



共同或聯合承攬

Understanding Joint Venture

高銘堂 MT Kao / 財團法人中興工程顧問社 執行長 President, Sinotech Engineering Consultant, Inc.

公共工程招標的歷史背景及其演進

The Historical Background and Its Evolution, Public Works Tender in Taiwan

政府公共工程招標，原本「設計」與「施工」、「本業（土木）」與「異業（機電）」，必須分開，且限制廠商共同投標。其歷史背景起源於早年國家經費有限，大型基礎建設所需要的資金必須靠外援或貸款，技術要向先進國家學習。國內廠商能力有限，大家都希望按圖施工，平行包商間的協調，由業主單位來做，甚至連水泥、鋼筋等大宗材料都由政府來供應，以減少廠商的資金負擔。

There were days construction resource scarce and the companies small and weak in Taiwan; the government decreed that “design” should be separated from “construction”, “civil” from “electrical/mechanical”, for local public works tenders. Build according to the drawing provided by the consultants through the owner was the norm, and the contractors welcome the owners to supply bulk material like cement and rebar to relieve financial overburden.

隨著國家經濟持續發展，工程建設變得龐大複雜，社會環境也不再像從前一樣單純，政府單位面對日趨繁瑣、嚴苛的開發與採購法規，必須重新思考工程招標辦法，就契約範圍、競爭模式、風險分擔比例等，依照現實需求做合理調整。也因此在近二、三十年公共工程招標，出現了異質結合、共同投標、統包、BOT，或各種 PPP（Public Private Partnership）等承攬方式。

Public works then become sizable and sophisticated, concerned authorities busy to untie knotty regulations to balance development initiated by government have to revise the tenders for extended premise, varied evaluation

modes and risk sharing schemes to smooth projects execution in a society presumed to build Tower of Babel. So, only in recent decades the tender laws are changed for more options such as joint tendering (by different business line, or the same line), turnkey, BOT, or various kind of PPP.

但緊緊盯住政府建設的社會大眾卻認為，脫離非傳統最低標的招標方式，都可能存在弊端，所以會放大審視採購過程與結果。任何改變，只要造成局部缺失，就要追究。這種獵巫壓力的存在，會造成業主單位對於引進國外先進技術，或在設計與施工上協助國內工程業，感到猶豫。所謂改革難，創新危險。不能負任何誤失責任的業主單位，終究還是不會讓工程採購與管理制度，向前走得太快。

However, a mistrustful public, preoccupied with the populist idea that the lowest tender should win, will not be happy to see anyone awarded the contract through evaluation process stray from the conventional way. As long as there would be witch hunts following misses in public works, the officials will become hesitate to try new ideas, including to import advanced technologies from the international firms for foreign-local venture. It's the reason why the change in government procurement law and public work management system is slow.

「共同或聯合承攬」廠商實務操作時要解決的難題

The Difficulties that a Joint Venture May Have Encountered

我們可先定義「共同承攬」是異業廠商的結合，「聯合承攬」則是同業廠商。而不論「共同」或「聯合」（以下統稱為「Joint Venture」），廠商為單一工程投標與執行的結合，在國際上都是常見的商業行為。但

在台灣，人們會先從「聯合行為」的角度，來檢視廠商的結合，會不會是壟斷、圍標？所以在招標時，業主單位會很小心的去限制參加者的家數、規範資格，並要投標者簽署、遵守，載有若干制式化規定的共同投標協議書，做為他們已經盡到當所注意，不會容許與廠商有不法連結的證明。

According to the procurement laws in Taiwan, the Joint Venture means the Joint Tendering by suppliers (or contractors) of the same line of business or those of the different line. While it remains ordinary commercial decisions for international firms, the authorities in Taiwan are careful and only to allow joint tendering before he's sure there won't be any concerted action taking place in the industry. Usually the tenderers are requested to sign a Joint Tendering Agreement with a given form to reaffirm the authorities that they will abide by the laws.

共同投標協議書所規定的這些要廠商簽署、遵守的簡明條款，主要是去規範「Joint Venture」的大框架，如承商的基本資格、彼此的分工、承攬的比例等。至若執行階段對「Joint Venture」的管理，則大致回歸到契約本身。與針對單獨廠商的傳統工程契約相比，「Joint Venture」廠商除了要負更多的介面協調責任外，並沒有什麼不一樣。但是廠商在漫長的履約過程中可能面對什麼樣的風險或問題，在投標時就必須要看明白，更要了解將來「Joint Venture」遇到問題後，業主依「工程契約」或「採購法」冷硬的規定裁決事項，相較於傳統工程會不會更嚴苛？

The given clauses in the Joint Tendering Agreement direct the tenderers to fill in their qualification, scope of undertakings and proportionate share in the project, which, the owners considered as fundamental. Anything that the tenderers wish to explain for their approach will be regarded as deviation and the tender rejected. Questions made to the Owner at or post the tender will be answered with interpretation in conformity with the "Procurement Law" and the "Contract" (between the Owner and the JV). Such a practice suggest that the Joint Venture have to assess all the risks implied in the future during performance within short tender period. Also, it is noted that the decimation of interfaces and uncertainties between the partners means the Joint Venture always will have more problems in execution compared to the traditional contracts administered by the Engineer or the Owner themselves.

採行「Joint Venture」履約方式的工程，通常會是較大、較複雜，本身就有較多的問題。一般人誤會這或與「Joint Venture」有關，其實並不蘊涵因果關係

(correlated but not causation)，所以我們不必去討論。真正因為「Joint Venture」的型態，廠商可能遭遇的問題大致有兩類：

Usually, projects eligible to allow the Joint Tendering must be big and complicated, and by nature tend to have more problems. People may have impression that Joint Venture will bring in more problem is not true, there may be correlation but not causal. So, it's not necessary for the owner and the contractors to avoid JV. Two categories of problems are often seen in a Joint Venture:

- (1) 兩家（以上）制度、經營理念不一樣的公司，因為要完成一個大工程所產生的合作問題，包括效率的損失等。
- (1) companies of different systems and ideas have to work out a grand project, and the problems of efficiency loss emerged and must be managed.
- (2) 工程本身或市場形勢發生變更，個別的「Joint Venture」成員，無法或不願意承擔原來分擔的風險。
- (2) the project, the market or the members themselves change, the result can be that one or several of the Joint Venture member(s) won't bear the consequence stemmed from the risks appeared.

「Joint Venture」的法律地位，應適用於台灣民法的第 667 條至第 699 條「合夥」等規定。要注意的是它只以「短期」的方式存在。如果希望長期運作，就是要登記公司。就營造業來說，必須取得特許，實績也要重新計算。換句話說，登記公司的業務承攬與執行，法律上與原公司無關；而又因為成員廠商參與的是個別工程，與其他成員的結合也是臨時的，卻要針對工程與其他成員一起，對業主共負永久責任。所以實務上也要注意某種程度的切割：法律與契約責任、稅負、資產處理、JV 人員聘僱法律義務、銀行帳戶、執照、准證、智慧財產權，以及 JV 協定終結前無法避免的相互保證等，也就是前面所談到合作與風險問題的處理。相較於傳統工程契約，這些新問題更需要智慧與經驗來協助解決。

The legal status of Joint Venture is mentioned in clause 667 to 699, Civil Code. But in Taiwan, Joint Venture is permitted to exist on temporary basis. For construction industry the effort to register it as a new company has no meaning as license to do construction work is difficult to apply without any completion records. The contractual requirement to accept Several and Joint liability toward the owner despite how small scope of undertaking will be will haunt the members for participation. The same reason for the minor partner that it has to clear carefully the responsibility in the Joint Venture

for big project: contract, tax, asset, employment, bank account, license, intellectual property right etc., particularly for people accustomed to conventional single responsibility contract.

「共同或聯合承攬」對公共工程推動有正面效果

The Benefits Brought by Allowing JV Formation in the Tender

容許廠商組成「Joint Venture」方式承攬工程，業主單位也蒙受利益，因為有完整的工程團隊接手，他們可以減輕介面管理工作，等同間接減低工程成本、增加預算。當今工程發包常遇到困難，若允許廠商自行選擇團隊成員，可以提升發包成功率，對工程推動大有助益。所以機關不能因這種履約方式、契約規定較傳統發包來得繁瑣，而不去考慮。尤其有些工作，因國際廠商認為土洋合作會增添許多溝通工作，技術轉移更對他們無益，機關就遷就他們，只在招標時做一些鋸箭似的規定，減省一時工作，其實是損及政府發展產業的更長遠構想。

If the owner accepts companies of the same or different business lines to form Joint Venture for tendering and contracting, work load and cost for interfaces coordination can be relieved. The liberty to allow companies to select partners further lower down the possibility that one of them may not perform the works as people know each other will form a team now. Sometimes international companies complain to the owners that in order to include local partners for technology transfer they need to manage the inefficiency arising out of Sisyphus communication, it can be convincing that the owner will listen and consider also to save additional travail required for Joint Venture tendering so as to omit the policy to allow foreign-local Joint venture in the tender. Regrettably it will hurt the opportunity that an industry will undergo a metamorphosis.

所以一個有效的「Joint Venture」管理機制，應該可以嚴格、明確的要求承攬團隊，在既定的框架下實踐承諾（至少是投標時所做的），讓業主可以隨時了解契約的執行是否能達成實體目標，並符合政府栽培本國人才、發展產業等招標原意。這些管理機制要有效運作，除了要與實質罰則緊密連結，也要允許誠實的廠商遭遇突發困難時，有彈性與空間來解決問題。

Joint Venture can be an effective regime to supervise foreign and local cooperation allowing the owner to moni-

tor the progress and understand whether or not the natives will be trained properly conforming to the government policy budded in the tender stage. Mechanism that combine severe penalty and the outcome will be useful; but flexibility shall be given to help the Joint Venture to solve the problem when it's proven that they're sincere to advance the technology transfer.

要更進一步探討「Joint Venture」組織的特質，以及它進入公共工程究竟會發生什麼作用，可以先了解個別廠商參加「Joint Venture」有什麼好處？首先異業廠商之間的合作，如前所說，可以減輕業主介面管理整合工作、降低工程風險。如果團隊是由廠商主動組成，大家可以找制度、經營理念比較相近的公司，以避免未來的糾紛與效率損失；而且因為彼此熟悉，對另一成員承擔風險能力的評估會比較實在。反之，如果業主就各異業分別招標，廠商會更加擔心平行承攬施作不良的牽累，投標時需要將此機會成本堆疊上去。

It will be useful to explore the structure and operation styles of a Joint Venture for the benefit they may have brought to public works; and it will be more evident to know the reasons why companies want to join the team as a member for various reasons. For Joint Venture allowing contractors from different business line to tender, the liberty for companies to select partners will be advantageous to the owner to avoid efficiency loss and unnecessary dispute; meaning tremendous price down.

再其次，就同業廠商的合作，許多業主單位受傳統觀念或社會大眾的成見影響，總認為此舉減少競爭者數目，徒然降低競爭態勢，沒有必要。但對一般的承攬而言，卻相信與同業廠商共同承攬對他們有利：藉另一成員分擔承攬金額，可降低在單一工程資金與風險的負擔、學習其他成員可能較佳之技術與管理能力、擴展採購與發包接觸對象，未來得以增加本身競爭力；或者本身實績不夠時，藉聯合承攬以取得投標資格；甚或充份運用閒置資源等。

For Joint Venture consist of contractors from the same business line, many owners become meticulous thinking of reducing of the number of qualified tenderers if some of them permitted to group together. But it's not a justifiable decision because many of the companies prefer to: share both the capital and risk with others, learn from partners to improve their technical and managerial skill, know different vendors/subcontractors in the market, fortified itself with other's completion records, and make additional usage of resources that will otherwise going idle.

但就業主單位而言，開放「共同或聯合承攬」的直接效益，如減低工程成本，社會大眾不一定從標價上就看得出來而給予正面評價，反而會指謫這是把借牌漂白，所以有時業主單位會比較保守。而就成本與進度而言，除非工程夠大，可以抵消「Joint Venture」組織通常會有的成員合作不易，效率不彰等問題，業主單位總希望面對的是單一窗口。所以數年前有不只一家業主單位，曾因 Joint Venture 成員不願蓋章計價，實際已支付款項的廠商領不到錢，並且無法辦理驗收，造成困擾，所以幾年間不再允許廠商共同投標。

The owners feel that the watchful public may not appreciate the cost saving harvested from the liberalization allowing contractors associated with each other as it won't be shown on the tender opening price record, and instead, they fear doubt will be casted against any relaxation of qualification through joint tendering. There had been episodes justifying the banning of joint tendering as some of the Joint venture members intentionally sluggish the application of certificates halting the contractual process. The annoyed owner shut the door for collaboration for years and still on vigilance.

台灣工程市場過度切割，營建業規模與能力變得有限，許多大型工程必須靠廠商協力合作、共同承擔，才能完成；有些工程又需引進先進施工技術或特殊工程設備，與國外公司組成「Joint Venture」承攬工程，共享施工資源，的確是最方便可行的辦法。或許有人擔心國際廠商意見太多，不易管理，寧願他們以本國廠商次層承攬商身分承擔工作責任，其實這反而會製造更多問題。只要業主單位能肯定自己的裁量權，不去迴避國際廠商一直拋出來的問題，積極溝通，採購目標，無論是直接或間接，一定可以圓滿達成。

The construction market in Taiwan is highly fragmented and the contractors aren't big and strong; so for sizable projects the collaboration between the companies is essential. Forming Joint Venture with foreign companies sharing equipment, technologies and talents shall be the easiest and cheapest way. Many owners would rather ask the local contractor to sign the main contract and request the foreign company to be the second-tier contractor. The arrangement is costly and induce more communication problem, but, a determined owner can solve with calm discretion.

「Joint Venture」的型態 — 「聯營組織」(Consortium)

Type of “Joint Venture” — Consortium

異業廠商為某特定工程結合，而參加投標，得標後執行契約，我們稱之為「聯營組織」(Consortium)，採用這種型態是因成員廠商只能，且只願意，負責自己專業與營業範圍的工作。把成員廠商提供的工作或服務加在一起，才能回應業主對招標工程的整體需求。舉例來說，如統包電廠中供應發電機、鍋爐或土建基礎的廠商各不相同，結合在一起，組成 Consortium，才能參加電廠投標。

We may name it as Consortium if the contractors of different business line bind themselves together for the performance of particular project. The members in such a formation will be and only can offer the works/service according to their expertise and usual business. They form Consortium to tender because the owner's want to have offer “complete”, for example, a total power plant consisting of turbine generator, boiler, facilities and civil foundation suppliers.

雖然業主會要求 Consortium 的成員廠商必須個別 (severally) 與共同 (jointly) 對他負責 (liable)，但實務上，工程所有的工作都為成員廠商所「認養」，只剩下很少量有共同性與一般性的工作，如保險、保證、工務整合 (進度表、發票)、代理費用、風險準備金等，會歸為「共同項目」，由成員按其在直接工作上的「承攬比率」來分擔；也有為了希望工作劃分更簡單、明確，這些約占全部工程金額兩、三個百分點的共同項目工作，在某些 Consortium，會由個別廠商，或代表廠商來承擔。

Though the tender will request all the Consortium member to bear Several and Joint liability toward the owner, each party will divide the works apparent in the total project. Only items have common characteristics and not involve big money (normally, 2 or 3 percent of contract amount) will remain as “common items”, of which, the cost will be shared by the members according to share of participation, assigned to the Leader of the Consortium, or individual member.

Consortium 組合各成員的工作責任範圍應該明白，可以各自負責成敗、盈虧；理論上任何成員不必為其他成員的錯誤，或欠佳的運氣去賠錢；但它還是有介面與協調問題。不只是在實體工作的供應範圍，在施

作的空間與時間上，從設計、供應、施工到試車，彼此要有承諾，特別是現代的工程都是急迫且複雜，每一成員都有可能在壓力下犯錯，必須支付受影響後的趕工費用，負擔整體工程的逾期違約金。另外因無法證明某些延遲是某廠商的責任，在無法釐清實況情形下，有時候自認為無辜的廠商，須按「承攬比率」來分擔整體工程的逾期違約金。所以 Consortium 的運作實際上並不容易，成員間協調不佳，常轉為法律爭議。這對東方人來說，會很不習慣。

In theory, the Consortium member wouldn't be responsible for loss and profit resulted from the mistake, bad luck and poor performance by other members. But in practice, there will be interfaces in the scope of supply between the members. Work sequence and accessibility will always be the subject of argument, and money required for acceleration of disturbed work and additional interface management shall be paid by the faulting party. However, the responsibility of delay, if not found and corroborated properly, costs and ultimately penalties imposed by the owner should be distributed according to the Share of Participation. Disputes among the members need to be addressed from time to time.

另一種情形是某些工作項目，可能不屬於各成員廠商的專業與營業範圍，為了要有投標機會，只好找第三者來擔當，但因這個項目的金額不一定大，或這廠商有類似寡斷等優勢地位，不願意擔任成員廠商。但因這工作或服務是整體工程所不可或缺，如特殊材料、設備，或施工機隊等，Consortium 只好同意列為「共同項目」，因採購、發包，而產生的成本與變數，則由全體成員來承擔。

In practice, sometimes there will be work items for which the undertaking requiring a party other than the members of the Consortium, it can be special material, facilities, or construction fleet belonged to an "influential" party, etc. And it will become one of the "common items" to the Consortium for many reasons, among them, that third party may have privileges or simply feel the risk is enormous. So, the Consortium will have to take the risk and place the works as common item.

也有一種可能，大廠商考慮到小廠商因遲延或其他過失，必須賠償的趕工費用，或負擔整體逾期違約金會很高，甚至超出小廠商在工程的承攬金額。在權衡輕重後，認為小廠商犯錯的機率不大，不必為此而失掉組成 Consortium，喪失承接大工程的機會，在合作協定中會同意減少小廠商的賠償風險。比如說，以

承攬金額的百分之十為個別廠商賠償的上限，超出的部分再由全體廠商按工程「承攬比率」分擔，這是比較明智的做法。因為以列為「共同項目」及發包的方式去找廠商，遲延或做不好的風險可能還在，而且大多數情況下，業主單位可能招標時即要求這部分要由有機具、有實績，並願負共同責任的包商來參加。

Another possibility the Consortium must have provisional sums for the items which bear the same nature of "common", is the situation that a company who has to undertake works of which the total value is small related to the total contract price. But when this small partner is liable for the delay causing related party acceleration cost or/and having to undertake the total penalty according to the logic, the total indemnified amount could be unproportioned to their undertakings. An arrangement can be made for the members to bear the cost beyond the initial amount, say 20% of the smaller partner's undertaking, according to the Share of Participation. It can be fair to the small partner and will attract them to perform specialty work; and the Consortium can tender and contractors with big stake in winning the tender may proceed to compete.

所以廠商要組成 Consortium，或受邀加入一個組合時，就要去了解其他成員廠商的規模、在未來標案擔任的角色、競爭力與協調能力等。因為成員廠商的專業與營業範圍不一樣，取代性很低；在台灣又要考慮具同樣資格，但曾經參加過競標的廠商依法又不會被核准，選擇很有限。

Considering the stipulation above, when a company want to organize a Consortium, or is invited to participate in an association, he has to do due diligence work about the future partners for their role, competitiveness and the willingness to cooperate. In Taiwan, attention shall be given to the possibility of replacement, even it's years away, because when the original one quit the JV for whatever reasons, the substitute will only be approved if they have the same qualification, and also have not participated in the same competition.

Consortium 型態的合作，還有一些缺點，就是會把標價堆到高於預算、或其他競爭者的標價。因為從人性出發，個別成員看到的都是圖說規範不利於自己工作的部分，認為業主這部分的預算是偏低的。同時大家都希望別人減價，也知道別人會要自己減價，所以會在算出來的成本上，再加一個「前置量」，做為開會減價的準備。有經驗的代表或領導廠商會要求各家減價，吵到最後，常是要求大家按照預算以同一比例減

價。但業主的預算有時不準，就會引起爭論。更有些廠商認為自己工作的金額占總價的比例不高，高出行情也不會影響得標，不理會其他廠商減價的要求，認為減價是主要廠商的事，與他無關。所以決定標價的會議常有紛擾，與會者彼此可能產生心結，這種猜忌造成的因，可能會種下日後執行工作影響合作的果。

The final price submitted by a consortium could be staggering high by its nature. The individual member, for estimators they appointed, will see the specified requirement and contract conditions for their part is stringent. They also complain the budget as established by the Owner and the Engineer is low for the very scope they're assigned; it's human nature that people understand everybody will cut their price significantly. So, the price presented to the leader or for final meeting will be marked up for an amount that the tenderer expects others request him to cut. Trimming of total price in a consortium is painful and takes an experienced and capable leader, however, there could be hangover hurting the people until after the tender that the same people need to work together for a big project.

「Joint Venture」的型態 — 「合資經營」 (Integrated J. V.)

Type of “Joint Venture” — Integrated Joint Venture

相對於 Consortium 成員把所有的工作幾乎「分光」，「合資經營」(Integrated Joint Venture)是兩家(以上)的公司，不分工作，而是依投標時承諾的「出资比例」，共同負責成敗、盈虧。這個 Integrated JV 如同一家新公司，設立經理人，從成員廠商調集資源，包括資金、保證、重要幹部、機具設備、技術、財產、管理軟體，並依 JV 合作協定向市場採購、發包，取得要完成工程所需要的資源。

Contrary to the Consortium operation that the members always divide the works to last items, the Integrated Joint Venture will implement the works as an entity. The members invest the “new company” with the capital according to the “Share of Interest”, i.e., the percentage, agreed in the tender. There will be managers assigned by the partner in line with the “Joint Venture Agreement” as if it were a new “Company”. Resources such as working capital, guarantees, staffs, equipment, technology, property, soft wares will be solicited from the partners or the markets. Profit and loss will be borne by the partners according to the “Share of Interest”.

Integrated JV，在估價投標階段，是要提出一個最具競爭力的標價，對第三者在材料、施工與設備的報價，以及規範圖說可能有的問題等，立場一致，不會像 Consortium 的情況，各成員會有不相信對方的負面情緒。在最後的標價決定會議，成員廠商也應只是彼此提醒要去注意的風險，或發表對競爭情形的判斷。對組織 Integrated JV 的代表廠商，選擇成員會比較重視與他的互補性、商譽，以及財務狀況。

Since tendering stage, people assigned to work for the Integrated JV from the partners may enjoy congenial work spirit for the common good to finalize a competitive price. Most of them have identical discipline, i.e., civil, M/E or HVAC, to check the same quotation offered by subcontractors or vendors; they've no reason not to trust each other. And in the final meeting, they can identify the risk amicably to obtain the lowest possible tender price. For Integrated JV, the leader wants to have the lowest cost, shall consider to select the members complementary with each other in expertise, high company reputation and good financial capability.

但在某些狀況下，工程中某些工作需要特殊技術或施工機械設備，JV 團隊中的某一個成員可以提供，從市場和成本的角度來看，應該由他來承攬這個工項並負責盈虧成敗，較為合理。所以這些項目應該算是共同項目，這個成員就是 JV 的小包。這種情形很多，比如說，在 EPC 合約，JV 雖然是以 Integrated 的形式經營，但把其中的設計交給某一具此能力的成員；或是說某個港灣工程，其中的浚挖作業要交給有船機的成員，然後大家再以 Integrated JV 的經營方式，執行整個工程。

There can be situation when one member of the JV is in an advantageous position (to him and to the JV) to offer special technology or construction machine required for certain important items; then it will be fairer to ask this member to undertake the work items for market availability and cost implication. The situation may be exemplified by the cases that one JV member shall undertake design work in an EPC contract; or one member with dredging fleet shall be assigned for the reclamation works in a sea port construction works. It means that a Joint Venture, actually operate as a consortium, with one member exclusively work for that independent work and all the member also work as Integrated Joint Venture members for other work items.

如前文所說，在台灣「Joint Venture」的法律地位，準用於民法中的「合夥」等規定，並受保障，但它只以「短期」的方式存在，不是像許多國家可以申

請用一個稅籍帳號，就是說可以獨立開發票，適用幾個工程的承攬。在 Consortium 的情況，個別成員在銷項方面會依自己承攬的工作的計價金額，開設發票給代表廠商，再由代表廠商彙總，開設發票予業主；對成本進項的處理，則和個別成員承辦一般工程一樣，不會與 JV 有關係，也就是說在財務、會計與成本管理，可以維持原來的做法。

As expressed in the previous paragraphs, the legal status of Joint Venture is mentioned as partnership in Taiwanese Civil Code but only for temporary existence. It distinguishes from the situation in some other countries that the Joint Venture are given an invoice number valid for several projects. In the case of Consortium, the individual member will open its invoice for each certificate with the amount equal to what they're entitled in the performance and contract price; the Leader summarize the invoices and doesn't need to take care of the expenditure part of the cost. And the member company will not be disturbed in terms of financing, accounting and cost control.

但在 Integrated JV，銷項金額與 Consortium 的情況差不多，是按照「出資比例」由各成員開銷項發票給代表廠商彙總；但成本進項一般是由代表廠商與供應商／小包等訂約，加上成員廠商經授權的對外採購支出、派遣至 JV 人員的薪資、專利權利金，或小額費用等，再依「出資比例」與實際的成本，開立進項發票給成員廠商。銷項與進項發票的差異，就是盈虧。這類型的 JV，會計與成本控制較複雜，實務上應注意三個問題：

In the case of Integrated JV, the invoices shall be opened by the Leader, who represent the association, for each certificate to the Owner; and the individual member shall open the invoice according to their Share of Interest in the project. For the part of cost input management, the expense will include the cost paid to the vendors/subcontractors, which the JV leader or in less frequent cases the members signed with, the salaries of those seconded to the JV, patent fees, and minor expense handled by the members. The Leader will collect and manage the ledgers and open the voices of the same amount to the follow members. There will be balance between the outgoing and incoming invoice for each member, then that's the loss or profit.

(1) 與供應商／小包的簽約，以及進項憑證的處理是委託代表廠商，這對台灣廠商是較新的經驗。因為除了彼此必須信任，還有帳冊要交由其他公司處理的問題。一般的小公司在做帳方面的透明度是有限的。所以在台灣，為承攬工程所作的短期

結合，如果工作不能分清楚，共同投標會有困難的。

- (1) It can be new to Taiwanese companies for Joint accounting and cost control in an Integrated JV, and maybe difficulties. Because usually the leader will be authorized to sign the sub-contracts, and receive the invoices accordingly. The books shall be managed by one party, supposed to be a stranger, and naturally not appreciated by small companies as ledgers and expense shall be most sensitive part of construction business. Maybe it's also the reason company in Taiwan, either doing design or construction works, will prefer consortium type of work division.
- (2) 代表廠商要負責財務、會計與成本管理，所以這方面的流程與系統應該與代表廠商一致，其他成員廠商必須去適應，做正確的解讀。在大方向上，如年度盈虧申報與繳稅策略、單據與各項作業電腦化程度、成本控管，成員與代表廠商的差異不能太大。
- (2) The Leader shall be responsible for financing, accounting and cost control; there will be procedure adopted for JV operation. Normally it has to be identical with what is using in the Leader's head office; and the member companies has to be adaptable. Also the members have to discuss common strategy for taxation, process for receipts and invoices, extent and system of computerization, interpretation of cost monitor and control report, inventory and warehouse management; so that the difference should be minimized.
- (3) 在與外國廠商的合作，還有總公司管理費、智慧財產權利金匯出，JV 是否同意認列為有效成本、他國與我國是否已簽署雙邊協定避免重覆課稅，以及後續執行是否會有問題等，在某些國家此部分金額要求的幅度會比較大。而總公司管理費方面，許多歐洲公司會認為這是一種必要成本，在 Integrated JV 投標前，應先澄清。
- (3) Many foreign companies regard head office overhead is a cost item, and the remittance for granted, the same also considered for patent or any other intangible service. Amount about the range under which tax exemption or duplication can be applied shall be clarified, and more important whether the bilateral agreement between Taiwan and that foreign government entered or not. It is understood, some companies from Europe need higher margin for overhead; and when we go out to countries like India, head office overhead will be charged at the same rate as profit tax.

Integrated JV 的經營管理，不是如 Consortium 只要擔任聯合組織對業主的窗口，而是要完成工程。所以經理必須由代表廠商派任，副手則由各成員廠商派任。重要幹部與技術人才，各廠商都必須支援。然而 Integrated JV 出狀況最多的就是這一部分。因為大家是同業，專業與營業範圍都差不多，所謂天塌下來有人頂，有些成員廠商人才不足，或想把較好的人派到較重要的工程，就讓代表或最大廠商去煩惱。也就是這樣，許多業主單位認為同業承攬，專業太近，幾家廠商組成一家投標，對執行完工又沒幫助，徒然減少競爭態勢，所以反對開放共同投標。

The purpose of Integrated JV operation/management is to complete the works and secure profit, not like the case of Consortium mainly to serve the owner no more than communication; so the Leader is responsible to assign the project manager and other members shall second deputy or assistants. The elite staffs required to carry out the tasks also better to be sent by JV members and their availability shall be checked before the tender. However, the members in Integrated JV usually are coming from the same business line and their staff supposed having similar background; there's possibility that a member irresponsible or incapable may send unqualified persons onto positions and cause problems. And it happens among the local contractors who never have enough engineers but eager to take much work and risk; typical entrepreneurs. The malingering hurt the project very much and even will remind the owners that allowing Joint Tender is not a right thing.

對人員的派任，本國廠商常欲簡化作業，而有些奇怪的詮釋。首先，派員，特別是派資深、有經驗的人，是成員廠商的權利，也是義務。人員的成本，薪資、加班、獎金、休假、動員等費用都是由 JV 負擔，但不允許加上管理費與利潤。但在與先進國家如日本的合作，因薪資水平差太多，所以會出現「包」的概念，沒有按照真正的人數與費用來計算。因不定數太多，會衍生出許多問題。合作廠商在將來談判這方面的追加減時，必須準備很大的彈性。

Taiwanese companies for all its desire to simplify the future transaction, have odd interpretation about the assignment of persons to JV organization. First, it shall be the members' right and obligation to send the right persons for the positions, the costs including salary, overtime, bonus, vocation, and mobilization shall be paid by JV, but overhead and profit shall not be added. But the cooperation with advanced economies like Japan, the idea of "wrap up" that the foreigners to offer lump sum is used for the personnel assignment because the fundamental difference

in manning cost is so much. The lack of preciseness for numbers and expense of the assignment will oblige the JV member to talk in the future with flexibility; and only they have mutual trust they can conclude it.

為了鼓勵大家派員到 JV 工作，並符合 JV 分擔風險的本意，任何成員都不應為他們派任人員的犯錯而背負過失責任。但如果成員發現 JV 工作人員有不適任，市場上或各成員有更佳人選，可以要求 PM 同意置換。又，為保護較弱廠商，通常在 JV 合作協定會有一條，在工作中，或完工後若干時間，成員廠商不能聘僱另一成員的員工。

Second, the companies shall not be responsible for any mistake and losses made by the persons assigned to JV positions. If persons working for JV in any position are found not competent for the duties, the PM shall agree the replacement from any other person from the market or the member. Also, for the reason often the minor partner needed, the JV member shall agree not to employ persons having been working in the other member during JV proceeding or/and until sometime after.

與外國人的 Joint Venture Joint Venture with Foreign Companies

各種建設工程，包括附屬於其中為齊備、維持機能必要的電氣、機械、設備、建築、結構物等，是經濟發展的基礎。台灣自 1950 年後，無論是規劃、設計或施工，不斷向先進國家學習，現在相當多領域中，我們能力已不遜於他們。甚至在若干高技術的工程，如捷運、電廠、石化工業等，我們都有能力輸出國外，最關鍵的就是，從過去與國際廠商的 Joint Venture 中得到了實作經驗。

Man built environment, including electrical, mechanical, equipment, building and structure pertaining to it, is the foundation of economic development; Taiwan is quite successful in learning the advanced construction and engineering technology from top notch countries and now export them for projects such as subway, power plant, or patrol-chemical industries thanks to the experience obtained from working with them in Joint venture.

自 1980 年以來，國家政策要求，外國廠商承攬重大工程，無論是設計或施工，都要找本國廠商合作，本國廠商從做占比相對少的小包開始，到聯合承攬、技術合作，終究取得主導地位。例如只允許外國廠商（根據 GPA）有限度的參與，且都要求由本國廠商做為代表廠商。雖然，因為台灣的工程造價歷經完全競爭後，幾乎是全世界最低，使得國際營建業者無法長期、支配性的參與。但相對於許多國家，我們營建產業的自由度還是

很高，只要他們有特殊技術、在特定項目、可以克服本土業者的競爭，在台灣還是可以扮演活躍的角色。

It's the policy of the country since 80's, the foreign companies undertaking critical civil engineering contracts, design or construction, would be requested to commit fixed percent of the total contract amount to the locals, in the form first as sub-contract, then JV partnership, or technical advisory. Now, in most of the foreign-local cooperation the international companies can only be participated according to GPA signed between Taiwan and their country. But the reason for such reversal may be that the rates and prices for civil work in Taiwan are almost the lowest in the world, which, discourage the outsider for permanent and dominating participation. But construction market in Taiwan is still free for firms from advanced economies to be active if they possess unique and competitive technology.

以施工來說，就外國營造廠參與台灣的工程，自早期的北二高、台北捷運初期網路、電廠、超高大樓、高速鐵路，至 LNG 儲槽，以及最近的離岸風電工程，本國廠商從完全接受他們的指揮，到以次包身分，或 Consortium Partner 獨立承攬某一部份工作，其實路走得很艱辛。因為台灣承包商競爭意識太強，長期降價搶工作，公司靠少數幾個能幹的幹部，就能降低成本，承攬大工程。這種經營方式，老闆只能容許即刻可以發揮生產力，替公司賺錢的工程師。公司沒有餘裕留置人才、也無暇追蹤新的或複雜的業務，結果會是，在與國際公司談判時居於劣勢。

As construction work in past decades is concerned, foreign constructors participated in the 2nd freeway, phase 1 Taipei MRT, power plant, skyscrapers, high speed rails and until recently the off shore wind mill projects, many as main contractors while the locals started following their whole direction, acted as sub-contractors and finally consortium partner working side by side with them have factually to take the brunt because the low price they used to offer. The low price has forced the bosses only to reward the employees who are able to make imminent contribution for plucking low hung fruit, and nobody has leisure to study the new technology in negotiation with international companies for new type of projects. The market fragmentation trims the companies to pygmies.

相對於國際公司組織嚴密及分工精細，用人簡約或專業不足的台灣公司，不得不以鬆散結盟方式找下包或合作夥伴，一同與外國人談判，或是幫忙計算獻策，求能應付一時。但過度依賴外部資源的結果，遇變化常反應不及，讓外國談判代表以為本土公司能力有限。遑論缺乏談判經驗，拙於表達，常導致最後談

成的契約，不論是聯合承攬或下包，不能達成談判目標，或只能將戰線延長至標後，甚至到要履行契約時，已經同意過的事又要重談，讓對方驚訝。

The international companies have rigorous organization and subtle work division among their staffs; contrast to this, Taiwanese construction companies stranded long for low overhead have to ask the sub-contractors, vendors or any sort of business partners to join the negotiation more than back up. It's a loosen form of consortium by entrepreneurs by nature is impatient for detail discussion and serious clarification. So, there could be possibility the cooperation agreement concluded but the local party would revisit the parts they've pledged hastily before the tender to the astonishment of foreign partner.

其實與國際廠商進入實質的合作，某些徒有其名或工作只靠發包的本國廠商才會了解到，專業分工並不是徵募幾位考上執照的工程師，派遣他們到工地應卯就算了。最近許多公司無法招聘到理想質量的工程師，進而造成履約問題，在某種程度上是一種淘汰，因為只有夠實力的廠商才能取得資源。的確有些大型工程，只有國際營造商或開發商才能居於主導地位。與他們的合作，或許能讓台灣的施工廠商，因較合理的單價與契約條件，擺脫在低價、得過且過間徘徊的長期困境。

In JV organization with international contractors, many well branded local companies are now waking up to know the true professionalism isn't equal to the recruitment and assignment of persons with licenses required by the project. Instead, they must have experience and really are engaged in the works. Recently, many contractors have problems to carry out the contract because they fail to recruit sufficient qualified engineers in a tightening market. It's a weeding, however, the contractors who may be working with the international developers or contractors may free themselves from the plight always trapped in the low prices and get by with shabby resource. We presumed that the professionals will have bigger say in the projects that the foreign companies will have participated, so as to have reasonable prices and contract terms in the works.

工程設計的發展，在人才資本均匱乏的時期，都是由國家集中有限人才，然後靠美國政府或國際開發組織等，派遣顧問指導，轉移技術。後來又要求國外顧問公司必須將設計工作交給本國設計廠商，他們提供的服務讓業主覺得方便並有信心，因而持續茁壯。台灣設計廠商的能力與成本，在國內外足以與外商競爭，像捷運、橋梁、工業區，與水利等工程，我國業者還能在東南亞取得工作，即為例證。

The nation had to put talents and capital available together to learn from the more advanced foreigners for the design capability at days the country was backward and technology transfer most important. The locals' ability gained ground when measures such as forcing the international companies to sub-let part of the works to them taken hold by the government. Gradually, the owners prefer the locals to do the design work as immediate response are expected. Until now, Taiwanese engineering firms also are encouraged for the success in the competition in Southeast Asia for the design service like MRT, bridge and viaduct, industrial park and hydraulic structures, it confirmed that they can do the works as good as Westerners.

但就設計工作來說，與國外廠商的合作，如果用 Consortium 垂直分工的方式，像公路或軌道工程以里程碑來分，就表示國外或國內廠商都有單獨完成工作的能力，只是某一時間內能夠完成多少工作的能量問題。但如果以 Integrated Joint Venture 的觀念來分，就有主、有輔，其中的一家來做大部分的工作，另外一家提供諮詢、查核或其他工作。各廠商間的工作項目及承攬比例會先談定，並在共同投標協議書中載明。承攬比例應以「金額」，但也可以用其他認定方式來做基準，以適應產業的發展狀況，或權責單位的查核特殊需求。

But for design works, should they be divided vertically between the two companies, e.g., according to the mileage in the cases of railroad or high way projects, it implied that each party can do the jobs alone. The consortium type of work division is only meaningful when both parties are locals and there won't be any issue regarding technology transfer. Design companies forming an Integrated JV may try to merge themselves, but can be hard between the learning local company and foreign firm with manifested better know-how. The compromise can be one party performing as main designer while the other to provide advice or checks. And under the scheme, the Share of Interest shall be measured by undertakings in money term; or other means adapt to the technological maturity of the industry or the owner's requirement to check for the tender or contract.

表面看來無瑕的合作協定，都可能淪為一方的借牌，尤其是設計工作，承攬比例可能只用來分配最後的盈餘。大部分的銷項費用，可以用其中一方人員的薪資費用，或發包給第三者的契約價金來充抵。這種情形，當外籍設計公司找不到，或不願意去找，真正做設計工作的本土廠商做為合作對象，就會發生。如果有不具備實力的公司願意配合，做為傀儡夥伴時，會有非之無刺的情形發生。如果政府主管機關在決標前，或執行中的查核，能夠詢問競標者他們的工作細節，特別是薪資及

賦稅資料，並保留核可權，直至工作完成，外國廠商是不會踩紅線的。

Any JV agreement following the tender stipulation superficially, can be used by the major partner to sidestep the minor, usually the local party, in the case of design service. The Share of Interest entered into the formal agreement will only be applied at the moment to distribute the profit, which, as predetermined officially is a small percentage of the total amount after deducting the actual expense going to the major partner for execution. Though cumbersome to check, the owners can request the competitors to submit execution plan before award, and check details including the salaries and tax filing for expatriates during the execution (though need to find a balance with relevant privacy right), hold the approval until design completed. The international companies will not cross the line.

「共同或聯合承攬」，市場形勢與成員相對實力

Joint Venture, the Market Situation and Strength of the Members

「共同或聯合承攬」的構成與運作有一定的原則，遵循法律規定，不去對抗市場與常識，是 JV 廠商們應有的自我要求。但工程的承攬與經營，雖大致須運用工程與邏輯思維，實質上還是要受商業、人文因素的影響。有時只能妥協於現狀，故理性必須包容人性，先進不能即刻除代舊習，所以：

JV formation and operation shall follow principles to work under existing laws and regulations; and never try to do opposite against the market and common sense. We recognize the tendering and execution of the construction contracts shall be guided by engineering and logic, however, most of the times affected by commerce and humanity, having to compromise with the status quo. The rationality has to contain human nature; and the progress cannot be the reason to eliminate the common practice, so:

- (1) 規模較大或承攬工作較多公司的權威與影響力
- (1) Size does matter with regard to JV member's capital and Share of Interest

JV 組織做決定，理論上要有共識決，而非如一般公司是以股權表決。實際上，在聯合經營體承攬的工作較多、投入的資源較多，應該就是 JV 的 Leader，人事上有權派任專案經理。在 Integrated JV 中工程的執行，實際上是做為 Leader 的大公司他派任的專案經理，以及工程師群來完成工作，不可能事事徵詢其他成員的意見。

In theory, JV organization reach decisions through unanimity, not majority votes as in the case of permanent company. If a JV member undertakes more shares than the others and most likely he'll be the Leader of the JV, having the privilege and responsibility to assign the Project Manager. The execution of the works, particularly in the integrated JV will be carried out by PM and staffs most of them also come from the Leader "following the direction from mother company". There won't be any leisure to consult with the member for every detail.

小公司固然可以針對某些意見，有所保留，但如 Leader 以聽他的話不成功後，他須負責後果；或不聽他的話卻成功但因遲滯決定，造成 JV 效率的損失，也要賠償，這與情況相反時，分配到他所獲得的賠償，不成比例。所以有些小公司，特別是與 Leader 不一樣國家的成員廠商，以為「共識決」在某種程度上會等同「否決權」，想要脅大公司屈服，這是危險的概念。

The minor member can of course have different opinion against the Leader, however, any insistence resulted in indemnification including loss of efficiency and time can be borne reverse to the Share of Interest for a minor member of the JV. There is possibility that a minor partner, often the company in different country with the Leader, mistakenly to interpret the unanimity as a veto to extort the major partner is actually dangerous.

在某些國家，產業內各廠商的互動還是要看公司的相對規模，或業務或生產鍊上的層級關係（hierarchy）。像日本廠商的 JV，是不講民主與法制，壓制的味道很重，是不會容許類似「下剋上」的抗議情形發生的。但任何牽涉到台灣廠商的 JV，則可能完全相反。主辦廠商或專案經理可能要花更多的時間對內解釋，他為什麼對業主、第三者，要做如此的反應。在不同的文化，大家對「權力距離」的解讀不一樣。

In certain countries, the companies in the industry have to interact with each other according to their relative sizes and business relationship whether one usually will be the other's underling in the hierarchy. So, in the JV though alienated from the other business in home country, the less sizable company needs to submit to the apparent oppression disregard the principles of "democracy" and "rule based" operation. And in any JV involving Taiwanese members, The Leader and the Project Manager always need to spend more time and effort explaining for the responses to third parties or the owner. There is different interpretation to "Power Distance" under different culture.

(2) 對成員廠商基本利益的尊重

(2) Respect the JV Member's fundamental Right

JV 是短期結合，成員廠商的基本利益並不能以「多數決」做減損，更不能以專案經理以例行手段來妨害或限制。所以一個 JV，專案經理由 Leader 派任，副經理就要由其他成員來派任，組成工地委員會來行使共同權力。成本、會計的主管也要有同樣的安排，如果工程或專案規模不夠大，無法支援這些人員的永久性進駐，也要安排成員公司不定期查帳或稽核。業務性質較敏感的部門，如採購、發包等，各成員可能也會要求派員，或至少要求某些較重要的項目，要由成員公司複核、同意。信任關係建立後，這些步驟可以簡化，但基本上這是成員的權利，Leader 與專案經理必須尊重。

JV works on temporary basis, and the member's right can't be determined by majority votes, nor can the exercise of them be impeded or restrained by the deeds by project manager and his staffs. Deputy and assistant managers shall be assigned by other members and in theory they'll have similar power with PM; together they will organize the Site Committee for quotidian JV works. Cost and account department shall have the same arrangement allowing experts for stationing or checks. The members may also be interested in sending people for department responsible for procurement or to request the PM to submit cases of detail to each member for review and approval before trust established between JV office and them.

如同一般公司，Integrated JV 會依合作協定規定組成董事會，決定組織、規章、核定成本、進度、同意重大人事、採購、對業主報價（變更）、訴訟，與財產處理案件等，此為採行「共識決」。對 Integrated JV 而言，除非 Leader 業務上具分量、能拿到工程、執行時大家可預見有豐厚利潤、指派的 PM 具領導力，否則在最關鍵的權力機關董事會開會時，Leader 要接受挑戰。

Just like ordinary company, integrated JV will have to set up the Board according to the agreement entered between the parties. The Board meetings will decide the project organization, operation rules, approve reports from Project Management for assignment of persons, procurement, and proposal to the Owner, cost, litigation, asset management, etc. The Board meetings can be confrontational and critical to JV operation unless the Leader is the one bring the business and profit for members, and the PM assigned is intact for performance.

在 Consortium，董事會最關心的是進度，與之有關的介面協調事項會是討論的焦點。

In the case of Consortium, meetings will focus on the progress and clarify any problem that may appear in the interfaces between works taken by different members.

但不管是那種形式的 JV 組織，成員的投資或承攬比率如何，在 JV 中，沒有一個成員的權利或地位能高於其他成員。

High above anything, no JV member is said to be superior to the other members disregard the Share of Participation.

(3) 工程所在國廠商的特殊地位

(3) The standings of local JV members

工程所在國政府為扶植國內業者，不論是設計或施工，通常會要求國際廠商將部份工作以 Consortium 或 Integrated JV 方式交給業主認為夠資格之本土廠商。但資格與技能、競爭力並不一定等同，尤其在投標前相對為短的時間，國際廠商認為其做評估會有風險，所以就產生只想付出有限費用，找不實際參與的廠商來合作 (sleeping partner) 之念頭。以離岸風電設計為例，投標規定國外與本土承攬比率必須在一定數字以上，但查核只在投標時做一次，細節等實做時才見分曉，這樣的執行可能無法符合招標原意。

There may be requirement from the host government that the foreign participants of the project have to form JV with local companies, either in Consortium or integrated JV. But as aliens, the international companies feel it too risky within short tender period to decide a known amount can be undertaken by strange companies, so they prefer to go for a sleeping partner just paying puny fees for a legitimate participation. Take offshore wind mill design works as example, the paper will show the Share of Participation adherent to the tender stipulation, and the international contractors will gain the freedom to do what they want in the future for the limited risk. It's because the checks will only be done once in tender stage, and won't expose the actual work details carried out in the far future.

其實不論是設計或施工，較弱的一方會希望得到保障。如本土廠商相對於開發商與具技術經驗的國際廠商，他們希望站穩了後有機會做真正的工作，因此開始學習。但因要實際參加工作，需要有人才、經歷，最嚴重的是可能面對失敗，所以如果無法說服對方交付工作，只好繼續配合國際廠商，做不到真正的工作，只等著依照承攬比例分配利潤。前一節中已提到，看來無瑕的設計工作合作協定，所載的承攬比例只是籠統的承諾，真正的銷項費用流向在招標查核時尚不知往何處行去，在無法掌握之下，最後可能淪為借牌。

When cooperation between foreign and native companies is enforced for design or construction of wind mill works, most of the locals want to be guaranteed for

success. The international companies, high fly developers or contractors, for the requirement in schedule and project financing would like to find maximum freedom in their future actions. And it's possible for local companies to offer minimum fees to woo the foreigners and wait to get the final dividend according to the Share of Participation appeared on the paper. We said about this in section above, stressing the checks by the owner done only once at tender stage when where the actual design cost goes is unknown can be misleading.

在某些情況下，當地廠商範圍甚至可以縮小到同一國家的不同縣市。以台灣來說，在花蓮、金門、馬祖或澎湖，某些廠商具壟斷性施工資源，或社會關係，在台灣本島，可能就不明顯。舉例如日本，全國性的公司到北海道或沖繩，要與當地的廠商合作，並以當地廠商做為 JV 的 Leader，這就是憑著地域的特殊關係取得的地位。在組織 JV 邀請成員時必須注意這一點。

There are companies getting clout by their origin, and the companies from outside not necessarily from foreign have to recognize it. For example, there will be local companies cornered special construction resource, or social relationship, like in Hualien, Kinmen, Matsu or Penghu in Taiwan. It can be more apparent in Japan, larger than Taiwan, the so called big five going to Hokkaido or Okinawa has to ask the locals to join the team and sometimes even ask them to be the Leader. When people want to organize JV, he has to consider the point.

(4) 「共同或聯合承攬」中的異議與偏執者

(4) The Dissenter and Paranoid as the JV Member

「共同或聯合承攬」常有成員持反對意見，或發生於外國廠商因文化上的成見，在篩選本土合作對象與組成團隊時，即誤導或激怒本土廠商；也有本土廠商因欠缺與異國合作經驗，並對大型工程設計、施工感到陌生，故對國外領導成員所採措施感到疑懼，而有抗議甚至抵制行動發生。但這些都必須以耐性來解決，在順利完成工作的共同目標前提下，只要相關人員回到理性，「個人化」的問題都容易解決。

It's not unusual that in a Joint Venture the members could be antagonistic against the Leader and cause troubles from time to time. It happens when a dominant foreign company mislead or irritate the natives for the unnecessary cultural prejudice; or in the other way that the locals are not knowledgeable about international cooperation and the execution of a gigantic project, so in addition to casting doubt about the JV decisions they may protest and act not in congeniality with the team. The problem supposed to be temporary and personal, when the concerned party have

common goal to complete the works, patience can work out to solve the problem.

但有時某些成員，或因老闆或做決定者成見太深，並主觀相信異國大公司會遷就，所以會往敵對與偏執的方向走。諷刺的是這時前面所說：規模較大，或承攬工作較多公司的權威與影響力較大的這個觀念，他們的見解卻是「同歸於盡，是誰損失比較大」。再加上視國際廠商「非我族類」，可恣意欺侮，道德上他們不以為有任何欠缺的錯誤想法，讓人束手無策。台灣這 20 年工程承攬史上，不只是發生在與外國廠商的 JV，小公司與大公司的結合也出現這種情形。

If the bosses or the decision makers believe that the big international company will give way to what they want, they will be more eccentric and paranoid so as to cause big problem for JV. Ironically, when we deem that the JV member's capital and Share of Interest is bigger, his influence and power may be more convincing, is now totally wrong under the notion "If the contract suffers the big share participant will suffer most". There will also be dark side of "nationalism" embraced by those paranoids telling them bullying on the foreigners is complete amoral. The short construction history witnessed the bad stories not only locals harassed foreign, and also the small companies torment the bigger ones.

工程承攬有專業與商業兩種成分，但對某些公司而言，追求利潤是一切。在 Consortium 的情形，他們從報價開始就有強烈保護自己的想法，認為我的承攬比率低，能否得標和我減價沒有關係。得標後要別人片面讓步，不肯承受任何風險等偏執，常造成 JV 的困擾。在 Integrated JV，這類型的公司要求 Leader 分配利潤，但當 JV 遇到任何風險，如果 Leader 或 PM 有可指謫，他們就忘記 JV 的設立目的，是在承擔風險、任何成員都不應為他們派任人員犯錯，背負成本上的責任。問題是他們的抗爭可以無限上綱，自傷傷人，如拒絕簽字請款，或拒絕業主要求每一個成員都要簽署的作業表單。遇到這種情形，考驗 Leader 的智慧。

The contracting business has elements in both professionalism and commercial consideration, but for some company, pursuance of profit shall be above everything. In the case of Consortium, the egoistic boss will leave the responsibility for tender price deduction to the companies with bigger Shares of Participation; and during execution, they will ignore the situation that each member has to accommodate for the ambiguity found in interface and shoulder any risk brought by changes. In the case of Integrated Joint Venture, the eccentric will request the Leader to

bring profit for the JV or they will pinpoint the Leader and PM for any bad judgement or fault made in carrying out the works. They don't go back to the point that the purpose of JV is members to share the risk; and the companies assigned the persons to JV positions shall not be responsible for any mistake and losses those people will make. They will select the right moment to deter the JV proceeding for refuse to sign on any format requiring them to endorse. The leader is tested when the member become erratic.

「共同或聯合承攬」，從準備到完工的階段性工作

Stages of Joint Venture, from Inception to Works Completion

「共同或聯合承攬」的第一階段，是「備忘錄」階段。當某一公司對某工程研究後，覺得從技術轉移、增強實績、改善競爭力、財務、施工資源、法律與規定等觀點，認為這個工程可以參加，他可以進一步研究未來的組織架構，JV 夥伴要找誰，投標成本等問題。這時候他可以與可能共同投標的夥伴簽訂「備忘錄」，但只僅於表達興趣，並沒有說一定要參加。

The first stage of Joint Venture, can be called "Stage of Memorandum". When a company feel it will be able to tender a project through forming Joint venture with other friendly company for benefits like technology transfer, enhance work experience, improve competency, better financing, make good usage of resource and from legal point of view, etc. He can study for the JV formation, future partners and tendering cost, and accordingly invite the partners for Memorandum of Understanding, however, at stage it's not binding for tendering.

「共同與聯合承攬」的第二階段，是「標前協議」階段。這時組織架構，包括成員與分工要做決定，規劃、估價與標單製作的任務分派、相關法律的研究，未來運作的行政流程，以及正式合作協定的草擬。

The second stage of Joint Venture, can be called "Stage of Pre-bid Agreement". The decision has to be made for JV formation, members to be invited and the work division. The assignment to finish the tender such as project planning, estimation and documentation will be allocated to the team with precise schedule. The study will also include contract and law, internal procedure, draft of a formal Joint venture agreement.

「共同或聯合承攬」的第三階段，是「JV 正式運作」階段。當得標後，就要有正式合作協定，依其規定成立管理委員會，開始調度、徵募人員、管理資產、資本與財務、採購、發包，把工作完成。

The third stage of Joint Venture, can be called “Stage of JV proceeding”. After the award there should be formal JV Agreement established. The Supervisory Committee set up accordingly, start to assign persons to senior positions and recruit staffs, manage the asset, capital and financing, procurement and subcontracting, complete the works.

「共同或聯合承攬」的最後階段，是「JV 結束」階段。一般來說，當工作完成，盈虧大致決定後，這時要做的工作很容易被忽視：成本清算、財產處理（資金、材料、機具、智慧財產）、人事（歸建與資遣），及 JV 的正式解散。

The final stage of Joint Venture, can be called “Stage of JV Wind up”. After work completed, profit or loss determined, the remaining works for wind up can be overlooked: there should be liquidation, asset handling (working capital, material, equipment, intangible property), personnel issues (return to the original companies and lay off), and formal closure of JV.

結論

Conclusions

熟悉工程公司總體經營管理的人可以了解「共同或聯合承攬」是很單純、普遍的商業行為。要談妥它的組織、運作以及成員互動的原則，又要在很短的時間內完成，這就需要將來的夥伴與自己公司要互通信息，坦誠以告，所以出去談 JV 的人要有些視域、高度與智慧。談 JV 的人，在中、小型公司就是老闆或有決定權的人，這是正常的。「共同或聯合承攬」協定，沒有標準形式或條款，所有的一切都是談出來的；當然，與其他人合作，或自己單獨承攬工程的經驗，都應該做為參考。

People familiar with the governance of construction company or engineering firm understand JV operation is simple and common in the commercial world; and the confusion, if any, may come from that the people sent for negotiation with potential collaborators don't present the company well within short time frame and collect the information reciprocally from the counterpart. Therefore, people sent to conclude agreement with potential members must be the guy with vision, position, and intelligence; not bad in Taiwan that the bosses or people have the same power will participate the discussion. No standard clauses or form of agreement can be followed as each work and cooperation shall be unique.

JV 的組織、權力制衡與行政流程，幾十年來，並沒有什麼更易，因為人性未變。然在管理方面，因各種軟、硬體以及通訊技術的精進，JV 運作的效率提高，成員要取得工程執行各種數據，並給予回饋，更為方便。國家與公司或有界限，但不應再是問題。

For many years, it doesn't change for the part of JV formation, balance of power, and internal process, because the ultimate requirement is to exercise control for the company participated in the organization; the human nature behind it is not different. However, there're various soft and hard ware for administration and the skill and speed form communication are much improved. That a Board member now can obtain more in-depth information and ask many questions based on the data extracted; the border and the company line shall not be the problem.

若干高科技公共工程，政府藉要求國際與台灣廠商合作，以推動進度、降低成本，並植根台灣的政策美意，不能糟蹋。而如前面文章所說，共同承攬是最有效、便捷的方式。

The government has firm policy to solicit the successful technology transfer from international companies to Taiwanese firms in public works with high technical content to push the construction, lower the cost and groom the industry. JV between the foreign and the local will be the most effective and convenient mean to realize the policy for all its importance.

國際廠商在尋找合作對象方面有時間的壓力，工程業界必須主動，提供客觀資料，並防制短視近利的廠商，以變相的低額佣金來扭曲招標機制希望達成的目標。當然我們相信廠商本身的自律最為重要，但科技進步，資料與數據的保存不是問題，經過還原，一個 JV 的運作是否符合訂約本意，其實無所遁形。所以只要政府的關心，能延長至契約工作完成階段，並保留審議判斷的權力，能達成技術轉移的 JV 一定可以組織成功，不論施工或設計。

We understand the international company will have time pressure to seek the partners within tender period, and there is possibility that a short-sighted company will offer the lowest possible price for commission to elicit the foreigner for their freedom of actions. Under the circumstance, the company determined to reach to the modern technology shall be active to illustrate his ability to work in all rigorous conditions. We trust it's critical that the companies in the industry must be disciplined so as not to spoil the government policy, however, checks is important and the modern JV organization will be able to provide so much in-depth information and data as described above. The Owner shall be in good position to judge whether or not the technology transfer as mandated in Joint Tendering Agreement is followed as the truth can be revealed to show the real situation. So, it means if in the tender the owners reserve their right to supervise the implementation of contract or agreement until the work is finished, the JV operation can be organized to receive the technology transfer; for construction or engineering. 