

IPD EN FRANCE: IS IT LEGAL?

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ABSTRACT

Normal design and construction creates poor project outcomes and low productivity. Integrated Project Delivery (IPD) was introduced as a response to these and other shortcomings. Despite the advantages this method provides, IPD is not used in France. This paper discusses different interpretations of French procurement legislation and regulations. French procurement legislation is based on the *European Directive 2014/24/EU on public procurement*. Based on the way the Directive is understood in other EU countries this paper suggests that there is no legal reason why IPD cannot be used for both public and private construction in France. Some will doubtless suggest that this needs testing in the courts before they will risk using it. Limitations of this paper are that it is based on the opinion of a single French construction lawyer and observation of what happens in other EU countries. The implications of this paper for public and private sector clients in France are that they can consider using IPD for more complex projects in their portfolio; for practitioners it is a signal that they can start to learn how to deliver projects using IPD and Target Value Delivery (TVD); for francophone scholars there are whole new areas for research.

KEYWORDS

Integrated project delivery, collaborative contracting, legal barriers, habit barriers, system change.

INTRODUCTION

As elsewhere, construction is very important for the French economy. *As elsewhere*, construction in France is dominated by “*normal*” construction procurement using bilateral, transactional and adversarial contracts. *As elsewhere*, this approach to construction procurement does not deliver what customers want (Barbosa et al, 2017; Egan, 1998).

Construction clients want projects delivered on time, on budget with full scope (Mossman & Ramalingam, 2021). *As elsewhere*, construction clients in France rarely get this level of service from *normal* construction.

Normal construction systematically separates design from production. The construction sector is the only major industrial sector where this still happens. The result is that designers lack good cost information during the design process and frequently produce designs that are difficult to build. This frequently means that designs need to be reworked (de-scoped) to meet the client cost criterion and to make the project more buildable. This separation often creates claims, conflicts, mistakes, costly corrections (rework), and delays. As construction projects

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become more complex, there are increasing schedule and cost pressures and a growing quest for sustainability and quality. These pressures, the fragmentation of the construction sector and the adversarial relationships that flow from the use of *normal* bilateral, transactional and adversarial contracts put the people involved under significant stress.

IPD can address the problems listed above (Ashcraft, 2022). IPD is a relatively recent way to procure construction based on a relational contract. Only construction customers (clients) can choose to procure in this way.

Most adults in France, as elsewhere, have experience of relational contracts (they signed up to one when they got married). Relational contracts for construction have existed since 1992 in UK, since 1997 in Australia and since 2004 in the USA (Mossman, 2023). In France, this type of contract is not widely known in construction, perhaps because of the language differences.

Some people see barriers to the use of IPD. Since research has been done on IPD application elsewhere, the purpose of this paper is to understand what, if any, legal obstacles there are to the use of IPD in France.

Following the method section, this paper introduces IPD and its key elements and then discusses the potential legal barriers to its adoption by French construction customers.

The research question answered in this study is: *Can public and/or private sector construction customers use IPD (relational) contracts to procure construction in France?*

METHOD

The research method used in this paper is a literature review of IPD and its main characteristics. Then, one of the authors, an experienced construction lawyer reviews a representative IPD contract to identify the legal challenges in France. Her opinion is then challenged by other authors with knowledge of the use of relational contracts in other EU countries that have adopted the same EU Directive (EU 2014) in their own legal code and are already using relational contracts for construction. A content analysis of the French legislation was carried out to answer the concerns raised by the construction lawyer.

LITERATURE REVIEW

The use of collaborative/relational contracting to improve the performance of construction type projects came to prominence in the 1990s in the UK process industries. It built on the previous ideas of partnering by incorporating them into a contractual agreement. Known as *project alliancing*, by the early 2000s its use had spread to the public sector in Australia and from there to Finland in the 2010s. The term IPD emerged in the US in the early 2000s during initiatives to address poor project outcomes of *normal* construction methods – they fail to deliver projects to cost, schedule, and quality (Ashcraft, 2022). To overcome these limitations, Will Lichtig created a multiparty agreement, the *Integrated Form of Agreement* (IFoA) (Lichtig, 2006) for Sutter Health. The IFoA requires key delivery partners to pool their proposed profit *at risk*, jointly manage the project through consensus, and use lean processes during design and construction. In 2007, an American Institute of Architects, California Council group named this approach *Integrated Project Delivery* (IPD) (AIA CC 2007). IPD is an approach to agreements and processes for design and construction (Zhang & Chen, 2010).

IPD developed in the US within the Lean Construction community as a holistic approach to both contracting and to delivering projects. This paper is only looking at the narrower procurement/contracting aspects, making IPD the same as *project alliancing*.

IPD is now seen as a method with the potential to revolutionize project delivery. While *normal* delivery methods are based on transactional contracts, IPD is generally based on a single relational contract. “*Relational*” because consideration is given to the quality of relationships and processes, not just to the end product (Roy et al., 2018). It is a project delivery approach

that integrates people, systems, business structures and practices into an innovative process that collaboratively harnesses the talents and insights of all participants to reduce waste and optimize efficiency through all phases of design, fabrication, and construction (AIA CC 2014).

Different organizations approach IPD differently. There are, however, consistent similarities that have been found within most IPD projects and definitions. At core, an integrated team jointly develops project targets, makes decisions by mutual consensus and shares the risks and rewards for achieving them (Azhar et al., 2014).

IPD uses relational contracts — ideally a single agreement that all key participants sign including, at least, the client, lead designer and lead builder. Specialist trades and specialist designers are often added to the contract when they are in a position to significantly affect the project outcome. Use of these relational contracts is common in Australia, New Zealand, the US (Gokhale, 2011) and more recently in Canada and Finland. Clients in other countries are catching on.

For this paper, we use the elements of IPD defined by Rubel and his colleagues from The American Institute of Architects California Council in the second AIA CC report on IPD (AIA CC, 2014). These are listed in Table 1.

Table 1: Main elements of IPD (AIA CC 2014)

Structural elements		Behavioural elements
Business model	Contract structure	Enabling behaviours
Profit separated from cost	Early involvement of key participants	Optimize the whole, not the parts
Costs guaranteed to completion	Jointly developed and validated targets/goals	Trust
Limited entitlement to change orders	Shared risk/reward, based on project outcomes	Integration of information, people, and systems
Profit based on agreed project outcomes	Joint project control and decision-making	Continuous improvement/learning
	Reduced liability among risk/reward members	Appropriate use of technology
		Collaboration

Different definitions and widely varying approaches and sophistication levels mean that the term “IPD” is used to describe different contract arrangements and team processes (Kent and Becerik-Gerber, 2010). Other characteristics of IPD are mentioned in other studies. For example, Cohen (2010) mentions the use of a multiparty contract and collaborative decision making. Others write about the use of Target Value Delivery (TVD) and designing to cost. Table shows the frequency of each characteristic observed in different studies defining the delivery method reviewed by Barutha (2018).

Table 2: Literature review of commercial IPD characteristics listed (Barutha, 2018)

	(Kent & Becerik-Gerber, 2010)	(Ashcraft, 2012)	(NASFA, 2010)	(Lahdenperä, 2012)	(Cohen, 2010)
Early involvement of key participants	x	x	x	x	x
Shared risk and reward	x	x	x	x	x
Collaborative decision making and control		x	x	x	x

Jointly developed and validated targets	x	x	x	x
Liability waivers among key participants	x	x	x	x
Multi-party agreement	x		x	x

Both Tables 1 and 2 reflect IPD's origins in the lean construction community in the US. Lean methods are integrated into the contracts and/or the execution strategies.

IPD is designed to increase collaboration, align the interests of different stakeholders, and encourage actions that add value to the project. It uses a relational structure with shared risk and reward to create a system that enables and supports collaboration. Delivery partners are generally bound together with a multiparty agreement that includes at least the client, the lead designer, and the lead builder. Key consultants and trades can also be included in the agreement (Fischer et al., 2017). An IPD agreement places authority within the team (which includes the client). Projects are jointly managed so that shared risk is balanced with joint production control so that work is more likely to flow. IPD requires jointly made and validated decisions which enable the team to stay aligned to the project targets. It generally limits liability among delivery partners which enables them to share information in a secure way. In contrast, *normal* construction agreements are made independently between two parties at a time and focus on transferring risks. It discourages behaviours that create value for the client but are not required (or rewarded) by the contract, and results in siloed working, protective and defensive behaviour, keeping information close.

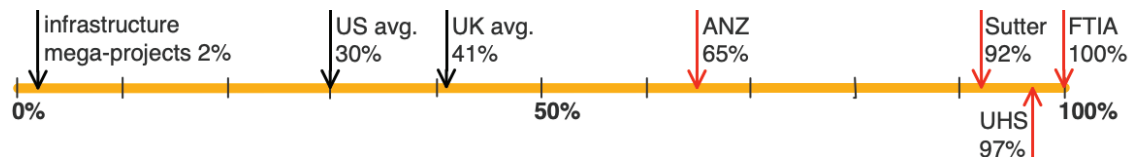


Figure 1: Percentage of projects delivered on-time *and* on-budget. All the projects at the right-hand end – ANZ, Sutter, UHS and FTIA – are IPD or *project alliances*. Sources⁶

As Figure 1 and Ashcraft (2022, Table 2) demonstrate, IPD has shown a positive effect on cost, schedule, quality and team morale; researchers have shown IPD projects to be significantly less expensive than Construction Management at Risk and Design-Build comparisons; others found significantly higher satisfaction with IPD on cost, schedule, and quality than other delivery systems; 86% of IPD projects reported an increase in the profit pool as performance exceeded initial expectations; pair-wise studies found that IPD is statistically superior in some aspects, although the specific benefits differed among studies (though some dispute this finding); in other research, IPD projects outsourced other project delivery systems and a model using characteristics correlated with project success has predicted better outcomes using IPD for complex projects (Ashcraft, 2022; Cheng et al., 2015; Walker, Harley and Mills 2015).

Though IPD is not yet widely used, it is known as an efficient construction project delivery method. A study, led by Kent and Becerik-Gerber (2010), surveyed several owners, contractors

⁶ **infrastructure mega-projects**: on time *or* on budget – Companies public annual report; HIS Herold Global Projects Database, press release 19 Nov 2013 widely quoted; **USA avg**: Construction Industry Institute 2012 Sample of 957 projects avg. US\$65m; **UK Avg**: calculated from 2020 Glenigan data for all Non-Housing Construction; **ANZ**: 61 Australian and New Zealand Alliance Projects, 85% on- or below budget, 76% on-time or better, limited use of *lean* thinking. (Walker, Harley and Mills 2015); **Sutter**: 24 projects 2007-19 worth \$4.7bn. Overall, 5% under budget with no scope compromises; **UHS** (United Healthcare Services): 40 IPD Projects completed 2007-14 in USA, US\$2m-150m (Seed 2014); **FTIA** (Finnish Transportation Infrastructure Agency): 10 IPD projects 2011-22 avg. value €81m.

and designers and revealed that fewer change orders, cost savings, and shorter schedules were listed as the most beneficial aspects of IPD compared to other delivery methods. In addition, case studies of completed IPD projects show the successes realized by project stakeholders.

Companies in the French construction sector are now waking up to the possibility that IPD can help to align the interests of clients, designers and constructors and simulate the collaboration and litigation free characteristics of a single organization (Thomsen et al, 2009).

IPD incentivises delivery partners to collaborate and look out for the interests and success of both the project and of other delivery partners.

KEY ELEMENTS OF IPD

For most people in the construction sector, there is no clear understanding of what's involved in IPD (Kent and Becerik-Gerber, 2010). That is still the case. The following section is a short brief for those not familiar with it.

SELECTING DELIVERY PARTNERS

Construction clients select their delivery partners for IPD projects in a variety of ways.

In the private sector it is not uncommon for the client to select either the designer or the constructor first, to agree the profit that organisation wishes to make on the project and then for the two of them to identify a lead constructor or designer that they can work with and agree with that organisation the profit they want to earn from the project. This snowball type process continues until all the key delivery partners are selected. Key delivery partners are those that can seriously affect the success or failure of the project. This method is not generally possible in the public sector unless it is associated with appropriate open competition.

In the French public sector, as in most parts of the world, it is necessary to organise an open competition where the selection criteria are known from the outset – in Europe they are included in the advertisement published in OJEU, the Official Journal of the European Union. This is the first step in the procurement process.

Finnish public sector IPD projects are procured in this way using a model developed with and for public sector clients in Australia (Ross, 2003) and selection is usually based 60% on quality criteria and 40% on cost. The cost assessment uses the amount of profit that the bidder wants to make from the project and the schedule of rates that they will use to recover their direct production costs and project related overhead during both design and construction. The Finns are clear that having the right people in the project team is vital. They recognise that at the start they don't know exactly what they want to do. According to Finnish construction lawyer, Juha Virolainen, they work to select the *people* who can create the most advantageous project. When selecting partner companies, they are most interested in the people who will represent that company, their IPD experience, their relevant construction experience and their professional skills. "We [assess] skills with case examples or questions. Only named key personnel can participate in these workshops, case examples and *exams*, so the company's best writers cannot answer for them" (personal interview & email with one of the authors).

Finnish procurement law is based on European Directive 2014/24/EU on public procurement (EU 2014) and, as Virolainen pointed out, there is no requirement in the directive for the whole project cost to be known in order to make a selection⁷. French procurement law is based on the same directive. If the Finnish public sector is allowed to procure in this way, why shouldn't French public sector clients be allowed to operate in this way too?

⁷ As one author of this paper has pointed out, in 'normal' construction the acceptance of the lowest bid does not mean that the final cost is known at the time of selection either. As noted above, the successful bidder is likely to be looking for opportunities for change orders and claims to increase both the cost and the profit on the project.

AGREEING COST

In *normal* construction the customer pays the contractual price for the work (the agreed tender price + any agreed or awarded claims). This generally means that doing more work creates a bigger profit for the constructors. This leads constructors to bid low and increase the cost during the project at every opportunity through change orders and claims. Once in contract, the actual cost is generally irrelevant!

IPD projects use *target costing*. Target costing shifts production cost from a fixed to a variable amount with profit and market price established upfront (Tillmann et al., 2017). If delivery partners reduce the amount they spend on staff time, materials, etc., (their production costs) their profit increases. This incentive aligns the interests of the designers and constructors with those of the customer (to build a project that meets the requirements of the customer and end-users within their budget). This helps the customer have greater cost certainty while enabling the delivery team to increase their margins.

Many IPD projects include Key Performance Indicators/Key Result Areas (KPI/KRA) that affect the size of the incentive/profit pool.

Normal construction:

Price = Agreed tender price (incl profit) + agreed/awarded claims

IPD Target Costing:

Profit = % of ((Agreed Cost – Actual Cost of work) + KPI/KRA ±bonuses)

Before starting an IPD procurement process the construction client prepares a business case for the facility they are considering. The business case includes information about the economic and other benefits to the client organisation of the proposed facility as well as a review of how much the organisation is willing to pay to acquire those benefits. Once the business case is clear, the client goes to the market to find delivery partners with whom they can work to deliver the facility. Delivery partners are chosen using several criteria which generally include a schedule of rates for members of staff and the profit they expect to earn from the project if it is successful.

Once the key delivery partners are selected and they agree the basic principles of the IPD contract, it is possible to move to the next phase – getting agreement about how much it is likely to cost to deliver the full scope requested by the client within the client's timeframe. This cost – the *Target Cost* – is agreed in a process called *Validation* (Grau et al., 2021). Additional delivery partners may be added to the relational contract during this process as they are identified and selected. The conceptual estimates of cost are made by the constructors who are expected to deliver the project to the price they have estimated.

The delivery team then designs both the facility and the delivery system so that the scope requested by the client is delivered within the time and agreed Target Cost using the Target Value Design (TVD) process (Tillmann et al., 2017). Using TVD requires the delivery partners to design to cost. The estimated future cost is calculated on a regular basis, generally twice a month, so that the delivery team are quickly able to see the effect of their decisions on the anticipated profit that they will make.

HOW ARE DELIVERY PARTNERS PAID FOR THEIR WORK?

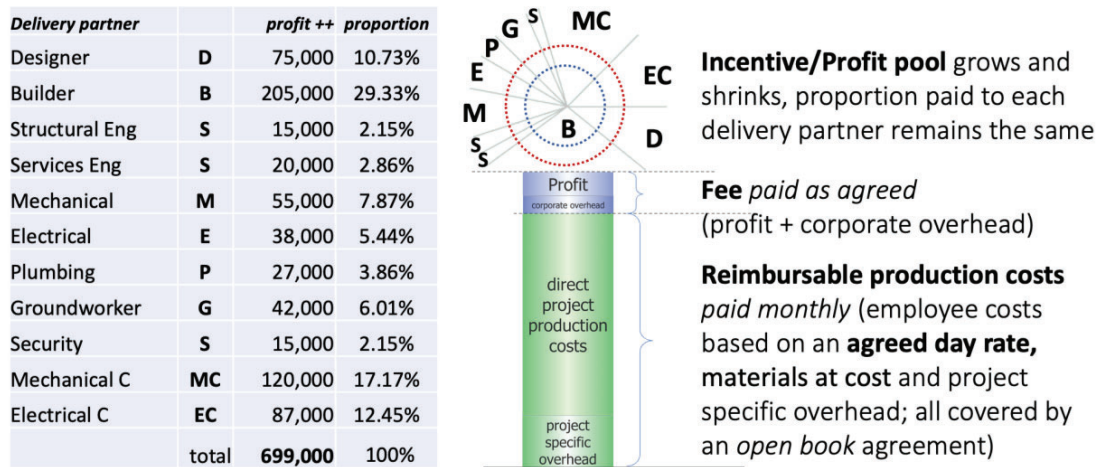


Figure 2: How do delivery partners get paid? Project production cost payments and incentive pool (= fee) Source: Mossman with permission; image derived from Ross (2003), Wilson (2014), Morwood, Scott and Pitcher (2008) and Fischer et al (2017)

Figure 2 shows how much profit the delivery partners to a relational contract have agreed (left hand side). The total is poured into an incentive/profit pool (the fee) and the delivery partners agree that each will receive that percentage from the pool no matter how large or small the pool is at the end of the project. So, the mechanical contractor (MC) for example will receive 17.17% of the profit pool at the end of the project. If the delivery team are successful in keeping the reimbursable costs (green bar) below the total agreed with the customer, some of the saving will be added to the project pool and the remaining saving will go to the customer. The contract may also include additions to – or deductions from – the incentive pools that depend on how well the delivery partners have addressed the client's KRA and/or KPI.

If the reimbursable costs exceed the total agreed with the client, the profit pool related to the project costs will shrink. Most clients recognise that if they wish to retain the project team as *advocates for the project*, they need to ensure that delivery partners do not make a loss. What this means is that the delivery partners may make no profit (the pain), but all their costs will be reimbursed and the customer will pay anything over and above the reimbursable cost plus fee agreed at the start of the project. So far as the authors are aware, this has only happened once.

HOW ARE PAYMENTS AGREED?

Figure 3 shows the process flow of a typical IPD project using TVD. Notice that the key project delivery team members are assembled from the beginning (1). They first work together to agree each party's production cost rates, project specific overheads and fee (profit + corporate overhead at risk). Agreement of the contract terms and conditions is the first step in validation (2) – these discussions help to build the team while building a foundation for understanding the business case and the *Conditions of Satisfaction* for the project. The key task in validation is to establish if the project can be delivered within the budget and timescale requested by the customer. If they feel it can be, there are final negotiations on the contract terms and conditions, schedule, the people who will be involved, hours teams will spend in the co-location space, and risk/reward arrangements so that these can be included in the contract.

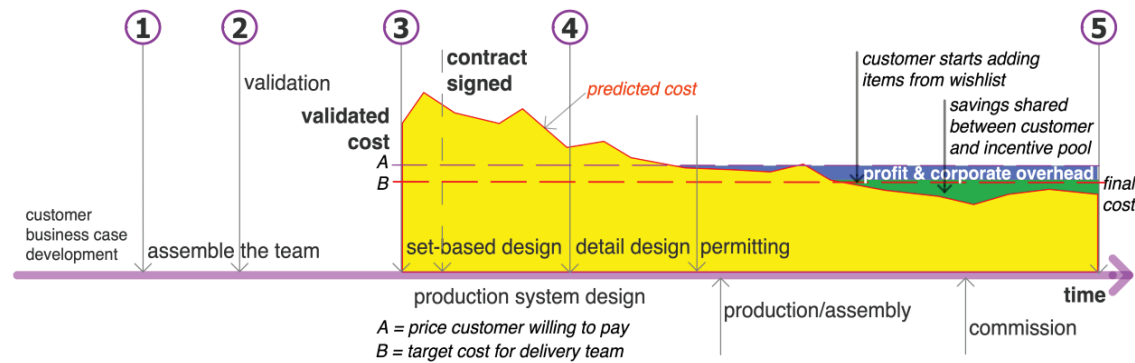


Figure 3: TVD process flow (Mossman with permission)

They work collaboratively from (3) to deliver the project. Project cost is regularly tracked and the total estimated cost is updated every 2 to 4 weeks. Because the constructors are already members of the delivery team, it is they who provide the cost estimates; they have *skin in the game* and it is in their interest to produce the best possible estimate they can. Their estimates may be reviewed by cost consultants. As details of the design become clearer the estimates become more and more accurate and monies that may have been initially allocated to contingency diminish. The predicted cost between (3) and (5) generally falls. At some point the predicted cost generally falls below the total price the customer wants to pay (A) and there is then *some* money in the profit pool to be shared between the delivery partners. When the predicted cost falls below the allowable target cost (B) some of the savings made are added to the incentive/profit pool. Some customers use the savings that they receive to buy additional scope from their *Wish List*. This additional scope adds to the funds in the profit pool.

ARE THERE LEGAL BARRIERS TO USING IPD IN FRANCE?

In this section, potential legal barriers to implement IPD in France are presented for both public and private sector based on the contract review done by one of the authors, a construction lawyer.

There are no legal obstacles to the private sector using IPD.

The principles on which an IPD contract is based (payment terms, limitation of builder and designer liability, early termination of contract) do not contravene the rules of public policy applicable to private contracts under French law.

The Public Procurement Code (*Code de la Commande Publique*, “the Code”) requires, with some exceptions, the use of competitive procedures for the award of a public contract. Article L.2152-7 of the Code requires the contracting authority to award the contract to the tenderer who has “*submitted the most economically advantageous tender*” on the basis of one or more precise objectives linked to the subject of the contract or its performance conditions.

Art. R.2152-7 states: “*In order to award the contract to the tenderer or, where applicable, to the tenderers who have submitted the most economically advantageous tender, the purchaser shall base himself either 1) on a single criterion which may be (a) the price, provided that the sole object of the contract is the purchase of standardised services or supplies whose quality cannot be varied from one operator to another (b) The cost determined according to an overall approach which may be based on the life cycle cost defined in Article R. 2152-9. Or 2) on a number of non-discriminatory criteria linked to the subject-matter of the contract or its performance conditions, including the cost criterion and one or more other criteria including qualitative, environmental, or social aspects. [...]*” (Légifrance, 2023)

It follows from the above that the cost criterion must necessarily be considered for the award of a public contract. This criterion is important, but it rarely represents more than 50% of the overall assessment score. The notions of “price” and “cost” are not defined in the Code. Almost all public design and build contracts are awarded based on a global and, often, fixed price.

On the day an IPD contract is signed, the programme has not been decided and the overall price is neither determined nor determinable. These elements are defined by mutual agreement between the delivery partners during the *validation* phase and become part of the contract during the early part of the design phase provided the total price is within the client's budget.

The only financial information generally communicated to, and agreed with, the client by delivery partners prior to the start of the validation phase is the hourly or daily rates for the people who will do the work and the amount of profit and corporate overhead (the **fee** in Figure 2) to be earned if the project is delivered successfully.

RESULTS AND DISCUSSION

There appears to be no legal barrier to the private sector using relational procurement in France. The private sector is not subject to the Code. Private clients have the option to a) Negotiate with delivery partners that it has chosen and conclude a contract by mutual agreement, or b) Set up a competitive process based on freely defined criteria. Both can be used with IPD contracts.

Is there a legal barrier for the public sector?

The Code requires selection based on competition and allows for decisions based on a balance of criteria that must include some element of cost - there is an acceptance that the financial criterion can be weighted below 50%. When using the Competitive Dialogue and Innovation Partnership procedures, the Code requires the use of cost rather than price (Art. R.2152-8). The EU 'competitive dialogue' and 'innovation partnership' procedures are two of the EU procurement procedures suitable for use with IPD. A third approach the 'negotiated' procedure has been used to procure public sector construction works in Finland since 2011 (Lahdenperä, 2013). This also demonstrates the feasibility of using the IPD contract approach in compliance with EU Procurement Regulations (EU 2014), which are the basis of the French Code⁸.

IPD delivery partners are selected using competitive criteria: e.g. competence, capability and experience as well as price/cost. Can the financial requirement of the code be satisfied by the potential delivery partners' schedules of rates and the amount of profit and corporate overhead that they expect to earn (the **fee** in Figure 2) if the project is completed successfully?

The legal advice received suggests that the available financial information (Schedule of rates and expected fee) is insufficient to enable the client to assess the price or cost criterion within the meaning of Art. R.2152-7 (see above) of the Code. Yet the Code Art. R.2112-6 makes it clear that the inability to determine a final project price is not an obstacle to public procurement, nor is the use of defined unit rates and unknown quantities. In Art. R.2152-9 and -10, the Code gives an example of a cost criterion – lifecycle cost. This includes elements that are unknowable at the time of the contract. The requirements for such a criterion are that it is non-discriminatory, clearly defined and objectively verifiable.

Art. R.2112-6 of the code allows for unit-rate reimbursable contracts. This suggests that the inability to determine a final project price is not an obstacle to public procurement, nor is the use of defined unit rates and unknown quantities.

Despite this, the legal author feels that the use of an IPD contract in the public sector will be difficult to reconcile with the competitive tendering procedures imposed by the Public Procurement Code. That constitutes a barrier to public sector IPD implementation.

Two of the other authors believe that the legal author's interpretation of the law is influenced by her experience of the *normal* way of doing things – the Design-Bid-Build, DBB way. In the DBB way there is an agreed sum for the completion of the project written into the contract.

⁸ Although the Finnish use of IPD pre-dates the current version of the EU procurement regulations (EU 2014), the procurement procedure they used (the 'negotiated procedure') was established in earlier versions of the EU procurement regulations and continued in the 2014 version.

It can be argued that when a DBB, contract is signed the final cost is not known. There is an agreed sum for the completion of the project, but almost all construction using DBB costs more than the agreed sum (claims) or delivers a reduced scope. With IPD, clients often spend less than the agreed cost and get greater scope than anticipated. Which of those procurement routes is more *economically advantageous*?

Many government lawyers and many who procure construction for public sector organisations are likely to interpret the code in the same way as the legal author. What this suggests is that the interpretation of the code needs further opinions. Some will doubtless suggest that this needs testing in the courts before they will risk using it. They might have a long wait. An Australian review of AU\$43bn worth of projects found zero AU\$ spent on dispute resolution (Victoria, 2009)

IPD is a *system change* in construction procurement. As a system change, it requires new thinking habits, new concepts and new language (e.g. *delivery partner* or *trade partner* instead of (sub-)contractor, tier 1-n, etc.). It is difficult, even impossible, to do IPD with a mindset from *normal* construction. These are reasons why it is often difficult for people embedded in *normal* construction to understand what is involved in IPD.

As clearly illustrated in Figure 1, data from IPD-type contracts suggest most contracts complete on or under the target cost and on or ahead of time – the opposite of the outcomes of *normal* contracts (Cheng et al., 2015; Walker, Harley and Mills, 2015). This data also suggests that IPD is more likely to be the *most economically advantageous* procurement route for any public-sector client *provided* they can be sufficiently involved in the management of their projects. Active client engagement in IPD helps to increase the chances of success (Seed, 2022).

CONCLUSIONS

This study aims to identify the legal barriers in adopting Integrated Project Delivery in the French context. First, the challenges that construction sector is facing are highlighted to show the need for an alternative delivery model. Then the main IPD main characteristics are presented. The third part of this paper focuses on the legal – and related – barriers to IPD adoption in both public and private sector.

There are no legal obstacles to the private sector using IPD. The barriers that exist are in the mind and are related to habitual ways of thinking about project delivery.

The review has also demonstrated that the principles on which an IPD contract is based (payment terms, limitation of builder and designer liability, early termination of contract) do not contravene the rules of public policy applicable to private contracts under French law.

The Public Procurement Code requires selection of “the most economically advantageous” offer based on advertised and non-discriminatory criteria that can be qualitative (such as competence, capability and experience) as well as price/cost. In *normal* construction this is often interpreted as the *lowest bidder* even though that is rarely the price finally paid.

IPD uses value-driven selection criteria incompatible with the idea of the lowest bidder. IPD is a system change in construction procurement that requires different thinking and different concepts. It is as if *normal* construction is from Mars and IPD is from Venus.

There is nothing in the Public Procurement Code that requires public sector clients to procure lowest bidders. Over two decades of experience with IPD and similar approaches suggests that *active* clients using a relational contracting approach can provide the *most (economically) advantageous* project outcomes for all stakeholders.

Despite that, our lawyer’s interpretation of the Public Procurement Code is likely to be widely shared in the public sector and beyond. This, if nothing else, will make it difficult for many involved in public sector construction to consider using IPD.

There are barriers to IPD adoption by organisations in the public sector — it seems clear that they are unlikely to be legal – they may be based on old (*normal*) thinking habits and assumptions.

OPPORTUNITIES FOR FURTHER RESEARCH

It will be useful to have:

- Further opinions from other lawyers
- Opinions about alternative relational contracts
- A discussion of relational contract theory in the context of the French legal system may help in this discussion. French and Anglo-Saxon legal systems are different.
- A discussion of cultural and behavioural barriers to IPD in the French context.

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