



# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

Key speech: ESCL Chairman Prof. Dr. Bastian Fuchs

Moderator: ESCL President Dr. Eng. Adriana Spassova



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ESCL Annual  
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Postponed for June 2022  
Sofia, Bulgaria



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- ✓ connection with either European law or with the law of more than one European country.

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**2<sup>nd</sup> prize:** **Gabriel Armanet**

**University:** King's College London

**Study program:** MSc Construction Law and Dispute Resolution

**Title:** *"Delivering the Olympic Games: Will Paris 2024 be less well organised and equipped in procurement than London 2012?"*



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University: King's College London

Study program: MSc Construction Law and Dispute Resolution

Title: *"Is it time for English law to consider disruption analysis for site-overheads claims? The contrast of Costain v Haswell and Walter Lilly v Mackay"*

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**1<sup>st</sup> prize: Nicola Ibbotson**

University: King's College London

Study program: MSc Construction Law and Dispute Resolution

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**2<sup>nd</sup> prize: Rob Ooms**

**University:** Delft University of Technology, Faculty of Civil Engineering

**Study program:** MSc in Construction Management and Engineering

**Title:** *"Collaboration through gain-and-pain-share mechanism. A roadmap to incentivize collaboration by gain-and-pain-sharing concepts"*



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## ESCL Thesis Prizes 2021

**2<sup>nd</sup> prize: Saurabh Varanasi**


University: Delft University of Technology, Faculty of Civil Engineering  
Study program: MSc in Construction Management and Engineering

Title: *“Analyzing the collaboration tools used in the Dutch Bouwteam contract form and comparing it with similar international integrated contract forms of Finland and UK. An explorative study into the collaboration tools used in integrated contract forms for infrastructure projects”*


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**1<sup>st</sup> prize: Cristian Rubanovici**

University: University of Copenhagen  
Study program: Master of Laws

Title: *“Particularities of International Construction Contracts in the Offshore Wind Industry”*

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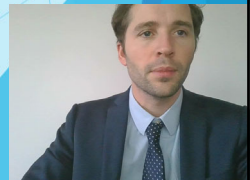


# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

ESCL Second Prize 2020 Winner: Gabriel Armanet (Senior Consultant, FTI Consulting, Paris, Construction Solutions - Forensic and Litigation)

Thesis: Delivering the Olympic Games: will Paris 2024 be less well organised and equipped in procurement than London 2012?



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Delivering the Olympic Games: will Paris 2024 be less well organised and equipped in procurement than London 2012?

## Why comparing the London and Paris Games

The Olympic Games are schedule-driven construction megaprojects which often receive criticism caused by their cost overruns.

On the one hand:

- The London Games was a showcase for the UK construction industry.
- The third suite of the New Engineering Contract (NEC3) was a driver of this success.
- The London 2012 works were delivered on time, within budget, and without disputes.

On the other hand:

- The Paris Games governance model is different from the one chosen by London.
- The procurement code is embedded in the traditional procurement mode ("MOP" Law).
- The CCAG standard forms of contract are used to procure the public works and services.

Further details and references: <http://ilaw.com/ilaw/doc/view.htm?id=417989>

International Construction Law Review [Part 2], 2021 ICLR 148

Key concepts: Alternative Dispute Resolution, Adjudication, Architect, CCAG, Construction, Contract, Contractor, Costs, Design, Dispute, Engineering & Construction Contract, European Community, France, HGCR, ICE, JCT, Litigation, NEC, Procurement, Standard Forms of Contract, Tender, Time, UK, Works.



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## Compared Organisation and governance

### Unified model for London Games

The Olympic Delivery Authority (ODA) was the single body accountable for preparations of the London Games.

The ODA was recognised by the industry for its good management.

The ODA appointed a Delivery Partner by means of a competitive dialogue. The Delivery Partner was a polymorph entity ensuring both programme and private project management.

The Delivery Partner's duties mainly included procurement, planning, cost control, and management of the interfaces between 50 individual projects.

The Delivery Partner had authority in the supply chain.

### Shared governance for Paris Games

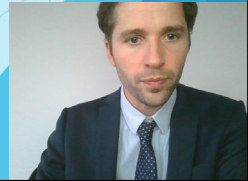
For the Paris Games, the SOLIDEO is the director of the funding of all public owners involved in procuring venues and infrastructure. The SOLIDEO is also a project developer.

The SOLIDEO coordinates 28 other public owners working on the 62 Olympic sites.

Each public owner, is responsible for "building the team" and procuring specific venues and infrastructure.

Professionals (Architects and Consultants) are appointed by public owners, in line with the French procurement code ("CCP").

Multi-site coordinating consultant ("OPC") to consolidate the 29 public owners' programmes, manage the interfaces.



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## How the SOLIDEO controls the timely delivery of the works ?

(1) **"Conventions d'objectifs"**: signed between the SOLIDEO and the public owner(s) to commit on costs and schedule (and other societal targets) against funding of the operations.

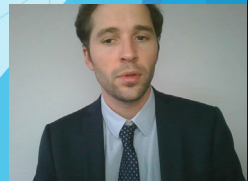
(2) **Contractual scrutiny right**: which takes the form of monthly reports from the public owners, indicating whether they have achieved defined Key Performance Indicators (KPIs).

(3) **Statutory right to take over the works**: if a public owner (and/or its "team") is not performing satisfactorily, the SOLIDEO can take over the owner's role. Yet, enforcing such right would be a negative signal, and possibilities to mitigate any delay or cost overrun would be limited.

(4) **An multi-site scheduling and programming consultant ("OPC-IC")**.

### What were Paris reasons behind the selected governance model ?

- French political and administrative organisations.
- Possibility to use existing and experienced local public authorities.
- Intention to leave a legacy closer to locals and sports organisations' needs.



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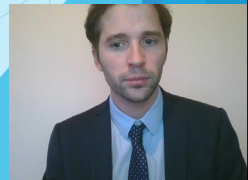


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### Deliver Partner (London) vs Architects and Consultants (Paris)

- With the London experience, the Delivery Partner became a procurement model selected by many public owners in the UK and across the globe. Yet, under French law, appointing a Delivery Partner may not be possible.
- The CCP permits the appointment of a professional: a *Conducteur d'opérations* acting on behalf of the owner, with the possibility of delegated authority. This professional may be given administrative, financial, and technical duties. This may be comparable with the Delivery Partner role for the programme management aspect (nota: 'programme' is to be understood as the technical project/need definition, and not limited to schedule/planning).
- However, the CCP prohibits a 'private operator' from combining the duties and roles of a *Conducteur d'opérations* and the ones of a private project manager / Architect (*maître d'oeuvre*) (i.e. developing the design, supervising the works and administering the contracts).
- For the Paris Games, the Delivery Partner's role is achieved via a combination of actors; (i) the SOLIDEO for programme management, (ii) the OPC consultant in charge of coordination, and (iii) the other public owners, including their respective Architects and project management Consultants.
- The duties of this myriad of actors do not fully encompass the role of the Delivery Partner of the London Games because they may not be able to act in a unified way.

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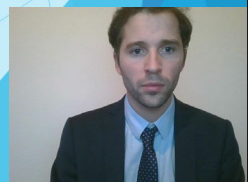
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### Procurement routes (London Games)

#### Delivery Partner, early supply chain-engagement, and two-stage tenders when required

- The NEC3 suite was mainly used as the modular NEC Engineering and Construction Contract (ECC). It allowed to fit different complexity levels.
- For the most complex works with a high level of risk, the ODA used the restricted tendering procedure and the competitive dialogue, combined with a two-stage tender when required. For the 'less complex' works, the ODA used single-stage tender.
- The use of Option C (Target cost) enabled the reduction of risks and facilitated collaboration between the parties.
- Whilst Option X22 for Early Contractor Involvement (ECI) did not yet exist, the ODA decided to appoint contractors early for the most complex venues before the design was finalised.
- The ODA used early supply-chain engagement, with framework agreements, early in the Project and appointed suppliers. This early engagement influenced the design, secured material, created savings, and facilitated the achievement of the environmental targets of the ODA.

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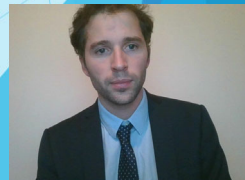


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## Procurement routes (Paris Games)

### “MOP” Law, traditional procurement route and departure towards Design & Build (“D&B”)

- Since the 1980s, the French “MOP” law, on public project ownership and its link with private project management, separates design from construction and thus determines the timing of the appointment of Consultants, Architects and Contractors.
- Since April 2019, 30 laws and regulations, including the former French Public Procurement Contracts Code, the MOP law, or the Law “No. 75-1334” on subcontracting, were codified under one single code: the “Code de la Commande Publique (“CCP”). The CCP enacts the latest EU Public Procurement Directives.
- French procurement law is more prescriptive than the UK public procurement regulations and defines the duties assignable to professionals: the *éléments de mission*.
- The CCP restricts the use of the D&B to complex projects and/or projects whereby energy efficiency requirements make it absolutely necessary to obtain early contractor's contributions. The D&B contractor must be associated with an Architect. All these conditions are restrictively interpreted by the French courts.
- A schedule-driven project is not a sufficient condition to use D&B, but for the Paris Games, the parliamentary law was designed to enable the D&B procurement route to be used.



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## Procurement routes (Paris Games)

### French attraction towards D&B, but not yet towards la *Consultation Anticipée*.

- The London Games' procurement routes contrast with the single-stage tender and late appointment of contractors in France. ECI is promoted by the UK government.
- The departure from MOP law supposes the reconciliation between design and construction, but this may not be successful without recourse to *Consultation anticipée*.
- The CCP enables the use of a tendering procedure whereby the complex nature of the works require the involvement and appointment of the contractor at an early stage alongside an Architect.
- The CCP enables the adoption of a conditional approach with a firm contract for the design stage and conditional contracts respecting the EU procurement regime. This reduces the risks of claims caused by design inadequacies and insufficiencies.
- The *Direction des Affaires Juridiques* (DAJ), responsible for issuing the French contract forms, provides no guidance to use this procedure.
- There is no evidence that the *Consultation Anticipée* was used for the Paris Games.



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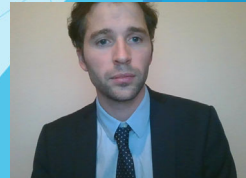
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## Contract forms and options (London Games)

### The NEC3 Suite of Contracts (London Games)

- NEC3 suite of contracts facilitated the timely delivery and address unknown requirements, allocate risks, and control costs. It allowed the contractors to undertake engineering / any level of design.
- To meet some obligations under the London Olympic Games Act 2006, NEC provisions were amended: collateral warranties for the LOCOG; minimised use of retention; reduced payment terms from 30 to 18 days; specific insurance; and enhanced ADR provisions.
- For the appointment of the Delivery Partner: NEC Professional Services Contract (PSC), notably Option G (term contract). The NEC PSC contained provisions for incentivisation designed to drive collaboration (KPIs, Key Dates, and other targets).
- For the appointment of the Contractors The NEC ECC Options A and C were principally used to because they both aim at adhering to budgets and deadlines.
  - Option A, with a fixed price securing the costs, for the less complex works with a firm design.
  - Option C, the target cost contract, for complex infrastructure and iconic venues, for instance, the Olympic Stadium and the Aquatic Centre, where ECI at the design stage was necessary.
- The NEC enabled collaboration with Early Warnings, Compensation Events, KPIs, and incentivisation that facilitated on-time delivery and within budget.
- The NEC PSC and ECC Option C aligned the interests of all participants.

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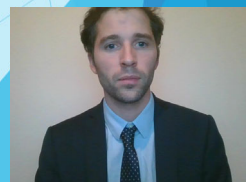
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## Contract forms and options (Paris Games)

### Cahier des Clauses Administratives Générales (CCAG)

- The CCAG forms are published in the governmental body: the DAJ. Since 2021, six (6) forms exist, now including one dedicated for Architects.
- Compared to the UK, there is no such contemplation for the choice of the standard form to use for the Paris Games. The public owners use the traditional CCAG anchored in the French public procurement regime.
- Even if the CCAG is not *ipso facto* applicable and its use is primarily the public owner's decision. In the end, almost every public owner relies upon them because they are familiar with the French construction industry.
- The provisions of the CCAG apply only to contracts expressly referring to it. Public owners can deviate from it, only if these deviations are expressed in the *Cahier des Clauses Administratives Particulières* (CCAP), which accommodates particular project requirements. However, if a deviation is not reported, French administrative courts can declare the deviation as non-enforceable.
- The CCAG PI governs the contractual relationships between public owners and professionals (until the CCAG for Architects). The CCAG Travaux is used to appoint Contractors in a traditional manner.
- As a result of the use of "MOP" law during the last 40 years, the DAJ has never published a CCAG for D&B. This absence of standard CCAG for D&B is a potential issue.
- Since the CCP categorises a D&B contract as a contract for works, public owners rely upon the CCAG Travaux. Writing CCAP for D&B from the CCAG Travaux is a complex task because the duties and roles of each project participant resulting from the "MOP" law are embedded in both CCAG PI and Travaux.

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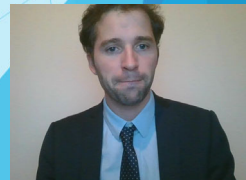


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## Contract forms and options

### Enabling collaborative working

- Compared with the NEC, the good faith principles existing under French law are not self-sufficient to create a collaborative environment. The French procurement culture for selecting the team discourages the creation of a climate of cooperation at an early stage.
- The CCAG is considered as unbalanced, written by the DAJ for public owners. This is illustrated by practices on provisional rates, *OS exécutoire* and other “coercive measures”. However, this non-alignment of the parties’ interests may be mitigated by collaborative features introduced in a CCAP.
- In 2021, the DAJ has attempted to attenuate the dominance of the public owners encouraging more dialogue between the parties.
- As a reminder, the collaborative role of the NEC provisions is enhanced when combined with a two-stage tender. For the Paris Games, there is no evidence that the 29 public owners involved in the Paris Games are deviating from the CCAGs to enhance collaboration.
- Yet, the intrinsic role of NEC provisions is still debated. John Uff suggested that too “*much credit has been claimed for the use of NEC for the Olympic building project*”. The ODA recognised some shortcomings of the NEC, namely: administrative burden. NEC have limited provisions if one party is not performing the contract satisfactorily, and authorities suggest that NEC is “*a triumph of form over substance*”.
- The ODA also used other forms, bespoke, JCT contracts, I-ChemE, etc. illustrating the capacity of the UK to rely on the most suited form of contract. French authorities do not have this luxury.



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## Organisation and governance impacts

### London Games

Stratford was congested for a few years during the preparations for the London Games. Logistics and coordination contributed to the punctual completion of the works. The Delivery Partner also put in place frameworks contract, planned and secured access for the workforce and material transportation.

Having one organisation ultimately in charge of the project facilitated the negotiations with multiple road and highway authorities.

In May 2003, London won the Games with an Olympic bid for £2.37 billion. In 2007, the budget was revised to £9.3 billion. The ODA had more than £8 billion for the construction.

In 2012, the ODA spent almost £7 billion and saved more than £1 billion. The final cost of the London Games was £9 billion, including the LOCOG spending. The LOCOG and the ODA returned £300 million to the Treasury.

### Paris Games Games

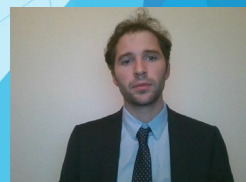
The Seine-Saint-Denis area is now difficult to access because of multiple construction operations. The SOLIDEO recognises that the simultaneity of these works is difficult, despite the coordination efforts the OPC Consultant.

The same results may be achievable for the Paris Games too, but it requires a greater effort, because of the shared governance and the lack of authority of the OPC consultant (with public authorities or concessionaires for utilities).

In 2017, the budget for the Paris Games was estimated at €6.6 billion. The construction budget is €3.2 billion.

In October 2020, despite Covid-19 and the procurement cost overruns on the Aquatic Centre, the SOLIDEO declared that its original budget was maintained.

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## Procurement and contract impact on the timely delivery

### London Games

The venues were successfully delivered on time or ahead of time (Olympic Stadium, the Aquatic Centre, the Athletes Village, etc).

The factors of success were:

- Option A and Option C,
- Two-stage tenders when required,
- NEC Early Warnings,
- NEC Key Dates,
- NEC Accepted Programmes,
- Time Incentives (Options X6),
- Liquidated Damages (Option X7),
- KPIs.

The NEC programme management influenced the time of the delivery by regularly assessing what was required to meet Key Dates, and monitoring the performance using KPIs.

Yet, the right to update the Accepted Programme was recognised as an obstacle to the progress assessment

### Paris Games

There are no provisions in the CCAG PI encouraging the *Architects* to meet the project deadlines or discouraging Contractors from not working on schedule.

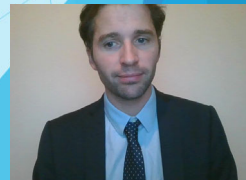
The programme of the contractor's works is accepted by the Architect after the contract is awarded via an instruction to proceed (an OS). This was amended with the CCAG issued in 2021.

After the issuance of this OS, the *programme d'exécution* becomes the binding programme of reference. This programme is the baseline to assess the progress and delays, and no revisions are foreseen.

An OS can take a peremptory form: an OS *exécutoire* to force the project execution.

Yet, the *programme d'exécution* is a stable baseline to assess progress.

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## Procurement and contract impact on the respect of the budget

### London Games

Programme management, procurement practices, and the NEC, enabled the respect of the 2007 budget.

NEC ECC Option C facilitated the completion of the project under budget. NEC ECC Option A also assisted in securing the costs.

The benefits of this option were valuable: it motivated the contractor to perform better and to share the benefits with the ODA.

In terms of scrutiny and management of cost, the NEC was effective in ensuring the reliability of the final completion cost.

Compensation Events and the NEC provisions are clear in identifying which costs are allowed or disallowed. It encouraged the parties to proceed promptly with changes

### Paris Games

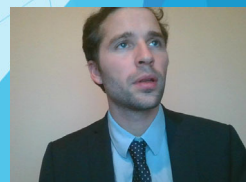
Although the budget is respected to date, the use of single-stage tenders did not assist in creating savings or adding value in.

The CCP and subsequently the CCAG Travaux both exclude the use of a target cost option.

The absence of incentives for cost savings will not necessarily assist in delivering the project within budget.

The use of OS with provisional rates does not assist in guaranty the final project amount. CCAGs 2021 now prohibits OS without value.

The potential mismanagement of changes and use of OS *exécutoire* may mislead the public authority in reporting reliable final anticipated project costs.



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## Dispute resolution (1/2)

### Robust dispute avoidance system for London Games

Early Warnings provisions, enabling the timely identification of potential issues.

The ODA did not select Option W2 to refer disputes to adjudication "at any time".

Instead, two panels were appointed:

- Independent Dispute Avoidance Panel (recommendation).
- Dispute Adjudication Panel (binding decision).

Because of the proactive ODA management, and Early Warnings, the alternative dispute resolution apparatus was rarely used.

There is no record of a TCC dispute with the ODA.

### Absence of dedicated dispute prevention and avoidance for Paris Games

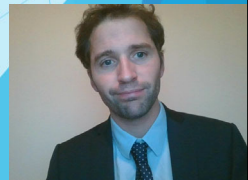
The CCAG has no dedicated mechanism to prevent disputes, conversely OS may create disputes.

If a dispute comes into existence, it must be referred to the administrative courts.

If the parties do not wish to litigate, they can refer to a CCRA (equivalent: ad hoc DB). Yet, it the CCRA several drawbacks:

- Formation supervised by the DAJ and involves State and Court representatives.
- Up to six (6) months to a issue a recommendation (non-binding).

After the recommendation, the parties can refer the dispute to conciliation or to arbitration.



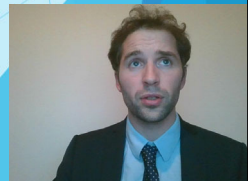
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## Dispute resolution (2/2)

### French administrative courts influence is omnipresent in the resolving disputes

- France does not have an equivalent of UK Housing Grants, Construction and Regeneration Act 1996, as amended.
- To settle a dispute, the Civil Code establishes strict requirements for reaching an agreement, which may be the outcome of a conciliation or direct negotiation. It requires the recognition of a mutual loss of rights, actions, claims and reciprocal financial concessions.
- Administrative courts have a right of scrutiny and can rectify any settlement agreement considered detrimental to the public authority. Without the consent of administrative courts, a settlement agreement may be unenforceable.
- The use of arbitration as an ADR mechanism to litigation is authorised by the CCAG Travaux for public contracts, but its application is limited to the settlement of the works and supplies' spending, and its use is subject to specific conditions. In fact, there is a cultural reluctance from public authorities to use arbitration to solve public project disputes.
- In 2013, the CE decision in *Région Haute Normandie*, imposes -in case of errors or omissions- a burden of proof on contractors to establish an Architect tortious liability. This decision influenced the French construction industry to adopt defensive stance, which may eventually lead to more disputes.



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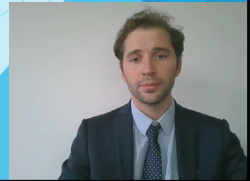
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## Conclusions

- The governance and organisational structure may not be the only approach to delivering the works successfully and the results of the Paris Games model are as yet unknown.
- The Delivery Partner, the early engagement with the supply chain and the two-stage tenders enabled the success of the London Games. Some French public owners departed from the “MOP” law for the Paris Games, but without recourse to *consultation anticipée*.
- In contract with UK, the standard forms of contract issued by private bodies have evolved to reflect changes in procurement practices (JCT, I-ChemE, PPC2000 etc.). French public owners have limited solutions with the CCAGs and still no form for D&B.
- Dissuasive/punitive or incentive/collaborative methods may achieve the timely delivery of the Games. However, the French practices may generate an adversarial posture leading to budget overruns and/or disputes (that the natural “Olympic effect” would not prevent).
- For cost control and adherence to the Olympic budget, CCAG forms are less collaborative and more opaque in assessing and instructing changes.
- With its two panel for prevention and adjudication, as compared to the lack of standing DBs in CCAG and the role of the French courts, London Games was more equipped in dispute resolution mechanisms.

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# ESCL Thesis Prizes 2020 & 2021




21<sup>st</sup> October 2021

ESCL Second Prize 2020: **J.B. Kim** - BEng(Hons), MSc, MCI Arb, PE, CCP, CLCM

Thesis: Is it time for English law to consider disruption analysis for site-overhead claims? The contrast of *Costain v Haswell* and *Walter Lilly v Mackay*

1



ESCL Second Prize 2020  
Thesis: Is it time for English law to consider disruption analysis for site-overhead claims?  
The contrast of *Costain v Haswell* and *Walter Lilly v Mackay*

## Contents

- Cost structure of a project / Breakdown of site-overheads
- Characteristics of site-overheads and the associated legal issues
- Most used method: daily overhead rate-based method
- Legal issues to be considered when using the daily overhead rate-based method
- Alternative method - disruption analysis

2



## Cost structure of a project

Direct Cost:	Material	Labour	Subcontract	Equipment
Indirect Cost (Overheads) and profit:	<u>Site-overheads</u> <ul style="list-style-type: none"> <li>• Supervisory staff costs</li> <li>• Running costs of the site</li> </ul>			Head Office Overheads & profit

- Site-overheads generally include supervisory staff costs and site running costs which include costs for temporary offices, facilities, utilities-water and electricity, insurances, bonds, office equipment and engineering costs.
- Staff costs may include staff salaries, pensions, benefits, allowances, welfare expenses; travel expenses, transportation expenses and the like

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## Characteristics of Site-overheads: indirectness

- Site-overheads are indirect costs thus they are not generally allocated to a specific activity.
- Site-overheads are generally categorised into:
  - ✓ Two-group: Fixed, Time-related; or
  - ✓ Three-group: Fixed, Time-related and Volume-related
- Traditionally site-overheads are categorised into two-groups, but the three-group categorisation is supported by the leading construction law textbooks Hudson and Keating.
- The legal question in relation to factual causation arises when proving cause-and-effect of a site-overhead claim because the losses are indirect in nature. The difficulty in proving causation arising from its indirect nature has been frequently brought up in legal arguments, including in the context of:
  - ✓ Global claims;
  - ✓ Concurrent delays; and
  - ✓ Double compensation.

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## Daily overhead rate-based method

- It calculates daily time-related site-overheads multiplied by the compensable delay days deduced from a separate delay analysis. There must be critical delay to the project.
- Typical steps for the two-group categorisation are:
  1. Extract the costs from the accounting system (the cost ledger);
  2. Identify direct costs (material, equipment, labour, and subcontract) and indirect costs, using the ledger coding to categorise the nature of these costs;
  3. Break down the indirect costs into time-related costs and fixed costs;
  4. Collate the time-related costs and calculate the daily time-related costs; and
  5. Apply these time-related costs to the EOT period.
- The output of a prolongation cost analysis is usually expressed as a **day rate**, either per month or for another period of time such as a Window from a related delay analysis.

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## Factual scenarios to be considered

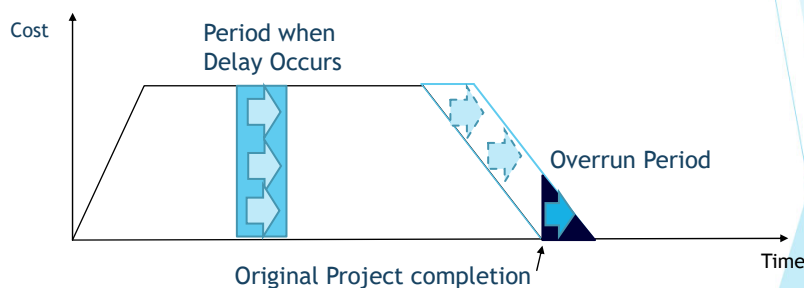
- The reason for considering the factual scenarios is because each scenario demands different considerations to properly analyse quantum.
- Full suspension scenario
- Partial suspension scenario
- Non-critical delay to the project
  - ✓ Non-critical delay/disruption
  - ✓ Constructive acceleration scenario
- Concurrent delay scenario (True concurrency is very rare)

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## Full suspension scenario

- **Timing of Measurement:** The Period when Delay Occurs vs The Overrun Period



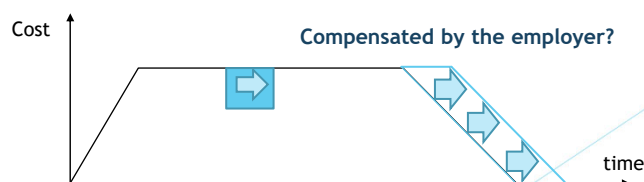
- **Measurement Method:** Value-based Method (i.e. using the contract rate) vs Cost-based Method
- Duplication

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## Partial suspension scenario

- *Costain v Haswell* [2009] EWHC 3140 (TCC)

- ✓ Costain was engaged as design and build contractor for a water-treatment plant involving the construction of ten separate buildings. After completion of the works Costain claimed damages from Haswell, its engineer, for alleged negligent design which had delayed foundations of **two of the ten buildings** (referred to as RGF and IW) on site.
- ✓ The parties' delay experts agreed that the period of delay of 12 weeks for these two buildings was critical to completion. Costain claimed prolongation costs in respect of that 12-week delay. These were claimed at a rate agreed between experts of £35,000 per week based on the daily overhead rate-based method.



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## Partial suspension scenario

- Costain v Haswell [2009] EWHC 3140 (TCC)

- ✓ As for partial but critical delay based on the facts, the judge held that costs related to two buildings should be awarded.

*"Since Costain is seeking to recover the totality of its site costs during the period October 2002 - January 2003, in my judgment, it follows that this claim must fail in the absence of evidence showing that, during that period, all the activities on the site were being delayed by delays to the RGF and IW. In the absence of that evidence, the only proper basis of claim left to Costain would be to show what were the prolonged site and overhead costs referable only to the RGF and IW buildings which had been incurred over the period of delay. That would be a perfectly legitimate basis of claim."* at [236]

- ✓ Keating 11<sup>th</sup> ed. at [9-090] commenting on *Costain v Haswell*, para. 181 to 185

*"Simply showing that the delay event was on the critical path for the works will not, by itself, establish that it impacted on all other site activities (as opposed to merely the activities immediately following and dependent upon the activity in question) or trigger an automatic entitlement to loss and expense or damages on all of these potential bases."* (emphasis added)

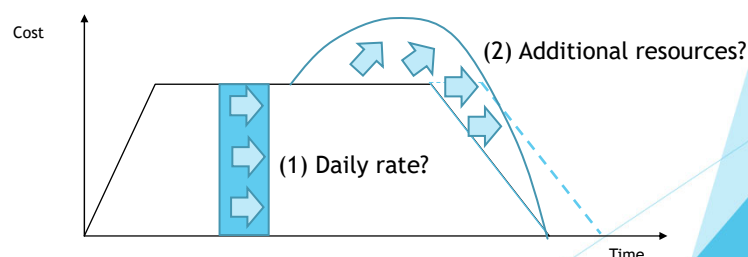
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## Non-critical delay to the project

- Non-Critical Delay/ Disruption

- Constructive Acceleration

- ✓ In practice, considerable pressure from the employer is often applied to the contractor to bring additional resources to the project in order to complete the project on time when the entitlement of the EOT is undecided.

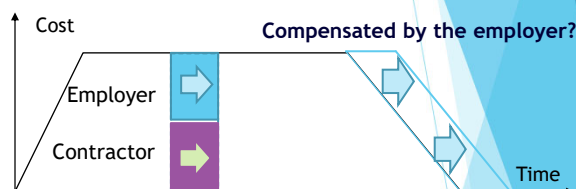


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## Concurrent delay

- When concurrent delays occur, can the contractor be compensated for time-related costs excluding volume-related and fixed costs?
- Full time but no money in England and Wales
  - ✓ *Henry Boot v Malmaison* [1999] Con LR 32
  - ✓ SCL Protocol(2017)
    - **Delay:** “Where Contractor Delay to Completion occurs or has an effect concurrently with Employer Delay to completion, the Contractor’s concurrent delay should not reduce any EOT due”.
    - **Quantum :** “Where Employer Delay to Completion and Contractor Delay to Completion are concurrent and, (...) then the Contractor should only recover compensation if it is able to separate the additional costs caused by the Employer Delay from those caused by the Contractor Delay.”
- Contractor may claim additional resources directly linked to employer’s fault.



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## Precedents disallowing the daily overhead rate-based method

- Canada: *Perini Pacific Ltd v Greater Vancouver Sewerage and Drainage District* (1967)
- The US: *Wallace v US* (2004)
- England and Wales: *Costain v Haswell* (2009)
- Reasoning:
  - ✓ Global claim/lack of causation
  - ✓ Separate entitlement/rule with an extension of time (EOT)
  - ✓ The degree of culpability/suspension under the partial suspension scenario
  - ✓ Double recovery/duplication
  - ✓ Concurrency

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## Alternative method - disruption analysis

- **Disruption analysis:** the measurement of the difference between actual resources (and related costs) incurred and those which would have been incurred but for the employer's act of prevention.
- The key resources to analyse are indirect staff extended or thickened. Thickening in this context means the provision of additional resources over and above that anticipated.
- Extended or thickened staff should be directly linked to the employer's act of prevention. In other words, the Contractor should demonstrate the necessity of additional staff attributable to the employer's act of prevention.
- The contractor may analyse the extended /thickened staff by comparing actual staff and planned staff (i.e. staff in the tender document). However, the planned staff needs to be proven as realistic and achievable. (*Walter Lilly v Mackay* [2012] EWHC 1773 (TCC) at [492])

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## Application of alternative method in UK case

- ***Walter Lilly v Mackay* [2012] EWHC 1773 (TCC)**
  - ✓ Walter Lilly & Company Limited ("WLC") was appointed as a main contractor by the employer, DMW Developments Ltd ("DMW").
  - ✓ WLC was engaged by DMW to carry out building works for each of the three houses which were known during construction as Units or Plots A, B and C, of which C was to be Mr and Mrs Mackay's
  - ✓ WLC claimed for additional site-overheads (extended and thickened).
  - ✓ WLC relies upon the cost data recorded contemporaneously on cost accounting system (called a COINS system).
  - ✓ The evidence presented before the TCC was that the site-overheads were allocated for Units A, B and C using staff allocation sheets each month.
  - ✓ The case raises a number of issues which include global claims and concurrent delays.

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## Application of alternative method in UK case

- *Walter Lilly v Mackay* [2012] EWHC 1773 (TCC) at [491]

*"...What WLC has produced is not on analysis any global or total cost claim. It has sought to identify the specific additional or extended resources and to link them to the events upon which they rely as having caused or given rise to their need for additional or extended resources. It has made allocations in respect of such resources to Unit C. DMW suggests that those allocations might be wrong; however, the Court can determine with relative ease from the evidence whether such allocations are reliable or not... The cost is determinable from the COINS system ...One can take an example, say a site supervisor on Unit C who is on site for an additional 45 weeks by reason of Clause 26 factors; if he spent 100% or 50% of his time on Unit C during this period, the loss or expense incurred by WLC is his salary cost for that additional 45 weeks (in full or half of it as the case may be). Even if one considers the "thickening" preliminary costs, this is not "total" or "global". All that WLC's case and evidence goes to show is that during certain periods as a result of alleged events it had to or did apply a greater level of resource than originally allowed for; again, if the linkage between the relevant event and the need to provide a greater resource is established, the costing of it is established by showing how many man weeks were consequently necessary and how much the salary cost was for those man weeks."* at [491] [emphasis added]

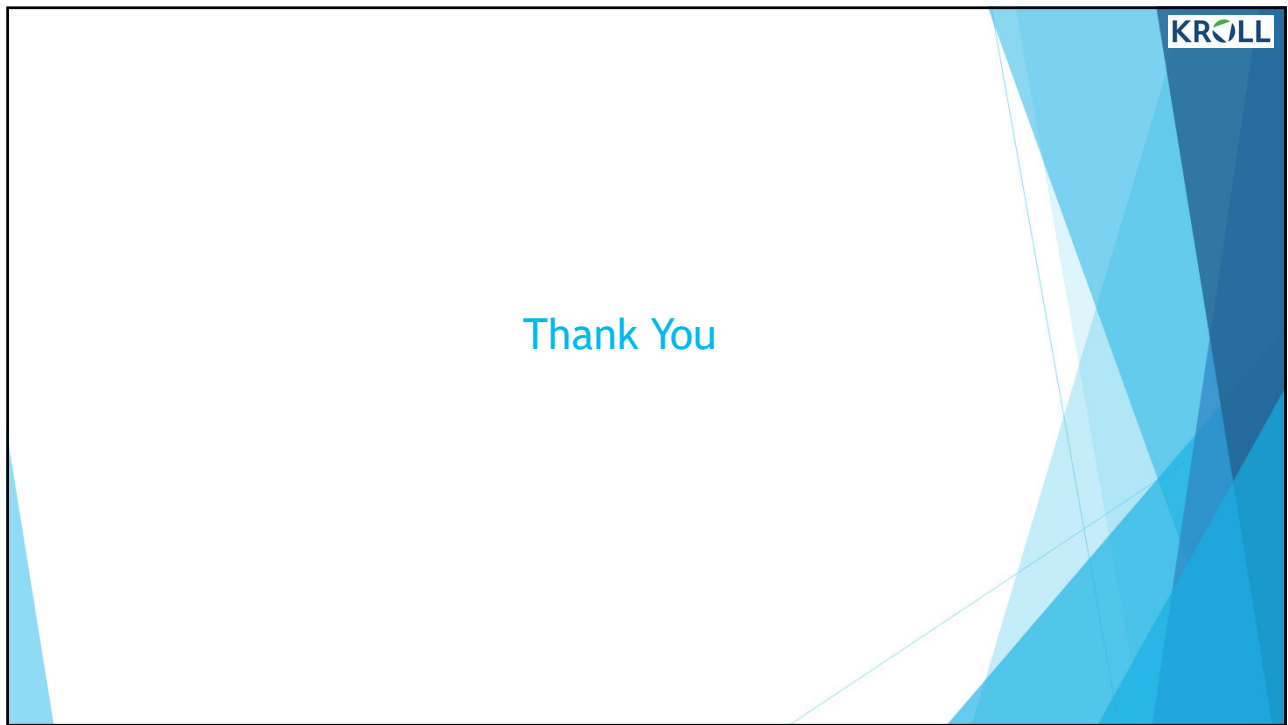
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## Take away

- An extension of time claim may be relevant to an additional site-overhead claim. However, an EOT entitlement does not provide automatic entitlement to a monetary claim.
- Daily overhead rate-based method (EOT days x daily time-related overheads) may or may not be accepted by the court, depending on the factual situation.
- Site-overheads are indirect costs and as such they are not generally allocated to a specific activity. They are generally categorised into fixed, time-related or volume-related. However, for major projects, there is a tendency that indirect costs are allocated to certain activities/ areas/ sections/ phases as seen in the *Walter Lilly* case.
- Disruption analysis (linking the allocated indirect resources to the employer's act of prevention) may be an alternative solution to prove the causation and quantum in certain circumstances, including: (a) partial delay but critical, (b) non-critical delay including constructive acceleration, and (c) concurrent delay.

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# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

ESCL First Prize 2020 Winner: Nicola Ibbotson  
Thesis: DO DESIGN COMPETITIONS COMPLY WITH THE LAW AND DOES  
THE LAW PROVIDE A FRAMEWORK FOR ASSESSING VALUE?

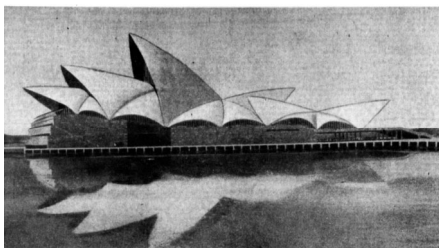


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[ESCL First Prize 2020](#)

Thesis: Do Design Competitions Comply With The Law And Does The Law Provide A Framework For Assessing Value?

**Judging architectural design competitions involves evaluating qualities which are not quantifiable.**



Subjectivity is therefore necessary.



However, public procurement law requires the principle of transparency to be adhered to via an objective approach to the evaluation.

2



Thesis: Do Design Competitions Comply With The Law And Does The Law Provide A Framework For Assessing Value?

ESCL First Prize 2020

### **Method: Analyse active design competitions**

- How bidders interpret design briefs
- The role of tendering authorities, writing a brief and evaluation methodology.

Public authorities are required to follow specific tendering procedures.

- Open Procedures: Anyone can enter and submit a bid. All information should be public.
- Design Contests: Anonymous, only submitting a design proposal.

I took a wide definition of design competitions to include any tenders which required a design submission. In the UK Design Contests are rare.

More often, tenderers are also required to submit information on themselves and their experience alongside a design.

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Thesis: Do Design Competitions Comply With The Law And Does The Law Provide A Framework For Assessing Value?

ESCL First Prize 2020

### **Evaluating a Design at Award Stage**

Evaluations of tender submissions are carried out through the interpretation of the

- 1) award criteria, and
- 2) weighting through an
- 3) evaluation methodology.

The distinctions between the three are important although unclear. Examples of accepted award criteria are outlined in PPC2015. However, there is no list of an acceptable evaluation methodology or even a definition of what it is.

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ESCL First Prize 2020

## Evaluating a Design at Award Stage

### Award Criteria

Section 67(3) of the Public Contract Regulations 2015 (PCR2015) defines permitted award criteria and includes amongst others the following which are relevant to evaluating design: *“quality, including technical merit, aesthetic and functional characteristics, accessibility, design for all users, social, environmental and innovative characteristics and trading and its conditions”*.

### Evaluation Methodology

Tendering authority can either:

- Apply the award criteria in a general discretionary manner to the tender bids
- Dividing the award criteria into sub-criteria which can help in the evaluation
- Structure it's general discretion by creating an evaluation methodology

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	The Award Criteria against which the design will be evaluated	Weighting	Evaluation Method
Housing Development 01	<ul style="list-style-type: none"> <li>• <b>Initial Proposal Requirements:</b> (Maximises the site footprint, parking, deliverable within the constraints of the site, in line with planning objectives, likely to be favourable with the planning department, sympathetic with the local surrounding area, Delivers a target of at least 120 new homes)</li> </ul>	60% quality 40% cost	Designs are assessed against the award criteria using a <b>scale of “how well the requirements are met”</b> “from unacceptable to excellent”. Each score has an evaluation criteria.
Housing Development 02	<ul style="list-style-type: none"> <li>• <b>Layout</b> (Consideration of - Layout &amp; Roads, Access &amp; Parking, Creation of private &amp; semi-private spaces)</li> <li>• <b>Context</b> (Consideration of - Location/Settlement type &amp; Integration, Site Characteristics, Definition of boundaries)</li> <li>• <b>Character</b> (Consideration of Building form &amp; detailing, Building Fabric/ Materials, Configuration)</li> </ul>	80% Quality, 20% Cost	Designs assessed against the award criteria using <b>“interpretation criteria”</b> which has a <b>scale of excellent to satisfactory</b> . Each of these criteria has a description from “inspiring little or no confidence” to “a high degree of confidence”
Exhibition Space	<ul style="list-style-type: none"> <li>• <b>Response to the requirements outlined in the brief.</b></li> <li>• <b>Methodology</b></li> </ul>	70% quality 30% cost	Designs assessed against the award criteria using a <b>“scoring mechanism”</b> , 0-10 from absent to outstanding response. Each score has a description.
Renovation	<ul style="list-style-type: none"> <li>• <b>Proposed Concept</b></li> <li>• <b>Design Statement</b></li> </ul>	70% Quality 30% Cost	<b>A jury will evaluate designs anonymously.</b> No further evaluation method given.
Urban Realm Contest	<ul style="list-style-type: none"> <li>• <b>Response to feedback and refinement of proposal</b> ideas following Phase 1 assessments.</li> <li>• <b>Viability</b> of the proposals with clear balance of creativity versus pragmatism, to ensure that proposed concepts are commercially deliverable.</li> <li>• <b>Demonstration of understanding the project requirements</b>, in particular the scheme's ability to reconnect neighbourhoods strengthen the green character and biodiversity of the area with high-quality placemaking.</li> </ul>	80% Quality 20% Cost	<b>A jury will evaluate the designs anonymously against “benchmarks”</b> on a scale from 0-10. Each benchmark has a description.

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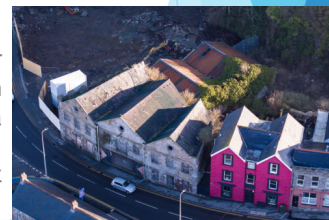
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## Evaluating a Design at Award Stage

### Reviewing the tenders

- The Housing Development contains “*criteria*” and an evaluation methodology of “*interpretations*”.
- Interpretation relates high score to, a design that, “inspires an extremely high degree of confidence that the tenderer will successfully fulfil the requirement”.
- Having an award criterion of whether a design inspires a particular emotion, is very subjective, will not likely comply with the law. Defined instead as the evaluation criteria there are no such restrictions.
- Design contests are anonymous and evaluated by a jury, a greater freedom is given in the evaluation in balance. However, the urban realm contest has the most detailed and objective award criteria and detailed objective evaluation methodology.
- The renovation project, the design will be marked anonymously but the evaluation contains little detail.



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## Bidders

### Interpreting the Subject Matter of Award Criteria

- Award criteria are to be objectively quantifiable (PCR, EU principles of transparency etc).
- However, several decisions permit subjective criteria demonstrating being objectively quantifiable isn't a rule. Also, quality etc permitted in PCR.
- **The substance of award criteria can be subjective as long as the language is not ambiguous.**

### How Ambiguous do Criteria Have to be to Not be Objective?

- Reasonably Well Informed and Diligent Tenderer' (RWIDT). To comply with the RWIDT test, hypothetical tenders are to be able to interpret the award criteria in the same way.
- Tending authorities want to receive different designs which have interpreted the brief in different ways. More specific criteria are more likely to comply with the RWIDT test but will not attract a wide range of different designs.

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## Bidders

### Interpreting Design Brief and Award Criteria

- Less defined design briefs invite wide interpretations. Very detailed briefs likely to result in submission of similar proposals.
- The dilemma is whether to interpret the competition brief literally or inspirationally.

### Innovation

- *“We had a belief that a competition without the usual constraints and guidelines would attract high quality, innovative and buildable results.”*
- A key aim in holding a design competition is to receive designs the authority has not considered before.
- The Housing Development tender require tenders to show ‘added value’. This was the innovative criteria permitted in *Mears Limited v Leeds City Council [2011]*. The Galley tender also requires ‘added value to achieve high marks.

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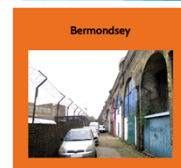
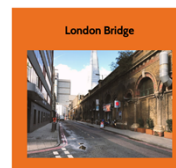
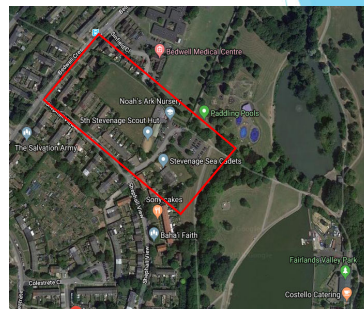
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## Bidders

### Reviewing the surveyed tenders

- Housing Development includes award criteria of *“initial proposal”*, and an evaluation method of *“how well the requirements are met”*.
- Requirements include subjective qualities such as *“sympathetic with the local surrounding area”*. The brief only includes the site location highlighted in an aerial photograph and no further site information. Because of the lack of definition, it is arguable that hypothetical RWIDTs would not interpret the site’s sensitivities in the same way.
- The Design Contest similarly contains a very detailed brief and detailed award criteria.



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### The Tendering Authority

With respect to objectivity, the authority can fall outside of the law in a few ways:

1. Fail to produce sufficiently clear award criteria so that bidders cannot interpret them in the same way.
2. Fail to produce clear award criteria so that they cannot use them to demonstrate an objective evaluation.
3. Introduce criteria not previously been notified through the evaluation process.
4. Fail in their evaluation process if they make a manifest error.

### Defining an evaluation methodology

- Trying to anticipate what may tell the entries apart in advance and how wide or prescriptive to make the criteria.
- The clearer the criteria are the less discretion the authority has in its choice.

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### The Tendering Authority

#### Demonstrating an objective evaluation

- *European Dynamics v European Union Intellectual Property [2016]* “Key deliverables” and “additional information” as award criteria was considered too vague to distinguish between key deliverables and non-key deliverables.
- *Healthcare at Home Limited v The Common Services Agency [2012]*. Bidders were asked to detail a sequence of listed process but with the qualification of “not limited to”. Problematically, the opposite decision was reached

#### Introducing New Criteria

- “By necessity the criteria for categorization must be developed or chosen after the architectural teams have submitted their entries... Until we know the proposed solutions, we cannot know what differentiates them”

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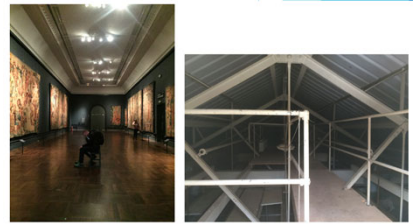


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### The Tendering Authority

Considering the surveyed tenders:

- Housing Development 02 contains information on the site and requirements. Likely authority could demonstrate evaluation.
- On a strict interpretation, read in the light of the *European Dynamics* decision, Housing Development 02, the tendering authority will have to demonstrate which designs are more “*sympathetic to the surrounding area*” than others, but unlikely to be able to without further information.
- Is the Museum granting themselves a great discretion by including so much information?
- A decision could be demonstrated transparent by highlighting any one of the many considerations contained within the brief. Difficult to distinguish which parts of the brief are more important to the tendering authority than others?



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### Conclusions

#### Do Design Competitions Fall Under The Applicable Law?

- Possible, however, many qualities built-in to design competitions conflict with legal requirements.

#### Award Criteria and Evaluation Criteria

- Award criteria and weightings are heavily regulated whereas flexibility is granted in evaluation.
- It is unclear how far one element of the decision impacts the requirement of objectivity of the other.
- We suggest all the tenders but one, include more detail on the evaluation process than required. This may be because of an approach to risk, uncertainty and the subjective quality of assessment.
- We suggest the evaluation method for the Renovation Tender may be unclear and may not comply with the law.

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Thesis: Do Design Competitions Comply With The Law And Does The Law Provide A Framework For Assessing Value?

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## **Conclusions**

### Subjectivity and RWIDT

- Nature of the RWIDT test means it is more difficult to predict the outcome when the substance of the award criteria is also subjective.
- Suggest Housing Development tender 01 may not pass the RWIDT test but this is uncertain.
- Judicial opinion seems to be divided between those taking a literal interpretation of objectivity versus a more practical approach.
- Wide design briefs with less information are likely to attract innovative responses but are less likely to comply with the applicable law.

### Evaluation

- Creating award criteria ahead of the evaluation process is difficult or impossible.
- We suggest the Housing Tender 01 and the Renovation Tender may not permit a transparent evaluation due to lack of detail.
- Public procurement law restricts the authority in their choice of selecting the best design. Tendering authorities may find they are not able to select the design which offers best value on pre-decided award criteria.





# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

ESCL Second Prize 2021 Winner: Rob Ooms

Thesis: Collaboration through gain-and-pain-share mechanism



1

ESCL Second Prize 2021

Thesis: Collaboration through gain-and-pain-share mechanism

## Presentation Outline

- Problem Statement
- Research Objective
- Research Question
- Research Design
- Literature
- Results
- Conclusion
- Discussion & Recommendations

2



## Problem Statement

### Current situation

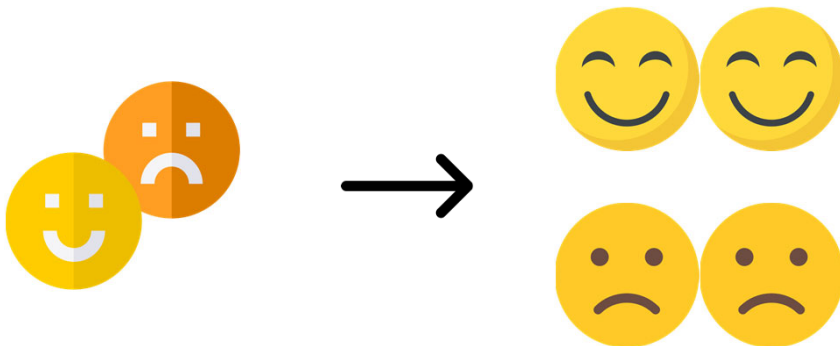
- ▶ Lack of collaborative incentives to meet future objectives according to complex projects



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## Problem Statement



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## Problem statement

### Theory

- Gain-and-pain-sharing could enhance collaboration and is named in different research papers as the mechanism to incentivize collaboration.



### Gap

- Not often used
- Lack of understanding and knowledge of the mechanism.

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## Research Objective

- Roadmap for implementation of gain-and-pain-sharing

To generate a strategy for the client  
The roadmap is about when, how, and what to implement



6

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## Research Question

- ▶ “How can a gain-and-pain-sharing mechanism be used, to incentivize collaboration and create mutual objectives in a construction project?”

7

## Research Design

1. 
2. 
3. 
4. 
5. 

8

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## Literature: The Definition

- *gain-and-pain-sharing is defined as an agreement that allows the parties in a construction project to share profits or cost savings and to share losses due to errors or cost increases. Next to financial benefit, a gain-and-pain-share mechanism can also result in non-monetary rewards such as satisfaction and recognition*

### Monetary



### Non-monetary



### Objectives & Collaboration



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## Concepts

### Target cost



### Risk-Pot



### Bonus-Malus



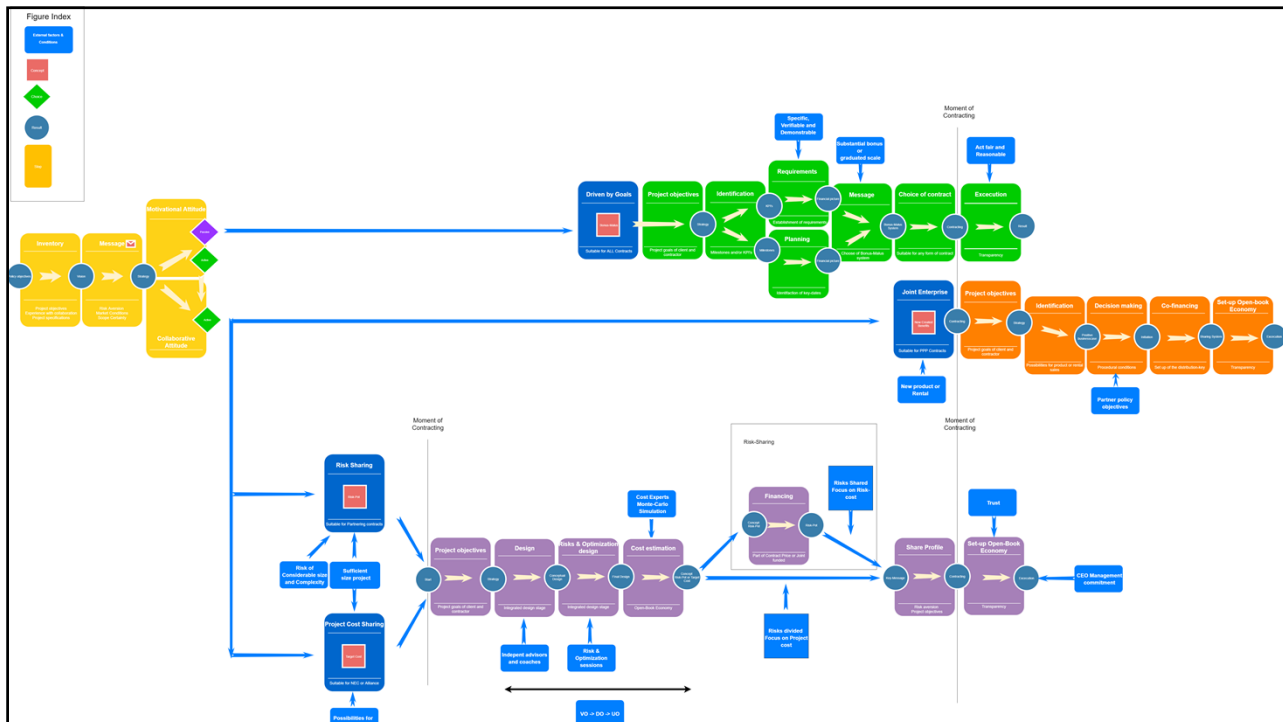
### Sharing of new created benefits



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## Conclusion

### Possible Concepts

- 1 Bonus-Malus
- 2 Sharing of new created benefits
- 3 Risk-Pot
- 4 Target Cost

### Selection Conditions

1. Company & project objectives,
2. Project specifications
3. Experience with collaboration concepts
4. Risk aversion
5. Market conditions
6. Scope certainty
7. Preferred form of contract

12

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## Discussion

### Contribution

- 1 Clear description of gain-and-pain-share mechanism
- 2 Overview of methods
- 3 Roadmap with clear steps for implementation

### Limitations

1. Limited amount of cases
2. Concepts differently used
3. Lack of soft attributes
4. Lack of non-monetary options
5. Underexposed success

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## Recommendations for the Dutch construction sector

- 1 Roadmap as starting point for conversations
- 2 Roadmap to create awareness for collaborative environment such as partnering
- 3 Experiment with small projects
- 4 Open-book economy



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## Recommendations for further research

- 1 An assessment framework
- 2 Decision tree
- 3 A (serious) game
- 4 Focus on contractor-side
- 5 Non-monetary options



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Thank you for your  
attention



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# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

ESCL Second Prize 2021 Winner: Saurabh Varanasi

**Thesis: *Analyzing the collaboration tools used in the Dutch Bouwteam contract form and comparing it with similar international integrated contract forms of Finland and UK***



1

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[ESCL Second Prize 2021](#)

## Thesis Ideology

What is collaboration?

A well-defined contract replaces collaboration



**NO, IT IS A MYTH**

Introducing the concept of collaboration in a contract DOES NOT guarantee effective collaboration between parties

2

2



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## Collaboration tools



Creating joint objectives  
Team building through workshops  
Co-located office for all parties  
Hiring a facilitator  
Periodic reflection meetings

3

3

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## Problem Statement & Research Objective

### Problem Statement

There is a lack of research on recommendations to improve the collaboration in a Bouwteam contract form by comparing it with the collaboration tools of international integrated contract forms.

### Research Objective

1. Analyze the collaboration tools used in Bouwteam contract form in the Netherlands, Alliance in Finland and NEC4 in the United Kingdom until the end of the design phase
2. Investigate possibilities of improving collaboration in these three contract forms

**End Deliverable:** A set of prioritized collaboration tools for each contract form

4

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## Research Questions

### Main Question

*Are there any collaboration tools followed in the integrated contract forms of Netherlands, Finland and UK which can be adapted to each other to improve the collaboration?*

### Sub-Questions

SQ1: What are the tools which positively influence collaboration?

SQ2: What are the collaboration tools used in the Bouwteam contract form in the Netherlands?

SQ3: What are the collaboration tools used in Alliance contract form in Finland and NEC4 contract form in United Kingdom?

SQ4: What are the differences in the collaboration tools between these integrated contract forms of Netherlands, Finland and UK?

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## Research Methodology



Literature Review



Case Studies



Validation Interviews

6

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### Case Studies

Sr. No.	Name of Project	Type	Contract Form	Country	Project code
1	<u>Oranje Loper</u>	Bridge renewal	Bouwteam	Netherlands	<b>B1</b>
2	<u>Michiel de Ruijtertunnel</u>	Tunnel modifications	Bouwteam	Netherlands	<b>B2</b>
3	<u>Rantatunneli</u>	Tunnel construction	Alliance	Finland	<b>F1</b>
4	A46 and Anstey lane improvement	Highway modifications	NEC4	United Kingdom	<b>U1</b>

- Document Study and Interviews
- Intra-case analysis and Cross-case analysis

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### Key takeaways of cross-case analysis

Category	Project B1	Project B2	Project F1	Project U1
Pre-tender and Tender phases				
Joint collaboration plans				
Project Follow up meetings				
Early involvement of subcontractors				
Informal rewards and recognition				
External stakeholder engagement				
Client involvement				

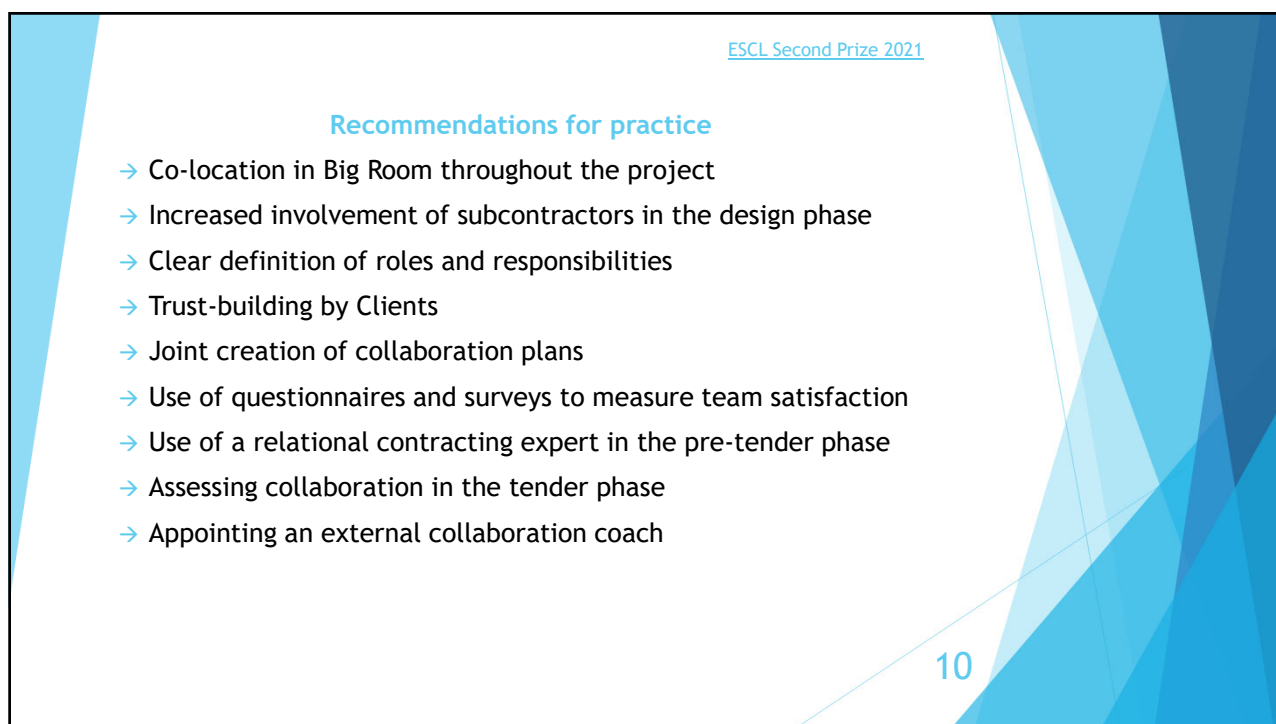
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## Thesis Ideology

~~A well-defined contract replaces collaboration~~

Introducing the concept of collaboration in a contract  
DOES NOT guarantee effective collaboration between  
parties

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## Limitations of research

- Recommendations given are mostly not suited for remote working
- Focus is only until design phase and not construction phase
- Only one project studied from Finland and UK
- Recommendations depend on change in mindset of parties



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### Scope for future research

- Collaboration in construction phase can be studied to identify new tools
- Collaboration tools used in Australia and Hong Kong could also be studied
- For interviews, select project engineers and assistant managers also
- Delving into cultural differences to check how the given recommendations need to be adapted



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A background image showing a handshake over a desk with a laptop and papers, overlaid with a blue gradient.

# Thank You

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# ESCL Thesis Prizes 2020 & 2021

21<sup>st</sup> October 2021

**ESCL First Prize 2021 Winner:** Cristian Rubanovici

**Thesis:** Particularities of International Construction Contracts in the Offshore Wind Industry



1

[ESCL First Prize 2021](#)

Thesis: Particularities of International Construction Contracts in the Offshore Wind Industry

## Research question

*How should standard construction contracts be modified in order to fit the needs of the offshore wind industry, and what are the challenges and perspectives of amending such contracts?*



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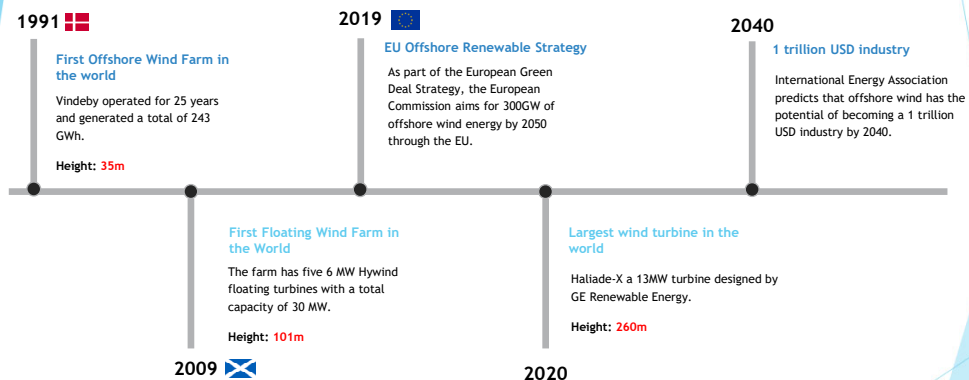
## Table of Contents

1. Offshore wind highlights
2. Overview of an offshore wind farm
3. Common contractual strategies
4. International contractual standards
5. Amending FIDIC
6. Knock-for-knock regime
7. Vessels and Adverse Weather
8. Conclusion on contracts

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## Offshore wind highlights



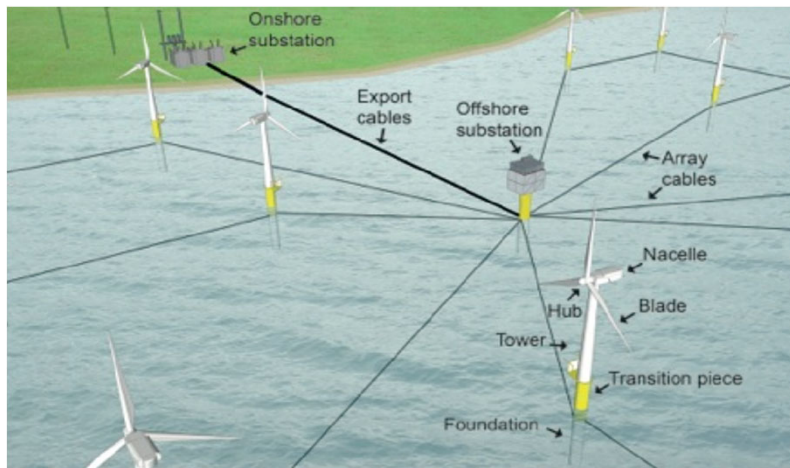
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## Overview of an offshore wind farm



Source: [https://www.researchgate.net/figure/Offshore-wind-farm-and-its-components-DAmico-et-al-2015\\_fig2\\_302556466](https://www.researchgate.net/figure/Offshore-wind-farm-and-its-components-DAmico-et-al-2015_fig2_302556466)

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## Common contractual strategies

1

### Engineering Procurement Construction

**Number of Contracts:** Bundle packages, 1-3 contracts  
**Contract Price:** Relatively high, usually lump-sum price  
**Risk Exposure:** Low, usually capped, requires an experienced EPC Contractor  
**Employer's Control:** Low, might be used with transparency and influence on project deviations

2

### Multi-contracting

**Number of Contracts:** 9+  
**Contract Price:** Relatively low  
**Risk Exposure:** High; requires an experienced Employer with in-house staff to handle the interfaces  
**Employer's Control:** High/direct

3

### Engineering Procurement Construction Management





- A professional services contract
- EPCM Contractor is not part of the construction contract
- EPCM Contractor acts as an agent of the Employer

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## International contractual standards

CONTRACT	CHARACTERISTICS	OFFSHORE WORKS APPLICABILITY
	<ul style="list-style-type: none"> <li>International standard contract</li> <li>Trusted by international financial institutions</li> <li>Around 8 standard contracts for works and consulting services</li> <li>Suitable under different legal systems</li> <li>Extensively elaborated, minimum reliance on the background law</li> <li>Suitable for project financing</li> </ul>	<ul style="list-style-type: none"> <li>Designed for onshore works</li> <li>Must be heavily amended, usually a merge between General and Particular Conditions</li> <li>Most of the parties within the offshore wind industry are familiar with the FIDIC Yellow Book approach</li> <li>Must be amended for offshore wind specifics</li> </ul>
	<ul style="list-style-type: none"> <li>Around 8 standard contracts</li> <li>Developed for oil and gas projects</li> <li>Both onshore and offshore construction contracts;</li> <li>Largely based on English law</li> </ul>	<ul style="list-style-type: none"> <li>Suitable for offshore construction projects</li> <li>Provide provisions for vessels</li> <li>Mainly used in common law countries</li> <li>Must be amended for offshore wind specifics</li> </ul>
	<ul style="list-style-type: none"> <li>More than 100 standards</li> <li>Maritime transport contract, designed for charter parties</li> <li>Usually, the background law is English law or Singapore</li> <li>Vessel owner friendly</li> </ul>	<ul style="list-style-type: none"> <li>Developed for charter parties</li> <li>Not suitable for construction</li> <li>Must be amended to cater for installation works</li> </ul>
	<ul style="list-style-type: none"> <li>Norwegian contract standard used in the offshore oil &amp; gas industry</li> <li>Based on Norwegian law</li> <li>The models be used for supply, manufacture, construction and installation</li> <li>Bilingual Norwegian/English version</li> </ul>	<ul style="list-style-type: none"> <li>Suitable for offshore construction projects</li> <li>Mostly used in Norway</li> <li>Must be amended for offshore wind specifics</li> </ul>

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## Amending FIDIC



### FIDIC CLAUSES

- The engineer and determinations mechanism
- Compliance with permits
- Contractor's and employer's rights and obligations (e.g. the use of data, HSE obligations)
- Extension of time
- Advance warning
- Commencement, delay, taking over, suspension and termination
- Defects liability period and defects notification mechanism
- Securities and insurance
- Variations
- Force Majeure/Exceptional Events
- Dispute Resolution

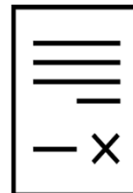


### OFFSHORE WIND CLAUSES

- Interface risks
- HSE procedures
- Unforeseeable physical/soil conditions
- Allocation of risks in relation to adverse weather
- Power Curve Warranty/Test
- Knock-for-knock indemnity
- Provision of installation vessel or cooperation with installation vessel owner
- Marine Warranty Surveyor
- Quality warranties: compliance with grid codes, noise emissions
- Coverage of new technology risks



### Bespoke Agreement

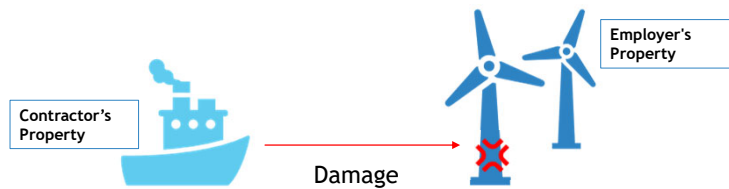


FIDIC GP3 "Particular Conditions must not change the balance of risk/reward allocation proved in the GCs"

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## Knock-for-knock regime



### Fault based liability

The Contractor will have to pay for damages caused to the Employer's property.

### Knock-for-knock

Each party will cover its loss irrespective of who caused the damages.

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## Knock-for-knock regime



- Reduces the cost of litigation and other investigations associated with the incident
- Facilitates resolution of claims at an early stage
- Enables cooperation between the parties and a safe working environment



- High insurance costs
- Might result in bad personnel behavior due to lack of punishment
- Might be held unenforceable in some jurisdictions
- High dependency on the applicable law

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## Knock-for-knock regime

"The Contractor shall indemnify and hold harmless the Employer and [the Employer's Group] ~~the Employer's Personnel, and their respective agents~~, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) Bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defect, ~~unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and~~
- (b) Damage to or loss of property ~~including the installation vessel~~ [of the Contractor and Contractor's Group, whether owned, hired, leased or otherwise provided by the Contractor arising from, relating to or in connection with performance or non-performance of the Contract; and] ~~real or personal (other than the Works), to the extent that such damage or loss:~~
- (i) ~~arises out of or by reason of the design, execution and completion of the Works and the remedying of any defects, and~~
- (ii) ~~is attributable to any negligence, wilful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.~~
- (c) [Subject to any other express provisions of the Contract, personal injury, including death or disease, or loss of or damage to the property of any third party to the extent that any such injury, loss or damage is caused by the negligence including gross negligence or breach of duty (whether statutory or otherwise) of the Contractor. For purpose of this Sub-Clause 17.1 (c) "third party" shall mean any party which is not a member of the Employer or Contractor Personnel, or their respective agents.]

~~The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].~~

[All exclusions and indemnities given under this Sub-Clause 17.1 shall apply irrespective of cause and notwithstanding the negligence including gross negligence or breach of duty (whether statutory or otherwise) of the indemnified party or any other entity or party and shall apply irrespective of any claim in tort, under contract or otherwise at law.]"

Source: FIDIC (Yellow 1999) Sub-Clause 17.1 + LOGIC (Marine Construction 2004) Sub-Clause 21.1 and 22.6 + BIMCO WINDTIME

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## Vessels and Adverse Weather



### Key aspects

- Limited availability - 16 installation vessels in the world, plan to extend to 23 by 2023
- Day rates range between 100,000 EUR - 200,000 EUR
- Reserved for different projects years in advance
- Attention must be given to the suspension/prolonged suspension mechanism



### Key aspects

- Contract price can be inclusive or exclusive of adverse weather days
- Regulated under the conditions of contract and a separate adverse weather schedule to avoid overlap with force majeure events
- Contractor may be entitled to additional time if the weather exceeds the agreed limits

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### Conclusion on contracts

COMPONENT	Wind Turbine Generator		Foundation		Offshore Substation	Array Cables	Export Cables	Onshore Substation							
SCOPE															
Design	Yellow FIDIC	Gold FIDIC	White FIDIC	Bespoke	Yellow FIDIC	Red FIDIC	Yellow FIDIC	Yellow FIDIC	Yellow FIDIC	Bespoke					
Supply			Yellow FIDIC + BIMCO or + LOGIC	Bespoke											
Installation															
Vessels	Yellow FIDIC + BIMCO or + LOGIC	Bespoke							N/A						
Site Investigations	Green FIDIC														
	White FIDIC														
	Red FIDIC														
Operation and Maintenance	Bespoke														

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## Questions?

Get in touch



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