



# THE EVOLUTION OF COLLABORATION IN BUILDING CONSTRUCTION, DISPUTES AND EXPERT SERVICES

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## THE CHANGING FACE OF BUILDING CONSTRUCTION

What does the future hold for the building construction industry and what are the implications for the associated dispute market?

Significant events shape the construction and building regulatory industry. From the Great Fire of London in 1666 and the Kyoto Protocol in 2005 to changes likely to result from the Grenfell Tower high-rise fire in west London (2017), our industry adapts, adapts and improves.

In the UK, Dame Judith Hackitt is, at the time of writing, in the process of undertaking an independent review of building regulations and fire safety. Her interim report has found that “the current regulatory system for ensuring fire safety in high-rise and complex buildings is not fit for purpose.” The report points towards the need to change industry culture and regulator effectiveness.

The report outlines that senior individuals must be responsible and have accountability to ensure buildings are fit for purpose. It also suggests that primary responsibility needs to rest with those who commission, design and build the project.

The report also highlights a lack of meaningful sanctions when what is being designed is not what is being built. This has created an environment where compliance with regulations and safety is not prioritised. In the UK, structural design is self-policed by accredited structural engineering professionals. The point of this initiative was to reduce the workload and required competence of those at building control level because of budgetary constraints. With an increase in enforcement sanctions proposed by the report, the industry will require more powerful regulatory bodies with high levels of competence.

This leads to a major factor in building construction disputes. Who is responsible for delayed or refused building regulations approvals?

As an expert witness, I have been involved in several cases where a delay in the regulatory approvals has been a factor in the delay claim. Often, it is a process that has been missed by the design or construction team, rather than a failing of the approvals body.

Only time will tell, once a framework of enforcement is established, how building contracts and processes will need to adapt to ensure that responsibility is clear and unambiguous.

### Accreditation

Dame Judith Hackitt’s review focuses on the UK industry; it calls for a change in the competence of those involved in the building process and requires a formal accreditation of individuals. The UK has no requirement for licensed professionals to sign or stamp drawings – a practice common in many jurisdictions around the world. In the US, there is a legal requirement for those responsible for engineering work to hold a Professional Engineer (PE) licence in the state in which they are operating. A change of this type in the UK will give more emphasis and responsibility to the institutions, as outlined in the Collaboration for Change report in 2015.

### Culture

The call for a shift in culture to effect a “true and lasting change” may be seen by many as an essential and overdue transformation in the UK construction industry culture with implications for the global construction community.

However, a call for a change in culture is not new. Sir John Egan’s Rethinking Construction report in 1998 called

## DAME JUDITH HACKITT’S INTERIM REPORT

### Key recommendations

- Greater personal responsibility of senior individuals
- Improved process, compliance and enforcement of regulations
- Improved testing, marketing and quality assurance for products used in construction
- Risk-based, proportionate and unambiguous regulations and guidance
- Improved levels of competence

for a similar revolution. It highlighted fragmentation of teams because of extensive use of subcontracting, resulting in highly contractual relationships preventing the continuity of teams essential to efficient working.

This may have been a catalyst for increased use of design and build contracts. These arrangements bring together all the individual subcontracts under one main contract and have likely been responsible for reduced disputes between client and contractor or designer. However, almost all of my expert appointments on complex projects are within a design and build contract type. Dame Judith Hackitt’s interim report stated: “The current trend for ‘design and build’ contracts ... has been identified as being particularly problematic in facilitating evolutionary design, which fails to be properly documented or reviewed.” It could be argued that design and build contracts have, in fact, created more problems than they have resolved.

As a design engineer, I dislike the term “value engineering”, especially on

design and build projects where the design team was under pressure to compromise parts of a well-thought-through design. Hackitt's report also addresses this point, finding "the use of 'value engineering' is almost always about cutting cost out of a project, at times without due reference to key specification requirements."

#### *Interdependent construction team*

Design and construction teams work together with many interfaces throughout a building project, meaning that all disciplines become interdependent.

Building regulations and codes encompass every discipline. However, contracts and responsibilities for individual portions of the construction project often poorly define the interdependent nature of the building process. The reality is that low construction costs and design fees lead to less collaboration and focus by designers and subcontractors to complete their work scope as economically as possible.

Most contracts do not adequately define any responsibility of collaboration. Instead, they focus on creating clear lines of responsibility between parties for the purposes of their contracts and potential litigation. Although this is useful to allocate responsibility and identify liability, it can often prevent true collaboration. It will be interesting to see how Dame Judith Hackitt's final review recommends improvements while maintaining contractual responsibility.

Another important aspect of collaboration is how the client integrates into the design and construction team environment. Disputes between client and construction teams are often a result of expectation against the reality of the contracted scope of works, which may have been "value-engineered" during the construction process.

The question remains whether Dame Judith Hackitt's review will prompt a cultural revolution large enough to change attitudes and collaboration between contractual parties.

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#### BUILDING CONSTRUCTION DISPUTES

So, what do all of these changes mean in relation to building construction disputes, now and in the future?

Most building construction disputes can be categorised by time, money or quality – often all three.

Quality manifests itself in failures or performance gaps that are often linked to the expectation outlined in the original design against the reality of what was delivered by the construction project.

It is common for complex disputes to require a range of multidisciplinary expert witnesses in quantum and delay, as well as a range of technical experts, including architecture, mechanical and electrical building services engineering, structural engineering and civil engineering. Additional specialist experts may be required, such as fire engineers, acousticians, water treatment specialists or corrosion specialists.

Historically, multiple associates within law firms attempt to coordinate and manage all communications with the various individual experts, many of whom work from home with no technical support. I have spoken to several lawyers who struggle with the time involved in this approach.

#### *Early intervention*

Law firms are seeing the benefits of early identification of technical experts to provide initial views on technical aspects of a case at an earlier stage.

As claims for delay, disruption, quantum and defects relate to technical matters, forensic technical engineers, architects and other professionals are appointed to review the technical issues remotely from any delay or quantum analysis.

It is essential that disruption, delay and quantum analyses are relevant and valid. Many of these issues require a forensic analysis of the technical, contractual and practical matters that caused the problems before considering them in a quantum or delay capacity.

#### MULTIDISCIPLINARY EXPERT TEAMS

##### *Maturing market*

The maturing of the expert witness industry in recent years has introduced significant advances in how experts work within multidisciplinary expert teams. A team approach is not always appropriate; however, on complex multi-issue disputes, the timescale and delivery of the expert services can be controlled through appropriate management. Design and construction teams comprise multiple professional services providers and specialist subcontractors, with a similar grouping of appropriate disciplines within expert "teams" that are often needed for complex construction project disputes.

##### *Benefits to the court, the parties and the dispute*

Appointing a multidisciplinary expert team, coordinated by a lead or coordinating expert, or commissioning a manager, creates efficiencies and

coordination of information flow. A multidisciplinary group of experts can work individually while benefiting from a team environment, which is closer to that of a building construction team. The structure and management of the team are important and should focus on gathering the relevant forensic analysis of the issues in dispute to help the legal team understand the various technical aspects and nuances of the case.

Interdependence of each discipline results in shared information being used to make design or installation decisions.

#### *A question of independence*

There is often concern over the independence of an individual's opinion in this type of environment. Any multidisciplinary appointment must always protect and ensure the individual expert's independence in compliance with Part 5 of the Civil Procedure Rules: "It is the duty of experts to help the court on matters within their expertise" and "this duty overrides any obligation to the person from whom experts have received instructions or by whom they are paid". By ensuring the appointment is clear and the management of the "expert team" is focused on information flow and expert project management, each expert has the responsibility to ensure the opinion is their own.

#### *Management of information flow*

In a construction project, information does not flow in one direction. Interdependence of each discipline results in shared information being used to make design or installation decisions. As a result, in an associated dispute, for example, a delay in the installation of drainage pipework in a large complex building may involve a plumbing expert, structural engineering expert, an architect, and a planning expert. This single issue is unlikely to be addressed by a single discipline as, in reality, it was a combination of each parties' actions that may have contributed to the delay.

#### *Eliminate duplication*

In a complex building construction project involving multiple delay events, there is likely to be a multitude of issues to be addressed. Establishing common approaches and an understanding of the contractual requirements can be applied to each issue; the forensic analysis of these aspects may not have to be duplicated by each expert. These common issues can

be identified and established by the lead expert. This single area of collaboration can save time by preventing each expert duplicating analysis of common issues.

The added benefit of the expert team approach allows a lead expert to identify common matters across the various issues, which can be important in gaining a fully informed opinion on the wider dispute.

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The continually developing building construction market will introduce significant evolution as worldwide improvements are addressed across the industry. Whether true collaboration is achievable is a question for the future. However, the key aspects of competence, enforcement and responsibility are likely to be the cornerstones of future disputes.

With building construction processes becoming more collaborative, complex and integrated, the maturing expert witness market and the management of

expert teams are already following suit, to the benefit of parties, legal teams, courts and tribunals.

Competence, enforcement and responsibility are likely to be the cornerstones of future disputes.

From my experience, the structure of expert teams depends on the particular issues in dispute. The key benefits for the legal team and the dispute in general in appointing a multidisciplinary team of experts with a lead or coordinating expert are:

- a consistent approach from each discipline;
- reduced time involved in managing a diverse group of individual experts;
- improved efficiencies of information flow between the legal team and multiple experts;
- forensic analysis of individual

technical matters while having the ability to discuss and eliminate 'unknowns' on multidisciplinary matters;

- improved liaison through a single point of contact, allowing ongoing progress monitoring;
- having an individual responsible for coordination and managing any difficulties as they arise;
- similarly structured reports, allowing the court and legal team ease of reading potentially diverse issues;
- saving time and eliminating duplication or possible conflict across multiple reports by combining common building construction process issues together under a lead expert with support from individual technical experts as necessary; and
- undertaking a review – at an experienced and informed lead or coordinating expert level – for appropriateness, consistency and a sense check of the individual expert's approach and conclusions.