

INSTITUTIONAL BARRIERS TO PRIVATE PARTICIPATION IN INFRASTRUCTURE: THE CASE OF ELECTRONIC TOLL COLLECTION IN TAIWAN

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Public Private Partnerships (PPP) was imported into Taiwan in 1994, with Build Operate Transfer (BOT) as the main approach. Adopting the tool of network analysis, which focuses on the explanation of actor behaviours, this paper aims to illustrate how the use of PPP can be hindered by institutional limitations. It examines the case of the Electronic Toll Collection project, which encountered problems in the procurement process, and was finally ordered by the court to return to the tender stage. The preliminary findings are that the difficulties in using BOT in this case result from: i) government treating PPP as a “free lunch”, assuming that all risks could be transferred to the private sector; ii) insufficient government action to prevent PPP becoming the channel of collusion; iii) the strong public opposition; iv) the incomplete judicial framework for resolving PPP disputes. The conclusion summarizes the conflicts between the imported PPP and the existing political, legal, judiciary and social institutions. An important question for further research is whether such conflicts are leading to institutional change which will enable PPP to be used more easily in future.

Keywords: electronic toll collection, institutional barriers, network, Public Private Partnership, Taiwan.

INTRODUCTION

Public Private Partnerships (PPP) is defined as the ‘cooperation between public and private actors with a durable character in which actors develop mutual products and/or services and in which risk, costs, and benefits are shared’ (Klijn 2003:137). PPP emerged in the late 1970s along with privatization and contracting out, at a time when governments were eager to resolve the problems of fiscal shortage and the need for increased investment in essential infrastructure.

However, in last 20 years, PPP has not performed as well as expected, especially when transplanted into emerging markets (Harris 2003). Conflicts between the institutional environment and the incoming of PPP are evident.

This paper is a case study of the Taiwan Electronic Toll Collection (ETC) project started in 2003. In 2006, this project was ordered to return to the tendering stage, when relations between various actors from different arenas broke down in chaos. It is based on in-depth interviews with public and private partners, ETC contracts and government documents, a site visit to the ETC toll and informal interviews with staffs from the public and the private sector.

The purpose of this paper is to illustrate how the use of PPP (mainly BOT) in Taiwan has been hindered by the nature of the institutional environment, i.e. legal, political and cultural environment.

The institutional barriers to PPP are explored through a network perspective, in which Actors and the interaction between them constitute a policy network. Network is defined as the changing patterns of social relationships between interdependent actors which take shape around policy problems and/or clusters of resources and that are formed, maintained and changed by an ecology of games between these actors (Klijn 2003: 137).

PPP progresses through a game that involves more than one arena (for instance, central and local government) and more than one network (for example a traffic and transport network and a public housing network). While the main actors are public and private partners, actors from other arenas and network also have power to influence the game's development. Each actor in the game use different strategy as they are from different institutional domain. This makes the game complex. The result of the game is influenced by the actors' behaviours and the institutional context.

The background of Taiwan PPP development and the ETC project is first outlined. Then the institutional problems in the ETC project are analyzed in three stages, examining the behaviours and interactions among the actors which led to the project's return to the procurement stage. The final section concludes, stressing the underlying issues in the conflicts between PPP and the existing institutional environment.

BACKGROUND OF ETC PROJECT

Taiwan started the progress of Public Private Partnerships in 1994, when Ministry Of Transportation and Communication (MOTC) stipulated the 'statute of encouraging private sector participating in transportation development' (Huang 2003: 2). After the promulgation of formal law: The Act of Promotion of Private Participation in Infrastructure Projects (APPIP) in 2000, the use of PPP was extended to broader infrastructure area with the increase of project numbers (Public Construction Commission 2006).

So far, Build Operate Transfer (BOT) is the main approach used in PPP projects (Huang 2003: 2-9). The use of PPP covered 17 sectors from transportation to agriculture, in which projects in the sectors of education and culture, tourism and transportation accounted for the majority (Lin 2006).

Electronic toll collection (ETC) aims to eliminate delays on toll roads by adapting military "identification of friend or foe" technology. This 'determines whether the cars passing are enrolled in the program, alerts enforcers for those that are not, and debits electronically the accounts of registered cars without their stopping, or even opening a window' (definition from Wikipedia).

Taiwan ETC project started tendering in 2003, and was ordered back to re-tendering in 2006. During this period, this BOT project process turned out to be more complex than expected, involving various actors from the public sector, private sector, legislative Yuan (parliament), court and the public/user.

The actors are as follows:

Public sector domain:

- Executive Yuan: executive branch of the government
- Legislative Yuan: parliament of Taiwan

- Control Yuan: highest control organization of the state, exercising the powers of impeachment, censure, and audit
- Taiwan Senior Administrative Court: under the judicial Yuan which is the highest judicial organ in Taiwan, in charge of the lawsuits in public administration
- Ministry Of Transportation and Communication (MOTC): subordinated body under Executive Yuan, in charge of Taiwan transportation management.
- Taiwan Area National Freeway Bureau (TANFB): subordinated body under MOTC, in charged of Taiwan highway construction and management.
- Public Construction Commission (PCC): facilitating body under Executive Yuan, in charge of PPP law making, examination and promotion in different area.

Private sector domain: Far Eastern (FE) as the bidder; Yu Tong (YT) as the bidder

Public/social domain: The public/users and Media

ETC PROJECT: ACTORS, GAMES AND INSTITUTIONAL BARRIERS

Stage 1: pre-tendering: BOT or in house?

The idea of using ETC was introduced into Taiwan in the 1990s; previously tolls were collected manually. In 1996, the head of MOTC proposed to implement ETC by contracting out to the private sector, namely through “Build and Operate”, which includes contracting out the finance, operation and technology management. However, when a new head came to power in 1997, MOTC turned back to the ‘in-house’ method, and TANFB (the body responsible for highways under MOTC) signed a contract with China Telecom, the state-owned enterprise, for the construction, operation and maintenance of the ETC system (Huaxia News, 2006).

However, China Telecom’s budget plan for this contract (about 1.6 billion NTD), was rejected by the Taiwan Legislative Yuan (Taiwan Parliament) in 2002, and the contract with China Telecom was terminated. Since the in house method had failed, the MOTC had to turn back to BOT as the only possible alternative.

Should ETC be carried out by BOT or ‘in house’? This choice caused conflicts between actors in the political domain. MOTC’s decision changed from BOT back to the in-house method and then back to BOT, following parliament’s veto of the ‘in house’ method, illustrated the obscure criteria for choosing between investment approaches.

In the 1990s, BOT gradually became popular in many developing countries, most of which, including Taiwan, were eager to seek breakthrough in fiscal shortage. However, at that time, Taiwan did not have any legal document or policy documents to deliver the private participation in public services. The choice of investment approach was decided by the government “behind closed doors” without any transparency in the process. In this case, the head of MOTC played a key role in the decision. The change of leader changed the decision greatly.

Although the stipulation of APPPIP in 2001 ended the subjective process of choosing an investment approach, the criteria set up in APPPIP implied a ‘free lunch’ attitude among the members of the Taiwan government towards PPP, which caused troubles later.

APPIIP defined PPP as ‘government zero investment’, namely, when PCC judges whether a project is applicable to PPP framework, only those projects which the private sector is willing to carry out, and for which the public sector does not need to invest a penny, will be done by PPP rather than a traditional approach.

The ‘free lunch’ attitude is common especially in emerging markets, when PPP was implanted as a quick method to meet the need of public service, without paying from public finance, it was not easily understood among the members of governments that they need to assume risks if they use this means of procurement. For example, in the interview with TANFB, a staff member argued that, “we don’t care about technology. We only required that government has no risk. The private partner will pay all the cost if they fail in technology”.

The principle of PPP is that both parties bear the risks which they are capable of bearing (Grimsey and Lewis, 2004). It is government’s responsibility to work out the suitable risk allocation between both sides. When risks are not allocated suitably, there are two consequences: i) the project can not go on because the private sector is not able to afford the extra risks. This termination risk will finally come back to the public sector. Example can be found in the Leeds Armouries Museum in UK, in which the public sector had to bail out the museum when the private sector could not afford the cost (NAO 2001). ii) The public partner is locked in to the private partner. For example, the private sector transfers the cost to the customer and causes the public opposition. It turns back to the public sector to bear this public reputation risk. This happened in this ETC project.

Summary: in the game of choosing BOT or ‘in house’ method, although there were conflicts between MOTC and Parliament, both of them stuck to the ‘free lunch’ criteria, in which cost is the only measurement in the choice. This criterion was then admitted in the legal framework. The problems of the ETC project originated here.

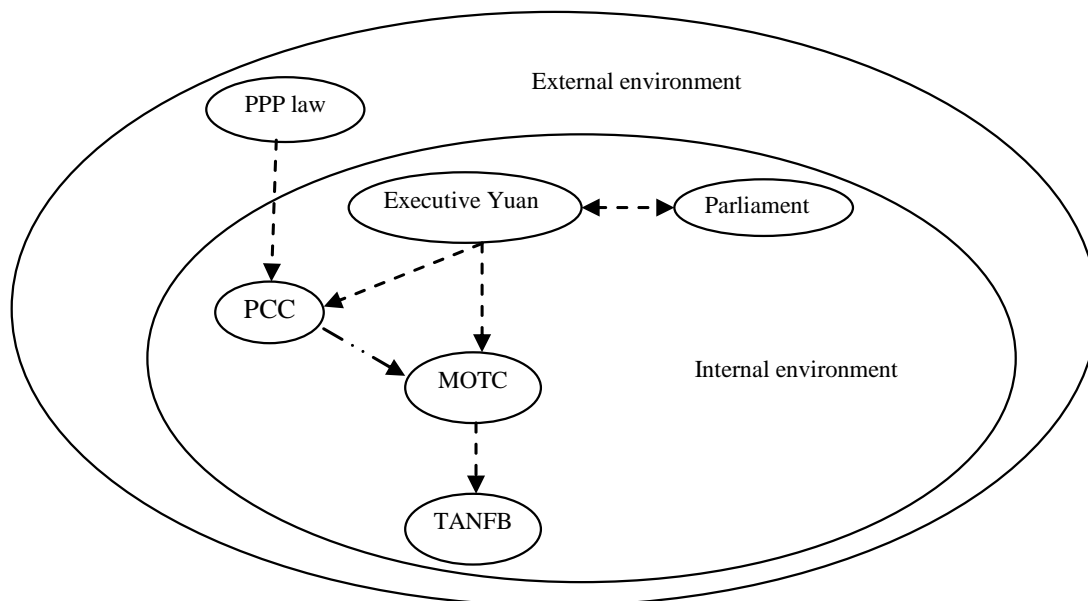


Figure 1: Stage 1

Stage 2: tendering: Far Eastern or Yu Tong?

In 2003, ‘ETC construction and operation BOT project’ began tendering.

In the tendering plan, the private sector is responsible for the finance, construction, operation, maintenance, and promotion of ETC system to users; it collects tolls to TANFB's account, and TANFB agrees to pay service charge (a percentage of the collected toll) to the private sector (TANFB 2003). At the end of 2003, Far Eastern (FE), defeated another two competitors: YT and Acer, and was chosen as the senior bidder. This meant that, FE would sign the contract with TANFB, if the coming negotiation between TANFB and FE was successful. Yu Tong Company (YT) obtained the qualification as junior bidder, which would substitute, if FE's negotiation with TANFB failed.

However, unsatisfied with this tender result, YT appealed to TANFB, complaining that the tendering and bidding procedure was unfair. After 20 days without reply from TANFB, YT appealed to PCC for further judgment. PCC decided to have a review meeting on 28th, April, 2004, but TANFB suddenly announced the rejection of the complaint by YT and signed the final contract with FE on 26th, April, just 1 day before the PCC meeting.

In the review meeting, PCC announced that, FE did not provide sufficient details about the Chinese version of its infra-red system, nor provide the notarization of this system according to the tendering requirement. FE's senior bidder qualification was invalidated due to this ignorance.

However, the ETC system has been installed by FE at 21 existing toll booths around Taiwan.

The game became complex when more actors became involved. From the perspective of network, separation between the public and the private partner can easily happen, as they have different strategies and come from different institutional domains. However, they also can stand at the same side when they face the same enemy. In this case, TANFB and FE, quickly formed an alliance by signing the contract, when they confronted the challenge from another actor: YT and PCC. In the interview, it was interesting that TANFB invited FE to accompany them in the interview and answered the questions together.

An actor's strategy depends on the power and resource it possesses. Risking the opposition from PCC, TANFB signed the contract with FE, implying the strong support from peripheral actors.

Later, the Head of MOTC and several bidder selection board members were summoned by prosecutors for investigating corruption and bribes. The head of FE was also alleged by the press to have a close relationship with Taiwan president's family. In 2006, the chief executive of FE was prosecuted by Taipei Public Prosecutors Office (Dajiyuan news, 04/08/2006)

As the network approach implied, the peripheral actors are not without power. Klijn argued that key players (formally involved in the project i.e. partners) have to consider the possibility that peripheral actors may intervene suddenly, or that the actions of these peripheral actors may have a substantial impact on the development of the area (2003: 141). In this game, although TANFB, FE and YT dominated the stage, the peripheral actors: MOTC and the lobbying groups had stronger impact on the project direction.

These peripheral actors, most of them from political parties and interest groups, are hard to see, when they usually play off-stage and through informal rules. However, in

Taiwan, the allegations were that the ‘informal rules’ include corruption, bribe and ‘under the table’ transactions, which were the legacy from the pre-democratic age.

Summary: in this tendering stage, an alliance was formed between TANFB and FE, to resist the challenge from PCC and the losing bidder: YT. Behind TANFB and FE, are the peripheral actors from MOTC and lobbying group. The alliance between TANFB and FE revealed the power of peripheral actors (interest groups) in controlling the project progress. The behaviour of the peripheral actors showed that the ‘under the table’ convention still exerted influence within the strict legal procedures.

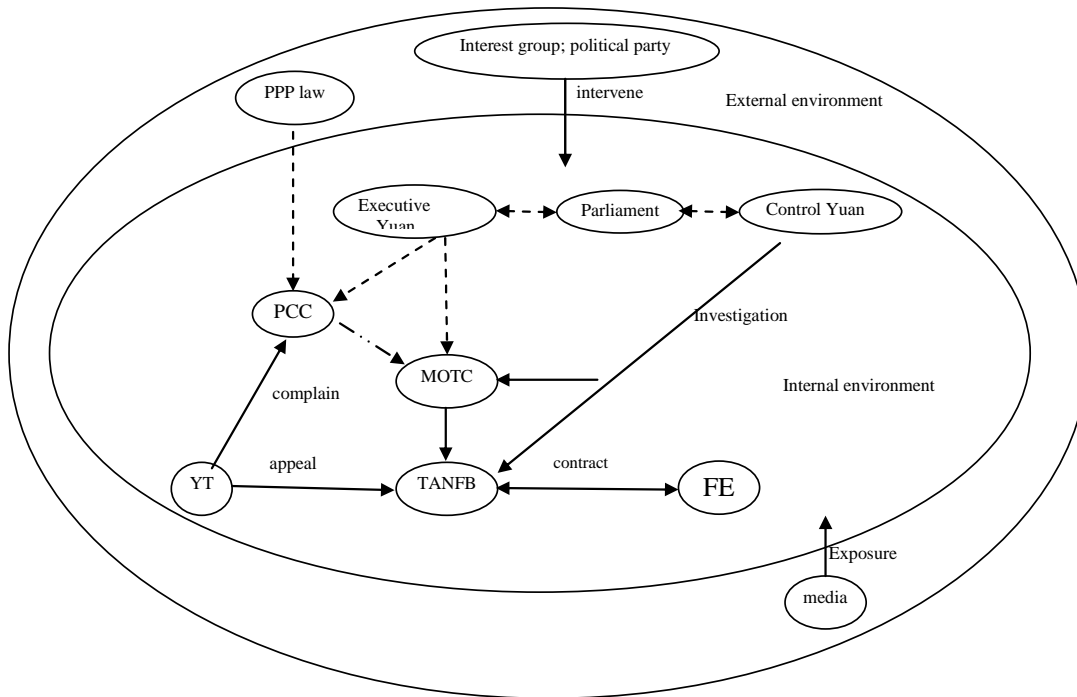


Figure 2: Stage 2

Stage 3: From contract signing to the court appeal: public interest or private benefit?

When this project network was challenged by the prosecution system, at the same time, the public/user was also involved when FE carried out their On Board Unit (OBU) promotion plan. In ETC project, the users need to buy an OBU through FE, in order to pay tolls when they drive through the toll booths without stopping. Angered by the high charge of the OBU and recent scandals, the users started to boycott FE’s facility.

At the same time, YT continued to appeal to the Taipei Senior Administrative Court. The judgment of Taipei Senior Administrative Court was regarded as an influential decision. It cancelled FE’s qualification, giving the reason that the procedure of selecting bidders disobeyed the principle of public interest and equity, and the public and private partners (TANFB and FE) had not considered the public interest during the project process, especially the high charges users would have to pay for using ETC(Taipei Senior Administrative Court, 2006).

When the public became involved, the situation changed unfavourably for MOTC, TANFB and FE. The Executive Yuan forced FE to make a new price plan to meet the public interest, even though this meant changing an agreed contract. MOTC, caught in

this unexpected situation, decided to appeal to the Supreme Court, and leave FE to operate the ETC system until the final judgment come out. In September, 2006, the Supreme Court announced that MOTC's appeal had failed, and ETC project was ordered to go back to the stage of tendering.

The users here were another peripheral actor who exerted strong influence on the project. But in the beginning, the power of the public was ignored. Although TANFB officials explained that they had done a public opinion survey before the project started, they did not expect that public opposition was so strong that it would cause the boycotts of purchase of OBU, and influence the judgment of the court, which forced MOTC to push FE to reduce the OBU price. One reason for the ignorance was that the actors in the public sector believed that the strong public opposition results from a 'complaint' culture in Taiwan: people always disagree with new things (for example PPP) until they realize the benefit after a long time (source from interview). Another reason was that, the nature of public interest of PPP was overwhelmed by the 'free lunch' incentive as mentioned above. When PPP was used by government to resolve fiscal shortage and pursue profit, public interest, which is the aim of public service, is easily overwhelmed by government's pursuing of private profit. The absence of clear public benefit was the reason that caused opposition of PPP in many developing countries, e.g. Brazil, Argentina (World Bank 2002, 2004). In Taiwan, the openness of the media provided the channel for the public's pressure.

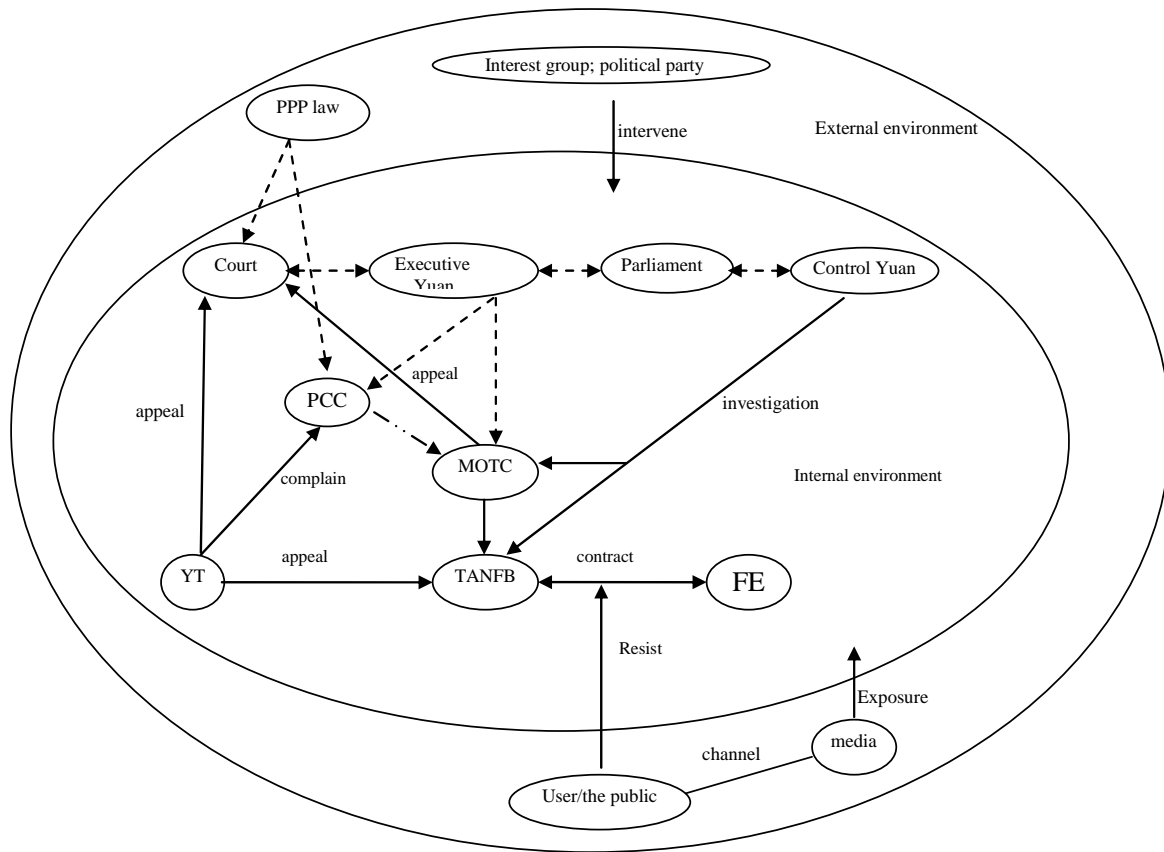
However, to give a 'free handshake' to the users by providing OBUs free of charge in order to reduce public opposition, would not have solved FE's problems. The judgment of the court brought out another question in judiciary framework which needs to be answered urgently: should public law or private law be used to judge the problems in PPP?

The legal system in Taiwan derives from European Continental law, which sets out a comprehensive system of rules, usually codified, that are applied and interpreted by judges. Private law and public law are two parts of the legal system. In general terms, public law, in which administrative law is its sub-system, involves interrelations between the state and the general population, whereas private law involves interactions between private citizens.

When the losing bidder YT appealed to Taipei Senior Administrative Court, the judgment of the court was the cancellation of FE's qualification, on the ground that the procedure of selecting bidders had disobeyed the principle of public interest and equity, and that the public and private partners (TANFB and FE) had not considered public interest during the project process, especially the users charge in using ETC. This judgment was based on the principle of the Administration law. However, the opponents responded that PPP should be judged by civil law rather than public administrative law. This issue actually raised new questions when PPP was imported. PPP, as a concept, crosses the boundary between public and private areas. When the lawsuit happens, should PPP be understood as the contract signed between two civil partner therefore private law will be apply to, or the issue belong to public arena involving public interest and be resolved by administrative law? This is a new problem which had never happened before PPP came to Taiwan. Lacking experience in this controversial area pushed the court to the centre of the debate.

This debate showed the gap in Taiwan's judiciary framework to integrate PPP. But what underlined the gap was the original question of what is PPP used for?

In summary, another peripheral actor (the public) directed the game to the court arena. The court ordered the project back to tender stage. The ignorance of the public voice and the judiciary deficiency in dealing with the conflicts between the public interest and the private benefits were exposed here.



Dotted arrows represent power relationship:
 ← - - - → check and balance; A - - - - -> B: A lead B;
 C - · · · → D: C facilitate D
 Solid arrows accompanied with words represent action relationship
 in this project, E appeal to F
 E $\xrightarrow{\text{appeal}}$ F:

Figure 3: Stage 3

CONCLUSION

From the start to the re-tendering stage, a complex network was formed around the ETC project, in which more and more actors were involved. Through the interaction between actors from different institutional background, conflicts between the existing institutional environment and the use of PPP emerged. The evidence in this paper demonstrates the problems below:

- Government’s assumption that PPP is a “free lunch”, which led to government ignoring potential difficulties;

- Insufficient government action to prevent PPP becoming the channel for collusion;
- Low social acceptability of PPP owing to allegations of collusion. Strong public opposition made the move to PPP more difficult;
- Insufficient preparation for PPP in Taiwan's legal framework was exposed by the ETC case, since it brought the public and private law systems into conflict.

These problems reveal the underlying difficulties of integrating PPP, as a new governance institution, into the existing institutional environment. The difficulties were mainly from the political and legal institutional domain. In the political domain, the assumption of the political actors that PPP would be riskless and costless for them showed that the PPP was seen more as a financial tool rather than partnership between government and the business and the public. Furthermore, it is alleged that potential for corruption of tendering procedures still exists in Taiwan, thereby making PPP become a channel of collusion. These insufficiencies of political institutional environment, plus complaints regarding costs of the OBU, resulted in strong public opposition toward PPP. In the legal domain, the lawsuit of ETC project raised a new challenge to the legislation system in Taiwan: under the European Continental law system, there have not been any specific law in Taiwan can be applied to PPP which cross the boundary between the public and the private arena.

The issues above revealed that Taiwan had not prepared well to integrate PPP. PPP still face the institutional barriers especially that in political and legal domain. However, as Lessard and Miller (2001) argued, transforming institutions is possible. Some projects can become radical institution breakers, through the exposure of problems and the efforts in resolving these problems. Whether institutional changes are triggered by the ETC project in particular will depend on the outcome of the re-tendering now being undertaken.

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