Feasibility Study of Implementing Competitive Dialogue in Taiwan

I-Jen Ting and Jyh-Bin Yang

Abstract-The European Union (EU) is committed to improving the lack of communication and lack of flexibility in the tendering process. Traditional tendering approaches can no longer meet the needs of current public construction procurements in complex execution environments. The competitive dialogue (CD) procedure was published by the EU as a new procedure for awarding public contracts in 2004. Introducing CD procedure as a new tendering approach will be a challenge for a country that tries to improve its contracting system. This article reviews the advantages of using CD and the implementation conditions by some countries, and then analyzes the successful factors and the difficulties those have been encountered by different countries. Finally, this article discusses the feasibility of implementing CD in Taiwan. The research outcomes are valuable for the countries who try to consider CD as a possible solution in their contracting systems.

Index Terms—Competitive dialogue, negotiated procedure, public procurement method, invitation tender.

I. INTRODUCTION

European Union (EU) included competitive dialogue (CD) as a new public procurement procedure in 2004. CD is a new type of negotiated contracting procedure included to be used in particularly complex contracts [1]. EU members were told to adopt CD as a new public procurement procedure before 2006. Recently, more countries consider to incorporate it into their existing public contracting systems. CD has five main implementation stages consisting of publishing a contract notice, selecting the candidates, opening the dialogue, submitting final tenders, and awarding the contract [2]. The dialogue stage is the most important stage. In this stage, the authority will discuss all details in the contract, and form the final contract.

Nowadays, CD procedure has attracted much attention globally. It is an interactive multistage procurement selection arrangement that allows for dynamic engagement with proposers [3]. Although it is a complex procedure, it has been regarded as a highly effective procurement process for complex, high-value and/or innovative contracts [3]. When existing contracting systems encountered difficulties in dealing with complicated contract conditions, incorporating CD is a good alternative.

II. REVIEW OF CD USES

Most of countries who have used CD contracting procedure are in the EU area. Table I shows the numbers of contract notices with CD procedure summarized by the European Institute of Public Administration [4]. Before 2010, the representative country that has successfully implemented CD is France and the UK, because they have more than one thousand cases. From 2010, the countries with CD experiences are changed. The EU adopted CD intensively. Table II shows the number of contract with CD implementation. It is clear that different countries have different experiences with implementing CD even the EU promoted CD as a good solution for solving complex contracting problems.

TABLE I: COMPETITIVE DIALOGUE CONTRACT NOTICES – JANUARY 2004-JUNE 2009 SOURCE: [4]

Country	Total	
France	1239	
UK	1194	
Germany	113	
Netherlands	72	
Ireland	47	
Denmark	38	
Denmark	38	
Finland	37	
Spain	19	
Portugal	4	
Norway	0	

TABLE II: Use of Competitive Dialogue in the Period 1 January 2010 to 31 December 2013. Source: [5]

10 51 DECEMBER 2015. SOURCE. [5]		
Country	Total	
EU	1,429	
France	581	
UK	460	
Netherlands	62	
Denmark	17	
Norway	17	

The UK and France have more experience with the CD procedure than other countries. The UK has significant practical experience with CD. It develops a negotiate procedure (a type of CD), and publishes some practical guidance for the problems that EU does not address well. France is the unique country that has a procedure called "l'appel d'offres sur performances" (literally translated "call for tenders on performance") comparable to CD in place before 2004. Comparing with the negotiate procedure in the

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I-Jen Ting and Jyh-Bin Yang are with Graduate Institute of Construction Engineering and Management, National Central University, Taiwan (e-mail: mego917917@gmail.com, jyhbin@ncu.edu.tw).

UK, the tendering procedure in France has the concept of a "particularly complex contract" [6].

Ireland, the Netherlands and Finland are moderate users of the CD procedure [5], [7]. The CD procedure has been used relatively extensively in Ireland prior to the outbreak of the financial crisis [8]. In practice, the implementation of the CD in the Netherlands suffered from a slow start [9]. The Dutch legislative provisions in the BAD dealing with CD principally add very little to the original provisions in the directive, and even the ARW 2005 only makes a few additions. The Dutch government has not until recently supplemented the legal provisions with guidance [6]. In Finland, the CD procedure seems to be used quite often for procurement of IT contracts [10].

In Germany, the health sector was a very heavy-duty CD user, although local (rather than federal) government also used the procedure very regularly. Other frequent users, filed under "miscellaneous", were bodies governed by public law that deal with either community development (building of public infrastructure) or research. In Germany, there is a very interesting thing is that only two instances of central government use of CD were recorded and only six uses took place at the federal level while central government was rarely the most frequent user of CD. This is a particularly low usage statistic in comparison to the other countries in this project [11].

Denmark was the first EU member state to implement the CD procedure for public procurement, but has not made any changes to its legislation, contrary to what several other member countries have done. Although some of the tenders using CD in Denmark have been either unsuccessful or terminated prematurely due to lack of competition [7], the CD procedure seems to have been used in a number of Public-Private-Partnership (PPP) procurements [10].

In Spain, most provisions on CD are simply direct transpositions of what is already in the EU Directive with only a few changes added afterwards. The only remarkable novelty of the Spanish law is to make the CD procedure the default procedure for the award of public-private cooperation contracts. As of September, 2010, the procedure has been used 59 times in Spain by 32 different contracting authorities and 19 times of this are in the region of [12].

In Portugal, CD only had been used only five time as of 2011. Moreover, there is no contracting authority has used the procedure more than once. The explanation find from the research focused upon during the interviews. The grounds for use are probably the most important as respondents' views shed light directly on the reasons why CD is having seldom use in Portugal [12].

CD is a seldom-practiced procurement procedure in Norway. An empirical research on CD in public infrastructure projects is published, in which the Norwegian Public Roads Administration (NPRA) has used CD in only six projects [13]. This study summarizes the level of using CD in the EU member states as Table III shows.

In addition, CD programs are often used in PPP projects because the scale of projects is getting bigger and the risks are getting higher and higher. In general, the government does not have enough funds to complete the scope of PPP projects and cannot manage them during early stage. Therefore, to incorporate CD into PPP contracting mechanism is necessary. Table IV shows a summary information presented by the European PPP Expertise Centre [10].

Country	Level of using CD	Notes
UK	Highly used	Had dialogue-like procedure
France	Highly used	Had procedure comparable to CD
Netherlands	Moderately used	Most are PPP procurements
Germany	Moderately used	-
Ireland	Moderately used	-
Finland	Moderately used	Used in IT contract
Denmark	Moderately used	First to implement
Spain	Moderately used	-
Portugal	Modestly used	The grounds of use is too restrictive
Norway	Modestly used	-

TABLE IV: CD PROCEDURE IMPLEMENTATION ON PPP PROJECT [10]

Country	CD Implementation
UK	CD procedure is used for all types of procurement. The joint guidance of the Office of Government Commerce and the Treasury published in June 2008 states that CD procedure should "replace the negotiated procedure as the main procedure for complex public procurements where open and restricted procedures are deemed unsuitable."
France	CD procedure can be used for all kinds of public procurement contracts and not for PPP projects only.
Netherlands	CD procedure has not only been used in large projects, but also in smaller projects. The majority or even all of the projects where CD procedure was used were PPP projects.
Germany	CD procedure is used for all types of procurement other than in the fields of water, traffic or energy supply, property development agreements.
Ireland	The procedure has been used on a number of PPPs to date, and has also been used on a wide range of other projects, such as IT contracts and property development agreements.
Finland	CD procedure can be used in general and is not restricted to PPPs only.
Denmark	CD procedure can be used in general. However, in practice this procedure has mainly been used for PPPs.
Spain	CD procedure can be used for PPP projects in Spain by reference to "collaboration between public and private sectors," although the negotiated procedure can also be used under certain circumstances. PPP in the form of a concession will not be developed under CD procedure.
Portugal	CD procedure is not widely used in Portugal either in general or for PPPs. CD procedure was used by the Lisbon Municipality to create, implement and finance a network of shared-use bicycles in Lisbon, complementary to public transportation. However, there were some doubts as to whether the grounds for the use of CD procedure were justifiable.

In the survey by the European PPP Expertise Centre [10], the reasons why those countries did not use CD are summarized below:

 They prefer to use procurement methods more familiar to them and better suited to particular conditions of their domestic markets, or prescribed by their national procurement laws, such as the open or restricted procedures;

- A small number of the respondents believe that CD is not well adapted to the procurement of PPPs, because of its perceived excessive length and cost;
- Contracting authorities in some countries have concerns that the CD procedure is less transparent and thus more prone to corruption risks than other procurement procedures.

Based on the global review of CD, it is clear that this new procedure for awarding public contracts is mainly used in the EU member states. CD has been implemented over one decade in the EU. Obviously, it provides solid benefits for the adopted countries because of continuous implementation. This is one of the reasons why this study wants to explore implementation motivations and problems of CD implementation.

III. MOTIVATION AND PROBLEMS FOR CD IMPLEMENTATION

The UK and France had a procedure comparable to CD before the EU announced in 2004. These two countries had used those procedures extensively. The motivation of using CD is to replace or to improve the original procedure. Table V shows the differences between UK and France's procedures and the CD by a previous study [6]. The CD procedure in the EU is more similar to the adapted negotiated procedure in the UK rather than that in France.

TABLE V: PRE-COMPETITIVE DIALOGUE PROCEDURES IN THE UK AND FRANCE [6]

	Fŀ	RANCE [6]	
Procedure	Number of candidates required to invite	Outline offers? Discussions on outline offers?	Availability of Procedure
France: Appel d'Offres Sur Performance meet its needs;	5 (as with restricted procedure)	No: initial bid submission and subsequent clarify/specify /fine-tune	When contracting authority cannot identify means to assess the technical or financial solutions available.
UK: adapted Negotiated Procedure	3 (as with negotiated procedure)	Yes	Availability of negotiated procedure with a contract notice.
EU: Competitive Dialogue	3	Yes	Particularly complex contract (cannot identify means or technical/financial complexity.)

Netherlands has adopted CD on complex contracts for infrastructure and construction projects (about 43%) and contracts on information and communication technologies (about 23%) [14]. The field of infrastructure planning can be considered complex because the traditional approaches to road infrastructure planning are changing. Therefore, this complexity is related to several developments in road infrastructure planning. Government has ever since dominated infrastructure planning. However, the shortcomings of such a hierarchical regulated approach become clear as it cannot easily adapt to the changing values and demands of the complex society, leading to government failure [15], [16]. This means that the traditional approach that arrives at a fixed end-result through a static planning process is impossible to apply successfully in current complex road infrastructure projects [17]. Therefore, when a government encountered a complex contracting environment, the CD will be a good solution.

The NPRA plans to use CD in complex and mega infrastructure project in the future. The NPRA has used CD in 6 projects [13]. In case1 and case 3, project's complexity (technical difficulty) was the major motivation for using CD, which includes sensitive ground conditions (quick clay) and the surrounding environment (since the project was in an urban area). Furthermore, case 1 was the first infrastructure project where the NPRA using CD. The client lacked experience and reference projects for executing similar project. The main difficulties of using CD are the complexity of design and execution of the projects and the difficulty of estimating the projects' costs. Regarding case 2 and 4, the motivation of using CD were to identify and to determine how the client's requirements and needs could best be met. The complexity was also the main motivation. The projects were defined as complex by taking into consideration the length of the road project (approx. 60 KM) and the contract complexity (the contract includes design, construction, operation and maintenance of the road project for 15 years) [13].

The contractor qualification in CD is necessary because of the propensity in some jurisdictions, for example, the challenges to public procurement procedures relating to large infrastructure projects (such as PPP tend to be) to be the rule rather than the exception in Germany and Austria [4]. The current German procurement system must be viewed as the result of a long and controversial legislative process in which various amendments and reforms have taken place over the years. This might be the reason why German procurement law tends to be much more complex than those in many other EU member states. Furthermore, it must be said that the German system does not only create problems for foreign academics or foreign tenderers, but it equally establishes obstacles for national practitioners and procurement experts. The CD procedure was integrated into German procurement law in September 2005 as an innovative procedure, allegedly introducing more flexibility and enriching the State's procurement of goods and services. In the sense of extremely complex projects such as those involving public-private partnerships, can be handled appropriately and successfully [7].

Based on a study report [7], the CD procedure was used in the medical sector thirteen times by four different contracting authorities. So far, the practice has confirmed a relatively flexible approach towards the scope of the procedure. The report also concluded that contracting authorities did not entertain doubts regarding the scope of application of the procedure. Through interviewees were using the CD because they felt the procedure was the most appropriate for the need at hand and the open or restricted procedures would not have been adequate to award the contract they wanted [7].

Danish contracting authorities stress that CD gives more value for money. This is perceived to be a result of efficiency gains rather than innovation [18]. The procedure helps to

increase competition between the bidders, and the final contract gives a better fit with their needs [14].

The CD has been used only five times in Portugal, with the last procedure being launched in March 2010. Two contracts were tendered for awarding bicycle renting schemes, one for IT services, one for consultancy services and one for hospital cleaning. Although the numbers are simply too small to conduct a detailed analysis, the absence of infrastructure or major IT projects tendered in Portugal by means of a CD should be noted. Table VI summarizes the motivation of using CD and the procurement problem encountered by discussed countries.

TABLE VI: PROCUREMENT PROBLEM AND MOTIVATION FOR CD USE

Country	Procurement problem	Motivation of Used
UK	The original procedure is not complete	Replace and improve the original procedure
France	The original procedure is not complete	Replace and improve the original procedure
Netherlands	Traditional project delivery methods cannot easily adapt to the changing values and demands of the complex society.	Improving the feasibility of the planning and creating a platform for innovative solutions.
Germany	The procurement law is much more complex than other countries.	Provide an innovative and flexibility procedure.
Denmark	No data	Gives more value for money and increase competition.
Spain	The open or restricted procedures would not have been adequate to award the contract they wanted.	The flexibility make it be the most appropriate procedure for the complex project.
Portugal	No data	For infrastructure or major IT projects
Norway	Traditional project delivery methods have difficult to execution of the projects and estimate the projects' costs.	Find the best solution and reduce the risk of cost.

IV. DISCUSSION

A. Analysis of Countries with High Use Rates

First of all, it is noticed that the countries with high usage rates, France and the United Kingdom, have different conditions to other countries. It can be discovered from section II that the UK and France usage rates are among the highest in all countries, because they already have the negotiated tendering procedures comparable to CDs before the launching of the CD in the EU, which shown in section III. Therefore, the completeness of laws, supporting measures and experience of procurement personnel are more suitable for using CD than other countries.

Next is the moderate user, Germany. German government procurement law was very complicated compared to other countries and the procedures were quite complicated. Prior to the introduction of CD, complex procurement projects were mostly awarded by recourse to the negotiated procedure. However, after the introduction of CD, the contracting authorities are free to choose between the two procedures, as long as the requirements of ground of use are met. Although the government clarify unequivocally that neither of the two procedures enjoys priority over the other. The primacy of CD has been justified by recourse to the more competitive character of the dialogue procedure [7].

Another moderate user, Netherlands. Netherlands has been on complex contracts for infrastructure and construction projects (about 43% of the total) and contracts on information and communication technologies (about 23% of the total). Compared to other European countries, the CD is applied more often by the Dutch national government and predominantly in road infrastructure projects [6]. Within the limited experience of the CD procedure in Dutch national road infrastructure planning, the framework of governance strategies as developed by Robinson *et al.* (2000) is dominated by two strategies: coordination (by the public parties) and competition (by the private parties) [19]. Furthermore, CD seems to be first choice option for PPP procurements in the Netherlands [10].

B. The Issue that Has Been Found

Although CD has been in use in certain countries since 2005, it still remains a relatively "unexplored" procedure at the European [10]. The authorities must first clarify the problems that they may encounter in order to increase the chance of success. This study discusses the issues in four stages: before bidding, tender stage, dialogue stage and after the dialogue.

1) Before Bidding

Compared with the traditional tendering process, CDs are very complicated. In order to conduct a CD successfully, the procurement department must be aware of how each stage operates. Therefore, the procurement department must conduct training for a period of time before the competition dialogue is implemented [10].

Because of the use of CD is conditional, it must be reviewed before use. The basis for the review depends on the interpretation of the three concepts that exist in the various articles of the EU directive. These concepts are particularly complex contracts and it is not possible to use open and restricted procedures, nor can they define technical means, the legal or financial composition of a contract. However, these concepts are abstract and cannot be quantitatively quantified. It is difficult for the authorities to formulate objective and clear specifications [12].

2) Tender Stage

According to article 44 to article 52 of the 2004 No. 8 EU directive, contracting and residing must select at least three candidates for the next phase. However, due to lack of experience and unfamiliarity, candidates may be very limited, and make the authority be difficult to select or find the contractor that can satisfy the conditions of the authorities in the tendering process. Nevertheless, some researches indicate that the contracting authority can continue the procedure if fewer than the minimum number of candidates meets the requirements for

awarding a contractor [12].

3) Dialogue Stage

The timeline of CD will take about one to two years in most cases, and there will be a few number of projects that will last more than two years. If the CD has many participants and must be carried out in all details, then the procedure can achieve its original purpose. It is risky for all contractors and authorities to spend so much time on one project [10].

The transaction cost of CD is also very high, because at the dialogue stage, bidders and authorities must spend money to hire experts or consultants to analyze and evaluate the merits of each program. According to the current rules, only the scheme will be withdrawn, but the bidders will not be withdrawn some experts suggested that they could reduce the number of bidders or withdraw some of the bidders during the dialogue to reduce the cost [10].

The most important issue at this stage is how to ensure the definition of equal treatment for candidates and ensure confidentiality in accordance with the article 29/3 of EU directive 2004118. According to this article, the contracting authority must guarantee equal treatment among all bidders and avoid revealing each solution to other participants. The "cherry picking" of the best solutions from different candidates is clearly forbidden, thus limiting the possibility for contracting authorities to create hybrid solutions that best suit their needs [12].

4) After the Dialogue

The CD stipulates that the candidate must submit the final price before choosing the final candidate, but it is difficult to practice on many projects. The article 29/7 allows for clarification and confirmation of commitments that do not alter the nature of the tender, and does not create the risk of distortion of competition and discrimination. The wording of this paragraph is ambiguous because "clarification" and "confirmation" do not seem to allow change, and the reference to "substantial" seems to imply that there is room for change.

Others believe that the lack of flexibility in negotiations at this stage may jeopardize the practicality of the procedure. Finally, after submitting bids (before or after the winners), the existence of a total ban on detailed meetings may raise such questions if it is not willing to simply adjust the scope of the previously notified negotiating procedure to accommodate competition [10], [12].

V. FEASIBILITY STUDY OF USING COMPETITIVE DIALOGUE IN TAIWAN

In Taiwan, the process of CD is rarely known, and the relevant research and literature are very few. However, the EU countries and other countries (ex. Australia and New Zealand) have implemented CD successfully. As the use of CD is increased gradually and the scope of use is increasing, it is the timing to consider whether the CD is suitable for the procurement system in Taiwan and other countries which wants to adopt new contracting approach to improve procurement performance.

A. The Government Procurement Act

According to the Government Procurement Act (GPA) in Taiwan, the tendering approach is divided into open tendering, selective tendering and limited tendering, which are similar to the EU's open tendering, restricted tendering and negotiation. The contract awarding approach is divided into the lowest price tender, and the most advantageous tender (similar to famous best value approach). Since the authority in Taiwan will try hard to avoid the suspicion of the beneficiaries of a particular contractor, the procurement authority will tend to use a very clear method of award decision. This is very inflexible and rigid, and the EU's procurement law is relatively flexible, and it will not be over-standardized. It is like the cost-price cannot be used as the sole criterion for award, but it should be economically most favorable.

Although the article 55 in GPA clear illustrates a procedure as follows, almost all authority will not perform negotiation.

Where an entity plans to award a contract to the lowest tender but cannot award the contract according to the preceding two Articles, the entity may alternatively award the contract through negotiation, provided that such negotiation has been approved by the superior entity and announced in advance in the notice of invitation and the tender documentation.

Notably, the article has provided a way to conduct negotiation. It is a chance to incorporate the CD into Taiwan's GPA.

B. The Negotiation System

Since the method of awarding is generally standardized, the relevant norms of the negotiation system are also very few. The timing of using negotiation is only when the authority can't award contract based on the appraisal mechanism, and the content of the negotiation is very limited. According to the forum of negotiation system of the most advantageous tender conducted by the Executive Yuan in Taiwan [20], many government agencies raised various concerns, such as whether the negotiation of different projects would cause controversy, it is difficult to implement only the principled regulations in the negotiations. The most serious case is that when an evaluation is completed and the first priority contractor is determined, if the change in the ranking after the negotiation would cause controversy. This case is the suspicion of most government agencies, so the negotiation mechanism is rarely used in Taiwan.

Although the government agencies have many negative concerns on negotiation, several real cases encountered the problem of wasting procurement time and cost due to rigid contracting approach. It is a necessity to incorporate new tendering approach to solve the problem.

C. Procurement Issue

In Taiwan, there are many complex construction or technological innovation projects. The government authorities have not carefully evaluated the financial status, technology, and engineering experience of the contractors. As a result, the follow-up contract stage become difficult to perform because of the contractors have insufficient capacity. Another condition is the details of the contract are unfair and unfavorable to the contractor, which makes difficulty for the contractor to perform the contract during the contract stage, and might cause substantial financial difficulties. Those two situations will make the contractor closed down, and delays the public projects completion. Moreover, there are high capability requirements on engineering and finance for some cases, so not many contractors can participate the project. It will lead to very few bidders when tendering. This situation will be very easy to make the contractor bid higher than the base price, and lead to the tendering failed many times. According to the discussions in Section III, the above situations can actually be greatly improved under the use of CD procedure.

D. Feasibility of Incorporating CD

The last part will analyze the feasibility of incorporating CD into Taiwan's GPA, according to the issues in section IV, Part B. Since the CD has not yet been introduced, this article attempts to discuss the issues that can be analyzed now.

1) Before tendering

It is true that the government should ensure that all agencies have a proper understanding of all processes before tendering. The government must promote CD through official government guidelines, forums, or education training. In terms of grounds for use, the government must first develop some basic principles, such as the high degree of complexity of the project or contract, and then clarify what types of projects can be used. In the previous review of the literature, it can be found that the grounds for use should not be too restrictive, but it must be clearly defined.

2) Tendering stage

In general, tendering participant candidates must have more than three candidates to carry out the next stage. However, at the beginning of implementation, the number of bidders will be very few. If such a strict rule is set at the beginning, the use of CD might face a serious challenge. To determine the number of participant candidates flexible, i.e. case by case, would be another way to go.

3) Dialogue stage

The duration of the dialogue phase in general is long and costly. A longtime schedule may lead to a very unsuccessful implementation of the CD process in Taiwan. Because of political factors, some government officials would like to have the project completed during their term of office. To develop a clear duration determination rule would be a good alternative.

4) After the dialogue

After the dialogue phase is over, the candidate must submit the final bid. After the completion of the submission, the authorities may make final explanations and clarifications. The scope of this phase must be clearly established. Otherwise, failure to obtain the target candidate may cause controversy. Such an example already exists in Taiwan's negotiation process.

Introducing CDs in Taiwan is beneficial and can improve

many of the existing procurement issues. However, under the existing system in Taiwan, such as the inelasticity of the tendering method, procurement authority avoiding controversy, and the lack of experience of the various agencies and contractors in using the negotiation system. It is difficult to solve all of them at one time. Therefore, it would be more feasible to use the existing laws first, make the existing consultation system more complete, and expand the scope of the existing consultation system, and then introduce the CD procedure as a new tendering procedure.

VI. CONCLUSION

With more and more advanced science and technology, construction project has become increasingly large and complex, and traditional tendering approaches have failed to meet the procurement needs. The CD procedure can indeed solve many practical problems. The introduction of CD has become an important issue that every country might face when it continues its economic developments. However, each country's procurement system and environments are different, and it must be carefully analyzed and planned. For non-EU countries, direct legislation to introduce competitive bidding procedures may not be appropriate for new tendering approach, and gradual and well-established support measures should be planned. This study attempts to analyze the feasibility of introducing the CD procedure in Taiwan. Although this study confirms the feasibility of incorporating CD procedure into Taiwan's existing tendering approaches, it must still be carefully planned and implemented so as to avoid the low usage rate after the introduction so that the original purpose was not achieved. Finally, other countries can also refer to the results of this article, to analyze whether it is suitable for use, and discuss the difficulties that may be encountered, so that the use of the CD procedure more successfully.

It is a good news that the World Bank publishes a guide: "Competitive Dialogue, how to undertake a competitive dialogue procurement process" in 2017 [3]. It is not only a useful guide for potential users but also a hint: competitive dialogue provides a solid tendering approach for use.

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I-Jen Ting is a master's student in the Graduate Institute of Construction Engineering and Management at the National Central University, Taiwan. Her research interests include public procurement, PPP project and competitive dialogue. Now her thesis focuses on the issues of the feasibility study of implementing competitive dialogue in Taiwan.



Jyh-Bin Yang is a professor in the Graduate Institute of Construction Engineering and Management at the National Central University, Taiwan. His research interests include project scheduling & delay analysis, procurement performance evaluation & performance-based contract, knowledge management system development and BIM (Building Information Modelling) implementation policy & performance

evaluation.