

On Saturday 24 January 2009, we held our first ever site visit to the new Buona Vista Station on the future Circle Line, MRT. The event was hosted by Nirhbik Sengupta (Construction Manager) and Singhal Vivek (Project Director) of Alpine Bau Gmbh (Singapore Branch), one of the parties in the JV responsible for the civil works contract for stages 4 and 5 of the Circle Line.

The morning commenced with a review of the scope of the contract which includes the construction and completion of Holland, Buona Vista and NUH Stations, including fit out works and tunnels for One-North Station. It was particularly interesting to learn about the technical difficulties encountered in the construction because of restricted access and the methods that had been employed to overcome these problems.

The attendees were then escorted on a tour of the site to see the tunnel entrance at Buona Vista Circle Line Station viewed from the unique location of the foundation level of the future rail track.

The attendees were then escorted on a tour of the site to see the tunnel entrance at Buona Vista Circle Line Station viewed from the unique location of the foundation level of the future rail track.





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## **Construction Contracts Dictionary** Author: Chow Kok Fong Construction Contracts Dictionary is the first published glossary of construction contract terms in Asia. It offers a working definition of contract and related technical terms commonly encountered in the administration of a construction contracts. The entries, listed alphabetically, fall under three main heads. CONSTRUCTION · The first are terms expressions used in the relevant statutes, standard forms CONTRACTS and contract documents such as drawings and specifications. DICTIONARY · The second consists of terms which feature in the law relating to contract and tort which apply to the construction industry and dispute resolution · The third includes technical and general terms and expressions which are frequently featured in construction arbitration and negotiations s\$189.00 In addition, footnotes have been added for many of the entries to facilitate reference to statutes, case law, source documents and other reference materials. BN: 9789810548674



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