

# Facilities Management Industry in Hong Kong – The Way Forward



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## The FM Definitions

After over a decade of arriving in Hong Kong, Facilities Management (FM) still carries a number of definitions regarding its meaning. The term “facilities” is interpreted as either the property or the equipment installed within the property. Thus, to property managers, FM refers to a form of property management service for commercial buildings or corporations. To building services engineers, FM refers to comprehensive lump sum based maintenance services for building services installations. During the last few years when Hong Kong’s economy was in decline, FM often related to non-core business out-sourcing as well as organizational down-sizing and cost-cutting.

The situation is complicated by the launch of FM services by the service providers from various business sectors such as property management and catering firms. FM seems to be the only cost-saving and quality improving solution for all non-core/supportive services to business entities. A number of business entities started to explore the feasibility of inviting FM services providers into their entities or to transform the mode of their operation in FM format. Some of these business entities include Cable & Wireless Hong Kong Telecommunication, Hong Kong Football Club, Hong Kong Air Cargo Terminals Limited, J P Chase Morgan, Dairy Farm, Disciplined Services Sports & Recreation Clubs and Australian International School.

In fact, there are a number of definitions for “Facilities Management” from various FM organizations. Some of their views are quoted as follows:

### The Royal Institution of Chartered Surveyors (RICS)

*Facilities management is the total management of all services that support the core business of an organization. Focusing on the interaction between the core business, the support functions and the facilities. FM is more than an operational activity impacting on the optimization of business occupancy and “bottom-line” productivity. It is the discipline that ensures all the different buildings and services of a company work as efficiently as possible across a global workplace.*

### International Facility Management Association (IFMA)

*Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.*

### British Institute of Facilities Management (BIFM)

*Facilities Management is the integration of multi-disciplinary activities within the built environment and the management of their impact upon people and the workplace.*

*Effective Facilities Management, combining resources and activities, is vital to the success of any organisation. At a corporate level, it contributes to the delivery of strategic and operational objectives. On a day-to-day level, effective Facilities Management provides a safe and efficient working environment which is essential to the performance of any business – whatever its size and scope of works.*

*Within this fast growing professional discipline, Facilities Managers have extensive responsibilities for providing, maintaining and developing myriad services. These range from property strategy, space management and communications infrastructure to building maintenance, administration and contract management.*

### The Hong Kong Institute of Facility Management

*Facility Management is the process by which an organization integrates its people, work process and physical assets to serve its strategic objectives. As a discipline, facility management is the science and art of managing this integrative process from operational to strategic levels for promoting the competitiveness of organizations.*

*The HKIFM hence recognizes Facility Management as both a process and a discipline. It also affirms the integrative approach adopted in Facility Management world-wide and promotes the synergy of effective people and building/asset management that can enhance a corporation’s competitiveness. In addition, HKIFM accords Facility Management to the highest professional*

*level whereby facility managers are instrumental in the strategic decision making of an organization.*

While the definition from RICS reflects the role of FM team within a business entity, the definitions from other three organizations point out the key focus from FM's perspective.

### **The Hong Kong Approach**

Despite the above-mentioned definitions introduced by various institutes, the FM industry in Hong Kong has formulated the scope of FM services by performance. The scope of FM services currently offered by FM professionals covers the following:

**1 Strategic Planning** (Capital Expense Planning; Space Policy; Procurement Strategy; Performance Measurement; Business Re-location; Operation Procedures; Energy Planning; Lease / Tenancy Management; Risk Planning comprising Emergency Procedures and Business Continuity Plan)

**2 Financial Management** (Budget Preparation; Expenditure Control; Cost Benefit Analysis; Benchmarking; Internal Re-charging)

**3 Operation Management** (Property Management comprising Security, Cleaning & Tenant Liaison; Supportive Services comprising Reception Services, Pantry Services, Mail / Messengers Services, Conference/Function Services, Transportation, Catering Services & Club House Services; Facilities Administration comprising Insurance, Licensing & Space Management which includes Space Inventory, Space Configuration, Furniture Inventory and Furniture Specification; Health, Safety and Environmental Compliance comprising Energy, Waste Recycling, Hazardous Materials, Indoor Air Quality, Noise & Water Quality)

**4 Maintenance Management** (building fabric, E&M installation, furniture, office equipment, landscaping) comprising Churn; Routine Maintenance; Minor Repairs & Emergency Recovery

**5 Project Management** (Feasibility Studies; Consultant Management; Statutory Submission; Project Procurement; Contract Administration)

### **PM vs FM**

From the established scope of FM services, one can say why facilities management is mistaken by the property

managers as "old wine in a new bottle". In fact, although the two types of management focus on property, they originate from different bases. Consequently, they are fundamentally different in their approaches to the issues.

For property management, it stems from the management of the property's common area. The prime duty of a property manager is to ensure the common interest within the building / estate is preserved. Decision may have to be made by means of voting among owners of the building. For facilities management, it emerges from business entity with a mission of maximizing the outcome from the physical asset in accordance with the entity's direction. Since achieving the business entity's goals is its prime objective, decisions are usually made by the FM professionals.

In one of the major FM services out-sourcing tendering and the series of tendering for the Housing Department's Property Services Contract, the cost of maintenance services to all building services installation is changed from its traditional cost reimbursement basis to lump sum pricing basis. FM services providers have to bear the uncertainty of any expenditure in the repairs and maintenance of all the building services installation throughout the contract period. Because of the degree of uncertainty in the equipment's performance within the contract period, the estimated value of such services varies from millions to billions Hong Kong Dollars per annum. Property maintenance professionals involved in the tender price estimation and the subsequent maintenance management do not have other alternative but to bear the role on commercial decision making and responsibility towards FM services.

### **Application of Performance Pledge**

Compared to property management and building services maintenance, FM services are data analytical and mission critical oriented. This type of approach is shown from its wide use of performance pledges and services level agreements. Typical items within performance pledge and assessment mechanism are shown on page 16.

### **In House & External Servicing**

Nowadays, FM services in Hong Kong can be broadly classified into two categories, namely in-house servicing and external servicing. In-house FM servicing can be found in the following organizations:

- The Kowloon Motor Bus (1933) Company Limited;
- The Hong Kong Institution of Education;

**Examples of Performance Pledge**

Performance Indicator	Measurement	Rating
1 Manpower	100% meets contract requirements Less than 100% of contract requirements	10 0
2 Staff Turnover (excluding relievers) (Calculation = No. of staff that have left / Total No. of Staff)	0 – 9% headcount turnover 10 – 19% headcount turnover 20 – 29% headcount turnover 30% or more headcount turnover	10 5 3 0
3 Report on/off duty on time (Calculation = Total No. of times staff do not report duty on time / Total No. of times staff required to report duty)	100% complied 90 – 99% times complied 80 – 89% times complied 0 – 79% or more times not complied	10 5 3 0
4 Complaints received about staff (e.g. attitude, reading newspaper/ magazines, gambling, sleeping, drinking alcoholic liquor, smoking)	No complaints received 1 complaint received 2 complaints received 3 or more complaints received	10 5 3 0
5 Complaints received on quality of work (such as improper supervision, sub-standard work etc)	0 complaints 1 complaint 2-3 complaints 4 or more complaints	10 5 3 0
6 Use of non-approved chemicals	All complied 1 time not complied 2 times not complied 3 or more times not complied	10 5 3 0
7 Respond to emergency call within 15 minutes after receiving the call and inform the Employer's Representative about the details of call-out arrangement.	All Comply 1-2 times do not comply 3 times or more do not comply	10 5 0
8 Fails to comply with Safety Rules for the Contractor.	All comply 1 - 2 times do not comply 3 times or more do not comply	5 3 0
9 Building Services availability not less than 99% (i.e.:Total downtime of Building Services (mins.) / Total operating time (mins.)	All Complied 95-99% downtime 90-94% downtime 90% or less	10 5 3
i) Contractor's failure to achieve 85% performance rating may lead to a verbal warning. Warning letter may be issued if verbal warning accumulated to 3 times.		
ii) Contractor's failure to achieve 81% performance rating may lead to one warning letter.		

- University of Hong Kong;
- Chinese University;
- Hong Kong University of Science and Technology.

On the other hand, entities adopting the out-sourcing approach in the provision of FM services are:

- Cathay Pacific;
- CyberPort;
- Science Park;
- Lingnan College.

For both types of FM services, maximizing the output from the entity's physical asset remains to be their ultimate objective. During the downturn of the economy, cost saving becomes the major key performance indicator. For in-house FM teams, sacrifice of long term preventive maintenance, rightsizing of the operation as well as the

management structure are commonly found. Besides, partial out-sourcing of FM services to external services provider becomes an additional assurance for goal achievement through the resultant keen internal competition between the two.

For FM service providers, apart from the above-mentioned action on the preventive maintenance, it becomes more technology driven in order to compensate the adverse impact from staff reduction. They have invested resources in developing Computerized Facilities Management Systems such as "Archibus", "MRI" and "Maximo" in accordance with their operation needs. Nowadays, such systems become the basic tool of any capable FM service providers. The real time data capture and instant demand analysis provided by these computerized systems allows quick deployment of appropriate resources to the right place at the right moment.

The recent establishment of web-based platforms allowing clients to have direct access into the real time reports from anywhere at any time moves the FM industry one unexpected step towards total information management.

**Going Forward**

The application of performance pledge, services level agreement together with the availability of real time data capture and performance reporting, senior management of business entities is provided with a systematic monitoring on the degree of utilization of their available resources performing the supportive services. Subsequently, areas for improvement on cost effectiveness can be identified for taking action. Such benchmarking initiative is the attraction of FM professional to business entities as industry

leaders are fond of saying “You cannot monitor the issue unless you can measure it”.


The benefit of cost rationalization has been the main attraction for all FM service providers in the years of economy downturn. With the substantial reduction in major areas of such cost rationalization having implemented a series of costs saving measures in recent years, and in spite of the rebound of the economy, one needs to consider whether cost rationalization remains mission critical for all FM service providers.

Today, public attention has re-focused on the social

responsibility of mega business entities such as Housing Department, PCCW and MTRC. The out-sourcing activities have been closely watched by trade unions and community concern groups. Attention of the media has also been alerted concurrently. A number of major FM service tenders have been withheld to avoid confronting the society on sensitive redundancy issues.

Enhancement of cost effectiveness by departmental / staff replacement may not be feasible when the social responsibility is taken into account and this issue will need to be further explored within the FM industry when interests of the community is taken into account at large.

## Modeling Mandarin Hotel with 15 Million Points

 is a trend using Terrestrial 3D Laser Scanner to model heritage and architectural constructions, bridges and roadways, etc. With this advanced technology, surveyors can carry out their tasks in alternative ways other than using conventional methods especially for those inaccessible areas, for example, overhead rail gantries and hazard slopes. The capability of laser scanner to acquires several millions of 3D points (i.e. point clouds) over an entire structure provides a more complete representation of the structure and reduces the time in the field. Further, the scanned point clouds can be used directly for 3D visualization or point-to-point measurement, or convert into 3D models such as contours, profiles or sections, etc.

### The Project

The subject project is part of the modernization works of the Mandarin Hotel at Central. The task is to undertake a detailed survey of the existing balconies of the hotel in order to verify the structural dimensions prior to the design and fabrication works. The dimensional thickness of walls, floor slabs, widths and heights of all balconies from Level 4 to Level 27 (totally 17 storeys since there is no Level 13), of which there are 32 balconies at each level, are to be surveyed. Besides the 544 balconies, the details of the terraces on Level 22 are also required for this project.

Accurate as-built information is extremely important in this project as new cladding mullions and their positions will



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be designed and pre-manufactured to length off site, and fitted efficiently on the existing balconies thereafter. However, due to the limited access to the external walls and to minimize disruption to the guest of the hotel, laser scanning is considered to be the most appropriate technique for carrying out the task.

### Field Operation

The new Leica HDS 3000 Laser Scanner is used in the project. The selection of laser scanning technique is due to its accuracy, fast speed and comprehensive data capturing capability. The operation of this new laser scanner is mostly similar to that of the previous model HDS 2500, but is having more powerful functionalities and friendly using interface.

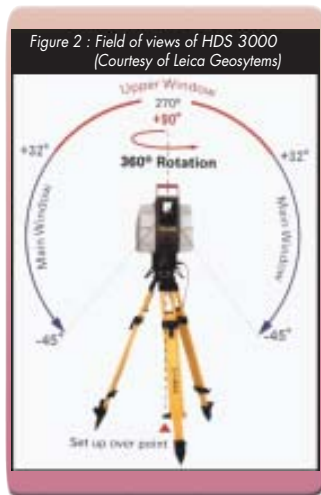
Just like conventional total stations, HDS 3000 uses standard tribrach and surveying tripod. Hence, it can be set-up over known control stations or newly established points which are geo-referenced. Due to the characteristics of the subject project, only an arbitrary grid network is established. Other than placing targets near the building, the control network is established by conventional surveying method ‘Traversing’ with the use of total station. Following the input of the measured instrument height of the scanner through the software Cyclone, the scanned point clouds are coordinated in real time once the scanner is originated to known points (i.e. minimum three geo-referenced targets).



One of the other new features of HDS 3000 is the built-in bore-sighted digital camera that is able to calibrate photo overlays automatically and to create panoramic digital image mosaic by using Cyclone (Version 5.1). The field of view (FOV) for scanning is no more a 'window' with fixed angles, but is all-directions (i.e. 360° in horizontal) fully selectable. The operator will be able to view the scene panoramically from the scanner's position via the screen of the connected computer and to select the scanning region. Besides, the FOV can also be easily defined manually by pushing the Quick Scan™ button (Figure 1 refers) at the back of the scanner.



In the previous model HDS 2500, the directions of the laser beams are controlled by the two mirrors (i.e. one for each axis) inside the laser scanner. Instead of this dual-mirrors design, the scanning direction in horizontal of HDS 3000 is controlled by the scanner itself, which is driven by the servo motor, whilst the direction in vertical is controlled by the mirror inside the scanner. This is also the reason why the all-directions horizontal field of view can be achieved. Further, the new dual-window design (i.e. Main Window or the Upper Window) allows the scanning FOV at each scan increased up to 270° in vertical, comparing to the 40° (40° FOVs of HDS 2500). Because of these large FOVs (Figure 2 refers), the scanner will not need to be re-orientated in order to achieve different scanning regions.



As shown in Figure 3, the FOV for the scans carried out via the Upper Window (i.e. zenith angle between +32° and +90°) is in 'sector' shape, whilst the FOV is in rectangular shape for the scans using the Main Window (i.e. zenith angle between -45° and +32°).

During the scan, the pulsed laser beam is emitted from the laser generator, reflected by the mirror which controls the vertical angle, via the glass shields of the scanner to the object. In general, the scanning sequence is from left to right in horizontal direction, from bottom to top for the Main Window and conversely from top to bottom for the Upper Window in vertical direction.



Figure 3 : Field of views scenvia Main Window (top) and Upper Window (bottom) (Courtesy of Leica Geosystem)

Figure 4 : True colour (From top), signal intensity and photo scene of Mandarin Hotel

The Class 3R Green Pulsed Laser is used by HDS 3000 for scanning due to its high level (Maximum 50Wm<sup>-2</sup>) of irradiance (i.e. power density) characteristic. Of course, this laser class is still safe for surveying purposes unless viewing directly to the beam or under long time of exposure. On the other hand, the true colour mapping can now be achieved by using Cyclone. The concept is to superimpose the colour of the object, which is extracted from the digital image captured, onto the corresponding scanned point clouds (Figure 4 refers). Hence, each of the scanned points will have its own 3D coordinates as well as the colour code and the returned signal reflectance (i.e. reflected intensity).

During the field operation, the laser scanner is set-up at 4 positions where the maximum FOV can beachieved. Each face of the hotel is individually scanned and totally 4 scans (namely "scanworlds") are undertaken. Following the field scanning, the 4 scanworlds are brought together to form one

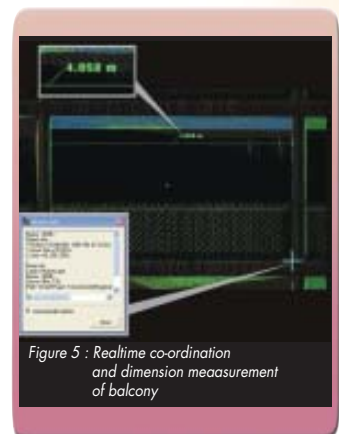


Figure 5 : Realtime co-ordination and dimension measurement of balcony

seamless point cloud via a registration process. This is done by matching up the names of the scanned targets (i.e. target ID) in each scanworld. As soon as the registration process completed, the coordinates and the dimensions between the scanned point clouds data can be immediately measured as shown in Figure 5.

### Problems Encountered and Improvements

Although colour mapping provides a powerful 3D virtual “fly-throughs” functionality, the colour of the point clouds maybe incorrectly assigned due to the direction of the light source or under gloomy environment. For example, the eastern face of Mandarin Hotel is partially shaded by the shadow of the nearby structures and resulted a different colour ratio for the point clouds of that part of the hotel. Under this circumstance, it is suggested to view the point clouds with respect to the signal reflectance (i.e. pseudo colours) as it is dependent not only on the colour of the object, but also the object material, the surface roughness as well as the incident angle of laser, etc.

Similar to photogrammetry, laser scanning technique is also having the “dead-area” problem at the inner portion of the balconies where cannot be directly scanned and are mainly because of the restriction of the setting up positions. The scanner is therefore needed be set-up at alternative positions in order to cover those dead-areas.

Beyond the said limitations, great improvements are found in HDS 3000. For HDS 2500, the scanning FOVs are selected via the photo which is captured by the digital camera at an offset position from the laser origin inside the scanner and resulting different scanning extends in reality. Instead, these two components of HDS 3000 are coaxial with each other and hence the operator can now

be confident with what he viewed is what he scanned. Besides, the overheating problem is also overcome by the new cooling system (i.e. the 4 internal fans) inside the housing of the scanner. The lighter weight and portability of both the scanner and battery, the larger scanning FOVs, the colour mapping capability, centering over known points with surveying tribrach and tripod....., all these features are aimed to improve and to overcome the limitations of the previous model.

### Conclusions

With the improved scan rate of HDS 300 (maximum 1800 points per second), a total number of 15 million points and 16 target positions are scanned for the project in 8 hours (net scanning time) with only three staffs for operation (One for operating the scanner and the others for setting and guarding the targets). The cost and time required for the fieldwork are much reduced comparing with using the previous model HDS 2500 or by conventional methods. For this type of project where accurate is paramount, the required time frame and survey tolerance using alternative surveying techniques may not be achieved. For example, using reflector-less total station maybe subject to inaccurate pointing (building edges and corners may be mis-pointed) and time consuming. It is indisputable that laser scanning technique is the best choice for carrying out this type of project as it provides not only a friendly using environment but also more productive for all measurements professionals.



Figure 6 : The Author and HDS 3000

## Valuation of Copyright Intangibles – Part 1

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### Introduction

Copyright intangibles are the intellectual property and protected by the law to the innovative owners for the economic benefits derived from them. Before looking into the steps of valuing the copyright intangibles, one must understand different aspects in relation to them. But for the purpose of valuation, the relevant aspects to the

concern of a valuer include :

identification of copyright intangibles; valuation methods; obtaining relevant internal and external data for the analysis of similar copyrights comparables and valuation.

Since copyright may have different legal interpretations in different countries, the following takes into account the statutory law and common law in Hong Kong.

## Identification of copyrights

For the purpose of asset valuation, a valuer must understand:

*what the copyright is; what types of works are within the category of copyright; what economic advantage it provides; what types of copyright are governed and protected by the law; what the legal protection of copyright is; what the economic impact of copyright registration is; and what the common forms of copyright transfer are.*

Copyright is a property right that subsists in certain works. Subject to the registration of the copyright, a copyright will become a legal right possessed by the owner of the copyright.

The legal protection of the copyright via the registration will confer the owner of it (which is called to be the “author” ) a bundle of certain exclusive rights that provides the innovative and creative authors with the sole rights to authorize or prohibit the following uses of the copyright work :

*to copy or reproduce all or part of the work (reproduction right); to make new versions of the work (adaptation right); to issue and distribute copies of the work by selling, renting, leasing, or lending them to the public (distribution right and rental and lending right), to enable the work to be performed, shown and played in the public (public performance right); to broadcast the work or include it in a cable programme services (broadcasting and cable rights).*

### Copyright work subject to the copyright registration

Copyright work (版權作品) is a work of any of the following 9 types in which copyright subsists. Copyright does not subsist in a work unless certain statutory requirements with respect to qualification for copyright protection are met.

Copyright does not subsist in a literary, dramatic or musical work unless and until it is recorded, in writing or otherwise.

The copyright work can be categorized into 9 types subject to legal protection, which include :

1 **literary works (文學作品)** – means any work, other than a dramatic or musical work, which is written, spoken or sung, (including books, newspapers, magazines, advertisements);

2 **dramatic works (戲劇作品)** – means a work of dance or mime, (including, plays and operas);

3 **musical works (音樂作品)** – means a work consisting of music, exclusive of any words or action intended to be sung, spoken or performed with the music (including, song lyrics, compositions);

4 **artistic works (藝術作品)** – means a graphic work, photograph, sculpture or collage, irrespective of artistic quality, a work of architecture, a work of artistic craftsmanship (including, paintings, sculptures and drawings);

5 **sound recordings (聲音紀錄)** – means a recording of sounds, a recording of the whole or any part of a literary, dramatic or musical work, from which the sounds may be reproduced, regardless of the medium on which the recording is made or the method by which the sounds are reproduced or produced (including, the musical recordings).

6 **films (影片)** – means a recording on any medium from which a moving image may by any means be produced (including, movies and motion pictures). The sound-track accompanying a film is to be treated as part of the film.

7 **broadcasts (廣播)** – means a transmission by wireless telegraphy of sounds or of visual images and sounds or of representations thereof which :-

*a. is capable of being lawfully received by members of the public in Hong Kong or elsewhere; or*

*b. is transmitted for presentation to members of the public in Hong Kong or elsewhere, (including television programmes, music videos);*

The place from which a broadcast is made is the place where, under the control and responsibility of the person making the broadcast, the programme-carrying signals are introduced into an uninterrupted chain of communication (including, in the case of a satellite transmission, the chain leading to the satellite and down towards the earth).

8 **cable programmes (有線傳播節目)** – means any item included in a cable programme service (有線傳播節目服務) which is a service which consists wholly or mainly in the lawful sending by any person, by means of a telecommunications system (whether run by himself or by any other person), of sounds, visual images, other information:-



- a. for lawful reception, otherwise than by wireless telegraphy, at 2 or more places in Hong Kong or elsewhere, whether they are so sent for simultaneous reception or at different times in response to requests made by different users of the service; or*
- b. for lawful reception, by whatever means, at a place in Hong Kong or elsewhere for the purposes of their being presented there either to members of the public or to any group of persons, and includes such a service that has as a component a multipoint microwave distribution system.*

**9 typographical arrangement of published editions (已發表版本) (the typography right).** Published edition, in the context of copyright, means a published edition of the whole or any part of one or more literary, dramatic or musical works.

The first 4 are named "LDMA" or primary works while the last 5 are known as secondary or derivative works.

Copyright comes into being or subsists automatically where a qualifying person creates a work that is original and tangible in a qualifying country.

### **Definition of a qualifying person or the "author"**

Copyrights include a variety of creative and artistic works – many of which are not literary. The term "author" (作者), according to each type of copyright work, includes artist, composer, film producer and the principal director, broadcaster, cable programme service provider, the publisher, computer software programmer, and writer. From such examples, it is easy to find that the author is the person who creates the work, the person whose skill, labour and effort brings the creative work of originality into existence. Since the copyrights can be granted to the companies, an author can be a corporation.

The basic rule is that the first owner of copyright in a work is the person who created the work, the author. A major exception to the rule is that where a person creates LDMA work or a film in the course of employment, the employer is the first owner of any copyright in the work, subject to an agreement to the contrary.

In principle, the copyrights provide legal protection regarding the original expression of one's ideas. Copyrights are not to protect the ideas themselves. The aim of the legal protection is to prevent another party's ability to profit from one author's original work.

Complication arises where more than one person is involved in the creation of a work. Determining whether a person solely contributes to a work or whether joint authorship or co-authorship (合作作品) exists demands careful examination of the facts in question. Whatever the circumstances are, the valuer should rely on the client legal advisor's opinion in order to determine who is the genuine author of a creative work for the existence of an author. A film is treated as a work of joint authorship unless the producer and the principal director are the same person.

Copyrights allow monopolistic exploitation benefits to the copyright owners. However, there is a general social benefit providing these individual economic benefits. The primary purpose of copyright is not to enrich the authors. It is to advance the science and human knowledge.

The term of copyright protection varies, with the maximum length of period being the life of the author plus 50 years (for the case of Hong Kong), depending the type of the copyright works concerned.

Where a name purporting to be that of the author appeared on copies of the work as published or on the work when it was made, the person whose name appeared is presumed, until the contrary is proved, to be the author of the work;

### **Transferability of copyrights (版權轉移)**

Copyrights can be sold or transferred in whole or in part. The transfer of copyrights is the most common way for authors to commercialize their copyrighted work. For the case of Hong Kong, copyright is transmissible by way of: a. assignment, b. testamentary disposition, or c. operation of law, as personal or moveable property.

The two common forms of copyright transfers are assignments and licenses. When all copyrights are transferred unconditionally, it is generally named as an "assignment". When only some of the rights associated with the copyright are transferred, it is known as a "licence".

An assignment of copyright is not effective unless it is in writing signed by or on behalf of the assignor.

A licence granted by a copyright owner is binding on every successor in title to his interest in the copyright, except a purchaser in good faith for valuable consideration and without notice (actual or constructive) of the licence or a person deriving title from such a purchaser.



An exclusive licence (專用特許) exists when the right being licensed by or on behalf of the copyright owner can only be exercised by the licensee to the exclusion of all other persons. If the license allows others to exercise the same rights being transferred in the license, the license is said to be non-exclusive.

Licensing becomes a popular form of the copyright transfer in Hong Kong. A license can be split into a bundle of legal and economic rights associated with copyrights. That is, any of the exclusive rights that make up a copyright can be sub-divided into smaller bits and then transferred

to one or more parties. For example, comedy books can be marketed in different ways. In addition to the book rights per se, there are audio rights, foreign translation rights, performance rights, and film adaptation rights. Each piece of right can be sold to one or more persons to maximize the author's return. From the above, it is understood that a copyright owner may limit the rights granted to another by : **(1) time; (2) geography; (3) language; or (4) type of use.** Rights can even be split by market segment or channels of distribution (eg. hardcover or paperback rights). However, copyrights are seldom sold, licensed, or transferred in their own totality.

## Are Investors Returning?

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Alvin Lam  
Midland Surveyors Limited

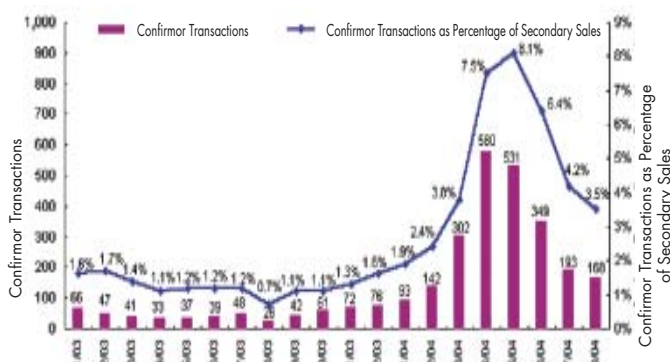
### Introduction

The property market has been experiencing some sort of a roller-coaster ride for a year. September 2003 to April 2004 was a period of high activities and profits, followed by a slowdown for several months. Now, sensing consolidation is almost over and that better prospects lie ahead, investors are trying to test the water again. There are signs of their revitalization.

### Confirmor Activities

The best indicator of investors' activities is the registration of confirmor transactions. From Land Registry records, the percentage of residential confirmor transaction has fallen from the high point of 8.1% in May to 3.5% in August, along with the slowdown in the property market. This is shown in Chart 1.

**Chart 1 Overview of Confirmor Transactions and as a Percentage of Home Sales**

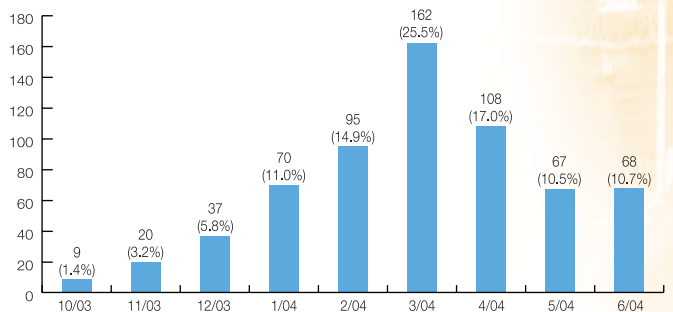


Sources: Land Registry, Midland Realty's Research Department

### Confirmor Profits

Confirmor registrations might have declined, however, those who did invest were able to sell off a considerable portion of their properties. From September 2003 to June 2004, 1,243 investors purchased 2,813 residential units through Midland Realty. Among them, 636 units, or 23%, have subsequently been sold. More significantly, 243 of these units were sold during the "quiet" market in the second quarter of 2004. (See Chart 2).

**Chart 2 Overview of Investors' Property Disposals by Time Line**

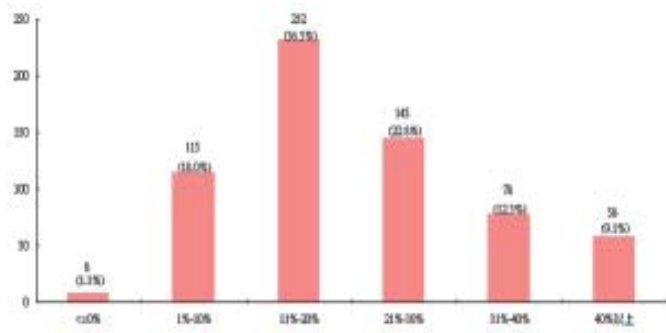


( ) representing investor sales as a percentage of total sales  
N.B.: Purchase transactions are based on Midland Realty's sales records while sales transactions are based on purchase-and-sale records at the Land Registry and Midland Realty's.

Sources: Land Registry and Midland Realty's Research Department

And they have reaped profits. Of the 636 units, 44.2% and 36.5% recorded a profit of 20% or more and 11% to 20% on the books respectively. (See Chart 3 below). Through these sales, investors have cashed in a massive HK\$ 1.8 billion, with a book profit of HK\$ 297 million. Boosted by a considerable gain, these sums will likely return to property investment again.

**Chart 3 Profit on the Book for Investment Properties that Changed Hand during September 2003 – June 2004**



( ) representing a percentage of the total sales volume  
 N.B.: Purchase transactions are based on Midland Realty's sales records while sales transactions are based on purchase-and-sale records at the Land Registry and Midland Realty's.  
 Sources: Land Registry and Midland Realty's Research Department

**Prospects**

More significantly, 77.4% of these confirmor properties are still held by the investors. This shows two aspects. First. Investors have the financial resources to hold these units and are not inclined to panic sale. Second. More importantly, they see a rosy picture ahead, or at least they think they can sell better in future.

Their views have been reinforced by a series of favourable measures adopted recently. Now rent control on residential properties has run its course, fuelling a strong stimulus to the residential investment market. In terms of house purchase, a total of 95% mortgage finance now offered can surely boost the second hand market directly. With

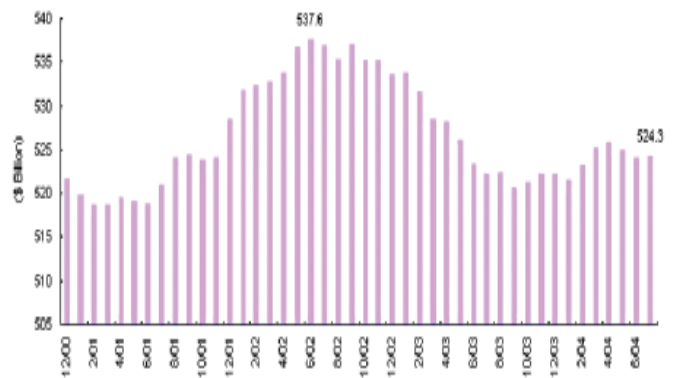
the economy improving and unemployment rate reducing, investors' confidence can only increase.

**Mortgage Loans**

More than that. According to the Hong Kong Monetary Authority, outstanding mortgage loans have remained low despite an increase in housing activities. The current figure stands at HK\$537.6 billion, lower than that in June 2002. (See Chart 4 below). This indicates that not all purchasers need bank loans. Their financial strength is strong.

The media reports do not cover a deeper picture. From past records, investment in first hand and second hand flats usually amounted to some 35% and 65% respectively. It is likely that the second hand market will achieve higher activities when investors return.

**Chart 4 Overview of Outstanding Mortgage Loans**



Sources: Hong Kong Monetary Authority

**Global Claims**

**Disruption** claims are notoriously difficult to prove and evaluate with precise apportionment to various causes. This is because there are often competing causes of disruption e.g. late information, extra work, piecemeal access and delay mitigation all occurring at the same time. Consequently, it is not uncommon for contractors to have no alternative but to roll together the financial effects of such claims when it becomes impossible to identify separately the effects of multiple causes.



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**Global Claims**

The terminology often used to describe a claim advanced as a rolled-up composite sum is a **global** claim. Put simply, this is where a contractor makes one claim for additional payment which is attributed to **all** the alleged causes of disruption as opposed to making several claims where additional payments are linked to **individual** causes of disruption. A Contractor may make several **global** claims on a project which goes awry and each claim will focus upon a particular aspect which has been disrupted by multiple causes.

In **Crosby & Son v Portland UDC** it was held that where there was a complex interaction of events which rendered it difficult, or even impossible, to evaluate the effects of the individual disruptive events, it is permissible to advance a claim calculated on a **global** basis.

### Total Cost Claims

There is a difference between a **global** claim which in certain circumstances is permissible and a **total cost** claim which in most circumstances is not permissible. A **total cost** claim is where the claimant declares that the project, or a part of the project cost it \$X, its income was \$Y, and the claim is valued at  $\$X - \$Y = \$Z$ .

Bramble and Callaghan (an authoritative legal / construction text book in the USA) provides the following comments on **total cost** claims:–

*“The total cost method is suspect because it assumes that the original contract price was proper and profitable and that any additional costs must have arisen because of the delay or interference that were the responsibility of the defendant, rather than because of a contractor-caused cost overrun on the contract price. To rely completely on a total cost approach to damages can be risky as it is usually unsuccessful. Courts and boards have allowed it only in exceptional cases, and its use alone significantly reduces the possibility of settlement.”*

Bramble and Callaghan said that a **total cost** approach may be used when the claimant could demonstrate that 5 conditions exist:–

- 1 *There is no other way of estimating damages*
- 2 *No underbid or errors in the bid took place*
- 3 *Inefficiency by the party submitting the claim can be distinguished from the costs of delay due to improper acts of others*
- 4 *The actual costs incurred by the contractor are reasonable*
- 5 *The user of the total cost method has used a reasonable cost accounting system to accumulate its job costs*

Therefore, any claimant who proceeds with a **total cost** claim takes considerable risk of failure.

**Global** claims and **total cost** claims can be distinguished because although both claims are based upon the effects of multiple causes of disruption, the **global** claim is advanced on the basis that the cost incurred is analysed

into as many subheadings as possible and the income (or baseline price) is further supported by analysis, e.g. the measured mile or data from previous work experience.

### Processing Global Claims

Difficulties with **global** claims occur when part of the **global** claim includes disruptive events which are not the liability of the respondent. Such claims are risky undertakings as the claim might fail in its entirety if the respondent can show that some of the additional payments claimed were due to the claimant’s own culpability, or neutral non-compensable events under the contract (e.g. inclement weather). This is why the term **all or nothing** is sometimes used when referring to **global** claims.

However, this strict view might deny a claimant the remedy of recovering loss or damages which were plainly due to the respondent’s default simply because the claimant cannot demonstrate that the whole of the loss or damages was the responsibility of the respondent.

The matter was addressed recently by the Scottish Court of Appeal in the case of **John Doyle Construction Limited Laing Management (Scotland) Limited (11 June 2004)**.

John Doyle was a works package contractor under contract to Laing, the management contractor, to construct certain superstructure works for the headquarters of the Scottish Widows’ Fund and Life Assurance Society. The works package finished 22 weeks late and Doyle claimed loss and expense as a result of the delays and disruption caused to its works by compensable events. Laing, among other things, pointed out that some of the delay and disruption was caused by snow, a non-compensable event, for which it was not liable. Consequently, Laing argued that as the claim was advanced on a **global** basis, and as it was not fully liable for all the events, the claim could not be sustained and should be struck-out.

The Scottish Court of Appeal acknowledged that **global** claims were a risky enterprise. Proof that a non-compensable event played a material part in causing the loss, combined with failure to prove that the event was the respondent’s liability, would undermine the claim. Furthermore, the respondent may have been able to prove that additional non-compensable events also contributed to the loss.

However, the Scottish Court of Appeal did not agree with Laing’s application to strike out the claim and went on to offer three qualifications with regard to **global** claims.

- 1 It might be possible to identify casual links, between particular events for which the respondent was liable and individual items of loss. That may be possible where it could be established that a group of events for which the respondent was responsible were inextricably linked with a group of heads of loss, provided that the loss was not caused by any other significant causes.
- 2 The question of causation must be treated by the application of common sense to the logical principles of causation. In this connection, it is frequently possible to say that an item of loss has been caused by a particular event notwithstanding that other events played a part in its occurrence. In such cases, an event or events for which the respondent was liable could be described as the dominant cause of loss, that would be sufficient to establish liability, notwithstanding the existence of lesser, non-compensable causes that were to some degree concurrent.
- 3 If it cannot be said that the events for which the respondent was responsible were the dominant cause

of the total loss, it may be possible to apportion the total loss between the causes for which the respondent was responsible and other non-compensable causes according to their relative significance. Any such apportionment must be based on the evidence and carried out on a basis that was reasonable in all the circumstances. Where the concurrent cause was the claimant's responsibility, the court opined that it may be appropriate to deny the claimant any recovery for the period of delay during which he was in default.

### Conclusions

In BERA's opinion, the judgment in John Doyle is a welcome acknowledgement of the reality of many situations that develop on construction contracts where contractors and subcontractors are rarely found to be "lily white" when their actions are put under the microscope in a forensic delay analysis. Construction sites are not controlled environments and the effects of disruptive events cannot always be easily segregated and quantified. The Scottish courts have cautiously accepted this point.

## Clever Argument on Damages – Defeated !

**Damages** on construction contracts are an emotive subject, and contractors are forever endeavouring to come up with clever arguments that aim to defeat an employer's claim for damages, in the event that they are late completing the works.

A common argument raised is that the delay in completion has actually benefited the Employer rather than causing him to lose money. For example consider a project to construct a block of apartments. The project should have been completed in January but is completed six months late in June. If the property market is rising the Contractor may argue that by finishing late the Employer is able to sell the apartments at a higher price than he would have done had the works been completed in January and that the additional money that the Employer makes on the sale should either completely extinguish or at the very least reduce the additional costs that the Employer actually incurs due to the late completion.



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On the face of things the argument seems reasonable but is it valid?

With regard to liquidated damages the answer is clear that such an argument is not valid. This point was clarified in the case of **Clydebank Engineering and Shipbuilding v Castaneda (1905)**. The facts of this case are interesting. Clydebank was to build four torpedo boats for the Spanish Navy. The contract provided that the boats should have been delivered on specific dates in 1897, but that in the event of late delivery liquidated damages would be charged at the rate of £ 500 per week per vessel.

The boats were all provided significantly late and were not delivered until 1899. The Spanish Navy levied liquidated damages. Clydebank's defence was that by delivering the vessels late they had in fact done the Spanish Navy a favour and had saved them money because in the intervening period, almost the entire Spanish Naval fleet had been sunk by the Americans. Clydebank



argued therefore that had they delivered the vessels on time, the four new torpedo boats would have suffered the same fate, and would have ended up at the bottom of the Atlantic Ocean.

The matter went as far as the House of Lords, but the court was singularly unimpressed by Clydebank's argument. The judge said:

*"Then there comes another argument which, to my mind, is more startling still: the vessel was to be delivered at such and such a time; it was not delivered, but the fleet the Spanish Government had was sent out at such time and the greater part of it was sunk, and, says the learned counsel, "If we had kept our contract and delivered these vessels they would have shared the fate of the other vessels belonging to the Spanish Government and therefore in fact you have got your ships now, whereas if we had kept our contract they would have been at the bottom of the Atlantic". My Lords I confess after some experience I do not think I have ever heard such an argument of that sort before and I do not think I shall often hear it again. Nothing could be more absurd a contention.*

Of course much of the reasoning for the dismissal of Clydebank's claim was due to the fact that the sum claimed was for liquidated damages, and this case and many subsequent to it have confirmed the principle that liquidated damages are recoverable even if the Employer subsequently suffers no damage or a lesser damages than the genuinely pre-estimated figure.

But would such a principle apply to general damages? Surely if general damages are assessed at the time the damage is incurred then this should take account of all matters known at that time, including any positive financial effects that the Employer may derive from the late completion?

Well this matter has been examined recently by the courts in the interesting case of **Earl's Terrace Properties Nilsson Design and Others (2004) 94 ConLR 118**, and somewhat surprisingly the courts came to the view that the positive effects that the Employer derived from late completion did not need to be taken into account in assessing the damages for late completion.

The case concerned the development of a row of grade II listed Georgina houses in Kensington in London. The works should have been completed by 30<sup>th</sup> June 1998 but were not finished until 30<sup>th</sup> September 1999, 15

months late. The Employer, Earl's Terrace Properties claimed entitlement to damages in respect of the late completion. There were no liquidated damages in the contract and so the entitlement was to general damages, i.e. the actual damages incurred, assessed at the time of the breach.

The amount claimed was largely for interest in respect of the sums that the Employer had invested in the project which it claimed had been held up in the project due to the delay. However the defendant argued that sums claimed required adjustment as the Employer must:

*"..give credit against such sum for any corresponding benefit it has gained by reason of the delay in the completion and sale of the house in Earl's Terrace. In particular ETPL must give credit against any such sum for any increase that occurred in the [value] of the "delayed sale" houses during that period of delay."*

The court did not accept this argument and held that the rise in the sale price of the houses if such occurred need not be taken into account in assessing ETPL's recoverable damages because the sale of the houses was unconnected with the original breaches of contract.

The judge considered that the loss that a claimant may recover from any breach of contract is the net loss resulting from such breach but the balancing of gains and losses to arrive at that net loss must only take into account transactions that were directly linked to the breach.

However he considered that movement in property prices are not linked to the development of the property or to the delay in completion or sale of the property resulting from the defendant's breach, because such movement in price may be the result simply of inflationary trends, or other local, unusual or specific causes such as planning permissions or the like.

In arriving at this decision the judge also considered the position if there had been a drop in property prices. In such a scenario contractors will obviously argue that general damages should exclude drop in property values on the ground that such would be too remote and not within contemplation of the parties at the time of contract. The judge considered that this logic should work both ways leading to the same conclusion with increased in property values.

Whilst the judge commented that there may be situations

where an increase in property prices may be linked directly to the breach complained of and thus have to be taken into account, in the general situation such increases

would not be sufficiently linked to the breach for them to have to be taken into account in the assessment of general damages for delay in completion.

## 加強 JCT 合同體系在國內更有效地通行 合同管理及成本控制的建議



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經過在上海工作兩年多及期間曾到中國其它城市如北京及天津為當地發展商的不同部門進行培訓的體會，採用JCT合同體系作為建築項目的合同管理及成本控制，確是比國內以往通常採用定額招標及定標較佔優勢。但如何能使JCT合同體系更合乎國情，使其發展最佳優點，避免承包商及發展商不必要的糾紛，使建築項目在工期、成本及總體質量方面得到控制更是我們關心的問題。

各處鄉村各處例，正如麥當勞餐廳在非洲家會在漢堡包內加入具有當地特色的醬汁；JCT合同體系源於英國，現在要在國內普遍使用，必須考慮如何使JCT合同體系更本地化，使其既能符合本地人口味，但又不失其基本理念及原則；經過與國內的發展商、監理工程師及承包商的交流，建議從以下幾點着手：

### 單價分析表

JCT合同體系的主要特點是以總價包干合同形式，合同金額由工程量清單中的數量、綜合單價及複價組成。在合同各款中規定工程變更的費用估值主要有：

若施工條件及性質與工程清單內的工作項目相同的，則應以工程量清單內單價計算；

若工作在類似性質或類似條件下施工時，則應盡可能在合理範圍內以工程量清單的單價作為該項工作的價格換算基礎，否則以公平的估價計算。

若工程變更出現在上述第(1)種情況下，費用估值非常明確，雙方可較快達成協議。若工程變更出現在上述第(2)種情況下，費用估值就會比較複雜，導致結算時間較長。

國內承包商常常覺得工程量清單中的單價既然是綜合單價，那麼如何以工程量清單中的單價作為價格換算基礎，來估值工程變更與合同單價類似性質或在類似條件下施工的工程。因此，碰到這樣的變更，承包商一般要求重新報價，完全背離合同單價。

為了解決上述問題，我建議在招標文件中要求投標單位提供

主要材料（如鋼筋、混凝土、模板及砌磚等）綜合單價分析表，即把綜合單價的材料、人工、輔材、機器、管理、利潤及稅金分別列明。這樣如果原招標圖紙的混凝土以等級C30改為等級C40，那麼估值C40的單價便可以C30的單價分析表作基礎計算得出；混凝土等級更改牽涉材料價的變化，其余如人工、輔材、機器及管理、利潤及稅金等費率則不需調整。要求投標單位提交單價分析表的另一好處是方便分析及評價投標位所報的綜合單價組成的合理性，因此應避免投標價位的單價分析表的組成五花八門，應在招標文件中提供樣本，提供共同平台，方便比較。

### 明確變更的計價方式

承包商經常質疑的另一個問題是何為公平的估價計算，他們常常認為合同文件沒有明確的事情，其後由任何一方或第三方決定都存在不公平的情況，因此，我建議在招標文件中明確指出若工程變更完全無法套用合同單價時的計價方式，具體如下：

土建及機電的主材價參照工程變更當月由上海市定額總站頒布的市場頒布的市場指導價為準，指導價以外的主材料價按市場價雙方協商，並得到業主的認可。

機電安裝套用“九三定額”相應子目，計取費率後，稅前下浮%作為計價依據。

土建安裝套用“九三定額”相應子目，計取費率後，稅前下浮%作為計價依據。

### 可調整材料價

在JCT合同體系中，如施工工期不會特別長的時候，合同單價一般為包干形式，不會因人工、材料、機械、運輸費用的漲跌而調整。這樣，市場價格升幅的風險將轉嫁于承包商，但在國內建築材料價格大起大落的情況下，上述的安排未必對發展商完全有利。根據《上海建設工程標準與造價信息》提供的所有鋼材價格走勢顯示，2004年3月份的鋼筋材料價約人民幣4300元/噸，但在2004年6月份為人民幣3100

元/噸，跌幅近28%，若項目在3月份招標，各投標位按市場價投標報價，但工程可能在6月份才正式開工，那麼，發展商將蒙受重大損失，而承包商則坐享厚利。

若出現相反的情況，而承包商未能適當地預測材料的升幅，同樣，承包商會承受沉重的成本負擔，結果可能影響工程整體質量或承包商可能想盡辦法向發展商提出各種索賠，以補償其高昂的材料成本。

為了更平均分配雙方承受材料供應價格漲跌的風險，建議將部分材料如鋼筋及混凝土材料價為浮動價，但承包商必須承擔或享受按規定的增幅或跌幅，其計算方法如右（只供參考）。

承包商與發展商將在定標前確定當時的鋼筋和商品混凝土市場供應價（“基礎價”）作為計算基礎。工程發展後，在各節點期間，如果當地政府有關工程造價或當地定額主管部門發報的市場供應價（說明#1）在此節點施工階段的平均價（“現行價”）比基礎價增減在10%以內時（包括10%），則增減的幅度由承包商承擔。如增加的幅度超過10%（“差價”），10%以上的增幅（“調整金額”）由雇主承擔，中標合同金額按此計算調整；如跌幅超過10%時，10%以外的部分（“調整金額”）由發展商得益並以合同價格內扣除。

隨着中國加入WTO及與港澳簽訂更緊密經貿安排，市場逐漸對外開放，尤其是銀行及保險業，若建築項目采用世界聞名的合同體系如JCT或FIDIC，境外銀行及保險公司會比較有信心提供相關服務，繼而減低費用。因此，國內建築項目采用國際合同體系已成越勢。但如何使這些國際合同體系能在

國內有效地發揮其特點，除上述建議外，其餘則有待業內人士不斷探索及研究。



**具體調整方法如下：**

- (a) 調整時間：  
調整金額按以下三個節點分三次調整：  
(i) 結構層施工至±0.00  
(ii) 結構層施工至50%  
(iii) 結構封頂
- (b) “差價”計算方法：  
調增差價=現行價(\*) - 基礎價×(1+10%)  
調減差價=現行價(\*) - 基礎價×(1-10%)

$\Sigma$  在每個節點階段每月政府發布供應價

$$(*) \text{ 現行價} = \frac{\Sigma \text{ 在每個節點階段每月政府發布供應價}}{\text{每個節點段施工總月數}}$$

- (c) “調整數量”的計算方法：  
調整數量 = 調整節點到達時承包商對  
“可調整材料”在節點期間的實際已完成的靜數量
- (d) “調整金額”的計算方法：  
調整金額 = “調整數量” × “差價”

說明#1) 指上海市建設工程標準定額管理總站發布的《上海建設工程標準與造價信息》中的建築材料市場指導價值的合計單價。

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